

THE
PHRENOLOGICAL JOURNAL

AND

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SCIENCE OF HEALTH.

A REPOSITORY OF

SCIENCE, LITERATURE AND GENERAL INTELLIGENCE.

DEVOTED TO

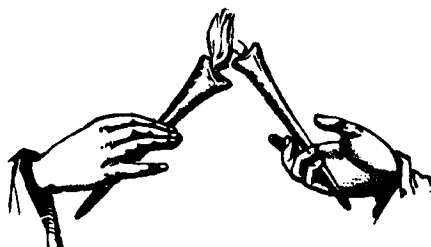
ETHNOLOGY, PHYSIOLOGY, PHRENOLOGY, PHYSIOGNOMY, SOCIOLOGY, PSY-
CHOLOGY, EDUCATION, MECHANICAL INDUSTRY, HYGIENE, AND TO
ALL THOSE PROGRESSIVE MEASURES WHICH ARE CALCU-
LATED TO REFORM, ELEVATE AND IMPROVE MANKIND,
SPIRITUALLY, INTELLECTUALLY AND SOCIALLY.

EMBELLISHED WITH NUMEROUS PORTRAITS AND OTHER ENGRAVINGS.

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“Quiconque a une trop haute idée de la force et de la justesse de ses raisonnements pour se croire obligé de les soumettre a une experience mille et mille fois répétée ne perfectionnera jamais la physiologie du cerveau.”—GALL.

“I regard Phrenology as the only system of mental philosophy which can be said to indicate with anything like clearness and precision, man's mixed moral and intellectual nature, and as the only guide short of revelation for educating him in harmony with his faculties, as a being of power; with his wants, as a creature of necessity; and with his duties, as an agent responsible to his Maker and amenable to the laws declared by the all-wise Providence.”

—JOHN BELL, M. D.

Contents: January to June, 1894

A	PAGE	D	PAGE	J	PAGE
Arrangement of the Phrenological Organs.....	14	Diet and Appendicitis.....	39	Jealousy.....	158
Alumni Annual Meeting.....	31	Mind Action, Discussion.....	49	Jerusalem, Antiquity of.....	312
Anthropology, Notes in 40-93-147-257-311		Deems, Charles F.....	96		
A Query (Poem).....	66	Does not "Mind".....	104	L	
A New Leaf (Poem).....	66	Decrease of Parental Cruelty..	148	Lozier, Clemence Sophia.....	71
Abbott's Estimate of Phrenology, Dr. Lyman.....	100	Doubtful Supremacy of Man, The.....	149	Lowell, Memorial to James Russell.....	108
Ancient Underground Refuges.....	147	Dole, Sanford B.....	156	Lady of the Eleventh Century, A.....	118
Audubon, John James.....	186	Do Adult Heads Increase in Size?.....	157	Lithookalani, Queen.....	157
Alcohol and Mortality.....	259	Dow, Hon. Neal.....	198	Lancaster, Miss Maud.....	174
Anthony, Susan B.....	273	Duplication of the Senses, The.....	204	Learning Gorillish.....	265
A Vision of Life (Poem).....	284	Dry Fomentation, A.....	317	Language, The Faculty of.....	277
B		E		M	
Biography, Sketches of Phrenological..... 24-81-136-197-242-300		Eiffel, M.....	90	Mapes, James J.....	28
Brain of Woman Relatively, The.....	57	Eye Defects, City Life and.....	34	Medicine or Nature.....	35-49
Burleigh, Mrs. Celia.....	67	Egyptian Chemistry.....	40	Mound Builders, The.....	41
Byrnes, Thos. S.....	101	Epilepsy and Brain Disease.....	50	Moral Influence of Place, The.....	44
Bradford's Opinion of Phrenology, The Rev.....	158	Effects of Climate on the Development of Children.....	141	Mann, L. L. D., Horace.....	81-136-197
Blount, The Hon. James H.....	156	Eating Habits of the Hindus.....	147	Music in Wales.....	95
Brain and Mind Composite.....	171	Etruscan Tombs.....	149	Morse, Prof.....	139
Billroth, Prof. Theodor.....	182	Etruscans, The.....	210	Mesmerism.....	145
Bathing Soon After a Meal is Dangerous, Why.....	203	Eyes and Mentality, Gray.....	203	Mackenzie, M. D., Sir Morell.....	185
Bland, The Hon. Richard P.....	209	Ethics of Jealousy, The.....	293	Ministry of Labor, The.....	204
Bonner, Robert.....	219	Effects of Quinine, The.....	310	Morton, M. D., Samuel George.....	242
Bok, Edward W.....	236	Eyes, Bad For the.....	310	Moral Growth in Character.....	307
Botany of the Old Egyptian Tombs.....	257			Mistake (Poem).....	307
Ballot for Woman, The.....	315	F			
		Facility.....	49	N	
C		Food Habits of the Indians.....	94	New Year Psalm (Poem).....	11
Collins, Charles.....	21	Fuegiens, The.....	95	Nicoll, Delancey.....	102
Character Studies..... 24-77-291		Fellows, John R.....	101	Natural Treatment for La Grippe.....	143
Child Culture..... 32-86-140-308		Fowler, Mrs. Lydia Folger.....	179	Neal, John.....	300
Crying as a Symptom of Disease.....	33				
Criminal Suggestion in Every Day Life.....	38	G		O	
College Athletics, A Halt Demanded In.....	43	Girard, Stephen.....	75	Observations on the Organ of Weight.....	12
Cook and Phrenology, Joseph.....	47	Gratitude.....	106	Orissa Twins, The.....	83
Chicago and the World's Fair.....	50	Graphology: or Character in Handwriting.....	165	Old New England Almanacs.....	258
Caprivi, General Count Von.....	73	Gladstone, Hon. William E.....	188	Opinions of Phrenology.....	206
Clark, Sir Andrew.....	88	Gilroy, Thos. F.....	208		
Cartarrhal Disease, Climate and Cook, The Rev. Joseph.....	122	Goitre.....	211	P	
Corbin, Austin.....	130			Phrenological Organs, Arrangement of the.....	14
Common Sin, A.....	144	H		Phrenology, Proofs of.....	48
Childs, George W.....	151	How to Study Strangers..... 15-47-125-179-281-285		Phrenology, Progress of.....	48
Chinese Exclusion Law, The.....	153	Halleck, Fitz-Greene.....	17	Phrenological Society and Field Notes..... 52 108-160-213-269-319	
Cheerfulness.....	178	How the Centers are Associated.....	50	Phrenographs..... 62-122-174-219-273	
Cold Water, A Word In Behalf of.....	201	Howells, William Dean.....	62	Parkhurst, The Rev. Chas. H.....	101
Cold Water Applications in Pneumonia.....	202	Heredity Subject to Will.....	93	Pimples on the Face.....	104
Carlisle, J. G.....	207	How One Woman Found Her Place in Life.....	115	Public Finance and Causes of Our Trouble.....	104
Curtis, Cyrus H. K.....	231	Howe, Elias.....	133	"Profundity of Ignorance".....	105
Clark's Advice, Sir Andrew.....	308	Heads Increase in Size? Do Adult.....	157	Perversion or Asymmetry.....	150
Chinese Ladies' Feet.....	309	How Much Will Be Left? (Poem).....	178	Peabody, Elizabeth Palmer.....	155
Character in Handwriting.....	317	Hoar, Senator G. F.....	309	Platt, Senator Thomas C.....	308
		How the Pyramids Were Built.....	317	Perception, A Study in.....	346
				Poor Teeth and the Cause.....	256
		I		Primeval Pottery and its Character.....	257
		Influence of Weather on Mind.....	294	Primitive Race of our Hemisphere, The Most.....	259
		Is the Handwriting on the Wall?.....	313	Phrenology and Craniometry.....	260
		Insanity in Egypt.....	312		

CONTENTS.

P	PAGE	S	PAGE	T	PAGE
Primary Man.....	281	Smith, Mrs. Elizabeth Oakes..	51	Teacher's Need of Phrenology, The.....	212
Parnell, Dr. B. A.....	300	Suggestion and Social Responsibility for Crime.....	97	The Most Deserving First.....	262
Pre-Columbian Voyages to America.....	311	Sovereign, James R.....	102	Three Visits.....	304
Pain in Vitativeness.....	317	Schieren, Charles A.....	209		
		Singing out of Tune.....	211	U	
R		Systematic Moral Education.....	225	Unanswered Question, The... ..	209
Recent Discoveries of Skulls in Egypt and Greece.....	41	Satisfied (Poem).....	245	V	
Remains of Early Indian Pottery.....	42	Sandow, Eugene.....	250	Voice Quality and Character... ..	104
Roseberry, Lord.....	191	Scarlet Fever and its Treatment.....	254	Vanderbilt, Commodore.....	125
Red Hair.....	266			Voice as an Index to the Soul, The.....	227
Rockwell, Florence.....	201	T		W	
Radford, B. J.....	295	Tyndall, Professor John.....	8	Weston, Edward Payson.....	51
S		Training the Feeble Mind in London.....	34	Wilder, Marshall P.....	77
Spirit of the Anglo-Saxons.....	10	Thompson, Miss Elizabeth.....	69	Warranted Criticism.....	99
Stone, Lucy.....	24	Teaching Deaf Mutes.....	85	Why Children Tease.....	140
Science of Health, The.....	35-85-143-201-280-308	"Temper," A Misnomer.....	87	What Our Children Should Be.....	142
Suggestions of Cause in Headache.....	37	The Outer and Inner Life (Poem).....	189	Wilson, The Hon. W. L.....	155
		Talent and Genius.....	211	Willis, The Hon. A. S.....	156
				Was America Peopled from Polynesia?.....	258
				What's in a Name?.....	303

ILLUSTRATIONS

A	PAGE	G	PAGE	P	PAGE
Audubon, John James.....	187	Gladstone, Rt. Hon. William E.....	164	Parkhurst, Dr.....	101
Anthony, Susan B.....	272-274	Graphic Centre in Brain Schematic.....	166	Peabody, Miss.....	155
B		Gilroy, Thomas F.....	208	Platt, Thomas C.....	208
Burleigh, Mrs. Celia.....	67	H		R	
Byrnes, Supt.....	101	Halleck, Fitz-Greene.....	19	Roseberry, Lord.....	192
Blount, James H.....	156	Hampton, Gen. Wade.....	22	Rockwell, Florence.....	203
Billroth, Prof. Theodor.....	189	Howells, William Dean.....	56	Radford, Benjamin J.....	287
Bland, Richard P.....	210	Highly-cultured Type of Woman.....	61		
Bonner, Robert.....	218-220	Howe, Elias.....	135	S	
Bok, Edward William.....	237	Hoar, G. F.....	209	Stone (Blackwell) Lucy.....	6
C		I		Strong Type of Cultured Man..	60
Collins, Charles.....	21	Individuality, Large.....	246	Sovereign, J. R.....	103
Capiati, Gen. Geo. Von.....	78	Individuality, Small.....	247	Stomach, Diseased.....	183
Clark, Sir Andrew.....	88	L		Stomach Repaired.....	183
Cook, The Rev. Joseph.....	112	Leighton, R. A., Sir Frederick.....	23	Schieren, Charles A.....	209
Corbin, Austin.....	131	Lozier, Clemence Sophia.....	71	Sandow in Stage Attire.....	251
Childs, George W.....	151	Liliuokalani.....	157	Sandow in Pose of "The Wounded Parthian".....	252
Carlisle, J. G.....	207	Lancaster, Miss Maud.....	175	Sandow in Pose of the "Dying Gladiator".....	253
Curtis, Cyrus H. K.....	213	Language, Large.....	278	South Australian Skull.....	283
Cro-Magnon Skull.....	282	Language, Small.....	279		
Conformateur Outlines.....	285-290	M		T	
D		Mapes, Professor J. J.....	29	Tyndall, Professor John.....	7
Deems, Dr. Charles F.....	96	Mann, L. L. D., Horace.....	82	Thompson, Miss Elizabeth.....	70
Dole, S. B.....	156	Morse, Samuel F. B.....	132	V	
Diseased Stomach.....	183	Mackenzie, M. D., Sir Morell.....	185	Vanderbilt, Commodore.....	127
Dow, Hon. Neal.....	105	Mor on, Dr. S. G.....	242	W	
E		N		Woman, A True.....	58
Eiffel, M.....	20	Nicoll, Delancey.....	102	Well-developed Skull of Man... ..	59
Englis Skull, The.....	282	Neanderthal Skull-Cap.....	282	Well-developed Skull of Woman.....	59
Esquimaux Skull.....	288	O		Wilder, Marshall P.....	76
F		Orissa Twins, The.....	38	Wilson, W. L.....	155
Fellows, J. R.....	102			Willis, A. S.....	156
Fowler, M. D., Mrs. Lydia F... ..	179				
G					
Girard, Stephen.....	75				



LUCY STONE (BLACKWELL).

For sketch see page 24.

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PROFESSOR JOHN TYNDALL.

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PROFESSOR JOHN TYNDALL.

BY EDGAR C. BEALL, M.D.

IT is a principle in phrenological character reading, that the direction or particular channel in which the mental faculties will be manifested, must be determined chiefly by the temperament and organic quality. This statement should suffice to remove the objection so often urged by those who are unfamiliar with the literature of phrenology, viz., that different heads of the same configuration are found in connection with widely diverse talents and dispositions.

It should be remembered that the primary mental powers, while related to specific lines of expression, are by no means limited to individual objects. A knife may always remain a knife, whether used to cut the pages of a magazine, to perform an autopsy, or sharpen a pencil. In like manner, a mental faculty is always fundamentally the same, though exercised upon a number of different materials or separate objects upon its special line of activity. Eventuality, for example, always takes cognizance of that which is expressed by the verb, and in one man it will be interested in the campaigns of Napoleon, or the expeditions of Stanley, while in another, the same grade of development would find its chief gratification perhaps in the narration of personal adventures, or in reading novels which deal in exciting events. In all cases it is concerned with action.

Now if Constructiveness and the percepts are large in a healthy brain, there will always be talent for mechanism. If the temperament is emotional, the mechanical expression will be artistic. If the constitution is cool, with ordinary quality, the manifestation may be confined to simple construction upon the physical plane; and if to the coolness of the temperament there is added excellent quality

and a high intellectual culture, we have the combination most favorable to the scientist. This was well illustrated by the eminent English scholar who is the subject of these remarks.

Prof. Tyndall bore the stamp of a superior organization. He was an example of that phase of high quality which means loftiness of purpose and purity of soul, rather than mere exquisiteness of sentiment or refinement of taste. There was an earnestness and magnanimity of character suggested in the features which scarcely any person could mistake. The temperament was the mental-motive. This signifies that his mind was attracted first to that which is essentially intellectual, and secondly to those studies or avocations which relate especially to the practical, the positive, the tangible and the demonstrable. As the basis of the motive constitution is bone, so the intellect in this temperament is satisfied only with a foundation of fact. Such a man is impregnable in the fortress of reason. No alluring phantasm woven of imagination's subtle thread can turn him from the rocky path of the knowable or the known. And still he does not presume to define that which is beyond his ken. He understands the limits of his knowledge, and one of the first results of his logic is a demonstration of his inability to fathom the secret of the absolute. He will not readily believe a mere tradition, and yet his refusal to accept a theory or a hypothesis, is not an assertion of superior enlightenment, but rather, to use Prof. Tyndall's own words upon this subject, "a protest against the assumption of knowledge which must long, if not forever, lie beyond us, and the claim to which is the source of manifold confusion upon earth."

There are some egotistic, dogmatic and conceited scientists, as well as hare-brained poets, and fanatical philosophers. But the model man of science is above all else temperate and judicial. He must gauge, weigh and measure, not only the walls which enclose his fellows, but also the manacles which bind his own hands and feet. It was thus with the great investigator and teacher whose portrait is before us, and whose contributions have made epochs in the history of scientific thought.

He was a remarkably clear thinker, and hence a lucid writer. His literary style, which has been so often complimented, was largely influenced also by his honesty and devotion to truth. In this respect, and in many other ways, he resembled Abraham Lincoln, who might also have become distinguished as a scientist if he had received the necessary training in his early life.

Prof. Tyndall was physically characterized by length, sharpness, and compactness, rather than breadth of form or porosity of fibre. His mind was also penetrating, keen, and inclined to specific detail and mathematical precision, rather than philosophical generalizations or poetic elasticity of conception. His head was well balanced, and his mind was firmly poised. The brain in the superior and frontal regions greatly predominated over the basilar portions related to the selfish appetites, and the organization as a whole was a long way removed from the animal type.

As to social qualities, there was more desire for intellectual and moral sympathy than merely personal comradeship; more loyalty and constancy of affection than ardor of manifestation, and a popularity due to recognized integrity of character rather than to his observance of conventionalities. Cautiousness was a conspicuous element. This is shown in the portrait by the width of the upper back head, also by the length of the middle third of the face. There was

no tinge of rashness or immature judgment in his procedures. The indications of large Conscientiousness are unmistakable, both in the form of the brain and in the angularity of the face. Directness, and a sense of law, method and rule are expressed in the clearly defined features, and the moral impulses received an added value from the absence of all voluptuousness or frivolous inclination.

While the forehead was broad in the temporal region, at Constructiveness, it is not likely that the diameter at Acquisitiveness was equally great, for the temperamental signs are all opposed to the hoarding instinct. Such a length of nose and neck are very rarely, if ever, associated with commercial sagacity. But there are evidences of prudence, self-reliance, dignity, moral aspiration, decision, steadfastness, thoroughness, and a degree of discipline in the whole mental life, the equal of which it would perhaps be difficult to find. An illustration of the man's generosity may be seen in the fact that he donated the entire proceeds of his thirty-five lectures in this country in 1872, to a scholarship fund, the income of which is given to scientific students of various American universities to further their studies in Europe.

Of Prof. Tyndall's intellectual capacities, only the best can be said. He may not have carried his deductions as far into the abstract as some other men have done, but within the sphere of his special labors he was reliable and accurate. His perceptive faculties predominated, but still he was not insensible to the problems of metaphysics, religion, and esthetics. He was pre-eminently adapted to the acquisition and application of knowledge pertaining to the material world. As a chemist and geometrician he had few superiors; and though not verbose as a speaker or writer, he was exceedingly discriminating in the use of words.

Prof. Tyndall received the degree of LL.D. from Cambridge in 1855 and

from Edinburgh in 1866, and that of D.C.L. from Oxford in 1873. In 1876 he married Louisa Charlotte, eldest daughter of Lord and Lady Claud Hamilton.

The father of the great physicist was also named John Tyndall, and was descended from William Tyndale, the martyred religious reformer, and translator of the Bible, who was burned at the stake in 1536. The family were from Gloucestershire, but about the middle of the eighteenth century some of them emigrated from England to Ireland, where Prof. Tyndall was born in the village of Leighlin Bridge, near Carlow, August 21, 1820.

The accompanying portrait represents him in his prime, and we prefer it as an aid in studying his character to the more recent likenesses.

The writings of Prof. Tyndall include many important volumes, but he is chiefly known for his investigations of diamagnetic polarity, and the molecular constitution of matter. His studies on radiant heat begun in 1859, culminated in the publication in 1863, of his famous book entitled "Heat as a Mode of Motion." His death, which occurred on the night of Dec. 4, 1893, will cause profound regret in the scientific circles of every country and among all lovers of truth.

SPIRIT OF THE ANGLO-SAXONS.

BY GEORGE BANCROFT GRIFFITH.

IN a country like ours, untrammelled by the distinctions of royalty, where no undue regard is paid to birthright, where titles are conferred or withheld at the pleasure of the people, where honor and respectability are made equally accessible to all, and where every man is called upon to act for himself, no peculiarity is more striking, no effect more beneficial, than that course of independent action which has consequently been generated. We are of the race perhaps the most distinguished that ever existed. From its origin to the present time it has been noted for activity and bravery. Its early character may be seen at a glance in their reply to Alexander. When asked what they most feared, they said: "We fear nothing save that the heavens fall on us and destroy us."

With the Anglo-Saxon race has originated nearly all those noble conceptions—by them have been accomplished nearly all those splendid achievements—which have resulted so signally in blessing mankind. Although a distinct race, and possessing characteristics peculiar only to itself, there is notwithstanding

a great variety in its descendants. England is indeed mighty; she proudly boasts as mistress of the seas; the thunder of her arms is heard from East to West and from North to South. The sun in his course never ceases to shine on some part of her domain; yet with all her power both civil and military—though she may have extended her sway over a great part of the world, trampling on the nations of the East, she is not invincible. The sturdy son of New England has borne off the palm; has humbled her pride; he has plucked from her coronet its most glittering gem, and she acknowledges in him elements of superiority which she will acknowledge in no other nation.

The American, although of Saxon origin, and although he owes his parentage to Britain, would seem to belong to another and distinct class. His manners, his habits, his very nature are unlike those of any other. To him was assigned by Providence a task of extreme difficulty; by him was accomplished an object never before thought practicable. By him a new world was to be created. He was to convert the forest into a fruitful

field. He was to sever by a single stroke those tyrannical chains which might have fallen fast about him, and the still stronger ties that bound him to his mother country. He was to erect by the might of his own right hand an empire more powerful than any other on the face of the globe. Our forefathers, when driven from their homes in England, found at first a peaceful abode in Holland. There they remained twelve years. There, on the fertile plains or in the great cities of Holland they might have remained, and there almost every other race—people—*would* have remained. But to cross the stormy deep, to go to savage shores, to find a home for their posterity in a new world, to create a new empire, was an enterprise suited to their taste. The hazards they were to run, the very grandeur of the scheme, the difficulties they were to encounter, were the food for Saxon spirits. They undertook their task with an ardor equal to the enterprise. They crossed the ocean. The forests, once teeming with savages and wild beasts, have given place to populous cities and thriving villages, the home of the happy and the brave. They consider no bond so sacred that it should be preserved at the price of freedom, or, rather than receive anything like tyranny from the mother country they at once burst its bonds and the ties of relationship.

Difficult as may have been their task they committed one of no less consequence to their posterity. To establish a government on the inalienable rights of man was indeed a new thing under the sun. It was aiming a blow which might shake the foundations of the thrones of Europe, aye, of the world. For them to perpetuate it was to carry on war, in principle at least, with the rest of mankind. This they have done. And though we are comparatively a quiet people, the same independence of action, the same determination of purpose is grandly shown when occa-

sion demands. The fire which burned in the breasts of our fathers is in ours. We need only to be placed in circumstances like theirs to see it glow with original fervor.

A NEW YEAR PSALM.

(From the Swedish.)

BY LYDIA M. MILLARD.

The years roll unresting
Down Time's rapid stream,
A bubble fast fading,
Our day's brightest dream.
We follow unfearing,
The onrushing hours,
With Time's billows nearing
Eternity's shores.

Thou All-Great Eternal,
Thy throne rests secure ;
High over Time's surges
Its pillars endure ;
No tempest or darkness,
No rude, raging sea
Can break the chain binding
Thy creatures to Thee.

Our dear ones have left us,
But Thou dost remain ;
Thy love hath bereft us,
We welcome the pain.
Thy strength crowns our weakness,
Thy light cheers the gloom.
The grave's deepest darkness
Thy smile doth illumine.

We forward go, fearless,
At Thy blest command,
Through dark waters cheerless,
O'er storm-beaten strand.
While Thou our defender,
Our leader shalt be ;
Through death or through danger
We triumph with Thee.

All-Great One Eternal,
To Thee soars our song ;
To Thee every purpose,
Thought, feeling belong,
Before us, behind us,
Around and above,
Like rainbows immortal
O'er reaches Thy love.

OBSERVATIONS ON THE "ORGAN OF WEIGHT."

BY DR. J. L. CAPEN.

IS it reasonable to suppose that there can be any radical error about the location of a phrenological organ, which scores of phrenologists have marked for years with unquestioning confidence? Let us consider the nature of the evidence of certain organs, and the conditions affecting their functions.

It is not always easy to obtain demonstrative evidence of the function and location of any organ. The phrenologist does not remove the skull, or any section of it, and apply the battery to a portion of the brain to learn its function. That method adopted by the vivisectionists has resulted in proving certain centers of motion, but nothing more. The phrenologist has a much more laborious method and one that demands repeated examinations, and the exercise of much judgment, before he can make a good approximation to the function of any portion of the brain.

It need not therefore appear strange that successive classes of students, for a considerable length of time should take for granted much of what they have read and heard; and especially might this be the case concerning some of those organs that may be considered of minor influence over the character.

As the brain tends to act as a whole, so far as possible, no one organ can be easily isolated and studied alone; hence the skill of the practical phrenologist depends very largely upon his judgment in combining the influences of the different organs, the temperament, and the quality of the brain.

Some of the organs are more greatly affected by the state of the health, the physical development, and temperament, than are others. Thus Alimentiveness may be morbidly active in certain forms of dyspepsia

and comparatively inactive in a well-balanced temperament in good health, except periodically as the system demands nourishment. The practical phrenologist in describing the function will pay quite as much attention to these general conditions as to the brain development. A similar rule applies to amativeness. The full-fleshed, red-faced man, and the delicate, healthy man of thoughtful, industrious temperament, are influenced by it in a very different manner, and in different degrees. From this we might well expect that if there were an organ of "Weight" in the anterior lobe, or elsewhere, it would be greatly influenced by the development of the muscular system, and it might be affected to such an extent as to make it comparatively difficult to decide the degree of influence due to each—to the muscular development and its concomitants and to the brain.

It is generally understood by anthropologists that a prominent bony ridge over the orbits indicates a muscular race. What is true of a race must be true of numerous individual instances. We can, however, find many men of superior muscular development and of talent and skill like that attributed to Weight who are not particularly prominent at the superciliary ridge. Observations of this nature led me to doubt whether the "organ of Weight" is represented by any fullness in that region.

There is, I think, some difficulty in ascertaining the size of the individual organs situated behind the frontal sinus, although very little in determining the development of the perceptive group as a whole, when we note the trend of the cranium above the sinus.

The experiments of the physiolo-

gists seem to show that there is a very intimate connection between the cerebellum and muscular movements. They do not hesitate to call its function that of "co-ordination of motion," and I have found but one author to challenge their assertion. It is well known to all of us who have been so fortunate as to witness the barbarous experiment of amputating the cerebellum of the fowl, that, at least for the time being, the power to stand, to walk, or to fly is lost, and the wounded, frightened bird flutters, struggles and falls from the table unable to help itself. If the question had come to a phrenologist with an unprejudiced mind as to the seat of an organ which should give one a judgment of weight, skill in self-poise in dangerous places, sympathy with muscular energy, and the use of power, in fact such functions as are attributed to the organ of Weight, if the question had come after having witnessed what we have described, is it not likely that he would have turned his attention to the cerebellum? It is my opinion that that close observer, independent thinker, and frank, honest scientist, Dr. Spurzheim, would have done so.

We have seen that in general the superciliary ridge is most prominent in muscular men. The cerebellum is also large in such men, and it is probable that in a large majority of cases the situation of "Weight" will appear to be verified because of this coincidence; but if a single case of deficiency in the sign with a decided proficiency of the function can be found, it will go further to disprove the location than any number of such coincidences will go for its confirmation.

I think I have known several such cases. I knew a lad who was particularly given to climbing, walking on narrow edges of fences, et cetera, who had but a moderate development of the supposed organ of Weight. Forty years ago I was acquainted with a young carpenter of

extraordinary skill and courage in a direction to imply a large development of Weight. He was in the habit of running down ladders from the plates and roof of a church on which he was at work without making any use of his hands as a guide. In crossing fields he would leap the fences—never climb over them—yet he never appeared to have any ambition to be thought an acrobat. This young man had a phrenological chart marked by an expert, and "Weight" was only *four* in the scale of seven. To me it appeared to be a correct marking for the conformation of his head, though it failed to represent the muscular skill which he exhibited. I recollect a schoolmate and near neighbor who exhibited some of the characteristics attributed to the organ of Weight, and to a remarkable degree. It is impossible for me to say that there was no unusual development of Weight. Indeed, it is my impression that the eyebrows were quite prominent and the forehead retreating, but I happened to know that the "bilious temperament" had been marked quite strong by a phrenologist, and I know that the muscular apparatus was conspicuous. This lad was notorious for his skill and courage in snowballing sport. It happened not infrequently that he would be on one side and all the rest of the players of the school on the other. At such times he would be as cool as ever, make his balls as firm and round as possible, dodging a score of balls that might hit him, and, when ready, he would take deliberate aim at some conspicuous player, and almost certainly hit him, and hit hard. If there was no snow, it would suit him quite as well to make use of stones.

If we suppose as I do, that the functions attributed to an organ called Weight have their seat in some portion of the nervous system which is most directly connected with muscular coördination, and that there is a harmony between the development of the *muscles* and of the *motor nerves*,

then we have in the *degree of muscular development* one of indication of the functions attributed to Weight. It indicates "sympathy with power," and probably "skill and dexterity."

Some phrenologists seek for a single sign for each faculty, but others do not so much incline to a sharp division as to more extensive combinations. I think that it will be found that every healthy man with a good muscular development, a wide cerebellum, and a head high in the crown, has muscular skill together with all the functions attributed to Weight. As the cerebellum of a man weighs, on an average, a little over five ounces, and the cerebrum not quite forty-five ounces, and, since the phrenologists have attributed about forty organs to the latter, independently

of the numerous centers of motion of the physiologists, it need not cause surprise if, to the cerebellum, should be attributed, in addition to Amativeness, at least two other functions, *co-ordination of motion* and the functions of the *sympathetic system*. And then, if we name one of these organs Weight and the other Vitativeness, we have one full complement of three organs, Amativeness, Vitativeness and Weight.

In this case, we shall not consider any of them organs of "ideation," but purely physical powers, regulating the instinctive action of the nervous system, though connected with the cerebrum, in which there may be an "ideational" organ, as in the case of Conjugality related to Amativeness, Distinctiveness to Weight, and Alimentiveness to Vitativeness.

ARRANGEMENT OF THE PHRENOLOGICAL ORGANS.

THE qualities and the faculties which are common to man and the other animals have their seat in those cerebral parts which are equally common to man and brutes. Whenever, then, we are speaking of a quality or faculty common to beasts and man, we should seek its organ in the inferior posterior, the posterior inferior, or the anterior inferior parts of the brain. Of this number, for example, are the instinct of propagation, the love of offspring, the instinct of self-defence, that of providing food, the instinct of cunning, etc.

The qualities or faculties which man exclusively enjoys, and which form the barrier by which he is separated from the brute, have their seat in those cerebral parts which are wanting in animals, and we must consequently seek them in the anterior superior, and the superior anterior parts of the forehead. Of this number, for example, are comparative sagacity, the metaphysical disposition, or causality, wit, the talent for poetry, the disposition to religious sentiments and ideas.

The more indispensable the qualities and faculties may be, the more do we find their organs placed near the base of the brain, or toward the median line. The first and the most indispensable of all the organs, that of the instinct of propagation, is placed nearest the base; then comes that of the love of offspring, etc. The organ of the sense of localities is more indispensable than that of the sense of tones, or that of numbers; and hence the last two are placed farther from the median line than the first. Then, the more a quality or a faculty is essential, the more it is necessary to seek its organ near the base of the brain, or the median line. The organs that are less indispensable are placed toward the top and sides of the head. If I wished to discover the organ of the talent for poetry, I should not, according to this principle, look for it either at the base or near the median line of the brain. * * * * Every one must be struck with the profound wisdom, which is manifested in the arrangement and successive order of the organs. *Gall*

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XII.

QUALITY OR PERFECTION OF TEMPERAMENT.

IN the study of temperament the student needs to keep in mind the highest order or best quality of temperament to serve as a measuring rule by which to test the variations and shortcomings of different persons in respect to organic constitution. One phase of temperament will be strong, while other phases are weak, and the result shows eccentricity, by strong and weak points in juxtaposition in the constitution. In regard to strong and weak points in the character there is no question by anybody, and we know that temperament varies quite as much as do the dispositions.

Balance of temperament is very desirable, yet this term carries to a Phrenologist two types of meaning; a temperament may be balanced, and still all its factors be weak, and therefore balance of temperament does not make a man with small head and low type of development amount to much, even if his temperament is balanced. A marble that boys play with may be perfectly round and nicely balanced, but an iron-clad ship would laugh at its efforts of penetration. A head may be medium and balanced in temperament, and each temperament low in the scale, and though all the faculties are balanced and harmonious, the man will be mediocre in his scope and power of achievement. The head may be large or very large, the health good and all the temperaments harmoniously balanced, and then it is that a normal king of men is before us. There are some men with large heads, as there are horses and men and chickens with large bodies; but

there is not much snap and spirit and power in them. But a healthy constitution that is largely endowed in each of the departments of temperament will produce health and power, skill and success. And in proportion as these favorable conditions are present in a given individual, so will his talent and power of achievement be manifest. There are some men with splendid mental development; they are brilliant and far-reaching in the scope and elevation of their minds, but they lack in the vital and motive power, and, therefore, the mind is not backed up by vitality so that it can work strongly and long. A man with a twenty-four inch head and a predominance of the Mental Temperament, with a light frame and not very strong nutritive system, might be a splendid architect or accountant, or artist, and do magnificent work, but it would take him longer to accomplish a given amount on the same principle that it takes longer for a single gas-burner to boil a kettle than if there were a sufficient amount of flame to enwrap the kettle.

QUALITY.

Students of Phrenology are sometimes much puzzled in regard to the meaning which should be attached to the word "Quality" in connection with temperament or constitution. If we apply this thought of quality to material substances generally, it will cover more ground than mere fineness, and it means more than mere delicacy, softness and pliability. Quality is a generic rather than a specific

term. Softness is a specific term; hardness, toughness, endurance and strength are specific terms, and quality is the generic term and constitutes the embodiment of the whole of these. Timber may be fine-grained, but soft and weak. An article may have the quality of softness yet lack strength and power. When we combine all the conditions which go to make up the composition and substance of structures, and when we can put into anything all the elements which express desirable specific conditions, the sum-total is quality.

There is material as fine as that of which fiddle-strings are made, but it lacks strength, compactness, hardness and resonance. We can have bulk with coarseness, softness and flabbiness, and quality as applied to that would need the adjective low, coarse or soft to define it. Density in reference to material is one element of quality which embraces a large amount of matter in a given space; hence the timber called *lignum vitæ* will sink in water like a stone, while the least dense among the different kinds of timber will float like cork; and yet if cork were compressed to its smallest possible dimensions it might be as solid and heavy as *lignum vitæ*. Power is associated with the idea of density or compactness. Timber which grows compactly is strong, but timber which grows spongy and loose-grained is not strong. When, therefore, we can combine fineness with density and solidity we have a higher type of quality than when the material is soft and loose. If students of Temperament would apply some other term than quality by which to express the specific peculiarities, if they would say susceptibility, sensitiveness or excitability to define their meaning of certain conditions it would be more appropriate than the term quality; because as I use quality it means the total make-up, high or low, fine or coarse, strong or weak. We can have strength without coarseness and fineness without lightness, for

the hardest woods when polished make the most brilliant surfaces and are most delicate to the touch, and the same is true with metals; so I conclude that the word Quality as applied to the comprehensive definition of the human constitution must embrace sensitiveness, nervous susceptibility, stalwart enduring power, sturdy strength, and also the elements of vitality and nutrition, by means of which all the conditions and qualities of temperament are nourished, sustained, builded and kept in healthy action. Sometimes the muscular power is ample in fiber but it lacks in the elements of nerve force to give it power, and at other times the nerve force is very much greater than the muscular power, and therefore the nerve stimulus is not supplemented and put into action and execution by adequate motive power; in such a case "the spirit is willing but the flesh is weak," and in the other case the flesh is strong but the spirit does not inspire it to effort.

HIGHEST POSSIBLE QUALITY.

If the reader can imagine a human being as tall and as large as a healthy, normal human being might profitably and properly be, with a strong development of every temperament, including enough of the Vital to generate all the steam which could be used to advantage, enough of the Motive temperament to give that vitality impetus in the sphere of achievement, and enough of brain to compass the whole realm of knowledge in as high a degree and wide an extent as ever has been done by special individuals, he would verily be in the presence of a son of God, a man or a woman in all the plenitude of skill and power and wisdom and health; and such a person would represent the possibilities of human organism, a grand human constitution, complete and ample in all its parts and factors, wise in the acquisition of knowledge, skillful and efficient in its treatment and use.

If such a person could be presented

having the logic of Bacon; the imagination of Shakespeare and Milton or Byron; the ambition of Cæsar; the intensity and prowess of Alexander; the inventive skill of Watt, of Ericsson or Edison; the eloquence of Cicero, of Burke or Beecher; the memory of Cervantes; the bravery of the leader at Balaklava, with the love of Pythias, with the art of Michael Angelo, with the sympathy of Howard, and the pious fervor and gentleness of Fenelon,—combine all these higher excellencies which have been developed in human experience, and add the vocal power of Jenny Lind or Patti, of Sims Reeves or Campanini, and we would have a personage which common people would worship, if they could, by any possibility, for one moment appreciate the amount of the elevation, excellence and power of the personage before them. Thus we get a dreamy appreciation of the possibilities of human organism. If all these high attributes could be concentrated in one person, we would then have the perfection of development, combining the highest strength, health and wisdom of manhood, the subject of our study and culture. And when one thinks of such a being, with such an origin and with such a destiny, he can be compared with nothing now on earth.

When the devout Psalmist was studying the objective realm of knowledge, and looked up into the glowing heavens, he was led to exclaim: "When I consider the heavens, the work of Thy fingers, the moon and the stars which Thou hast ordained, what is man that Thou art mindful of *him*, and the son of man that Thou *visitest* him." Then, turning his thought within, and taking a subjective view of life, and time, and worlds, and man, and lifting himself up in this higher study, his spiritual senses all aflame, he utters the reverential exclamation, "Thou hast made him a little lower than the angels, and hast crowned him with glory and honor!"

As such human perfection is not yet to be expected except as the result of

ages of hereditary influences and culture, we present several portraits of persons of varying quality and temperament as subjects of study, and for that purpose we refer the reader to Chapter VII, where the study of "Temperament" is introduced, and also thenceforward to all portraits and discussions until we shall have completed what we may incorporate in "How to Study Strangers."

Fig. 116.—In this large, beautiful and massive head and face of Fitz-Greene Halleck is shown a modest son of genius, who had excellent gifts. In a line of business he spent many years of his life as an accountant in Jacob Barker's banking house in New York, and afterward as confidential assistant of John Jacob Astor in his enormous business, remaining with the latter until his death, which occurred March 29th, 1848.

He will be known to fame and to the future for his poetical works. In respect to Mr. Halleck, it was said by a witty critic that his greatest defect as a writer consisted in the fact that he wrote so little. He was born July 8, 1790, at Guilford, Ct., and after Mr. Astor's death resided at his native place and died there Nov. 17, 1867.

In addition to his business vocation he found time to do considerable literary work.

He wrote an elegy on the death of his gifted friend, J. Rodman Drake, which was published in 1820. It was simple, eloquent, pathetic and full of natural genius and tenderness, containing the oft quoted lines:

"None knew thee but to love thee,
None named thee but to praise."

Mr. Halleck is most widely known and admired for his poem, "Marco Bozarris." This has been made the subject of recitation in schools for the last sixty years; and, though, when well recited there is nothing that can surpass it, when it is read or recited by a stalwart young man without culture or training in elocution, and whose rough and earnest voice is

not yet settled in its manly tone, it loses all its beauty in the boisterous, torrent of force, for instance, in the noted lines:

He woke to hear his sentries shriek:
To arms! they come! they come!
The Greek! the Greek!

And the other famous lines:

"Strike—till the last armed foe expires," etc.

have often been read in such a shocking way that if the author could have heard such perpetrations he would have stopped his ears or fled before such blows.

This poem was popular, it stirred wonderfully the public pulse, and fiery youth rejoiced in the enthusiasm it awakened, and, although it is a war poem, nothing in that field has ever been written in the English language that is better, taken as a whole.

His Apostrophe to Death in this poem is a wonderful piece of work. What could be more pathetic and more vivid than this:

Come to the bridal chamber, Death!
Come to the mother when she feels,
For the first time, her first-born's breath:
Come when the blessed seals
That close the pestilence are broke,
And crowded cities wail its stroke:
Come in consumption's ghastly form,
The earthquake shock, the ocean's storm:
Come when the heart beats high and warm,
With banquet-song and dance, and wine,
And thou art terrible! the tear,
The groan, the knell, the pall, the bier,
And all we know, or dream, or fear,
Of agony, are thine.

But, to the hero, when his sword
Has won the battle for the free,
Thy voice sounds like a prophet's word,
And, in its hollow tones, are heard
The thanks of millions yet to be.
Bozarris! with the storied brave,
Greece nurtured, in her glory's time,
Rest thee, there is no prouder grave,
Even in her own proud clime.
We tell thy doom without a sigh:

For thou art Freedom's now, and Fame's,
One of the few, the immortal names,
That were not born to die.

In this fine head and face are seen the indications of a highly wrought mental temperament; and yet, there is a basis of the Motive. The strong features, the high head and the ample altitude of the person evince power, but the element or quality called fineness or sensitiveness would in him take the lead.

What a wonderful intellectual development this is:—how ample the expansion of the forehead, how broad the temples, especially the upper section where Ideality and Mirthfulness are located. He has been criticised for his wit and for the playfulness of his spirit, but "Marco Bozarris" has sobriety and sincerity enough. His large Benevolence gives width to the top of his head in front, and the poise of his head indicates large Self-esteem; but his was the Self-esteem that retired from noise and clamor, and led him to stand aloof from the common phases of rude life, and to have a few choice friends which he cultivated for their delicacy and refinement of manner and thought.

If he had had more than a common school education; if he had been early cultured in the best schools so that he could have been ushered into the literary world at an early age and thus been given by culture the direction of scholarly activity, instead of being for forty years confined to the use of ledgers and the study of pounds, shillings and pence, he would then, doubtless, have distinguished himself by a larger amount of intellectual and literary work.

W. Weidemeyer says: "He was a handsome man, with benign features, illumined by a pair of sparkling eyes, and with the beauty of intelligence stamped on his countenance; courtly manners, quiet observation, and habitual reticence were his outward characteristics.

"Treating our author's poems col-

lectively, we find their wording natural, precise, and copious; the phraseology exact, clear, and compact—smooth or forcible as the subject may

ring to it. Seldom do we encounter expletives, stilted expression, or bad metaphor, and similes he used sparingly."



FIG. 116. FITZ-GREENE HALLECK.

require; the sentiment noble and aspiring, never misanthropic, mawkish, didactic, or metaphysical; the rhythm melodious with a clear and manly

Halleck's temperament with high quality in the direction of the mental side of development gave him a marked position in the direction of mental

effort, while the quality of endurance, hardihood and concentrated earnestness and energy would be generally recognized in M. Eiffel, Fig. 117.

Fig. 117.—M. Eiffel, the celebrated French engineer, has a face and head which indicate power. The head is broad and massive, the features are heavy and firmly set, and the thought

eye view of the beautiful city. That thought was copied but vastly improved upon in the great Ferris Wheel at the Columbian Exposition in Chicago in 1893, which, by its revolution, carrying car loads of people at a time, gave them an opportunity of rising in the open air to an elevation of two hundred and fifty feet high, and then



FIG. 117 M. EIFFEL.

of courage, force, fortitude and enterprise seem related with what he is naturally inclined to do. He has become widely known among the engineers of France, and is President of the National Society of Engineers.

His great work which has especially attracted the attention of the world is the Eiffel Tower, a marked feature in the great Paris Exposition of 1889. It was a thousand feet high and was erected in the heart of Paris, was ascended by means of elevators and gave the inhabitants and visitors an excellent opportunity of taking a bird's

gradually coming to the earth on the other side of the wheel. One revolution occupied about half an hour and gave visitors an opportunity for surveying leisurely the Fair grounds and Chicago, and it can ever be a perpetual pleasure to the public as it can be enjoyed with perfect safety.

It will be noticed that his head is broad through the region of the temples where Constructiveness is located:—it is simply developed in a way which gives a mathematical type of thought. It is largely developed across the brows, in which region the

organs of perception and judgment of proportion are situated. The organs which give memory are located across the middle of the forehead, and they are full and amply developed, and enable him to carry in his thought vividly and continuously all the facts which culture and experience have given him.

His intellect resembles that of his mother—it is intuitive and rapid in

idly which comes from that development, and then he has the masculine courage, force and fortitude which belong to the middle section of the head and the face.

He looks as though he would make a good military leader, and especially a courageous and masterful engineer.

Fig. 118.—In this portrait we see refinement and harmony of constitution with a temperament favorable to



FIG. 118. CHARLES COLLINS.

its action. We think that the middle of his face and the middle of his head resemble his father. The nose is too large for the forehead and the cheekbones are too broad and ample for the upper and lower sections of the face, hence we suppose that the middle section of the head running over in a belt from one ear to that of the other, and the middle section of the face, from the eye to the mouth, belong to the father. Hence he has the intuitive quickness of thought pertaining to the mother and the power of gathering knowledge rap-

idly, practical ability, and especially is he strongly marked in Constructiveness and Ideality. So he was a natural inventor. The face has great delicacy combined with a good degree of strength; an expression of sincerity, energy, earnestness, sympathy, prudence and power are all evinced in that head and face. He had capacity to gather facts, and the reasoning power and the inventive talent combined to arrange them to the best advantage, so as to get the highest and best use of facts. He had large Order, good Calculation,

and also the musical sense. He had the signs of excellent memory, fullness through the middle section of the forehead is manifested, while the lower part, which gathers knowledge, and the upper part, which knows the why and the wherefore respecting knowledge, gave him brilliancy of intellect, accuracy of thinking and acting, and the power of combining all his knowledge in an effective way to secure decided success.

He was chief engineer on the "Lake Shore Railroad," and was well fitted for such a position. He had signs of a strong will, steadfastness, determination and firmness of purpose. He was not arrogant and not given to sudden impulses of passion. He carried his intelligence with modesty, but expressed his thoughts with definiteness and clearness. Had he been devoted to literature he would have made his mark in that direction. His Language was more accurate than copious, more specific in its expression and thought than ornate or fluent. He would have excelled as a manufacturer, as a merchant or in the realm of science. He was a natural organizer and had the ability to do good work in any field where his experience gave him opportunity. He was educated as an engineer at the Rensselaer Polytechnic Institute, in the State of New York. He was employed in engineering on the Boston and Albany Railroad; the Cleveland, Cincinnati and Columbus Railway, and in the construction of the Painesville, Cleveland and Nashville road.

This portrait is introduced to show harmony of temperament and of mental development and shows a great deal of refinement and susceptibility joined with vigor, earnestness and power. There is an indication of a high quality of constitution.

He was born in 1821 and died in 1876 from overwork and anxiety.

Fig. 119.—This gentleman represents in the main a well-balanced temperament, with the Vital a little in predominance. There is a good de-

gree of the Motive temperament indicated by the strength of the features and the height of the head at the crown, and the Mental temperament is well represented, but it is not in excess. The Vital shows fullness of face, plumpness of figure and fullness of form. This organization would be ardent in its efforts and purposes, and at the same time steadfast and strong. In the development of the forehead we find a predominance of the observing faculties and an excellent development of the organs of memory,



FIG. 119. GEN. WADE HAMPTON.

Eventuality, Locality and Time; while he gathers knowledge rapidly, he retains it easily, and the reasoning intellect, chiefly developed in the faculty of Comparison, enables him to use his knowledge to a good advantage and apply it to affairs of life practically with decision and readiness. He is not so much inclined toward the calm, cool, thoughtful, philosophical mode of work mentally as towards the intuitive, the practical and earnest. He is not very large in the faculties which give policy, prudence, economy and invention. He needs a little broader head to make him wise in secular matters and smooth and guarded in his statements and manifestations.

Fig. 120.—We present in this portrait the President of the Royal Society of Art in England, an organization representing whatever is delicate, refined, chaste and cultured in the realm of art and literature. He may be said to have a high quality of organization and an even development of the organs of the mind and body.

He has fineness and sensitiveness of quality, and a considerable degree of intensity. All his features show marks of refined culture; the nose is classical, the lips are full, but not indicative of the voluptuous type. He has a full eye, showing amplitude of language and ability to express himself easily. His Order being large, he is systematical; Comparison being strong, he inclines to criticise and discriminate and finish nicely whatever he does. He has a high order of the Mental temperament, and enough of the Vital temperament to give it smoothness. Harmony seems to pervade his whole being, as well the Physical as the Mental, and consistency of character would naturally be the outcome. His face, contrasted with that of Eiffel, is most marked. There is a lack of the ruggedness which the Motive and Vital temperament impart. Yet Sir Frederick is not lacking in strength and force, but it is not of the heroic type; it is not force that seeks an outlet and must have it. He has a tall top head, which gives him a moral and ambitious type of feeling; it gives him elevation and dignity without arrogance. Hence, he has a high sense of character; he is mindful of every form of courtesy and propriety which

belong to culture and good society, and a feeling of sensitiveness and refinement leads him to keep aloof from whatever is rugged, hard and coarse. Such an organization belongs in the world of art and literature.



FIG. 120. SIR FREDERICK LEIGHTON, R.A.

He would be a gardener rather than a farmer, a cabinet-maker rather than a carpenter, and an artist rather than a mechanic, and would be inclined to poetry and music rather than to didactic prose.

Fitz-Greene Halleck has a fairly balanced temperament with an excess of the Mental; Eiffel shows the Motive in about equal prominence; Collins shows the Vital and Mental in the lead; in Hampton the Vital and Motive seem stronger than the Mental; in Leighton there is a high order of the Mental with the Vital and Motive following as a background of sustaining power.

CHARACTER STUDIES. No. 6.

BY NELSON SIZER.

LUCY STONE.

(See Frontispiece.)

THIS woman was one of the most earnest, single-minded and direct of personalities. The very thought of righteousness and duty was part of her make-up, and when she, hungry for education, heard that her brother could go to college, but she could not, it suggested the question, "Why not?" She found herself struggling against a public sentiment, on whose current she might float, but which she could not stem or conquer. Then she turned within and summoned every element of faith, hope, courage, persistency and intensity, which belonged to her character, and it was made up largely of these elements, and resolved that she would overcome the difficulty, she would master the situation. But, in her native place, Massachusetts, the opportunities for a collegiate education for women were not provided for one who was born as early as 1818. Three-quarters of a century have since changed many things for the better.

She had but one purpose—to know something—if possible to know as much as her brother had a right and an opportunity to learn. But she had to go to a Western State, where people were less ruled by past ideas, and where newer, braver and more radical opinions prevailed than in Massachusetts. Why could she not have lived six weeks longer than to October 18, 1893, until classic Harvard had opened its doors fully to women "on golden hinges moving."

At Oberlin, Ohio, she found a college, half a century ago, that would take a woman and educate her. It was a struggle for her to subsist, but she made her mark from the very day she entered. "Excelsior!" was her

motto, and she vindicated it. She was among the earliest college-bred women in the country, and was one of their earliest platform speakers, working with such advocates of human liberty as Garrison, Phillips, Whittier, May, Pillsbury and Foster; her voice was heard with no uncertain sound. That a woman should make a public oration, that she should dare to advocate on the platform any cause which had in it the flavor of legislative government was a disgrace if not a crime.

In those early days I have seen her, a slight, short figure, bravely standing before a congregation, which felt more curiosity and prejudice than sympathy for her, but every word seemed like a cannon shot, solid, uncompromising, efficient, hitting the mark without apology and without abatement. She had the faculty of thinking compactly, reasoning closely, and of stating the truth as she understood it without wavering and without fear. Her career is widely and well known; those who have had the rare pleasure of her personal acquaintance will, without a dissenting voice, say of her that she was one of the most thoroughly unswerving persons they ever knew in the line of conduct and purpose in the maintenance of opinions which she deemed essential to the happiness of any class of people, especially the downtrodden, the neglected and oppressed. Her utterances in those early days were not popular. Many regarded her as a usurper of prerogatives that did not belong to her. She was called a crank, a disturber and a fanatic, but she lived long enough to see progress made in reforms which were dear to her; and when she adopted the Woman Suffrage question, in 1853, it looked as discouraging and as unpromising as the other causes she had advocated successfully, and which

have succeeded in the face of every difficulty. Denied a college education in 1841 in her native State one now has to consider and count the number of colleges devoted to woman exclusively, or open alike to her and to men.

Now, the question is pertinent, What conditions, mental and physical, embodied in the personality of Lucy Stone gave her such power to make unpopular truths respected? If the reader will study this face, head and temperament, he will find well set and earnest features; the face does not look pinched and thin and puny and pale, but it looks honest, firm, thorough, staunch and self-possessed. The eye is clear and steady; the face is broad outward from the nose, showing a healthy lung power and vitality. The chin is well set; the upper lip is firm and definite. The signs which physiognomy give to Friendship in the face are very strong, and also the signs of integrity, love of truth for its own sake. In phrenological language, we say, she had a good Vital temperament, the faculty of converting food into nutrition and into brain power and life; and but for a local trouble, she would probably have lived ten years longer, and an intellect such as hers, like a lighthouse on the midnight coast, would have continued a beacon for the mariners on the stormy sea of progress and reform.

Her head was broad above and about the ears, and there were in that development elements of long life, hardihood and endurance. She had a solid, substantial constitution, and a tendency to sustain it in the normal way. She appears to have had rather large Acquisitiveness, which gave her a sense of value and economy, so that whatever had value must be acquired and so administered as to be of service to somebody or something which was sentient and needful. The faculty of Destructiveness was well developed and served to awaken in her that steady strength and courage, that unwavering stability of purpose, that

special kind of moral hardihood which leads a person to think and to say, "Let justice be done though the heavens fall;" but such a person is likely to think justice will not induce heaven to fall, but rather that injustice will call down condemnation.

Secretiveness gave her a judicious way of managing affairs, and of using effectively her power and influence; truths that ought to be uttered were frankly proclaimed; those that were not yet ready for utterance she could suppress. For instance, she could conceal her discouragements; she could seem to make light of that which was not promising, and had the spirit which said "Though he slay me, yet will I trust in Him." She had perhaps as good courage as any woman that ever lived. Men would listen to her arguments and her indictments of organized public crime, and though they did not accept and follow her counsels, they would talk it over when they got away, and say, "Well, she is the pluckiest little human being I ever saw."

She had very large Benevolence, which made her generous and self-sacrificing, and was one of the reasons why she felt in respect to a cause she loved like saying, with William Lloyd Garrison, "I will not excuse; I will not equivocate; I will not retreat a single inch, and I will be heard." But the inspiration of such a declaration in him and in her would be through sympathy for people suffering a wrong. And the power to utter it would come from the strong middle lobe of the brain, Destructiveness, Combativeness and Firmness. She appears from the picture to have had strong Veneration, as well as Firmness and Benevolence. The middle line of the top head was well elevated. Her Conscientiousness was evidently strong, and she had rather large Caution. Her courage took care of her, and her Caution was exercised in considering the evils that people were suffering and

which she wished to mitigate. She was anxious and fearful for others, not for herself. She was unvarying in her friendly regard; her affections once enlisted were ever alive. She had comparatively little of mere suavity. If, from a sympathetic feeling she were led to utter a truth in a softer form than Conscience and Causality could approve, she would restate it in a way too definite and too fervent to be misunderstood.

She had a good development of Constructiveness, and that gave her a tendency to devise ways and means, to frame statements on paper or orally in such a way as to reach the right results. She would have made a good business woman if she had been devoted to trade or manufactures and to the employment of help and dealing with people at large. She would have had a good reputation for integrity, and for efficient and well directed effort. She had an inclination to systemize her work, and a good memory of what she had done, of what she wanted to do and the means by which she should accomplish the work.

Her Language was excellent; she talked well, but cared more for the strength of her utterances than for the smoothness and elegance of the diction. People who listen to a plain exposition of their faults and improprieties feel scathed and scarified by the truth, and are apt to recoil upon the speaker and say that he is a scold. Wendell Phillips was called a scold because he spoke the truth plainly as he understood it, in a very direct way; and he had a masterly power of statement, yet his language was polished and his arguments incisive. Garrison, Foster, Pillsbury, Susan B. Anthony and Lucy Stone were often so accused by such people; their themes were not popular and did not cater to a lax and guilty public conscience.

A portrait of her is before us without a cap, showing the head was high from the opening of the ears,

that Firmness was one of her strongest qualities, and her Conscientiousness is nestled up towards the center of the head working with Firmness and Self-esteem. Her Conscience did not settle down next to Cautiousness, as we sometimes find it in heads, as if Conscience were taking counsel of fear. Her question would be, "What is right? What is true? What is needful?" Her Hope was well developed and she expected success. Spirituality was not so strong. Hence she had an expectation of desired results, not so much through faith as through a consciousness that the object of pursuit was right and ought to and must finally triumph.

Another of her strong traits was Human Nature, which is shown by an elevation of the forehead just where the parting of the hair comes; the distance from the opening of the ear to that point was long; consequently she had the intuitive sense of character, motive, purpose; she appreciated an individual's personality, his integrity, his desire for truth and his disposition to be right or otherwise, and was rarely mistaken in her judgment of persons. She had Continuity strongly marked; was not inclined to drop what needed to be attended to for something else, but to follow out faithfully a line of effort that promised success, even though it were a long and weary way to reach it. Her Approbativeness worked with her Self-esteem, Firmness and Conscience. She had a desire to triumph in what she did, but had less vanity or sensitiveness of spirit in regard to the disapproval of those whom she considered to be in the wrong, and she would pity people who could not or would not see the truth as it appeared to her.

She had large Vitativeness, and therefore a strong hold on life; and few persons of her weight were able to think as earnestly and continuously or achieve results that required such tenacity of strength and endurance.

That is a wonderfully strong face,

full of vitality and vim; it looks courageous and calmly brave, yet there is not a sour expression in it. There is a cheerful confidence, a steady self-reliance, which expects success according to correct means, and that does not seek to accomplish right results by tricky methods. There are few persons whose general conversation is more clearly definite and unwavering than was hers; she talked in straight lines. There was no hypocrisy in her make-up. She had a calm, soft eye, but an honest, earnest one. Her Benevolence, Reverence, Firmness or Steadfastness were decidedly strong and she had the sublime courage of her convictions.

She had a sisterly tenderness, a motherly spirit and a strong conjugal love. Wifehood and motherhood, friendship and affection were marked characteristics, and her love of home amounted to patriotism. It was not merely the habitation where she dwelt but the state and the nation she loved and sought to benefit. Her face had a wholesome, contented, healthy look, and was singularly free from marks of age. Most people at seventy-five years of age would show lines deep and numerous.

A loving biographer, speaking of her death, says: "The gentlest and most heroic of women has passed away. A woman who, in her whole character and life, most fully embodied the highest conceptions as daughter, sister, wife, mother, friend, citizen, no longer lives to disarm prejudice and convert even opposition into advocacy. For seventy-five years Lucy Stone spent her life for others."

Stanton broke the silence at Lincoln's bedside when he had breathed his last by saying, "He now belongs to the ages."

To conclude our notice of this interesting and remarkable person we append an article by her husband, which appeared in her paper, the *Woman's Journal*, of Oct. 28th, 1893:

LUCY STONE'S LIFE WORK.

From a half century of unremitting, heroic labor, it is difficult to select. But perhaps the three most silent points in Mrs. Stone's life work were:

1. Her wonderful series of lectures, which began in 1847 on her return from Oberlin College, in the church of her brother, Rev. William B. Stone, at Gardner, Mass., and continued with unabated vigor until the birth of her daughter in 1857. This earlier work culminated in the calling of the first National Woman's Rights' Conventions ever held, the great meetings of 1850 and 1851, in Worcester, Mass. These attracted public attention throughout the entire country, and the report of the convention of 1850 inspired Mrs. John Stuart Mill to write her remarkable article in *The Westminster Review*, on the Enfranchisement of Women, which started the agitation in Great Britain, resulting in the establishment, in 1869, of municipal woman suffrage in England. The National Woman's Rights' Conventions from 1850 to 1855 were mainly organized by Lucy Stone, and their proceedings were annually published by her in pamphlet form at her own expense.

2. The calling of the convention, in 1869, in Cleveland, Ohio, which resulted in the formation of the American Woman Suffrage Association.

3. The establishment of the *Woman's Journal*, Jan. 1, 1870, in co-operation with Mrs. Mary A. Livermore as managing editor, and with William Lloyd Garrison, Mrs. Julia Ward Howe, Lucy Stone, and T. W. Higginson as editorial contributors.

In addition to these were her work during the campaigns for the woman suffrage amendments in Kansas, Vermont, Michigan, Nebraska, Colorado and Rhode Island; her participation, from 1853 on, in the annual hearings before the Legislatures of Massachusetts and other States; her active part in the preparation of the annual

meetings of the American Woman Suffrage Association for nearly twenty years; her contributions to the newspapers; her editorial writing for the *Woman's Journal* which continued until within about a month of her death; her work in the New England Woman Suffrage Association, of which she was for years the president, and in the Massachusetts Woman Suffrage Association, where she always took the laboring oar; a correspondence which extended over the whole country and taxed her strength to the utmost; and the public speaking before all sorts of gatherings,

which continued till within a few months of her death. Few realized how much speaking she did. She was in receipt of continual calls to present her special subject before women's clubs and other bodies; and even up to the last year of her life, few of the younger women in her State spoke so often on the woman question. Until her last illness she hardly knew a day of uninterrupted leisure. In addition to all this public work, she was the best of housekeepers, mothers, and wives—the presiding genius of a hospitable home, which her death has left desolate. H. B. B.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

PROF. JAMES J. MAPES.

JAMES J. MAPES was born in New York, May 29th, 1806. He was not to my knowledge a lecturer on Phrenology or a practical exponent of the science, but his name is introduced in these sketches in order to reproduce the account of a remarkable case bearing directly upon Phrenology, which occurred to a member of his family, and which confirmed his belief in the science, and made him its warm advocate and a frequent visitor to our rooms. A few biographical items concerning this highly gifted and versatile man, will, therefore, be of interest.

Mr. Mapes possessed a daring and inventive mind, and when but eight years old succeeded in the bold experiment of manufacturing gaslight. At seventeen years of age he delivered a full course of lectures in New York on military tactics, embracing a very extensive range, from the school of the soldier to the more complicated duties of the field marshal. These lectures attracted a great deal of attention. He was also very much interested in the arts and sci-

ences, even when engaged in actual business, and succeeded in painting, engraving, and drawing without undergoing the ordinary routine of discipline. He was especially devoted, however, to the study of chemistry, in which he acquired a most enviable reputation. He was appointed professor of chemistry and natural philosophy in the National Academy of Design, in which capacity he delivered one of the ablest courses of lectures on the chemistry of colors that had ever been given upon that subject.

He was also a member of the Lyceum of Natural History. On account of his acquirements and varied learning in natural history, chemistry, and other physical sciences, the honors of learned societies have been showered upon him, both at home and abroad. He was LL.D. several times over. Prof. Mapes devoted much time to mechanical philosophy, and was the first man who ever opened an office in New York as consulting engineer. His lectures before the American and Mechanics' Institutes, on mechanical phil-

osophy, chemistry, natural philosophy, etc., etc., received the most flattering encomiums from the highest sources.

As an analytical chemist he had very few superiors in this country. His analyses of beer, made at the request of the Senate of New York, and beer and wines for various temperance societies, were regarded as standard experiments. He was the first manufacturer of epsom salts from the hydrobisilicate of magnesia, and the author of many improvements in distilling, dyeing, tempering steel, etc. In 1832 he invented a new system of sugar refining, and in 1846, an apparatus for manufacturing sugar from the cane, which was adopted in Louisiana and several other Southern States, and the West India Islands. He invented a machine for tanning leather, and many other instruments and machines of a useful character which have been extensively approved and adopted.

In 1842 he became editor of the *American Repository of Arts, Sciences and Manufactures*. In 1846 he advanced his views of agriculture before the American Institute. Their novelty excited the derision of many intelligent men, and the pity of his friends. He was regarded as wild and visionary in the extreme. In the same year he removed to Newark, N. J., and located on a small farm, with the view of applying himself to agricultural chemistry. His farm became a model, and by far the most fertile and productive of any in the State. The press emphatically awarded him their highest encomiums for his extensive attainments and usefulness.

The agricultural bureau recommended by President Taylor was earnestly advocated by Prof. Mapes, and his writings upon the subject probably took the lead in suggesting the organization of such a department. He possessed great physical strength, an extraordinary amount of vitality, and a large development of the executive faculties. He was a man of great

energy; he could not remain quiet, but needed continually to be doing something. He had a very large brain, measuring nearly twenty-four inches around its base. The reasoning and inventive organs were very large; so



PROF. J. J. MAPES.

also were Imitation, Form, Size, Locality and Ideality. He originated and manufactured Mapes' Phosphates which are still manufactured by his son, and used by farmers for fertilizing purposes. To sum up his character, he possessed courage, enthusiasm, earnestness, love of liberty, self-reliance, intense ambition, ardent social feelings, uncommon mechanical ingenuity and inventive power, strong reasoning ability, great talent for imitation, excellent powers of analysis, with extraordinary capacity to remember all events as well as principles of which he had once acquired a knowledge, and with a physical constitution that sustained him under any amount of labor, physical or intellectual. It will be noticed by referring to the engraving, how strikingly Prof. Mapes' phrenological developments were in harmony with his well-known character.

The interesting case to which reference was made at the beginning of this

sketch is as follows: A daughter of Mr. Mapes fell from a window when she was about four years old. Her head struck against an iron bar, which extended from the railing to the wall, and the skull was extensively fractured, but without lacerating the pia mater or doing any serious injury to the brain. She was attended by Dr. Valentine Mott. A part of the skull, about three and a half by four inches square, was removed from the superior-posterior portion of the head; the integuments were drawn over the wound and the child recovered. The part of the skull removed was that which covered the organs of Self-esteem and Love of Approbation. She did not wear any plate over the wound, but the hair over it, like that on the other parts of the head, was fine and kept short. Immediately after the wound was closed her father was struck with the variety of movements in the brain and its great mobility during mental excitement, producing, as he said, a sensation in the hand when placed on the integuments, as if one were feeling through a silk handkerchief the motions of a confined leech. There seemed to be a drawing together, swelling out, and a vermicular kind of motion in the brain. This motion was felt in one place and became imperceptible in another, according as different impressions were made on the child's mind, but having at that time only a meager acquaintance with Phrenology, he could not describe either the feelings or the precise localities in which the movements occurred. He observed, also, that when the child's intellectual faculties were exercised the brain under the wound was drawn inwards. The most remarkable fact in this case was that previous to the accident—evidently from some mal-conformation—the girl had not manifested the intellectual powers common to children of that age, whereas, on her recovery from the physical disability she exhibited extraordinary acuteness of perception

and strength of the reflective faculties, which still continues to be the case. The sentiments were also remarkably active and susceptible. In 1839, when she was eight years old, she was visited by George Combe, (who was introduced to Prof. Mapes by Capt. S. W. Dewey, a great friend of Phrenology.) Mr. Combe gave the following account of this interesting interview:

"I found the child healthy and intelligent, with no external trace of the injury visible to the eye.

"The form of her head is that of a superior female child. It is long and moderately broad at the base; Secretiveness, Approbativeness, Self-esteem, Cautiousness, and Firmness are all large. Benevolence and Veneration are well developed, and the anterior lobe is large. I saw the pieces of the skull which had been removed; the skull has not been replaced. On applying my hand I felt the brain rising and falling with the respiration, and distinctly ascertained that the organs of Self-esteem and Love of Approbation were denuded of the skull; also a small part of Conscientiousness, and the posterior margin of Firmness.

"I kept my hand for some minutes gently pressing on the external integuments over the site of the injury and distinctly felt a considerable movement, a swelling up and pulsation in the organs of Self-esteem, and the same movements, but in a less degree, in those of Love of Approbation. When I began to talk to the child, she was shy and bashful, and at first would scarcely speak. The vivid movements in Self-esteem indicated that amidst her extreme bashfulness this organ was active. As I continued to converse with her, and succeeded in putting her at her ease, the movements in Self-esteem decreased, while those in Approbativeness continued. I spoke to her about her lessons and attainments, not in flattering terms, but with the design of exciting Self-

esteem; and the movements increased. Again I soothed her, and they diminished. This was repeated, and the same results ensued. Her father gave her several questions in mental arithmetic to solve; she was puzzled, and made an intellectual effort, and the peculiar movements in the organs of Self-esteem and Approbativeness ceased, only a gentle and equal pulsation was felt. She solved the question, and we praised her; the peculiar movements in Self-esteem and Approbativeness returned and increased. This experiment was repeated at least four times, with the same results. I took out a piece of paper and began to write down notes, in pencil, of what had occurred. She looked at my writing, and as all attention was now withdrawn from herself, and her mind was occupied intellectually in observing what I was doing, I placed my hand on the integuments and only the gentle and regular pulsations of the arterial system were perceptible. This case is replete with instruction in practical education. It tends, so far as one example can go, to prove that, by exercising the intellectual faculties, we do

not necessarily excite the feelings; and also that each feeling must be addressed by objects related to itself before it can be called into action."

It is quite apparent in this case, that the faculties, whose cerebral organs were situated directly beneath the cranial fracture, were mostly affected by the accident, and also that the cause of mental dullness, previous to that circumstance, was attributable to the pressure of the skull on the brain. This is found to be no very uncommon circumstance. Numerous instances of a similar nature are recorded in the medical books. The agitation of the brain on excitement of the mind was illustrated by a case of Sir Astley Cooper's in which the brain being exposed, and the patient made to exercise his mind powerfully, the brain was protruded by the mental effort some lines above the skull, but receded on the relaxation of the mental activity. These facts possess peculiar interest, as connected with Phrenology, in throwing additional light upon the functions of the brain and its relations to the cranium.

ALUMNI ANNUAL MEETING.

After the graduating exercises of the class of '93, there was a meeting of the Alumni Association, the President, M. J. Richardson, of '70, presiding. After the reading of the minutes of the last annual meeting and the Treasurer's report, and a general presentation of the objects of the association, the following were admitted into membership: Matt. W. Alderson, '75; H. J. Olney, '75; Fred. W. Perkins, '89; U. T. Brenz, '92; Edgar C. Beall, M.D., '77; C. C. Martin, '80; Wm. Musgrove, '75; C. F. Sermin, '91; and the following from the class of '93: F. M. Cooper, M.D.; Prof. W. S. Bell, Wm. Jackson, J. W. Foster, J. J. Axtell, P. L. Conklin, C. H. Jones, Wm. Welsh and John Dykes.

The following were elected as officers for the coming year: Chas. E. Cady, of '85, President; C. W. Brandenburg, M.D., of '89, Vice-President; Albert Turner, of '91, Secretary and Treasurer. One Vice-President from each class represented in the membership as follows: Wm. Jackson of '93, Geo. Markley of '92, Jules Buchel of '91, Mrs. L. Bausch of '90, H. T. Estabrook of '89, J. B. Harris of '88, Albert Bausch of '87, Miss M. L. Moran of '85, Miss M. E. Herrick of '84; Samuel Groh of '81. Committee on Ways and Means, M. T. Richardson, Dr. Edgar C. Beall and Dr. C. W. Brandenburg.

The executive committee have not yet announced the working com-

mittee. The scientific meetings held under the auspices of the working committee are referred to on another page and show something of the work that is being done by this association.

Alumni meetings under the auspices of the working committee of the Alumni Association of the American Institute of Phrenology were held Monday afternoon, Oct. 30th, when the following papers were presented: "Phrenology in Schools and Colleges," by G. H. Greer of California; "Phrenology and Insanity," by Dr. H. A. Buttolph of New Jersey; and "Phrenology in the Ministry," by the Rev. N. F. Douglass of Iowa. Following these papers there was an animated discussion, especially in relation to the paper by Mr. Greer, and many strong points were brought out. At

the evening session, Dr. H. S. Drayton read a paper on "The Brain of Woman Relatively"; Bernard Hollander, on "The Centres of Musculation Against Ideation"; and Dr. Edgar C. Beall, on "The Faculty of Human Nature." These were also discussed. The paper by Dr. Drayton attracted a great deal of attention, and called out many ideas and suggestions.

These meetings have come to be a very important feature of Phrenological work, and are attended by large audiences. A summary of the papers may be expected in future numbers of the JOURNAL. It is hoped that the Association will take steps to secure the regular publication of the papers presented and the discussions which follow.

CHILD CULTURE.

CRYING AS A SYMPTOM OF DISEASE.

TO tell the nature of a young child's ailment is not always easy even for the most experienced physician. Sometimes it is quite impossible to make the necessary examination, especially if the malady involves the glands and muscles of the mouth and neck. In the crying of sick children, however, there are many peculiarities which when differentiated lead to correct conclusions. Dr. Hill, a Canadian physician gives some points of value in this regard that will assist a parent who may be compelled to depend upon herself for at least the early care of her baby.

In pneumonia and capillary bronchitis the cry is moderate and peevish and muffled as if the door were shut between child and hearer. The cry of croup is hoarse, brassy, and metallic, with a crowing inspiration. That of cerebral disease, particularly hydrocephalus, is short, sharp, shrill, and

solitary. Marasmus and tubercular peritonitis are manifested by moaning and wailing. Obstinate, passionate, and long-continued crying tells of earache, thirst, hunger, original meanness or the pricking of a pin. The pleuritic cry is louder and shriller than the pneumonic, and is evoked by moving the child, or on coughing. The cry of intestinal ailments is often accompanied by wriggling and writhing before defecation, an indication that the nurse soon learns to interpret. Exhaustion is manifested with a whine. Crying only, or just after coughing, indicates pain caused by the act. The return or inspiratory part of the cry grows weaker toward the fatal end of all disease, while the absence of crying during disease is often of graver import than its presence, as it shows exhaustion and loss of power. Loud, intense screaming sometimes tells of gravel.

THE ORISSA TWINS.

THE introduction of the famous Siamese Twins to the public was attended with great surprise and curiosity. But since then there have been several examples of twins united by bands of flesh or bone that rendered them inseparable by any device known to surgery. Everybody has seen the colored girls who sing and dance, and that double-headed boy wonder that walks on but one pair of legs. Recently a fresh instance of conjoined duality has come to notice. They are the Orissa Twins, having been born in that part of India. They are girls and are named Radica and Doddica, now being about four years old. Unlike the Siamese and colored twins they are attached breast to breast, by bone and intestinal connection. So that if food be given to one the other is satisfied, and if medicine is administered to one the other is affected, but not to the same extent as the one to which it was given. The most curious circumstance is that when a sentence is begun by one child the other frequently finishes it. When sleeping, one child lies on her back and the other on her side, which gives an idea of the great flexibility of the connection.

The children seldom quarrel, but when younger their proceedings were not marked by that agreement which they have since learned to be essential to their circumstances. As might be expected, when their relations became strained there was considerable tension between them, but when it gradually dawned upon their

growing intelligences that when one was hurt the other had to cry out of sheer sympathy, a mutual understanding was arrived at that "rows" should be discontinued, and now balmy peace reigns supreme. They have been taught English and, although they do not speak it freely as yet,



THE ORISSA TWINS.

they seem to understand it fairly well.

It is likely that the children will be taken on a tour through America, so that the public may see this interesting freak of nature.

TRAINING THE FEEBLE MIND IN LONDON.

THE London School Board has instituted classes for the special instruction of children, incapable by reason of physical or mental infirmity of being taught in the ordinary elementary day school. Two hundred and sixty-five children, selected mostly from those attending the ordinary schools, have been under this special instruction, and the results have been gratifying and encouraging.

The *Journal of Mental Science* expresses interest in the project, and refers to it as follows: "The system of teaching adopted follows somewhat on the lines of that found serviceable in institutions for imbeciles, sense, culture, manual training, and above all the development by enticing methods of the faculty of attention, forming important items. Lessons are brief and of a practical character, and the afternoons are devoted chiefly to manual occupations, such as modeling in clay, weaving in papers and cane, macramé work and needlework, great care being taken that these occupations shall not develop into a mere mechanical process, but each have a definite object to be reached. Lessons in articulation and in gymnastic exercises are of frequent occurrence." Mrs. Burgwin, the superintendent of these classes, says as to the result of the teaching: "Some of the pupils after the government examination will be able to return to the ordinary day school, whilst others will have to be excluded from the classes, having proved themselves incapable of making progress in any branch of work. These can only be classed as imbeciles." In regard to the pupils, she states "many of them are untruthful, in fact seem utterly devoid of conscience, and a great deal of time is spent in inculcating the virtue of truth and honesty in word and deed. While a few are gentle (often through feebleness) many are very spiteful,

and discipline is a source of much anxiety." The morning session is devoted to Scripture teaching, the three R's, drawing, with play, singing, gymnastic exercises, each lesson occupying about twenty minutes.

CITY LIFE AND EYE DEFECTS.

IT is satisfactory, a writer in the *Spectator* says, to be told that in England blindness is slowly declining, though Great Britain still stands in this respect behind two other European countries and three more come before Ireland. Short-sightedness, however, appears to be increasing everywhere, Germany having a signal and sinister pre-eminence in this respect. A French doctor has noted the remarkable fact that wild beasts caught when quite young or born in captivity become short-sighted, the conclusion being that the eye adapts itself to its habitual sphere of vision, and unless educated to see objects at a distance, loses the capacity of so doing. Even in after life, the eye may be to some extent so educated though probably only when the myopia is not considerable. It is within the experience of the present writer that his sight greatly improved in days gone by, when he became a volunteer, by practice at the butts, so that while at first he could not see the target to shoot at, without spectacles, at the three-hundred-yard range, after a twelve-month or so he only needed to put on spectacles at four hundred yards. But beyond that range he was never able to dispense with them. Country excursions are therefore extremely valuable means of strengthening the sight of town-bred children, and the conductors of such excursions should take pains to direct the eyes of the children to distant objects, to the farthest hill, church tower or other landmark, noting if possible any incapacity to discern the selected object, and then selecting some nearer one for the weaker-sighted.

THE SCIENCE OF HEALTH

MEDICINE OR NATURE.

TO one who with some knowledge of physiology and pathology studies disease in a careful, unprejudiced manner, much uncertainty will occur as to whether it is the medicine that cures or nature. Years ago the great M. D.'s administered large doses of powerful drugs, insisting that such a method was necessary to get the desired effect. Today the enlightened and progressive physician is found prescribing very small and even infinitesimal doses of the same drugs, and claiming to get results that the old doctor scarcely dreamed of. Then, too, the modern therapist often counsels good nursing and good hygiene or the entire disuse of any internal medication, and that in cases which appear grave.

It is beyond question that in many forms of serious disease, the fevers notably, that modern treatment is vastly superior to the old, since the ratio of fatality is far below that of a generation ago. The question naturally arises: Is this improvement due to the advanced hygiene of our time or to the change of medical treatment? Or is it due to a combination of both advances. If it is proper to affirm the last inquiry, it becomes expedient to ask: How much of the improvement is to be credited to the account of hygiene, and how much to the account of the "remedies" for whose preparation the aid of the pharmacist is called?

While we may not be able to set down in determinate numbers the part that hygiene plays in limiting disease or curing the sick, we know that its influence is very important. Free ventilation, cleanliness, nutri-

tious food, sunshine, kind, cheerful, intelligent attendance—one would scarcely set bounds to what they may accomplish remedially as well as preventively. We know that clean streets and clean houses do not invite contagion, and that the temperate and careful endure exposure to ordinary causes of disease without harm, when the intemperate and negligent in like circumstance would be stricken down. The appearance and disappearance of yellow fever, cholera, smallpox and other contagious diseases are matters of sanitary inquiry, and condemn or approve the management of health boards.

Turning now to the part played by the formulæ of the doctor in curing the sick we find ourselves involved at the beginning of an inquiry by many uncertainties. Foremost among these is the prevalent, if unacknowledged, ignorance of the profession in regard to the process by which so-called "remedies" act upon organ and function, and where the line should be set to separate benign effects from pathological. Recognizing the poisonous qualities of these "remedies," the small dose would appear to commend itself as eminently judicious, and by repetition likely to be "cumulative" in effect, but who possesses that scientific positiveness to say even after an inspection of the patient how many tablets or drops will be "cumulative." Further, who could assume that infallibility which may declare whether or not the effect so "cumulative" would be unattended by injurious results?

Let us take for an illustration the sulphate of quinia, a drug the opera-

tion of which is as well ascertained, certainly, as that of any known medication. Its special property appears to be to antagonize the return of periodical fever. But in what way does it accomplish this? How does its essential virtue affect the organism—and what part of the organism—to interfere with the febrile genesis? One authority tells us that it is by certain chemical changes which it induces that the malarial, or what not, poison in the blood is neutralized. Another authority regards quinia as possessing an anti-periodic virtue in itself that adapts it to certain forms of febrile attack. Again, there is authority for the view that quinia is a tonic of no mean power, and very serviceable in conditions of debility, whether of a nervous or assimilative nature. Through the tonic action the system is invigorated so that it may overcome and destroy disease germs.

One would think from the very extensive use of quinia by physicians of different schools that it was almost a panacea for all sorts of maladies, periodic, continued, occasional, acute and chronic. And yet we find those who most frequently dose themselves with this cheap and accessible remedy to be more or less complaining of the ills it is supposed to cure. Further we know that notwithstanding its position before the medical world as one of the "remedies" best understood it may be productive of serious local or constitutional disorder, and instead of having a curative effect may precipitate a crisis of dangerous nature. In those sections of the South and West, where this drug is in very common use, the "malarial" subjects exhibit a variety of symptoms more or less uncomfortable that are traceable to its poisonous effects.

The writer, when a boy, had a severe attack of intermittent fever, and was heavily dosed with solutions of quinia, the effect of which was to depress him greatly without stopping the recurrences of the fever at all.

The physician in attendance persisted with the quinia until the symptoms of exhaustion forced the conviction that the medicine had been making matters worse.

Now if the operation, physiologically or pathologically, of sulphate of quinia were roughly known it is clear enough that physicians would not use it so generally, *i. e.*, so experimentally, and would have better results to show for its employment.

Other old and standard medicines might be considered in a similar vein. To them virtues many and various are attributed, and yet they are found wanting when their vaunted potencies are most required. Take up any much-circulated medical weekly or monthly, and numerous advertisements and "provings" are seen on the fly leaves, and setting forth in the reading matter the remarkable effects of new preparations or new combinations of old familiar remedies. But what of the real history of these "new remedies?" They come in with a flourish of type, with the names of certain M. D.'s, who say that they have found their exhibition in this or that malady to have quite met the promise of the manufacturer, and that they merit the consideration of the profession at large, but a little later they go out quietly, unobtrusively, like the poetized Arab, and nobody seems even to wonder at the disappearance. Strange incongruity of business and professional medication! If a fraction of these compositions had the virtues ascribed to them certainly there would not be a tithe of the sickness that exists among our population.

Consider for a moment the differences of opinion among physicians with regard to that large class of defervescent of which antipyrene is representative. Some declare that they are of great assistance and do the work that is claimed for them. Others as firmly insist that they do not obtain good effects with them, but on the contrary, that they affect the

vital functions injuriously, and are not only unsafe but dangerous. The reader can recall the *grippe* epidemic of three years ago when antipyrine was extensively used, and the cause, it was claimed, of a large proportion of the fatality occurring at the time or following the epidemic invasion. To-day not a tenth part of antipyrine is used that was the case a year or so ago.

There is no limit to the range of suggested remedies for, say, pneumonia, or rheumatism, and yet how small the ratio of cures in this day of boasted scientific progress is to be credited to *secundum artem*. Take the report of the health authorities of New York for 1892 and it will be noted that of about 44,500 deaths those due

to zymotic diseases were nearly 9,300—over twenty percentum—while diphtheria destroyed over 1,800, and “local” diseases, so called, carried off 21,500. From the same source we have it that the latest returns show an increase of typhoid fever in the State at large with a greater fatality, and also a marked increase of diphtheria and allied affections in country towns. These reports substantially tell the same story of the inefficiency of medicaments after years of trial, and that to obtain success in the management of disease hygienic methods well understood and intelligently applied are the only sure resource of the physician.

H. S. D.

(To be continued.)

SUGGESTIONS OF CAUSE IN HEADACHE.

IN the course of a discussion of the causes and remedies relating to headache, a medical critic says:

Persons who are subject to rheumatism occasionally have headaches which are attributable to that disease. The pain in rheumatic headache, as a rule, is quite extensive, and felt over much of the head. It is sometimes heavy and aching; again, it is sharp and shooting. Occasionally the pain is confined almost entirely to the forehead or temples. In such cases it is assumed by some authorities that the muscles of the eyes are specially involved by the rheumatism. There is nothing in rheumatic headaches which clearly indicates their actual cause, but if the pain is associated with tenderness or soreness of the scalp and the headaches are worse at night, and come on in weather which is popularly termed “rheumaticky,” then it is pretty safe to assume that the victim has a rheumatic taint which is responsible for them. One writer tells of an interesting case, that of a sculptor, who was about to abandon his profession on account of excessive,

intractable headaches. The physician in question found that the headaches occurred only during the time when the artist was working upon the model in wet clay of a large composite life-size group. He therefore resorted to anti-rheumatic treatment and the results were eminently satisfactory.

Gouty subjects also suffer at times from headaches, which are generally worse in the morning. The pain felt is usually dull and heavy, and not very intense, but in some cases it is really agonizing. It is doubtful if gout alone can cause these headaches. The most of the subjects of it are very full-blooded. They also suffer from digestive and other disturbances.

In diseases of the kidneys, when those organs have become involved to such an extent that they are unable to do their work properly, certain poisons, which they should separate from the blood and throw out of the system, are allowed to remain in it. Headache is one of the indications of their retention. It takes on many different forms, but in a large propor-

tion of cases it is limited to the forehead, and patients describe the pain as a feeling of tightness, as though a tight band was tied around the head.

Indigestion, biliousness and constipation are conditions which very frequently give rise to headache. In just what way they act to produce the result is not known, but it is quite safe to assume that in consequence of these conditions poisonous matters are often absorbed from the stomach and bowels, and they more or less upset the general nervous system and the brain. Headache due to these causes is usually frontal, but it may be general. Dr. Brunton has made a close study of headaches of this class, and found that in constipation the pain affects the entire forehead, from the edge of the scalp to the eyebrows. In cases of headache higher up on the forehead, and just below or at the commencement of the scalp, he found, where constipation did not exist, that there was almost always a form of dyspepsia suffered from which called for the use of alkalies. Whereas, if the pain was located below this area—below the middle of the forehead—dyspepsia existed, which demanded the use of acids. When poisons are absorbed from the stomach and bowels, as has already been stated must often be the case, there is usually a tendency to giddiness, often some trouble with the eyesight, and almost always a depression of the spirits.

Among the common causes of headache brain exhaustion must have a prominent place. Brain work may bring it on, but where frequent headaches due to these causes are suffered from, there is usually lack of nerve strength—a certain amount of nervous debility. In such cases severe mental effort, or the giving way to powerful mental emotions, is quite certain to be followed by headache. In this form the pain is dull and heavy, and seems to be deep seated. It may, of course, be slight or very intense. The headache of brain ex-

haustion is quite generally associated with insomnia.

There are many other forms of headaches, but a consideration of them altogether, with their causes, would fill a volume. One fact, which must now be clear to the reader, is that headache, a symptom as it is of so many morbid states of the system, and dependent upon so many different causes, is an affection not always easy to treat. Sufferers from it, as a rule, when they consult physicians expect immediate relief, and if it does not come they are quite sure to vote their advisers incompetent. As long as its cause remains it is but natural to expect that the affection itself will persist.

CRIMINAL SUGGESTION IN EVERY DAY LIFE.

IN the *Arena* is a very practical, suggestive paper on "The Psychology of Crime," in which the responsibility of the daily press is earnestly urged. The author, Mr. Henry Wood, says: "Society concerns itself considerably with the punishment of crime, but very little with its prevention. The punishment for overt criminality is conventionally supposed to act as a powerful deterrent, but it has only a limited power in that direction. It is important that there should be an intelligent and general knowledge of the constructive process through which criminals are made. They do not come by chance, but grow, and their growth is through suggestion. The immediate psychical impulse which proceeds the overt act is but one link in a chain which reaches back indefinitely. The luxury and artificialism of our modern civilization, the struggle for wealth and social position, the pursuit of sensuous gratification—all of these are powerful factors which disintegrate character, obscure high ideals, and bring disorder and abnormality into overt manifestation. But perhaps a more

potent element of demoralization than any of those above enumerated is found in the deluge of delineated criminality and other morbid reading matter in which the community mentally dwells, the malaria of which it is constantly inhaling. This great unceasing supply of unsound mental pabulum comes in the forms of offensive sensationalism in the daily press, flashy illustrated weeklies and the cheap 'blood and thunder' fiction which is devoured in unlimited quantities by young and immature minds. The world is full of 'suggestion' of every quality. That which is distinctively classed as hypnotic is in quantity but a drop in the bucket when compared with the everyday variety. Society in general is responsible for its criminality. Its criminals are not detached units on the outside but rather eruptions from within. The circulation of the body politic is impure. The modern 'daily' possesses a gigantic

power to mould and color public consciousness. The purveyors of the daily press cannot be expected to be disinterested philanthropists more than other men though their power and responsibility are great. A majority of readers want sensationalism and supply responds to demand. The main hope for reform must begin with the public or on the side of demand. The great need is a more intelligent understanding of the psychological laws of suggestion and subjective realism as causative forces. Results can only be modified through internal and underlying antecedents and not by mere external repression. The scientific way to destroy evil is not to hold it up and analyze it in order to make it hateful but rather to put it out of the consciousness. To the degree that one does not see it, to him it becomes non-existent, because there is nothing to arouse its vibrations within."

DIET AND APPENDICITIS.

SO many operations have been performed within the past five or six years by American surgeons for the relief of people suffering from that serious malady, inflammation of the vermiform appendix, and so many deaths have been attributed to the same cause that an inquiry into the relations of diet to the disease has been considered very pertinent. It had been the common idea that disease of the appendix must be set up by some foreign body of an insoluble nature getting into it, as into a trap, and once there it could not get out, of course, and so made trouble. But it has been shown by the many cases that have come under the surgeon's observation that the disease is oftener set up by other causes, especially that of the extension of an inflammatory process from the ileo-coecal region into the superfluous appendix.

It has been found latterly that diet

plays a not inconspicuous part in the production of the trouble, and it is well for the public to know that immunity appears to lie in the adoption of a diet that is almost entirely vegetarian in its constitution. A physician in Japan has recently written to the *Medical News* with reference to the matter, and we quote from his letter:

"I have been in the habit of taking quite a different view from the ethnologic one of the immunity to appendicitis. It seems to me that the diet has very much to do with it; temperance in eating, aseptic hot water (Japanese tea is drunk continually), vegetable diet (Japanese eat rice in enormous quantities, as all the world knows), absence of meat diet (almost absolute in Japan), with its ptomaines and leucomaines, may be, after all, the cause, though indirectly, of the absence of appendicitis in Japan.

A vegetable diet necessitates a large extent of intestine, and this extraordinary intestinal length belongs to the Japanese. The following passage from one of Dr. Scheube's articles will, I think, be interesting in this connection: 'In my "Remarks on Japanese Diet," I said that very probably the rice is better used up in the intestine of the Japanese than in that of the European, and I expressed a surmise that the Japanese intestine must be the longer of the two. I had before me, at that time, one single measurement,—that of the intestine of an adult Japanese. The total length of the intestine amounted, in this sample, to 995.5, of which 183 belonged to the large intestine. The length of the body itself was 156.5.'"

The result of comparative measurements appears to show that the absolute length of the intestine is greater in the Japanese than in the European. But the writer has a theory which we will permit him to ventilate.

"I must add here a few words explanatory of the manner in which, to my mind, the effect of the vegetable diet is produced. The vegetable or graniferous diet is gaseous. The gases, inflating the intestine, prevent the impaction of the appendix vermiformis.

"But, however it may be explained, the fact remains that those people among us whose fare is of the plainest and least concentrated (which is the nearest approach to pure vegetation diet) are as exempt from appendicitis as any Japanese could be. The disease chooses for its victims only the highly fed, the great meat eaters, wine bibbers, and those that keep the blood in that plastic and consequently inflammable state which a meat diet naturally produces.

"Therefore, let any one who has suffered from a first onslaught of appendicitis betake himself to a diet of hot water (omitting the spirit) and vegetables, and taboo the meat."

NOTES IN ANTHROPOLOGY.

Egyptian Chemistry.—The following notes on ancient chemical apparatus and laboratories are taken from an abstract of the transactions of the New York Academy of Sciences, published in the *Popular Science News*. The Egyptians attained great skill in industrial arts at a remote period and have left records of a most enduring character, pictures cut in their granite tombs and temples. There we see the processes of gold-washing and smelting; the use of blow-pipes and of double bellows for intensifying heat, various forms of furnaces, and crucibles having a shape quite similar to those used to-day. Some of these crucibles, preserved in the Berlin Museum, date from the Fifteenth Century, B. C. The skill of the Egyptians in manufacturing glass is depicted on monuments of Thebis and Bemi Hassan and dates as far back as 2500 B. C. Siphons for decanting wine and on a large scale for draining land were in use in the Fifteenth Century, B. C.

The earliest chemical laboratories of which we have any knowledge are those that were connected with the Egyptian temples. Each temple had its library and its laboratory commonly situated in a definite part of the huge structure. In these laboratories the priests prepared the incense, oils and other substances used in the temple services, and on the granite walls were carved the recipes and processes. The Israelites driven out of Egypt carried with them knowledge of the technical and artistic skill of their contemporaries, and in the Bible are frequent allusions to industrial arts. Cupillation and the bellows are described by Jeremiah, and metallurgical operations by Job, Ezekiel and others. Giber, the Arabian physician and chemist of the eighth century, wrote very plainly of chemical processes, describing minutely solution, filtration, crystalization, fusion, sublimation, distillation, cupillation, and various kinds of furnaces and apparatus

employed in those operations. Giber describes in detail the aludel (or sublimatory of glass), the decensory apparatus for filtration, and the water bath. This latter instrument, however, is said to have a more remote origin, having been invented by an alchemist named Mary, who is identified with Miriam, the sister of Moses. The balance as an instrument of precision reached a high development under the Arabians as early as the twelfth century. In an interior view of a laboratory of the fifteenth century by Vriese, very sumptuous appointments are seen; a lofty room with tiled floor, furnaces on the right under an overhanging hood, an altar on the left, before which the alchemist prays on his knees; in the centre a table covered with apparatus, books and musical instruments; in the foreground an alembic, overhead a lamp swinging from a ceiled roof. The whole indicates wealth and luxury, and contrasts strongly with later pictures of the laboratories of impoverished alchemists.

Recent Discoveries of Skulls in Egypt and Greece.—Last year, before the British Association, some skulls were exhibited and described which were of men said to have lived six thousand years ago. They were brought by Mr. Flinders Petrie from Egypt and taken from tombs of the third or fourth dynasty. They were rather dolichocephalic—about 75—and from the general relations of the skeleton, belonged to a somewhat undersized race, with negroid characteristics. They may have been slaves or a mixed strain. Not less interesting is the description recently given by Professor Virchow of some Greek skulls of ancient date. One of them, from Menidi, was believed by its finder to be that of the great classical dramatist, Sophokles. The oldest were from Mykene, Sparta, and Namplia, and were prehistoric. They were all slightly brachycephalic, orthognathic, with the nose rather broad. The grave of Sophokles is believed, on a certain amount of literary evidence, to have been on the road from Acharnai, the modern Menidi, to Dekeleia, about eleven stadia from the latter. Following this close, the archæologist, Winter, opened a tumulus at this point and came upon a stone wall enclosing

four sarcophagi, two of marble, each containing a male skeleton. One of these was of a very old man with a cane by his side, an alabaster vase, etc. Sophokles died at ninety years of age, in B. C. 406, so the character of skull as that of a very old man corresponds. It proves on examination to be long, 73.3, with a remarkable irregularity between the right and left hemispheres, the left temporal sutures nearly obliterated, the forehead broad, the face narrow and high and slightly prognathic, the nose narrow, the capacity about 1,340 c. c. Possibly it is the very skull of the old poet.—DR. D. G. BRINTON in *Science*.

The Mound-Builders.—The Mound-builders, those interesting pre-historic people, about whom are so many speculations and so little satisfactory knowledge, are the subject of an interesting paper by T. L. Gaertnor, L. L. B., in the *American Antiquarian*, from which the following extract is taken: "The Mound-builders may have lived during the disturbing epoch (after the glacial period) to the south of the glacial region, and followed up the retreating sea of ice until they reached the chain of the Great Lakes, gradually extending their dominion northward even as far as Michigan and Wisconsin, making at the time only two classes of people and two types of aboriginal life. It is supposed that at some time subsequent to the glacial period, and perhaps quite late in the pre-historic age, they were met by the race of hunter Indians, who had crowded in between the ice regions and the Great Lakes, and for a long time occupied the forests of the North. During this time the Mound-builders were given to agriculture and were not warlike, but lived peaceably in their established settlements and built their villages in the fertile valleys of the Ohio and Mississippi rivers. By some these Mound-builders have been closely identified as a people resembling if not related to one of the ancient Mexican races, the Nahnas, whose origin is said to have been at the East and their migration to the West. From the Indian legends we get a scant and of course not perfectly trustworthy account of this ancient race. It is noteworthy that this tradition does not claim the Mound-builders to have

been the Indians' progenitors, but on the contrary pronounce them a distinct race of people from the Indians. The ancient tradition of the Delawares says that the Mound-builders were a great nation and had many forts and temples, and they called themselves Allegewi. So the Delawares gave to the stream which marked the eastern boundary of the strange race the name of Allegewi-hanne (hanne meaning stream) and to-day we have perpetuated the name of this mysterious race and perhaps the oldest of American words—Allegheny. But we have gone one step farther and adduce evidence showing that the ancient Nahnas afterwards became incorporated with the more ancient Mayas, though they dwelt in the land of the Mound-builders, the Nahna exodus from the Mound-builders' realm having taken place about the year A.D. 241. A considerable degree of contrast can be recognized in the skulls which have been found between the Mound-builders and the American Indians. The skulls of the former show a much fuller development. A remarkable feature is the hyrid, or tongue bone, which is differently shaped from that of any known human race. If we follow the explorations southward we find a constant increase in the size and conformation of the crania of the Mound-builders until we find near the Gulf of Mexico that the race had reached the zenith of its civilization. Judging from their remains the Mound-builders had achieved a considerable degree of civilization before they were overcome by their enemies. They probably devoted a greater part of their time to agriculture and to the construction of their temples (mounds). They also erected fortresses which were used for the protection of their people against the predatory warfare of hostile tribes or even, it may be, against the incursions made by other Mound-builders."

Remains of Early Indian Pottery.—In an article on Indian Relics, in *Science*, attention is called to the fact that it was customary among the Indians to visit the seashore at certain times of the year, as evidenced by the enormous quantities of shells in heaps found along the

shore, which also bear witness to the Indian's fondness for oysters, clams and mollusks. Special mention is also made of the remains of what must have been large, permanent villages in South Jersey. The author, Mr. Gifford, of Swarthmore College, says: "Of all they have left behind them sherds are the most abundant, and fortunately most valuable. Pottery is an unmistakable evidence of man. Natural formations simulate his handiwork, but pottery, no matter how coarse, is a sure sign of human habitation. It marks best the progress of culture, since that was one of the first, the most lasting, and the easiest method of expressing his artistic fancies. The mud pie was the germ of art. The culture of a people is often too quickly judged by the coarse sherds which cover almost every campsite. They made common vessels for common purposes. With the distinction of vessels began the separation of artist and artisan. We must measure ability, therefore, by the finest specimens found. No whole pots have, to my knowledge, been found in South Jersey, but from the curvature of the bits some of them were of very large size. Some of the shreds are not decorated at all, others show signs of more artistic ability than is usually credited to the Indians. The majority are soft, coarse; and mixed with bits of quartz. Some are hard and fine. Some contain holes near the rim for a bail, indicating that they carried their vessels in their hands and not on their heads. They vary in color owing to the nature of the clay. Some have peculiarly ruffled surfaces due to the kinds of moulds in which they were formed. The majority were moulded in baskets of grass. Some are ornamented with straight lines and dots, others with curved lines and dots in curves. The simplest decoration is a dented edge. Lines often cross each other to form square and diamond figures. The top is often fringed with highly decorative bands. Many of the markings simulate the tracks of animals, and on one potsherd is a picture of a human hand beside another hand in the act of gesturing. Some of these are covered with what a potter would no doubt call "slip," that is, a very fine clay mixed to the consistency of cream.



*Ex fronte, ex capite, ex vultu, etiam
in ipso oris silentio natura loquitur.*

PLATO.

NEW YORK,

January, 1894.

A HALT DEMANDED IN COLLEGE ATHLETICS.

IT would appear from the public exhibitions of the past five or more years that colleges and universities in this country are run for the purpose of training young men for physical encounters in public rather than for intellectual careers. In fine the reputation of an institution, however old, seems to depend upon the success of the boat or ball clubs organized by its students in contests with similar clubs of other institutions. No sooner does the Fall term open than boat races, ball matches, etc., are the chief topic of social and newspaper talk, the merits and probabilities of this team and that being canvassed according to the rules of the sporting calendar.

The spirit of contest and rivalry has been carried so far that we are reminded of the Roman Amphitheatre, and are inclined to wonder whether or not at this late period of Christian civilization American society is to tolerate a sort of revival of those old brutal struggles for muscular superiority.

The average college student appears to regard the old-fashioned games with their elements of healthful fun, as too passive or tame, and zealously advocates those new forms of "sport" that involve positive features of danger to life. The latest outcome of football, as everybody knows, is a veritable battle in which two well-trained companies of young men violently and, as it would appear from the exhibitions of conduct in every match, desperately struggle to accomplish those things that will *score* in their favor.

The New York *Tribune* describes the appearance of a defeated team in a recent fight—no, we meant "match"—as follows:

"About the entrance to the hotel were perhaps five hundred people waiting to see what a defeated Yale team looked like. And they saw.

"But they never saw a more woe-begone, used-up, pale-faced, bruised and bloodied lot of respectable, healthy, sane young men before. One by one the players crawled down off the coach and passed into the hotel through the alley made by the police through the crowd. Two of the players had to be helped, half carried, by substitutes. The men had come directly from the field, and were in their battle clothes. Their faces were muddy and marked with bloody streaks; their sweaters were stained and reddened, their heads a mass of tangled hair. In their dilapidated condition, marked with defeat, they did not look the strong, powerful young giants that had driven away from the hotel so full of confidence, and sure of victory, earlier in the day."

These "young giants," we suppose,

had been sent to college by their friends to pursue a course of mental training that would prepare them for the serious work of life, but as it would appear that the necessary exercise and discipline to adapt the football player for the "slugging" that is an accompaniment of the game (and makes it so interesting to the thousands who attend the matches), occupies the greater part of the player's time, they must neglect the training of their minds for the sake of their muscles.

We must confess surprise that old institutions like Yale, Harvard, Princeton, etc., tolerate this kind of thing. Certainly true honor is not reflected by athletic contests that involve as football does, permanent damage to the participants, and even loss of life. Further, there are the side associations of gambling and rowdy conduct that are usually a matter of comment by the press reporter on the occasion of a "great" game. The immature and over-excited college boys and their friends are found giving way to betting and to excesses—of drinking, and rough mirth—to the disgust of quiet, refined people. The ordinary life of a young man in any active sphere that may open to him involves quite enough of effort and strength against influences that are morally vitiating, so that practices associated with his school and college career that relax moral fibre are contrary to the principles of true education. College authorities cannot be blind to the disgraceful doings that have become so common, and if they do not soon take some decided steps toward correcting the flagrant abuses that now seriously mar student athletics, the standing of

institutions we have been accustomed to venerate will be impaired for scholarship and dignity.

THE MORAL INFLUENCE OF PLACE.

ONE of the chief features of that education which has most to do with the development of brain and mind is the house and home in which a child lives. Next to the influence of parentage this particular of environment may be said to wield the greatest influence upon the moral nature. We have been discussing the necessity of an education, directed with special reference to the training of the higher sentiments, and have indicated with some definiteness, we trust, the method that should be pursued in such training, that it may be normal, *i. e.*, in accordance with the organic constitution, and so productive of that poise and harmony of character that are fundamental to stable manhood.

The purpose of the writer in urging his views thus far upon the reader's consideration is to persuade him that moral education should be as much a matter of systematic pursuance as intellectual or physical training, and that because of its neglect society is responsible for the corrupt and vicious practices that abound in all walks of life.

We have stated at some time that the inculcation of good habits with reference to personal hygiene and one's immediate environment should be regarded as fundamental, since the order or disorder, the thrift or squalor of the home reflect a moral quality that becomes absorbed by the

child nature, and tinctures its after expression.

Life whether physical or mental is based upon food, air, warmth, shelter, and its quality has a certain and positive relation to the character of the food eaten, the air breathed, the shelter possessed. These factors of life's basis can not be put out of view in any rational consideration of moral development, so that it is essential for us to take a realizing look at the social and domestic condition of the individual from sanitary and hygienic points of view.

The vicious and criminal classes are found congregated in districts of town or city that are more closely populated than other parts, where poorly built and more or less decayed tenements hem in ill-ventilated and dirty courts, and border upon streets much neglected by the hoe and broom of the cleaning brigade. The sanitary character of the apartments in these tenements partakes of the condition of alleys, courts and streets. Generally indifference to soap and water is conspicuous in the color of their furnishings as well as in the complexion and dress of their occupants.

Much has been done by organized charity toward improving the condition of the poor, but the results so far have been and are individual rather than general, and must be so until the effort becomes a matter of state and municipal policy. The sympathies of the humane and church missions have found an ample field for charitable and reformatory work in slum regions, and many destitute families have been relieved, many sick, unfortunate and vice-enthralled men

and women have been helped to recover health or respectability. But charity appears to reach few persons in the great multitude, and its work seems to be overbalanced by a steady increase of poverty and vice, in great metropolitan centres especially.

At the present time owing to the great influx of semi-civilized foreigners, who largely represent the worst phases of European and Asiatic society, our tenement house population breathes an atmosphere more turbid than ever with moral poisons. To the practices and abuses that are legalized or tolerated here by convention, the debased foreigner contributes race habits that are even more destructive of moral integrity. Occasionally an incident brings to light in a striking fashion the depravity of the sanitary relations amid which the poor may live. In August last two children fell from a fourth story window of a tenement in West 61st street, New York, and were killed. The *New York Herald*, in an account of the occurrence, stated that "to get at the bodies of her children, the frantic mother had to go through the cellar of the house. There she waded through indescribable filth almost knee deep to where her children lay when the foul odors overcame her and she fainted." The quarter referred to is comparatively new, and the buildings, so far as their street appearance is concerned, of neat design.

Is it comprehended by the very people who promote the charities and missions how far the place, the overcrowded houses and their squalid conditions go toward depraving their occupants? We opine not. It is easy to think that for one who is ill it

would be proper to secure his removal to a house where the atmosphere does not smell so disagreeably and the children are not so numerous or so noisy. It is as easy to think that the man or woman who is penniless should be helped to employment that will supply the necessary earnings for subsistence. Having done such laudable things as these the kind visitor may urge also the importance of obedience to Christian precepts, and attendance upon some chapel services. Beyond this the average missionary is not likely to go, because the idea of doing more, except in very rare cases, is impracticable.

A German writer has properly said that the bearing of unwholesome dwellings on vice and crime is fully as important as their bearing on public health. The hygienist is able to trace the spread of epidemics to the foul state of the dwellings of the lower classes, and so, too, the student of criminology can trace the moral degeneration that may characterize a community to the same fertile soil. Our American slum districts may not have descended to quite the level of the hotbeds of vice that exist in the poor districts of the larger European cities, but a little personal inspection will satisfy any one disposed to look into this matter that they are bad enough.

There the lowest types of humanity are mingled, the brutish slop from Europe, with degraded, ignorant, destitute and careless native-born. Often on one floor half a dozen races will be crowded together. The criminal, the vicious, the innocent, the shameless, of both sexes, young and old, may be found herded in one room. Naturally amid such associa-

tions, the instincts of truth, decency and honor, have little chance for action; they are smothered in the germ. The child born or bred therein receives so early impressions of falsehood, deceit and impurity, that he or she grows up with faculties depraved, having no clear knowledge of what is true and good in conduct and language.

The influence of such surroundings is even more perverting upon the girls who live in them than upon the boys, for the latter have many opportunities to seek other scenes during the day. With their companions they wander about, and in the clean, well-built neighborhoods learn something of a phase of life that is strongly contrasted with that in the grim, noisome alleys they call home. The girls, required to serve the wants or caprices of parent or other relative, must stay in the noisome house, or if they go out upon the street, must remain within call.

In the spirit of the oft-quoted proverb, we can scarcely help associating cleanness and neatness with uprightness and purity, while disorder and dirtiness as naturally suggest intellectual defect and moral turpitude. The self-respecting man is attentive to his personal state. He would appear becomingly, and so gives scrupulous attention to toilette and dress every day. The careless, slovenly man or woman always impresses the thoughtful as wanting in refinement and in that pride of character that is fundamental to usefulness and influence. The children who are taught to despise untidiness, and to practice the art of order in their dress and habits, can be led with

comparative ease to understand the moral proprieties, and to apply them in their conduct and life.

JOSEPH COOK AND PHRENOLOGY.

APPRECIATING the fact that the Rev. Joseph Cook has for many years been interested in the study of human nature from the phrenological point of view, we asked him, when in our office a short time ago, for his opinion of the value of phrenology, and received a reply which we are certain will not only interest our readers, but will prove of benefit in the promulgation of the great truth it is our business to teach.

One reason the eminent men of the day do not more frequently express themselves in favor of phrenology is because the pressure of duties in their own sphere of labor prevents them from giving sufficient attention to the details or technique of the subject to enable them to speak with confidence. They often believe in its principles, and would avow their conviction if they felt that they could do it without being understood to endorse certain false interpretations of the doctrine which are sometimes made by ill-informed or over-zealous persons. Thus they remain silent. Phrenology, like the words democracy, catholicism, socialism, liberalism, or religion, often suggests different ideas to different persons, and it is to be regretted that the world is yet too young to grasp its full meaning and importance.

It is but natural to expect the distinguished public teachers of religion and morals to decide as to the merits of a new doctrine in mental philoso-

phy, and from the nature of their studies they certainly ought to do so.

The opinion of Mr. Cook is valuable in that it gives a more comprehensive view of the subject than is ordinarily held or uttered, and we are especially glad that he appreciates the dignity of the science. The letter is as follows:

Editor PHRENOLOGICAL JOURNAL:

Man has no study of more interest than man.

Phrenology is or ought to be the summation of seven sciences:

Physiology,
Hygiene,
Physiognomy,
Craniology,
Heredity,
Ethics,
Anthropology.

Any real expert in phrenological research has made a profound study of all these sciences and walks in the combined light of them all.

They are the Pleiades of the mental mariner who sails in search of a correct knowledge of man.

Without making myself responsible for the accuracy of every detail in the phrenological chart, I yet have a profound reverence for the guidance of any expert who has taken instruction through many years from these seven stars.

Next after the habitual and unguarded expression of the eyes and of the tones of the voice, the most revelatory signs of character seem to me to be gesture, physiognomy, physiology as a whole, temperament and cranial contour. The wise observer estimates a man not by his head merely, but by his head and body together; and not merely by the quantity of both, important as this is, but by their quality and symmetry as well. He judges the brain not by its protuberances, but by its diameters, contour and texture.

Choosing a foreman or a clerk, guiding the education of children,

settling my judgment of men in public or private life, estimating a wife or a husband and their fitness for each other, or endeavoring to understand myself and to select the right occupation, there is no advice of which I oftener feel the need than that of a thoroughly able, scientific, experienced and Christian phrenologist. It would be a great felicity to me, for example, if I could have such a veteran student of human nature as Professor Nelson Sizer, of New York, as a constant companion in study and travel, at home and abroad.

JOSEPH COOK.

BOSTON, Oct. 26, 1893.

PROOFS OF PHRENOLOGY.

THERE are many persons of extensive learning who continually refuse to acknowledge the value of Gall's method of determining the functions of the brain, and who imagine that he and his successors confined themselves exclusively to a single means of demonstration. The strictly Gallian method, viz., the observance of concomitant cranial forms and specific mental manifestations, is in fact as thoroughly scientific as the nature of the subject demands, but, unfortunately, some people demand more than the rules of logic. To answer the needs of the very skeptical and exacting class, it is well to remind them that the paucity of evidence of the Gallian localization of which they complain, exists only in their own imagination.

The phrenological brain centres have been demonstrated by a great variety of methods besides the one to which we are chiefly indebted, and the doubting Thomases might thrust their hands into the brain, so to speak, if they would, and be convinced of all

we assert. As an instance of the most unanswerable kind of proof, we wish to call attention to the account of George Combe's experiments with the daughter of Prof. Mapes, related by Mrs. Wells in this number of the JOURNAL. In this case Mr. Combe actually *saw and felt* the action of special convolutions of the brain during the unmistakable activity of the mental faculties which, according to the phrenological authorities, are related to those particular cerebral parts.

The experiments in this case were repeated so often, and conducted in such a manner, and by such a painstaking and scientific man, that no one who is not wilfully incredulous, can fail to admit the conclusive nature of the evidence. We have only to add that this is merely one instance of many of similar force and value with which the literature of phrenology is enriched.

PROGRESS OF PHRENOLOGY.

NEARLY all great reformatory movements are characterized by alternating periods of activity and rest. Sunshine and clouds find their way into all domains. Fifty years ago a wave of interest in Phrenology swept over this country, but it came like a shower of rain upon the parched earth. It was absorbed, and left but few marks upon the surface. But now the indications point to a new awakening upon the subject, which will be based upon a rocky stratum of widely diffused knowledge, instead of the shifting sands of curiosity and speculation, and hence will prove enduring.

Our Mentor Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed directly to the Editor will receive his early attention.

SPECIAL.—It is proposed by the editors to offer a question in each month of the present year for the consideration of the readers of the PHRENOLOGICAL.

Those who are inclined to answer the question are requested to do so in a brief, direct style, embodying the conclusions of personal observation and thought in a paragraph or two. If the question may be answered in the affirmative or negative, the writer should follow his Yes or No with a concise statement of the reason for such a position.

From the correspondence received on the topic the editors hope to fill a space in the magazine that will prove interesting to the readers generally.

Question—What produces the sentiment of gratitude?

Correspondents will please to send their replies promptly. All should be in the hands of the editors by the 16th of the current month.

FACILITY.—F. J. K.—The chart of the head given in Desbarolles is interesting. While we may say that in some respects the author stands almost by himself in regard to certain views in organic function, there are elements of truth in what he says. Assigning a centre or organ to "facility" of manual performance, shows an insight that should command attention because it anticipates in a singular way the discoveries of the physiologists with respect to the motor centres. The situation given it, bordering on Constructiveness, is significant. To be sure the motor centres in the scheme published by Ferrier and others show areas for the hand situated higher up in the lateral convolutions, but the relation is nevertheless maintained between the constructive sense as an ideational property on one hand and its mechanical correlative on the other. We do not note any disposition on the part of Desbarolles to claim originality for his localization, so that we infer the chart represented was found in books that he had consulted, and of which he does not deem it worth while to give the authorship. The authorities whom he does name are very well known to the student of phrenological science, and they do not mention "facility."

DISCUSSIONS OF MIND ACTION.—H. K. G.—Every number of the JOURNAL contains something in the line of analysis relating to the operation of the faculties. A great deal has been written upon their correlated functions, so that if you have access to a complete file of this magazine you can find in it all you would care to read, we opine, upon that topic. But much remains to be said, and he who takes up the topic must always find it a luxuriant field. Each mind has its phases of differential action, because of its variation of development in organ and faculty and in susceptibility to environmental influences.

So many elements are to be taken into

consideration that an estimate, especially in the case of a person highly organized and well developed, is far from easy, and requires for precision the skill and experience of an examiner who has given years of patient study to the work.

HOW THE CENTRES ARE ASSOCIATED.—
M. T.—The organic centres are not isolated bits or areas of brain matter, as you seem to think, but intimately related to each other by nervous fibres. Cortex or convolutions and medullary substance are pervaded with these fibres, presenting an elaborate distribution. Several classes of these fibres are known, each having their function. One class, for instance, called *archuate*, connect centres in one convolution with centres in another. Another class, called *transverse*, connect the hemispheres of the brain. Other groups of fibres bring the ganglionic centres at the base of the brain into communication with the convolutional areas. What we now know of the structure of the brain impresses us with admiration because of the wonderful provision shown in it for the operations of the mind. It shows, too, the importance of training and culture that secures activity of every part, so that there shall be an approximate harmony in the mental development. Psychologists are learning the facts of brain physiology, and being convinced that the common methods of teaching are faulty, and of consequence incompetent for the evolution of the natural powers of mind, because not formulated in accordance with the principles that govern in the constitution of the brain and nervous system.

EPILEPSY AND BRAIN DISEASE.—*Question.*
—Is epilepsy due to a disease of the brain?
J. H.

Answer.—In some instances the epileptic paroxysm may be due to some positive disease in the brain, but we are of the opinion that the great majority of cases are due to reflex causes, and, therefore, are evidence of functional disorder outside of the brain. Within a few years there has been not a little surgical experimentation on the brain for the purpose of curing, if possible, epilepsy, but the results have been far from encouraging. Dr. Keen, in a number of

Harper's Magazine last year, gave some accounts of operations for this purpose, but seems to have reported failures mainly. In this country and Europe there have been between 140 and 160 attempts to relieve sufferers from fits, with a very small proportion of actual recoveries. We think that attention to the invalid's habits, an improved hygiene, and, perhaps, the employment of hypnotism, will accomplish much more than operations on the brain.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred

CHICAGO AND THE WORLD'S FAIR.

I am willing to give Chicago a great meed of praise for its remarkable progress and public spirit, but the vanity and boasting of its people have reached such an absurd point that its papers are forced to make foolish remarks to gratify them. On Manhattan day, for instance, when the display and the class of people were superior to any I had ever seen on the grounds, and when several eloquent and most courteous speeches had been made by eminent New Yorkers, congratulating Chicago on her success, the *Evening Mail* could talk about "Queer People from Manhattan" and omitting all mention of any fine points connected with the city's guests, would go into some unimportant details. The *Evening Post* says "Poor Old New York," and then went on to say that its people had become scared on seeing Chicago, Mayor Gilroy having become "pale with fright." Well, Chicago's dirty streets and Chicago smoke are a little frightful, without doubt, to a New Yorker,

The Columbian Fair was doubtless superior to anything of the kind heretofore seen, but when New York gets ready to give us a World's Fair, I trust some changes will be made.

1st. It is to be hoped that its buildings will not flame forth in glaring white, a color which Americans are criticised for using far too much. The great buildings

were supposed to be models of architecture, but all positive, flashing colors, at least in external decoration, are against the canons of taste and against the voice of nature as seen in her building materials, for even marble is gray rather than white, and as soon as it is used Old Father Time commences softening down its hues into less prominence.

2d. Nearly all of the great buildings were in the Grecian and Roman styles with vast pillars which sustained nothing and a predominance of tame horizontal lines. I would have had a portion at least of the buildings in the Gothic, the sublimest style of architecture in the world, with its heaven pointing arches, buttresses, spires and pinnacles, its unequaled strength and its system of ornamenting the useful or, as Pugin has it, of "beautifying utility."

3d. I would have systems of seats and cheap, convenient methods of getting from one part of the ground to another and even through all the windings of the greater buildings. As one feature I would have a round tower-shaped building, diminishing toward the top. This building should be as much as five hundred feet in diameter at the base and should have a spiral floor-way winding around until at least a height of 600 feet was reached. I would have a railway on the strongest and safest plan, running along the whole distance. This would give a ride of several miles slowly enough to get a fine general view of the displays from every part of the world. The rise should be so gentle as hardly to be perceptible, and the views through the windows of all the upper stories embracing New York and its whole range of surrounding cities, with river, mountain and ocean, would be the most magnificent that the world contains. The whole ride, I think, should not cost over ten cents, and people should be allowed to get out when and where they wish for a closer survey of any department. Such a building would have much more room than the greatest one at Chicago, and the view of the whole vast display would be restful and inexpressibly delightful. The effect of this tower building when illuminated would be wonderful. The lack of sufficient conveyances through the grounds and the great

buildings at Chicago, as well as the lack of resting places, was very trying and sometimes, as I learn, fatal in its effects, to elderly or delicate persons. The sail among the buildings there and around through the lagoon was delightful, but it lasted only a few minutes, and the charge of 50 cents seemed beyond reason.

4th. The arrangements for the public comfort and convenience should be much greater and at less charge than those at Chicago. I noticed that in several of the eating houses on the Fair grounds the price was double what it would be in establishments of the same grade in Chicago or New York. Let the people feel that they can gain a knowledge of the wonders of human skill without exhausting their pocket books or wearing themselves out by walking or standing the whole day through. E. D. BABBITT, LL.D., M.D.

PERSONAL

THE death of Mrs. Elizabeth Oakes Smith, once well-known in American literature, has been announced. For many years Mrs. Smith was a contributor to the *PHRENOLOGICAL JOURNAL*. She was a very versatile lady of old New England stock; she exemplified her pride of birth and mental culture to the last. The editor had several letters from her when in her advanced age she lived in retirement in North Carolina. They abound in that sprightly, cheerful humor that was her support amid the bereavements and other sorrows of her later life. Mr. Seba Smith, her husband, was the famous "Major Jack Downing" of forty years ago.

THE celebrated long-distance walker, Edward Payson Weston, who is now fifty-four years old, started on the 18th of December for a walk to Albany. He was anxious to succeed, as he thought it would encourage the growing generation to see a man successfully undergo such great exertion who had lived on the simplest farinaceous diet and drank nothing but water.

Since writing the above we have learned that Mr. Weston reached Albany eleven hours ahead of time. This will certainly please all of our vegetarian readers.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

OUR PLAN.

We propose to make reports of the work done by the Phrenological Societies, giving dates of meetings, topics for discussion, etc., when received in time for publication in advance; and to make notes of the work done by those in the field.

Where advance dates for lectures can be sent in time for publication, we shall be glad to announce them, and in this way enable our readers to attend the meetings and lectures where possible. In spite of the hard times which seriously affect phrenological work, lecturers report an active interest, and in some cases great enthusiasm. We earnestly recommend the organization of societies in every neighborhood. Very much good can be done in this way, and we are sure that those who take part will invariably find it pleasant and profitable.

THE CHICAGO PHRENOLOGICAL SOCIETY.—Please announce in the *JOURNAL* that the address of the secretary of the Chicago Phrenological Society will be hereafter, Miss Dora Carpenstein, 531 Oakdale avenue, Chicago, instead of 240 Sedgwick street, our former meeting place. We now meet at the homes of the members, hence it has been decided to have the new secretary's address published instead.

Our society is prospering and growing, and during the season we have had many visitors. A leading feature of our exercises has been the reading of papers by the members, and they have been received with marked appreciation.

At a recent meeting a paper by myself was on the "Study of Physiognomy." Later a gentleman had a paper on the "Study of the Aspiring Organs;" and at our last meeting we had our semi-annual election of officers, followed by a long talk "On the Temperaments," by Prof. Thorne.

All communications should be sent to our secretary.

MISS C. DELANG,
Past Secretary.

WINNIPEG, MAN., Dec. 6, 1893.
Fowler, Wells & Co.

DEAR SIRS:—As you are aware, no doubt, Prof. G. Cozens, a graduate of your Institute, has been lecturing and has also formed a phrenological class here, which has developed into the Winnipeg Phrenological Society. The first meeting was held Nov. 30th and the society put on a running basis. We are sure you will be interested in us, and any suggestions that you may give us will be gladly received.

Prof. Cozens has done a good work here, and he will be gladly remembered by the members of the class and many others who

attended the lectures. Speaking personally, and from what I have heard others say, there is a feeling of exultation over the good we have individually received from studying the subject.

The officers of the society are: Donald Grant, Pres.; Jas. Shipton, Vice-Pres.; J. W. Payne, Sec.; Mrs. H. J. Bell, Treas.

Yours truly,
J. W. PAYNE.

THE COOPER PHRENOLOGICAL SOCIETY of East Texas Normal College was organized Sept. 15, 1893. It meets each Saturday at 3 o'clock, P. M. and discusses subjects pertaining to mental science, having debates, essays and comments by each member. We also have a class in Phrenology, which meets one hour each day, and is conducted by Prof. C. L. Hayles, who lectures on Phrenology, its uses, advantages, etc., etc. We have a small library of phrenological books, three skulls, two phrenological busts, a manikin, etc., for the use of the class.

Mr. W. L. North is Pres.; Mr. R. A. Long, Sec., and G. W. Smith, Treas.

This is one of the encouraging signs of the times, and it may not be long before every normal and commercial college will find it essential to success that the teaching of Phrenology be a part of the course of instruction.

THE ELGIN PHRENOLOGICAL SOCIETY, organized by Prof. S. F. DeVore, is in a flourishing condition. The severe state of the weather has interfered somewhat with the attendance, but the interest in the topics under discussion is unabated. At the last meeting Mr. J. H. Stickling delivered a fine address on mesmerism.

MRS. W. A. SMITH,
Secretary of the E. P. S.

THE NEW YORK ASSOCIATION OF GRADUATES has been attracting unusual attention. At the November meeting the question of Organic Quality excited so much interest that an extra session was held in the middle of the month to continue the discussion. The topic for the December meeting was Health as Related to Moral and Intellectual Education and Character, and was presented by Dr. Drayton, the editor of the *JOURNAL*. A lively discussion followed, in which a large number of members and visitors took part. At the January meeting, to be held the second Monday evening in the month, the Vital Temperament is to be considered. At the February

meeting, held the first Monday evening in the month, the Motive, and in the March meeting the Mental Temperament will have attention.

THE BROOKLYN HUMAN NATURE CLUB is growing rapidly both in numbers and enthusiasm. Less than a year ago it was organized with five members. Now there are thirty-seven enrolled, and the attendance at the public lectures given under their auspices is large. Dr. Beall was the speaker for Dec. 22d, and Mr. Leist is to lecture Jan. 26th. The committee is arranging lectures for the spring course. They hope soon to be able to have two meetings each month. The club is organizing an evening class for the practical study of phrenology and physiognomy to be instructed by Mr. Albert Bausch. All who are interested in the study of character are invited to attend the public meetings which are held on the fourth Friday of each month at W. C. T. U. Hall, 454 Bedford avenue, Brooklyn. Tickets of admission may be obtained on application from Albert Bausch, 100 South First street, or the secretary, Miss J. R. Floyd, 214 Rodney street, Brooklyn.

THE WASHINGTON PHRENOLOGICAL SOCIETY is holding very successful meetings and awakening a good deal of local interest and talent.

THE CLEVELAND INSTITUTE OF PHRENOLOGY AND PSYCHOLOGY.—Dr. English, Dr. Mason, and Prof. King, all graduates of the American Institute of Phrenology, have associated themselves with others at Cleveland for a course of popular lectures and instruction in Physiology, Phrenology, Psychology, etc. The course laid out is a comprehensive one and includes lectures from the early part of December to the end of April.

THE ST. PAUL PHRENOLOGICAL SOCIETY. Prof. Morris has just given a number of lectures under the auspices of this Society which he organized a number of years ago.

FRANKLIN McNALLY, class of '90, continues his office in Chicago, where he is working up a good demand for phrenological literature, and is meeting with success in professional work. He is also working on a new process of taking casts of the head, which promises to be very successful.

PEARLE BATTEE, class of '90, continues her work in Baltimore, and is still making friends for the cause and a good reputation for herself.

GEO. COZENS, class of '91, is in the northwest territory. He delivered successful courses of lectures at Winnipeg, where he established a flourishing phrenological society.

MRS. DR. T. S. ANDREWS, who has for many years been a successful lecturer, is working in Illinois, and doing much good in her professional work in the sale of books.

W. S. BELL, A. M., class of '93, made his first stop in Pittsburgh, where he delivered a number of successful lectures, and then moved on to the West.

V. P. ENGLISH, M. D., class of '86, is located in Cleveland, where he practices medicine and Phrenology, and gives frequent lectures, especially in connection with the University Extension Courses.

H. E. SWAIN, class of '70, who has worked in New England for many years most successfully, has visited points in Pennsylvania and New Jersey and is now back in New England again.

WM. WINDSOR, L.L.B., of Washington, continues the publication of the PHRENOLOGIST, and has an office for professional work.

IRA L. GUILFORD, class of '76, has been doing work in Maryland and Virginia, and his enthusiasm and earnestness never fail to attract attention to the subject.

J. B. HARRIS, class of '88, is working in Missouri, from which State he sends us frequent orders for books.

GEORGE MORRIS, class of '78, has been to the Pacific Coast for a season of rest, has visited St. Paul, and expects to lecture during the coming season in Iowa and adjoining States.

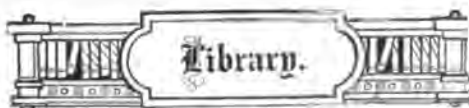
J. H. JACKSON, class of '93, has already entered the field and is doing very successful and acceptable work in Connecticut. Mr. Jackson's superior intelligence, energy and zeal for the cause will secure for him success wherever he presents the subject.

J. W. FOSTER, class of '93, expects to enter the field at the commencement of the year in Mississippi, where he will present the subject in popular and educational lines.

ALBERT BAUSCH, class of '87, is lecturing in New York and vicinity, accepting calls for churches and societies. His lectures are entertaining and instructive.

ALLEN HADDOCK continues the publication of *Human Nature* at San Francisco, and his last number shows commendable enterprise on his part, and the contents are well worthy of perusal. He is taking up other topics allied to the subject and of general interest. The periodical is now in its fourth year of publication and worthy of a large circulation.

F. A. FARISS, class of '85, writes from Iowa: "The prospect for winter work looks a little brighter now. My course is now southwesterly through Ottumwa, Iowa."



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

TEMPERANCE IN ALL NATIONS. Papers, addresses, essays, discussions and history of the World's Temperance Congress, held by the National Temperance Society, in Chicago, June, 1893. Edited by J. N. STEARN, in two volumes, royal octavo, cloth, \$5.00. Published by the National Temperance Society and Publishing House, New York.

The first of these two volumes is historical, contains 538 pages, giving the history of twenty-five great national organizations and societies in North America, nearly thirty in Great Britain and Ireland, and others in nearly every country, and the reports of nearly forty American Consuls to the following four questions, sent them by the National Temperance Society through the State Department of Washington: 1st. The statistics as to the quantity and kinds of intoxicating liquors produced. 2d. As to the methods of dealing with the manufacture and sale of intoxicating liquors. 3d. As to intemperance as related to poverty, immorality and crimes. 4th. As to efforts that are being made to discourage the use, manufacture and sale of intoxicants.

Volume second contains the proceedings of the World's Temperance Congress, giving the papers and addresses by a large number, indeed it might be said all, of the leading writers and speakers on the subject in the world, including every conceivable phase of the subject, and every possible method of dealing with it in this and all other countries.

It may readily be inferred that this volume must prove of great interest and im-

portance to all who are in any way dealing with the temperance question.

We shall be pleased to receive and fill orders for the above from any of our subscribers who may wish them.

OUTLINES OF PRACTICAL HYGIENE—ADAPTED TO AMERICAN CONDITIONS. By C. GILMAN CURRIER, M. D., Fellow of the New York Academy of Medicine; Visiting Physician to New York City Hospitals, etc. 8vo, cloth, pp. 468. Published by E. B. Treat, New York.

A compact, well arranged volume, that presents to the lay and professional public a fair review of the subject of its title, bringing into notice the results of later investigation into the causes of disease, endemic and epidemic, and describing the means of prevention. The field covered by Dr. Currier is seen from a glance at the chapter titles:

Soil—Climate—Protection of Body—Clothing—Bathing—Personal Hygiene—Physical Exercises—Schools—Occupations—Their Influence on Health—Heating—Lighting—Buildings—Ventilation—Diet—Foods—Their Preparation and Adaptation—Water and Water Supplies—Fluid Waste—Sewers—Drainage—Plumbing—Garbage and Other Refuse—Disposal of the Dead—Human Excreta, Disposal of—Bacteria and Diseases—Infectious Diseases—Disinfection—Restriction—Communicable Diseases.

Society is rapidly growing intelligent with respect to the very positive relations of disease and sickness to conditions of environment and habits of living—so that a book involving principles such as this discusses is not unwelcome. Teaching as it does how not to be sick, it is in the van of that wave of progress that carries the banner of prophylaxis, and insists that prevention is not only better than cure, but is the true mission of the physician. Dr. Currier has produced a meritorious work. On some points he speaks a little magisterially. Although the highest authority may be cited on the other side, yet one will not be the loser in following the suggestions generally of the book. We cordially recommend it.



WILLIAM DEAN HOWELLS.

See page 62.

THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

VOL. 97. No. 2.]

FEBRUARY, 1894.

[WHOLE No. 662.]

THE BRAIN OF WOMAN RELATIVELY.

(Read at the meeting of the Institute Alumni, October, 1893.)

THERE is some discussion in circles scientific and semi-scientific regarding the place of the feminine human brain. At times this discussion has assumed phases of acrimonious personality that were ill-accordant with that spirit of inquiry which is profitable in the direction of truth and of permanent information. There have been participants in the matter who did not hesitate to propound ideas of a fanciful nature, or views that would be likely to pass as valid with those who entertain strong prejudice in one direction or another, despite the fact that no stable ground existed for them. For instance, one man of certain notoriety in the walks of advertised medicine declared, in the presence of a large assemblage, that the brain of woman was necessarily inferior to that of man because it contained less gray matter in a given area of its substance, and also that on comparing equal volumes of the substance of a masculine and of a feminine brain, that taken from the masculine was heavier. Then, too, he said there was a difference in color that should be taken into account, and which certainly had a signifi-

cance that science was bound to consider. On being challenged to give his authorities, or the *data* of personal researches on which such declarations were founded, this man failed signally.

FACTS OF ANALYSIS.

I bring at this time the topic of woman's brain to your notice in no spirit other than that of candor; desirous to present a brief review of the anatomical and physiological facts bearing upon the comparative functional capacity of the brain of modern woman.

At the outset it can be said that so far as the constitution of the brain elements in themselves is concerned, there is nothing that warrants opinion regarding any defect as such to be set to the account of woman. Using language of Prof. Ludwig Büchner in the *New Review*: "Neither chemical nor physical examination of the brain by means of the microscope has yet shown any real difference between the two species of brains by which any distinction of functional capacity can be discovered."

There are some authorities who

claim that on the score of quality, on the fineness and delicacy of her general constitution, woman may assert a comparative superiority. Prof. G. B. Brühl, of Vienna, for instance, in his paper on "Woman's Brain, Woman's Mind," appears to think that the absence of difference in their tissue elements implies the absolute intellectual equality of the sexes. These writers do not throw out of view the fact of the smaller size of the feminine head and brain, but argue on the basis of comparative relations.



A TRUE WOMAN.

In this country and in Europe there has been much weighing and measuring of crania to determine the ratio of sex difference, but as should be expected, no precise standard has been obtained. Huschke's conclusion is a mean difference of 220 cc. Weissbach's, also predicated of German skulls, is about 200. Topinard, the eminent French anthropologist, finds a difference in weight of 200 grammes. Wagner, Krause, Vany, Broca, vary from 117 to 180 grs., or, expressed in ounces, from 3.8 to something under 6. Using Prof. Broca's ratio, the size of the male to the femi-

nine brain is as 11 to 10. Wagner makes the difference somewhat greater. Drawing a general average of the male brain at 49½ oz., the feminine would be placed at 45 oz.

OTHER NECESSARY INCLUSIONS.

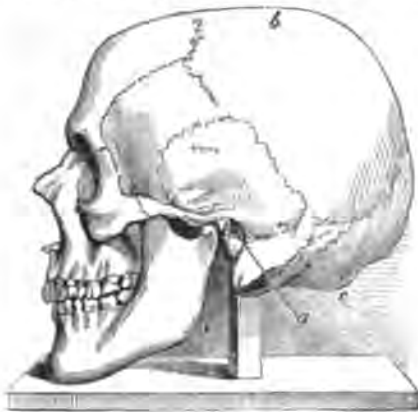
If we were to limit ourselves to the question of weight or size alone in the attempt to determine mental capacity, great injustice would be done.

Yet there are many physiologists, or writers on brain capacity, who stickle for the four or five ounces of over-weight in the male brain, as a positive determination of its superiority, and apparently forget that in all examinations of nerve property, its structure, as to quality and health, should be taken into consideration.

In our estimation of the real value of a woman's brain, we should be governed by strict principles of science, and permit no *bias of sex* to interfere with the procedure. I am inclined to think that in investigations generally, when made by men into matters involving woman's capacity, physical or mental, the bias of sex is an inconvenient factor, consciously or unconsciously affecting the final result. An unnamed fear lest woman shall get too much credit seems to operate against her getting enough. As one writer has humorously said: "When a man is brought in guilty of some form of mental misdeed, an excuse may be found for him, owing to his acquired bias of class, education, or what not. But if it be a woman who is at fault, no such plea is to avail. In other words, superstition, or mental supineness, is a result of education in men, but of nature in women. This is the survival of a venerable prejudice. Do we not remember that mother Eve took the apple of her own wickedness, but that father Adam was educated to do it?"

Even so fair-minded a man as Mr.

Spencer, who usually weighs all the issues in his speculations, appears to lose some degree of his admirable logical stability when discussing the ethical qualities of woman. The praise that he may venture to offer to women for this or that accomplishment is usually accorded in terms



WELL DEVELOPED SKULL OF MAN.

that tend to elevate the self-sufficiency of men, in that it makes the latter a criterion for the measure and value of what women have done.

SIZE BUT ONE QUALIFICATION.

Considering the matter of size, it must be admitted that mere expansion of the brain, as in the case of other organs, gives us but an imperfect measure of its capabilities. A large nose may not smell better than a small one; nor a large eye see better than a small one. Two men that may be selected may show a marked difference in head volume, yet each be great in some department of action, and we should be far from imputing inferiority to the smaller headed when comparing them. Indeed, the latter may make the bigger noise and attract the greater attention.

It is a fact of not uncommon experience that a relatively small brain of superior structure, especially if the development of those parts that appertain to the intellectual faculties be greater proportionally than other parts, can accomplish more of credit-

able work than a large brain lacking in such advantages of structure. This more conspicuously appears when the intellectual parts have been developed by education and exercise. In reference to this point, we may take the words of Büchner that "it is the less to be wondered at since the gray substance of the brain in which alone psychical processes are brought about presents in the smallest brain—by means of the vast quantities of nerve globules and cells which it contains—a more than sufficient basis for the most extreme psychical activity."

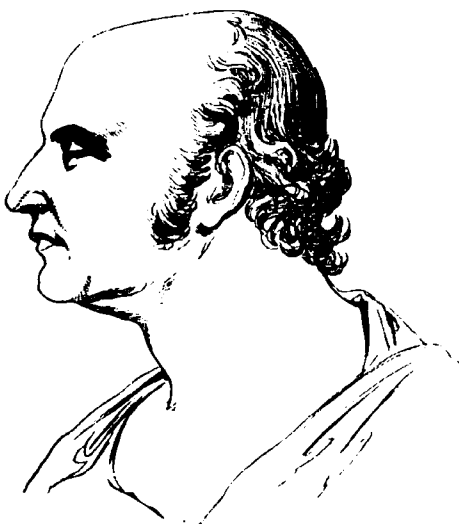
The Vienna Professor (Brühl) argues for woman's equality of brain structure on the line of relative proportion mainly. He points to the fact that several animals, notably the whale and the elephant, have brains much exceeding the size of the human, but, nevertheless, stand far below man in intelligence, this fact being explained by the relation of brain quantity to body, that in the case of the elephant being as 1 to 500, and of the whale as 1 to 3000, while the human brain to the human body is as 1 to 35 or 37. Explained in terms of function—as the brain is the centre of the whole nervous



WELL DEVELOPED SKULL OF WOMAN.

system, as well as the organ of mental function, so its volume must have a correspondence to the size and power of the nerve trunks that converge into it from all parts of the body. In connection with this very important

fact, we must take into the account the character, quality and peculiar elements of nerve structure in man, as well as the general superiority of his entire physique, when compared with that of any of the lower animals. Carrying the application of the principle to woman, we recognize the fact that in typical womanhood the general physiology is smaller and finer, the nervous system especially being more delicate and symmetrical. In proportion to her weight, however, the brain of woman is somewhat heavier, so that putting the two things to-



STRONG TYPE OF CULTURED MAN.

gether, it may be claimed, as a reasonable conclusion, and not a concession of galantry, that woman, so far as the brain and nervous system are concerned, is very near if not absolutely upon the same plan with her masculine counterpart.

HER SPECIAL ORGANIZATION.

That woman has a nervous organism differentiated in some respects from that of man should, however, be expected from the very nature of the case. I do not refer to those particulars of difference that may be explained by conditions of life that have become conventional, or are more or less due to accident, or prejudice, but to those peculiarities of cerebral structure that

are hers by natural endowment, and which naturally appertain to her sexhood. Of course I am easily understood as referring to the faculties that express the affectional sentiments and moral emotions, qualities that environ her great function of motherhood, and impart to it an indescribable dignity—qualities, too, that endow woman's character with its potencies for the development of the children of the race, in lines of integrity and nobility, that constitute her the teacher and guide of the young and the example of the man in the things of human conduct that make life beautiful, sweet and tender.

But observers of the feminine head who are of the Büchner type, must needs find "disadvantages" in the proportions of the feminine head as compared with the male. For instance, the greater relative development of the crown region, and of the posterior region in the feminine cranium and brain appears to be regarded as a disadvantage. Büchner says very truly that "if one looks at a woman's skull from above, its outline approximates to that of two cones with blunted ends joined together at their bases; whereas a man's skull presents from a similar point of view an egg-like appearance, expanding in the middle and toward the back." Their very difference in outline show the special differences in organic structure and mental function that appertain to typical sexhood, a fact that Büchner does not fully appreciate, it would seem. We are as fairly warranted in saying that the male head has its *disadvantages* because of its characteristic shape, including its comparative defects in coronal and posterior development, as in attributing to woman any disadvantage because her anterior brain does not appear so big comparatively as that of man.

RESULT OF A COMPARISON.

Granting that woman in the intellectual faculties is not so largely

stocked by nature as man, is not the account at least balanced by her superior endowment of the psychic emotions and those gentle instincts that are essential to the perpetuity of the human race? Is intellect by its nature greater than tenderness, kindness, reverence, affection, devotion, self-sacrifice, the qualities recognized in true womanhood? These are the qualities, too, that make *character* that constitute goodness, that represent the divine fire in the creature. Without some measure of them a man, whatever his intellectual talent or genius, may be lower than the brute, devoid of what we understand by manhood. When we think of Lord Bacon, the greatness of his intellect is lost in the perversity of his psychic nature; his meanness and moral cowardness elicit our detestation. When we think of Florence Nightingale, who but represents what thousands of other women with like opportunity would have done, our respect and admiration flow out irresistibly. I join heartily with Helen Watterson in her denunciation of the manner in which some women who write discuss women. Well and humorously does she score their disposition to run into type on all occasions to defend or assert women's right to equal consideration. This very disposition would imply an uncertainty as to the real status. One fact in the later life of woman is most conspicuous, that our civilization has provided opportunities for her evolution that were never hers before. Wherever she has been led to compete with man she has generally shown good capacity; in some lines she has even displayed greater skill and competence than her brothers. We should not forget that in bringing about this phase of civilization her own determination has been the chief factor, not that of her brother.

In the higher classes of this country women are to be found who much excel their

husbands in the culture and exercise of the intellectual faculties. It is by no means uncommon to find the man, who wants a controlling influence in the business mart, yielding precedence to his wife in the social circle. In the walks of education, in science and in letters, who does not know of women whose ability gives them a high rank, and renders them desirable as teachers and writers. At the high school and college the women make better average recitations than the men. At Barnard College last year, it is said, the examinations for entrance showed a higher percentage than that obtained by the young men at Columbia. It did not seem to affect the womanliness of Miss Somerville, or Miss Mitchell, to



HIGHLY CULTURED TYPE OF WOMAN.

attain high rank in astronomical study, or of Geo. Elliot to be the greatest of English novelists.

Woman seems to have shown capability in employments that are regarded specially belonging to men; for instance, navigation. We have known her to be successful in this on the ocean, the lake and the river. Captains Betsy and Hannah Miller for many years were well-known in British waters. On the plains and foothills of the West women have managed stock ranches and fruit farms. We knew one who for many years conducted a market and could handle the saw and chopper in preparing choice cuts of beef, mutton, etc., better than her hired men. It goes

without saying that there are hundreds of men in mercantile lines who owe their success to the keener discernment of their wives or sisters, or employees. Such manifestation of capability demands general respect, not affected disparagement; and, indeed, if after all that may be said we are met with the assertion that the rank and file of women are inferior

in brain and mind capacity to the rank and file of men, it should be recognized as a salient fact that the causes that have for ages retarded the progress of woman's intellectuality would have a similar effect when acting on men, and that not in the sex of woman, as sex, must the cause of her intellectual inferiority be sought.

H. S. DRAYTON, M. D.

WILLIAM DEAN HOWELLS.

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

BY EDGAR C. BEALL, M. D.

IN this organization, ease, gentleness, smoothness, flexibility, plasticity, and passivity are suggested in every feature and contour. There are no acute angles or obtrusive stretches of either trunk or limb. Nothing is cubiform or square. All is globate, conic or curvilinear. He is largest in the middle, and modestly tapers off in every direction, as if a development of the extremities might prove an invasion of the territory belonging to others. Even his head nestles down as closely as possible to his body, as if to escape notice, or to avoid the attitude of obstinacy and pride.

The whole bearing is that of a man who has great resources within himself, and whose mental processes are more subjective than objective. Still he is quick to sense the concrete or external world. He sees most facts and physical conditions with almost photographic accuracy. He is also as industrious as a beaver, though he cannot build with raw timber or undressed stones. The elements must first be fused in the crucible of his art. That is, he gathers, absorbs, and assimilates material from all realms of the real, and then, like the alchemistic spider that transmutes its vital juices into silver threads, he ravel out his heart strings and deftly weaves a fabric which in form and tint reflects and kindles all the subtleties of life and love.

In stature, if not also in figure, he is more like Venus than Hercules, and he finely illustrates the assertion of Coleridge, that "a great mind must be androgynous." At all events, he certainly possesses a rare combination of the qualities peculiar to each sex. He is five feet, four inches in height, and weighs a hundred and sixty-five pounds. He has the cerebro-lympho-vital temperament, some of the indications of which are in the large frontal lobes of the brain, the fullness of the cheeks and lower torso, yielding tissues, indefinite nose, a subdued voice, and a sort of *adagio* walk. His skin is delicate and soft, but of the consistency of velvet rather than satin. His eyes are greenish-gray, and his hair, which is fine and silken, of a peculiar mouse color, and not heavy, is parted with commendable intention, if not success, in the centre, thus avoiding the semblance of exaggerated angularity so frequently seen in our unæsthetic American male top head.

As a study in cheirognomy, his hand is of especial interest. It is remarkably small, and a perfect specimen of the conic or artistic type. It is an accompaniment of the mental-vital temperament, and is characteristic of women in general, the Orientals of both sexes, and is the hand of mystics, poets, singers, romancers, seers, saints, and dreamers everywhere.

With such a mellow, pliant constitution, which insures to the brain an

abundance of nourishment, the mental manifestations must necessarily be facile and prompt, but utterly without the fiery and impetuous zeal of the sanguine temperament, or the corrosive intensity of the so-called bilious. There is no excess of heat generated in the lungs, and but little waste matter thrown into the current of the blood to irritate or darken the instruments of thought. On the contrary, all pressures are equalized like weight upon a perfectly round wheel, and a singular harmony in the whole mental life is the result.

This is a fortunate, happy temperament. Its possessors never go to extremes. They never become Savonarolas or Loyolas. They are patriotic as to their native planet, and disposed to consider one world like this under their feet worth more than any number in the clouds. And though incapable of the highest flights of genius, they never grieve on that account. Others may have the genius; they are satisfied with the earth. But if they are content to remain near the ground, thanks to them, they are glad to help strew it with flowers.

Mr. Howells has an excellent volume of brain. His head measures twenty-two and a quarter inches around the base, and thirteen and three-quarters from ear to ear over the crown. On the whole, it is well proportioned, though the principal developments are "fore and aft." The back head is unusually strong. The regions devoted to hospitality, fellowship, conviviality, tender affection, cordiality and *savoir vivre*, are all large, and with his temperament these qualities will be manifested for the most part in a very normal manner. Friendship is especially marked. He will be extremely sociable, but with more quiet kindness and German *Gemuethlichkeit* than partisan attachment. Having moderate Firmness, Combativeness and Self-esteem, he will not antagonize others, and thus will attract many friends.

From the ear to the centre of the back head the line is long, which shows the love of children to be a dominant trait. And as he is deficient in nearly all of the harsh and distinctively masculine qualities, he is certain to be exceedingly popular with little folks. His heart and hand will go out to them, and life will be painfully incomplete to him without their presence. Unlike some parents, he would not simply consent to pay for his child's doll. He would go out himself and buy it.

He will also be very devoted to his wife. The cerebellum, or "little brain" in his head is unmistakably big. But as he is gentle and refined, he will combine appreciation and sympathy with love of the opposite sex. He will understand women as few men do. He can enter their world and be one of them in thought, and he should excel as a writer in delineating the female character. He must be a model husband. There is not a trace of tyranny in his composition, and he would grant his wife every right that he claimed for himself. The head extends backward very greatly also, at the love of home, which will render him very domestic. But as his fibre is not very compact, he will not be so averse to a merely geographical change as some men would be. He could move from one house or one city to another, but he would be careful to take all the furniture and all the folks. In other words, he will be domestic as regards personal associations rather than location.

The diameter at Combativeness is moderate. He is not contentious, and considers that "the pen is mightier than the sword." This naturally adds much to his amiability. Destructiveness is also of subordinate influence. He is capable of pique, but not of malevolence, and has not enough Firmness to cherish a grudge. In anger he would recall his ambassadors from the enemy's court, but would send no soldiers back instead.

And even if obliged to fight, he would never throw arrows with poisoned heads.

A little forward of the ears, however, at the seat of appetite, the head is wider. He may pray with regularity, but his longest fasts will probably be during the hours of sleep. This appreciation of gustatory pleasures will lead him in his books to introduce the subject of lunches and liquid refreshments with unfailing punctuality and accuracy of description. Acquisitiveness is not conspicuous. He may economize in some directions, but with his Benevolence and love of life, he will enjoy his income as he goes along, and share it liberally with his family. He has a full degree of Secretiveness, but it is the phase which is merely silent. If the door is closed he will not open it; but if it happens to be ajar, he will usually let it remain so. And as to veracity, he has no objection to the truth if it is agreeable, and if he indulges in any fictions other than those published as such, they will doubtless be of that ivory hue which never cause any harm.

Looking from the ear directly to the top of the head, the merest novice in practical phrenology can see at a glance that Firmness is deficient. Approbativeness is rather large, but this is also negative or passive in expression. That is, he is sensitive to blame, but not aggressive in the pursuit of praise or distinction. And as to Self-esteem, or the feeling of personal value, the backward declination of the rear top head shows it to be decidedly weak. He is modest to a fault. This will aid him as a writer in pleasing the popular taste, especially in the United States, where dignity is a rare quality. In this respect our novelist is very different from Bulwer, who loved to portray imperiousness and sublimity of character.

But the distance from Mr. Howells' ear to the region near the top of the occiput, or just below Self-esteem, is exceptional and remarkable for an American. This

denotes large Continuity, or the quality of patient application. Mr. Howells has not much strength of determination, or power to resist opposing forces; but if left alone he can keep his attention on one subject for almost any period. This development is very noticeable in his profile portraits, and its effect is equally apparent in a certain tediousness and prolixity in his literary style.

As to moral character, his frontal top head is very high at Benevolence, the line from the ear to that point being uncommonly long. His sympathies are keen and responsive. But the rear top head slopes off laterally somewhat at Conscientiousness, so that his motives in right conduct are those of kindness rather than duty. Such a man will usually be just and fair as a result of his efforts to do good. And in this instance, when the striking development and manifest culture of the intellect are considered, it is easy to infer that the sense of duty is not often necessary to impel him to discharge an obligation. In other words, he does not need to be driven to do that which he so clearly sees is best. His sins are of omission rather than commission, and as he has but few desires which conflict with the rights of others, he is thus much more equitable than many men with greater love of right, combined with still greater love of evil.

This analysis of his morality helps to explain also his feeling as to religion. He has a strong sentiment of Veneration, as may be seen in the height of the central top head. But in the choice of a creed, he will be led by his own intelligence and sympathy rather than by an ideal of duty derived from any traditional teaching. He will doubtless study the spiritual, the occult and esoteric, but always with the temperance which characterizes all his thought, and whatever his attitude may be toward the eternal mysteries, charity will be the light of his daily life.

Ideality and Imitation give width and height to the upper temporal regions, and the upper corners of the forehead are smoothly rounded out by Suavity and Mirthfulness. Tune is fairly developed, but with his inactive temperament he will not care to play a musical instrument. If he were a musician at all he would be a vocalist.

As to intellect, the forehead presents a rather harmonious development in the main. The sense of objects, and judgment of form are especially active. These give width between the eyebrows and eyeballs. Color is good, but those who wish to study the appearance of small Order should see the outer corner of Mr. Howells' eyebrow. It is so deficient as to render the upper eyelid almost continuous with the forehead, a few hairs only marking the line of division. This is another peculiarity of artistic natures, and accounts for much of the untidiness with which they are often reproached.

His short neck is a sign of sagacity, which was noticeable in Napoleon, Victor Hugo and General Grant. The drooping of the upper eyelid denotes a shrewd, critical, penetrating and non-committal habit of mind, and the somewhat pendant septum and point of the nose betoken logical acumen, and a sense of humor. These facial indices correspond to Secretiveness, Cautiousness and Human Nature in the brain.

Language is well developed in Mr. Howells, but it is the arrangement of words, not their individuality, which gives him particular delight. The forehead is very full in the centre at memory of events, fairly developed above at Causality, and in the central upper portion at Comparison and Human Nature it is extraordinarily large. Here is the fountain from which his literary works flow forth. This upper forehead is almost Shakespearean in height, and but few contemporaneous writers have it equally

developed. Benevolence has much to do with the elevation, to be sure, but still the sense of motives, character and all that pertains to human impulse and desire, will have a deep fascination for him, and form the groundwork of his art in depicting the lives of men and women who really exist. This in connection with Comparison makes him a chemist in the analysis of character. But his easy, small-boned temperament, the lack of Combativeness, etc., will explain the want of dramatic action in his novels.

As the lax tissues of his body favor a quiet absorption of knowledge and a habit of mental repose, he would instinctively choose for the expression of his thought some indirect or suggestive vehicle rather than a direct and objective method. Here we have the key to his literary taste and talent. A man of the motive temperament, who is composed chiefly of bone and muscle, would wish to make his contribution to the world in the form of a house, a bridge, or a ship. The ruddy-skinned, sanguineous man prefers to tell his story upon the rostrum with his tongue. But in Mr. Howells we have almost the typical man of letters—the magician who by the aid of the most paltry, lame and tangled tracings, is able to communicate and evoke the mightiest thoughts.

William Dean Howells is of Welsh, Irish and German ancestry, and was born March 1st, 1837, in the village of Martin's Ferry, Ohio. He spent several years of his boyhood in Hamilton and Jefferson, and at the age of nineteen went to Columbus, where he became an editorial writer on *The Ohio State Journal*. In 1861 he was appointed by President Lincoln United States Consul to Venice. In 1865 he returned to America, and in 1866 he assumed the editorship of the *Atlantic Monthly*, which he held for fifteen years. From 1881 for four years he lived in Boston, and then in 1885 he came to New York and took charge

of the "Editor's Study" in *Harper's Magazine*, which he held until 1891. He is the author of a great number of literary works, including poems, books of travel, novels, plays, etc., which abound in humor, wit, pathos, realistic descriptions, and phenomenal analyses of our American civilization. His home is now in New York, and he is regarded as the foremost man of letters in the United States.

In December last he began a series of autobiographical papers in the *Ladies' Home Journal* which are attracting exceptionally wide attention and interest.

A QUERY.

I'd like to ask some wise philosopher,
To answer me the query I would make:
Could he explain the mysteries of life
I ponder on until my temples ache?

Now here is this that plagues my simple
brain,
How much of what I call myself is really
me?

How far responsible (am I) for what I am?
How capable of being all I ought to be?

Again, is there an Individuality
At once so real, original, and own,
Of which, if stripped of its heredity,
There would be left enough to stand
alone?

We take a man for what he *seems* to be;
If he seem good, he claims that's what
he is.

Born with the virtues of his ancestors
He thinks the world should credit them
as his.

Upon the other hand, he makes excuse
For evil traits, and vicious tendency.
He yields to them, then pleads "inherit-
ance,"

And wants the world's unstinted charity.

Perhaps it may be true the kind of clay
Helps to determine what the ware will be,
But did not God make manhood in the
man

More than the equal of heredity?

ANNA J. GRANNISS.

A NEW LEAF.

Say, if you've decided
To turn a new leaf
By renouncing one vice
For one virtue in view;
After trying and failing
And coming to grief,
Such a purpose alone
Is a credit to you—
In showing some courage
From malice apart,
And it proves that you have
Such a thing as a heart.

Be assured, once for all,
That no step is in vain
Which is made against wrong
In defence of the right;
And that every true thought
Is a tangible gain
Toward putting the legions
Of error to flight.
Then continue to hope,
While you do what you can
For the progress of truth
And the glory of man.

Come, my brother, my sister,
The plan is for you;
In disclosing the truth
You will need no restraint,
For the truth is forever
Your privilege due;
And no other shall have
Any cause of complaint,
If your courage and hope
Are so bright and so clear
As to make every morning
Commence a New Year.

It is always a beautiful
Thing to do good;
Not alone by your help,
In a word or a deed,
Or defending a truth
Which is misunderstood,
Till it rises, from shackles
Of prejudice freed;
But to war against vice
Without favor or fear,
And to turn a new leaf
With the opening year

S. B.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XIV.

DIVERSITIES OF TEMPERAMENT AND CHARACTER.

Fig. 121, Mrs. Celia Burleigh.—This gifted woman was widely known as a writer and speaker, and all who have heard her as a lecturer or as a

profitable, as manifested through her writings, or through her magnetic presence.

That open, earnest, honest face



FIG. 121. MRS. CELIA BURLEIGH.

preacher, or have read any of her spirited utterances, in either of these capacities, will remember it as a rich treat, and will recognize the fact that her spirit was companionable and

indicates sincerity and earnestness, patience and faith. She was a friend of humanity, and labored to promote its happiness. Her intellectual vein was keen, her moral power was defi-

nite, influential and strong. She grasped truths and merged them into a logical form by a kind of intuition, that made it doubtful whether it was through logic or intuition that she reached the conclusions. She appreciated truth in any form, trusted, loved and aimed in every way to promote it. She had a loving, companionable spirit, was willing to defer her own pleasure for the comfort and happiness of others, and not unfrequently divided what she had with those who needed it more than she did, and sought out occasion among the poor for opportunities to do good.

She was sensitive in her moral qualities, keenly appreciative to reputation, and was awake to everything that belonged to tenderness and sympathy. Her fine quality of organization rendered her keenly alive to all that was joyous or otherwise, which made her liable to suffer more than she enjoyed, because she had such a living sympathy for suffering that she was attracted by it, and thus she bore a burden which was constantly wearing upon the nervous integrity.

The following sketch is from the able pen of Mrs. Lyman, and is a just tribute to a gentle and brave woman:

Mrs. Celia Burleigh was born in the year 1827. The circumstances of her early life were not such as seemed favorable to the cultivation and development of the noble and beautiful talent with which she was endowed, and though she promised some of her intimate friends an account of her early life, yet so trying were its experiences that she could not lift the curtain on the scenes she had passed through, even that her friends might know what she had endured and done. But from all her trials she came forth a noble, pure, philanthropic woman, able to sympathize with the sorely tempted, to encourage the struggling and to speak words of cheer and consolation and stimulus to

her sisters who were wrestling with problems in practical life which she had wrestled with and conquered.

Mrs. Burleigh was thrice married. Her last marriage with Mr. William H. Burleigh was very felicitous. In him she found an appreciative no less than a kind and affectionate husband. Between the intervals of her first and second marriages she wrote for the press under the name of "Celia," and a volume of her poems was published; which was very favorably noticed by the critics. Both before and after her marriage with Mr. Burleigh she made the acquaintance of many women of culture and talent, among whom she at once took a prominent place, and found, at last, congenial association and that inspiration which, if she had enjoyed it in early life, would have enabled her to make a brilliant mark in the world of letters. Both before and after her marriage she was identified with the women's movement, was known as a suffragist, a reformer and a writer of no little ability. She took an active part in organizing the Women's Club in Brooklyn, N. Y., a purely literary association, composed of some of the best cultured women of the day, of which she was chosen the first president. She was also a prominent member of Sorosis, and the success which attended her first efforts at speaking there led her to feel that she could work effectually for good in that way. Though her lectures were received with great favor, it was not till after the death of her husband that she seriously thought of a professional career. The more she wrote and spoke the more evident it became that she was elected to the ministry by the quality and working of her mind, and that she had a call to preach was clear from the call that so many had to hear her. In 1871, after much hesitation, she accepted a call to a parish in Brooklyn, Conn., and was ordained as a pastor. At last she felt that she had found her place, and worked with brave and beautiful

fidelity to her trust for a little over two years. Soon after her installation the disease of which she died began to develop itself, but she enjoyed her work so much that she kept at her post until forced to retire. "I had just found my place," she said, "I had been seeking so long that it seems very hard to go away from it so soon."

She placed herself under medical treatment at the Home, at Dansville, Livingston County, N. Y., but for her disease (cancer) there was no cure, and she was removed to the care and loving ministrations of friends in Syracuse, N. Y., where she died, July 25th, 1875.

Mrs. Burleigh was tall, graceful and dignified in her look and manner. Her face was an index to her soul, and no one could look upon it, so full of human sympathy, of generous enthusiasm and of faith in men and women, and not be drawn towards her. The fascination she exerted upon persons of her own sex was wonderful. She was not an original or a deep thinker, but she had a remarkable ability for assimilating the best thoughts and sentiments of others, and of seeing and declaring the natural consequences of right and wrong-doing in individuals and States. As a speaker she was simple and modest, but impressive and thoroughly in earnest, appealing to those great reserves of moral energy in whose existence in every soul she had unbounded faith. Mrs. Burleigh was for several years a member of the Second Unitarian Church, of Brooklyn, N. Y., and the church of which she was the beloved pastor was of that denomination. She has left many warm and loving friends, and though she has ceased from her labors, the influence of her noble, womanly utterances, her brave example, and the heroism she showed in overcoming to the end, keeps her memory green in the hearts of all who knew her.

Fig. 122. Miss Thompson is a healthy, vigorous study, and from the outline of her head and face we judge she resembles her father more than her mother. She appears to have, however, her mother's instinctive intuition, but her father's will-power, force, independence and other traits of character. Below the eyes the face is masculine, but above the eyebrows the forehead is feminine, dealing in facts and details, and giving to the mind a sharp and keen relish for the things which belong to her surroundings; also quick perception, prompt decision, ready criticism and definiteness of thought and purpose. If the fashion of dressing the hair were such as existed when her mother was young, laid smoothly to the head and giving adequate expression to all the phrenological developments, it would be easier to indicate to the observer the strong characteristics, which are so readily seen in the face.

She early reached a mark which signaled her career in the world of art, and her choice of subjects, being of a military and national character, has probably had a great deal to do with her popularity. Nevertheless, to win attention, they must be treated with taste and skill, which must come from strength of character joined with artistic capability.

Her head is broad, her face strong and the crown of the head high, and the influence of these developments doubtless led her to select subjects such as "The Roll Call," "Charge of the Light Brigade," subjects more likely to invite the pencil of the masculine rather than of the feminine artist. Hers is a courageous and critical nature, and when aroused by that which inspires her enthusiasm, she treats the subject with vigor, and through her artistic skill she manifests these strong points of character. Though work of hers had been exhibited in the Royal Academy Exhibition, much attention was excited by the exhibition of her picture entitled "Roll Call, After an Engage-

ment in the Crimea." This picture found a place on the walls of the Royal Academy in the Spring of 1874, and the vigor of the composition, especially the treatment in the draw-

Her large Perceptives tend to make her interested in her surroundings, and her strong courage, executive force and self-reliance combine to give her ability to express power



FIG. 122. MISS ELIZABETH THOMPSON, PAINTER.

ing of the horses and the management of the color, were too expressive not to command notice. The Prince of Wales and the Duke of Cambridge were much pleased with the picture, and commented openly upon its merits, and their royal approval helped to make Miss Thompson famous.

The temperament has enough of the Motive or the bilious in it to give strength and positiveness to her entire character.

in her artistic work:—and when feminine sentiment and sympathy combine with masculine vigor and force, woman is able to evince elements in literature, art, mechanism and in oratory which command attention, as is shown in the work of Harriet Hosmer and Rosa Bonheur in art, Maria Mitchell in astronomy, Madame De Stael and Mrs. Stowe in literature, Charlotte Cushman and Fanny Kemble Butler in the drama, or Louise Kellogg and Patti in music.

Fig. 123, Mrs. Clemence S. Lozier. —This remarkable woman was distinguished for a constitution of high quality, combined with great endurance. She was amply endowed with the Vital and the Mental temperaments. The face was full, the head large and the forehead especially

flinching from duty, or retreating from effort which was necessary to secure the success of her purposes, and to work out the good she desired to do in behalf of others.

She had large Order, which gave her system and regularity of action. She had large Mirthfulness, which



FIG. 123. CLEMENCE SOPHIA LOZIER, M.D.

broad, high and massive, showing varied and vigorous talent. The top of the head indicated a great deal of moral power, integrity, steadfastness, reverence, hope and faith. She was remarkable for her agreeableness of manner and for the smoothness and pliability of her spirit, while at the same time there was a steady strength which enabled her to lead and govern those who came within the sphere of her influence. She made friends with everybody, and yet there was no

brightened her countenance and cheered her way in her intercourse with the world. Her logical power was such as to qualify her to plan her course wisely, and she had an excellent memory which enabled her to carry in her mind the knowledge she possessed, and she had great facility in imparting her knowledge in an agreeable and thorough way, and was thus a natural teacher.

Those who had the pleasure of her acquaintance, and who enjoyed her

confidence and affection, remember her for the traits which are domestic, social, loving and good.

We derive our biographical facts from a memorial pamphlet prepared by her friends, which we are permitted to use.

Mrs. Clemence S. Lozier, M.D., was born Dec. 11th, 1813, in Plainfield, N. J., and was the youngest of thirteen children.

She was an orphan at the age of eleven years. Her early education was acquired at the Plainfield Academy, and in 1829 she married Mr. Abraham W. Lozier, an architect and builder, of New York. Her husband becoming an invalid, she opened a school for young ladies in 1832. This she conducted until 1843.

Soon after the death of her husband she associated with Mrs. Margaret Pryor as a visitor for the Moral Reform and Female Guardian Society, now known as the Home for the Friendless. She was also one of the editors of the *Moral Reform Gazette*. Her attention had early been directed to the study of medicine, by the fact that several of her relatives were physicians, and her tastes and inclinations led her to desire a medical education for herself.

In 1849 she attended lectures at the Eclectic College, in Rochester, N. Y., and was graduated with the highest honor of her class from the New York Central Medical College, in Syracuse, N. Y., in March, 1853, as no college of either of the dominant schools at that time permitted women to study medicine.

In 1853 she began to practice in this city, and continued active in her profession until her death.

Starting from a laborious work among the poor, she soon entered upon a most extensive professional practice, and such was her skill, in both medicine and surgery, that in 1864, and several years following, her practice returned her over \$25,000 yearly. For some years she had

the field, where the services of a skilled female physician were required, almost to herself, as there were but few, and none so distinguished to share it with her.

She not only became noted as a successful obstetrician, but attained distinction in general surgery, especially in the removal of tumors, often, where the ligature did not promise success, resorting to the surgeon's knife or the ecraseur; frequently performing grave, capital operations without the aid of counsel, preferring to rely entirely upon her own skill. Dr. Valentine Mott declared that many a surgeon would have shrunk back appalled at the thought of performing some of the operations she undertook without dividing the responsibility with another.

Few have had such marked success in the treatment of diseases of women, and few practitioners have derived such pecuniary benefits. Her intuitive discernment, quick sympathy, gracious tact and gentle patience, added to her inherited talent for the practice of medicine, fully fitted her for her profession.

On April 24th, 1888, Dr. Lozier, as Dean, delivered an address at the commencement of the Medical College, and on Wednesday, the 25th, attended the annual meeting of the Alumnae Association, of which she was an honorary member.

On Thursday, the 26th of April, she was also engaged with friends and patients. In the evening she complained of fatigue and retired to bed early. About nine o'clock she summoned her maid, telling her that she feared an attack of angina, having suffered from angina pectoris for some years. She was very restless and uneasy, until ten minutes after ten, when she suddenly ceased to breathe. She passed out of this life without a pain or a struggle, leaving a thousand grateful and tender memories among those who had been benefited by her skill and guided by her wisdom.

Fig. 124, General Count Von Caprivi, the German Chancellor, was born in Berlin, Feb. 24, 1831. He entered the army in 1849, and was made a captain in 1861. In 1883 he was made

ments. His features, being small, show but a medium degree of the Motive temperament. The front head shows abundant intellectual sagacity, and power of analysis and criticism,



FIG. 124. GEN. GEO. VON CAPRIVI, GERMAN CHANCELLOR.

Secretary of the Navy and Vice-Admiral, and made many improvements in the service.

William II. reorganized the Navy Department in a way that Caprivi did not like, and as a consequence he resigned and was given command of the Tenth Army Corps. By an unexpected stroke of fortune he received the Chancellorship on May 20, 1890, when Prince Bismarck retired. He was rewarded with the title of Count in December, 1891.

He is a man of large frame, good stature, ample vital power, and has a large and well balanced brain. Thus he has the Vital and Mental tempera-

the ability to gather knowledge accurately and to keep it ready for use. Then he has large Comparison and Causality, which enables him to analyze subjects, and to theorize soundly and wisely upon the facts that he acquires. He is exceedingly broad in the region of the temples, which indicates inventive, creative ingenuity, ability to comprehend affairs en masse or in detail, to appreciate the relations of forces to results, of things to their uses, and to understand complication without confusion, just as a skillful weaver will look at a piece of complicated textile fabric, and at once see how he can reproduce it in the

loom. He has also large Ideality, which is connected with Constructiveness in its action, hence he has invention, power to create resources from given conditions, and if he shall not prove to be a master in diplomacy, as he is doubtless a master in the evolution and control of troops, we shall be disappointed.

We infer from the development that General Von Caprivi has excellent financial capability, and would show skill in managing the revenues of a nation, making what is drawn from the people in the way of taxation subserve the public interest. As a business man he would conduct manufactures and workshops in such a way as to make good articles at as small expenditure of capital and labor as any other man in such lines of business. He is a man of wonderful order, systematizes everything and makes all act together like clockwork. He has refinement and good taste, a ready sympathy for those in trouble, and a strong tendency to spirituality and religious feeling. He ought to be an accurate talker so far as definiteness, clearness and vigor of style are required. The head is decidedly broad in the central region, and we credit him with force, courage and enterprise, and at the same time give him a good degree of secretiveness. In affairs of state he would be able to act with proper reticence and concealment when necessary. If we had a side view of the head, showing the back part, we could judge better of his social and aspiring disposition. As it is, from the attitude and expression, we are inclined to regard him as a man of ambitious and dignified tendencies, aiming to keep himself clean, upright, and moral in his work and demeanor. He seems to be hopeful, firm, honest and thorough. There is less of the sternness of expression, and of that which may be called roughness and hardness of feature than have been attributed to his great predecessor, Prince Bismark.

Fig. 125.—Mr. Girard, the richest man in America in his day, whose wealth was entirely self-made, as a crowning act of his life founded and endowed the Girard College in Philadelphia. He was born in Bordeaux, France, May 21, 1750; settled in Philadelphia early in life, conducted an importing and banking business, bought real estate and improved some of it, and died in that city Dec. 26, 1831, leaving an estate at the time estimated at thirty millions, since greatly enhanced in value.

He had a compact, wiry organization, fine intellect, great Order, Calculation, and business talent; was independent in feeling; very firm, and master of all who came under his influence. He began life as a sailor, and became the richest man in America, and he was distinguished for his excellent sense and unflinching integrity.

ANECDOTES OF MR GIRARD.

We have been told that Mr. Girard would plan twenty brick houses, describe the style and dimensions of everything, make out their specifications and estimates for material, and so carefully and accurately would he do this, that a cart at one load would carry off all that was valuable which might be left over from the whole work. A man applied to him for work; he called him to his rear window and pointed out a pile of brick in the yard, and told him to move them to the opposite corner and pile them up nicely; the man asked for neither hod nor wheelbarrow, but laid them on his arm, finished his work, and reported. Mr. Girard went to the window and saw it was done, and told him to move them back; and thus he ordered him to do until night. When he came the next morning, Mr. Girard having found in him a man that would obey his orders without question, and do his work patiently and well, placed him where he could have training in his general business, and in a few months had

charge of all his outdoor work, the man who had been so employed having given notice that he would like to terminate his engagement. He having thus tried, perhaps a dozen times, with failure, found a man that

shop, at which you had better apply." He did so, made a contract for two years, and when he had fulfilled his indenture, he brought that back, and showed it as "satisfied." "All right," said Mr. Girard, "make two



FIG. 125. STEPHEN GIRARD, MERCHANT AND MILLIONAIRE.

he liked, who would obey and ask no questions.

Mr. Girard indentured all his clerks in his warehouse and bank. One had been earnest and faithful, and had worn himself down in health; he came and informed Mr. Girard that he believed his indenture was completed. The old gentleman hauled out the paper, studied it carefully, and wrote the words, "Faithfully fulfilled" across its face, and signed his name. The young man asked, "What had I better do now?" "You had better go and learn the cooper's trade; and, at such a place, there is a

barrels for me and bring them here." He went back to the shop and made two barrels, brought them on a wheelbarrow and rolled them in. Mr. Girard turned them over and over, studied them with a sharp eye, and was satisfied; asking the price, was informed that they were worth a dollar apiece; he said, "Henry, step up to your old desk and make out the bill and receipt it," which being presented and carefully scanned, Mr. Girard drew him a check for \$20,000. The young man then said, "What shall I do now?" "Go up to such a store and hire it and go into such a

line of merchandise, lay out \$10,000 for goods, deposit the balance in my bank." The young man had learned a good trade and had gained robust health, and was then ready to go into business for himself. Those who did right by Mr. Girard, liked him; those who tried to be unfair, incurred his ill-will and perhaps hated him.

Stephen Girard had seen so much of flattery that he prided himself in not being susceptible to flattery. A friend and admirer of his, talking with another man, said that there was one man in the world that could not be flattered. The man offered a wager that he, being a fine conversationalist, could flatter even Girard. They paid him a visit; Girard's friend introduced the stranger, who entered into an easy and appropriate conversation and gradually culminated it at a point which Girard saw was intended as a flattery to him, and he frowned upon it. The man begged pardon and started on another artful circuit; he talked like a Chesterfield, charmingly, and as he was about to culminate his discourse in flattery Girard saw it and frowned again. The man tried it a third time with the same result, and then straightened up and said, "Mr. Girard, I hope you will pardon me. This friend of mine, and your friend, in conversation insisted upon it in contradiction to my expressed opinion, that there was one man in the world who could not be flattered, and I laid a wager that I could flatter you, and I believe myself to be a good talker. I have exhausted my resources, and I give it up, for I find, Sir, that there really is one man in the world that cannot be flattered," and Girard tilted his head back and to one side and smiled; he saw in the stranger's face a look of triumph and appreciated the fact that he was flattered by the thought that he could not be flattered, and they hurried out of his presence to avoid an outburst of wrath.

Mr. Girard was eccentric and erratic, but always sensible and just.

Philadelphia bristles with anecdotes respecting his peculiarities, one of which is too good to be lost.

In his day the Methodist church was not very wealthy, and in a new district of the city a society desired to build a house of worship. They called on Mr. Girard; he considered their poverty and gave \$1,500. A Presbyterian church desired to build, and Mr. Girard was called on for assistance, and he drew a check for \$500 and handed it to the man, who said: "Why, Mr. Girard, you gave to the Methodists \$1,500, and we supposed you would give us an equal amount." "Give it to me," said Mr. Girard. The man handed him the check; he tore it up and silently pointed towards the door, and the man left.

Still later a Quaker society desired to build a new house better than the little one they occupied, and one of the brethren called on Mr. Girard, stating what they were trying to do, and that they thought he would perhaps be willing to give them something. He drew a check for \$500 and handed it to the brother, who took it and, without looking at it, folded it and put it into his pocket. "What!" exclaimed Mr. Girard, "you do not look at my check?" "Friend Stephen" answered the brother, "what thee does is satisfactory without my inspection." "Give me zee check," said Mr. Girard. The Quaker handed him the check, and Mr. Girard then drew a check for a thousand dollars, handed it to the brother, who again folded it without looking at it, and put it into his pocket. "You do not look at zee check?" reiterated Mr. Girard. "No, Stephen," said the Quaker, "it is thy work, thee does it to suit thyself and it suits us." "Give me zee check," said Mr. Girard. The Quaker took the check out of his pocket and handed it to Mr. Girard, who then drew one for \$1,500, and gave it to the brother, who, thanking him, treated it in the same way as he had treated the others, and then Stephen let him go off with it.

CHARACTER STUDIES No. 7.

BY NELSON SIZER.

PHRENOLOGICAL CHARACTER OF
MARSHALL P. WILDER.

IT is but proper to say that the following description was dictated while Mr. Wilder was a stranger to the examiner, he never having seen him before or heard him speak.

Your head, measuring $22\frac{1}{4}$ by 14 inches, is large enough for a man whose weight turns the scales at 155 pounds, fifty-three pounds more than you weigh ; and with this large head you need to take excellent care of your constitution, by avoiding everything that is unfavorable and by adopting a course of life that will be best calculated to give adequate support to the brain.

You have a strongly marked mental temperament, with a touch of what used to be called the Bilious temperament, now called the Motive temperament. You have intensity of power and feeling, and for your weight you are remarkably strong, and you could walk with less fatigue than most persons under the circumstances. There are some people who are soft, mellow and pliable and they are easily fatigued, there is no grip and not much grit in their make up. When you are excited and your feelings are so awakened that you are in earnest about a thing, you talk in such a manner that you can make your feelings felt, and you can make others feel that it is their duty to do as you think and say ; and if you had the right to command men you would be a wonderful man to govern people, not by physical power, that does not govern very widely anywhere, but there are men whose word is law, their expressed wish is equivalent to a command, and then there are other people who will fret and fume, but children and even horses and dogs do not pretend

to obey them ; but people have a tendency to obey you, because you have an uncommon degree of Firmness, and when you think a course is right and wish to accomplish a certain thing, you exert a magnetic influence over people, and they incline to obey your requests as if they were commands—as if you had a right to make them. You have rather large Self-esteem, hence you are independent, you rise above the caprices and the undue claims of the public, and feel that you are superior and worthy of respect, and people do not feel that you can be waved aside and set back as though you were of no account. You have large Approbativeness, you highly enjoy the approval of others, and are sensitive to the good will of those whose good will is worth having. You are strong in Conscientiousness, you feel in duty bound to be true and that your engagements are binding, and when you promise to be somewhere or to do something, you feel that you are bound soul and body to the promise. You have large Cautiousness, which makes you watchful, and probably you have larger Cautiousness than you would have had if you had been six feet high and proportioned in such a way as to warrant that size of head. If your body had been large enough to wield your brain well in the common duties and events of life, you might have had less Cautiousness, but when a buggy drives among ice carts and coal wagons it has to be on its guard all the time, and so if you had been organized like a heavy wagon, I think your Cautiousness would not have been so active.

You have Secretiveness enough to conceal that which you do not wish to express, and you have tact which enables you to accomplish results in a smooth and easy way and some-

times in an unexpected way. You have a great deal of power over your facial expression, you can look sober when you are telling funny stories, and when a person is telling a story that nearly splits your sides with laughter, you can control your face in such a way as to look grave, and you can sometimes make people think you are stupid and do not see the point, but the truth is you can control the muscles of your face and keep them under restriction as long as circumstances require it. For example, if it was your vocation to be a collector for a commercial house, you could get a good many men to pay you where they would not pay most men. You have a very steady eye, and it is backed up by Firmness, Self-esteem, Combative-ness and Continuity and clear cut intelligence, so that when you ask a man to pay his bill and you look him straight in the eye, he feels that he must pay, he does not think that he can frame any excuse that will be valid, and he thinks the easiest way will be to pay. It is, perhaps, a little difficult to define just what I mean, for when a man, who is six feet high and weighs 180 pounds, walks in somewhere and asks a man to pay his bill, his very presence and manner say, "I have come for the money myself and you cannot refuse me." There is some excuse for such a man getting his money, but when you come in weighing only 102 pounds, people do not think that you are able to master them as the other man was, and they even feel that they could hustle you out if they thought proper to do so, but there is a difference, "Not by my might nor by power, but by my spirit, saith the Lord." And so a good many things are done that way.

You have large Veneration, you have a profound respect for those who deserve it, and you know how to carry yourself towards eminent people in such a way as to conciliate their good will, and it makes them feel that

you deserve as much consideration as they do. You have an easy way of expressing your respect for a person of eminence, and there is many a man who wonders why it is that you have such power with him and that he cannot say "No" to you. In the first place this Veneration is a certain kind of magnetism in itself, and in the second place there is magnetism in your methods, and your mentality impresses people with the idea that they must think and do as you wish them to, you do not have to express anger, or make them think that you will be angry if they do not do right, you apparently take it for granted that they will do right, as you expect to do, and you do not look for any wavering in the course.

You have the power of analysis and criticism which enables you to study things in such a way as to make shades of meaning very effective, and yet they are insidious and not brawling. If you wanted to make a man feel that he would get the worst for it if he did not accomplish something that he was in duty bound to, you would not speak roughly, but you would look him so sharply in the face that he would think there was powder somewhere if he did not do the right thing, and so you rule him with your intellect, and the moral feelings and self-reliance come in to back up what the intellect thinks.

You have large Mirthfulness, you see the droll side of life, and when you feel like it you can be very funny, and you can make other people laugh without laughing yourself; and it is your very gravity sometimes which makes the jokes seem so funny. If you wanted to assume what is called "mock gravity," you could do that to good advantage on the stage. If you were to undertake dramatic comedy, you would be perfect master of the position, and carry your audience with you. Your Mirthfulness and Imitation being large, with enough of Secretiveness to give you the easy

command of your feelings, and the tact to awaken the wit and the sympathy of others, your success would be easy and complete. Your strong social feelings enable you to carry the affectionate sympathy of others in your efforts to do it, with such a keen sense of human nature as to make your success easy and natural. You have large Sublimity, and a very keen sense of what is marvelous, grand and startling, and you appreciate the beautiful as well as the grand and immense, and your power of description is excellent. You have a clear sense of the meaning of words, and you have the power of being impressive in what you say. There are two functions of Language. One is to give fullness in the way of utterance and the other is to give incisive persistency without much noise; and we think if you want to make anything impressive, you lower your voice, and if you had an obstreperous or wilful boy to deal with, you would say to him, "I think you had better do this, for if you do not I am afraid you will be sorry." And then he would gladly do it. You have a broad and a high top head, and this development gives you a sense of righteousness and duty, and you can impress others with the same feeling, and with the idea that "there is a Providence that shapes our ends." And if you had a part to carry that appealed to the Sovereign Ruler of the Universe, people would feel impressed by that presence. In the Episcopal service the reader rises and says, "The Lord is in His Holy Temple, let all the earth keep silence before Him." And if that is rightly said, people feel the sublimity of it, but another man might rattle it off and the people would not think much about it. It would not move them in any way. Now, you have the power of making a thought impressive, and you can make it impressive by a vir-

tual, though mute, appeal to the Higher Power.

You have a sense of finance, you appreciate the profit and loss side of life, and you are pretty keen in understanding commercial values and commercial obligations, and you want to have a clear understanding of worth where you are under obligations to people, or where people are under obligations to you. If you had duties



MARSHALL P. WILDER, HUMORIST.

or privileges involved in a contract, you would want everything written out completely and definitely, and you would be accurate in your statements and definite in your claims, and you would not be likely to have trouble with people on the score of finance, if they only wanted to do right;—because you have a clear sense of the rights and duties that belong to finance and to financial obligations.

If you had been educated for literature you would have made a fine writer, and if you had been educated in the direction of poetry you would have written poetry, and if you had

been educated in the domain of art you would have painted well, and you would put your soul into the work you had occasion to do.

You are a good thinker and reasoner and a good judge of strangers. Your Imitation is large, you can personify people, you could speak in the voice of another so that it would sound as though some other person were speaking. You could carry on a dialogue and imitate the two voices so as to make it seem quite natural.

There is a good deal of the dramatic in you, there is also a good deal of the religious element and a wonderful amount of determination and dignity, but you are not quarrelsome, you generally manage to get your rights without quarrelling and without clamoring for them. If you were in business and a man owed you something, and he were to talk to you about a modification of the amount, you would look at him and say "Why, you do not decline to pay me my bill, do you?" And that would make the man feel cheap and he would not hesitate any longer, but some men in your place would say "If you do not pay me my bill I will call you before a magistrate." And that stirs up ill feeling right away, and a man is apt to answer to that by saying, "Do it if you like, I do not care." But you keep cool and collected, and so win your victory.

You have a large brain for your body, and therefore you need to do as much as you may to make your body sufficient to give your brain adequate support. You can do this in part by avoiding exhaustive effort, use the elevator instead of walking up the long flights of stairs, and if you take exercise take it on purpose and do not exhaust yourself by over exertion. Your large brain needs a body half as large again as yours is, and, therefore, you must do by yourself a little as a man does by his mill on a small stream, he has to reserve power by shutting off the flow of the stream at times, so that when he wants

to grind his wheat he will have some stored up power, as the natural flow of the stream is not sufficient to turn the mill all the time. And so you must rest a good deal and take proper and nutritious food that is easily converted, and then you will not need medicine nor assistance.

BIOGRAPHICAL SKETCH.

MARSHALL P. WILDER was born Sept. 19, 1859, at Geneva, N. Y. He was the son of Louis de V. Wilder, M. D.

He is endowed with a large, active and susceptible brain, but has a small body, standing but about four feet high and weighing 102 pounds. He has received a good education; has been before the public as a "humorist" about twelve years, and is one of the most marvelous story-tellers known. He is everywhere received with favor, and especially by notables in England and in his native land. Even Gen. Grant, having once been introduced to him, and, meeting him on a street corner in New York, near the Park, he called a carriage and asked Mr. Wilder to take a turn in the park with him, and thus devoted an hour. Such men as Mr. Beecher, Mr. Blaine, Mr. Depew, two presidents of the United States and the Prince of Wales have received him and treated him with the greatest courtesy—not because he is little and childlike in stature and appearance, but because he has wit, grace and good-nature, and they feel that he is a sunburst of light and joy.

He has written a book of about 300 pages, entitled "The People I've Smiled With." It is full of wit, pathos and tenderness, showing that though his body is small he has a big head and a genial heart. No sketch of his life and work will at all compare with an hour in his presence, under the electric influence of his wit and humor, and the best part of it is that there is no sting in his wit—he makes nobody unhappy and he is as modest as he is brilliant. A copy of the letter

which Mr. Beecher gave him as an introduction to the President will give some idea what so capable and brilliant a man thought and was willing to say of him over his own signature:

Dec. 24, 1886.

MR. PRESIDENT, DEAR SIR: Marshall P. Wilder desires an introduction to you, and since in his English career he has been received by the Prince of Wales and is a favorite with nobles and commoners of high degree, he will feel honored if you will receive him kindly. He asks nothing but the privilege of conferring pleasure. His entertainments are highly laughter-provoking and of an original character. He deserves great credit for making a brave

struggle against difficulties that would have appalled others. He is a most worthy and respectable person, and his efforts in my church on sundry occasions have given very great amusement both to the children and to the grown folks. Yours sincerely,

HENRY WARD BEECHER.

And the President, when he received the letter, invited Mr. Wilder to come forward and take precedence of Governors and Senators that he might show his regard for one so cordially recommended.

But one must read his book or hear him in public to realize how much can be done with so fine and large a brain connected with so small a body.

HORACE MANN, LL.D.

BY CHARLOTTE FOWLER WELLS.

"I DECLARE myself a hundred times more indebted to Phrenology than to all the metaphysical works I ever read." So spoke Horace Mann, one of the greatest American statesmen and educators of his day. The writer of these sketches feels that they would be incomplete without some mention of this friend of all that was good, and opponent of all that was evil. He was born in Franklin, Norfolk county, Mass., May 4th, 1796, and died August 2d, 1859. His father, Thomas Mann, was a farmer in limited circumstances, and the education of the son was obtained entirely from the common district schools until the age of 20, when he began to prepare for college, and in six months fitted himself to enter Brown University. He was graduated in 1819 with the highest honors, and the theme of his oration, "The Progressive Character of the Human Race," was the keynote of his entire life. He next became a student of law for a few months, when he was invited back to college as a tutor in Latin and Greek.

In the latter part of 1821, having resigned his tutorship, he entered the law school of Litchfield, Conn., where he studied for a year. He was admit-

ted to the bar in 1823, and opened an office in Dedham, Mass. In 1827 he began his political career as a representative to the Legislature from Dedham, and his first speech in the House was in favor of religious liberty. From this time Mr. Mann became a leading member of the House, and took an active part in the discussion of important questions, especially such as related to morals, public charities, education and the welfare of the poor, the ignorant, or unfortunate classes. He was foremost in procuring the enactment of laws for the suppression of intemperance and the traffic in lottery tickets, and for improving the system of common schools.

The establishment of the State Lunatic Hospital at Worcester was conceived by him alone, and by his advocacy sustained and carried through the House against the direct opposition of some prominent members.

In 1833 Mr. Mann removed to Boston, and at the first election after he became a citizen of that city, was chosen a member of the State Senate. In 1836 he was elected president of the Senate. At the organization

of the Massachusetts Board of Education in 1837, he was elected its secretary, and for the next eleven years was annually re-elected by the unanimous vote of the Board. On accepting this office he withdrew from all other professional and busi-

pense, Mr. Mann visited Europe to examine schools, and to obtain other information that might be made available at home. His seventh annual report, made on his return, embodied the results of this tour. Probably no other educational document ever had



HORACE MANN, LL.D.

ness engagements, declined re-election to the Senate, abstracted himself entirely from political parties, and while he held it resolved to be known only as an educationist. He began at once a vigorous and thorough reform in the school system of the State.

Mr. Mann's annual reports were remarkable documents, and excited great attention among the friends of education. In 1843, under the auspices of the board, but at his own private ex-

pose, Mr. Mann visited Europe to examine schools, and to obtain other information that might be made available at home. His seventh annual report, made on his return, embodied the results of this tour. Probably no other educational document ever had so wide a circulation. Many editions were printed, not only in Massachusetts, but in other States, and several editions were printed in England. A spirited pamphlet controversy arose between Mr. Mann and some of the Boston teachers on the subject of school discipline, which resulted in a triumphant victory of the former, and public opinion compelled the teachers to adopt in practice his views on discipline and the disuse of corporal punishment.

During his secretaryship Mr. Mann wrote twelve long annual reports, of the tenth of which the *Edinburgh Review* said: "This volume is indeed a noble monument of a civilized people; and if America were sunk beneath the waves would remain the fairest picture on record of an ideal commonwealth."

The *Common School Journal*, which he edited and much of which he wrote, consists of 10 vols. 8vo. He published a volume of lectures on education at the request of the board. He traveled over the State every year to hold conventions or teachers' institutes, at which he often taught all day and then lectured in the evening. His correspondence was voluminous, averaging thirty letters a day. He was often called upon for legal opinions in regard to school matters, which he always gave gratuitously. He was the father of the Normal school in America, superintended the erection of two State Normal school houses, and drew plans and gave directions for hundreds of others.

He says in his "Supplementary Report" in 1848: "From the time when I accepted the secretaryship in June, 1837, until May, 1848, when I tendered my resignation of it, I labored, in this course, an average of not less than fifteen hours a day; from the beginning to the end of this period I never took a single day for relaxation, and months and months together passed without my withdrawing a single evening from working hours to call upon a friend. My whole time was devoted, if not wisely, yet continuously and cheerfully to the great trust confided to my hands." Only in a single instance was any public appointment made by him during this whole period unfulfilled, and in that case his physician forbid his rising from a sick bed to meet it.

From 1848 till 1852 Mr. Mann represented his district as member of Congress in Washington.

In 1852 he was chosen president of Antioch College, a new institution at Yellow Springs, Ohio. He accepted the position and continued there until his death, laboring with great zeal and energy in the cause of education and philanthropy. In this institution Mr. Mann realized one of the most cherished objects of his whole educational career, namely, to give to woman equal opportunities of education with those afforded to men.

The following quotation from a letter written by Mr. Mann to a friend will give a vivid picture of his early struggles and trials and of his high intellectual and moral qualities:

"I regard it as an irretrievable misfortune that my childhood was not a happy one. By nature I was exceedingly elastic and buoyant, but the poverty of my parents subjected me to continual privation. I believe in the rugged nursing of toil, but she nursed me too much. In the Winter time I was employed in indoor and sedentary occupations which confined me too strictly; and in Summer, when I could work on the farm, the labor was too severe, and often encroached upon the hours of sleep. Yet, with these obstructions, I had a love of knowledge which nothing could repress. An inward voice raised its plaint forever in my heart for something nobler and better. And if my parents had not the means to give me knowledge they intensified the love of it. They always spoke of learning and learned men with enthusiasm and a kind of reverence. I was taught to take care of the few books we had, as if there were something sacred about them. I never dogeared one in my life, nor profanely scribbled upon title-pages, margin or fly leaf, and would as soon have stuck a pin through my flesh as through the pages of a book. When very young, I remember a young lady came to our house on a visit who was said to have studied Latin. I looked upon her as a sort of goddess. Years after, the idea that I could ever study Latin

broke upon my mind with the wonder and bewilderment of a revelation. Until the age of fifteen I had never been to school more than eight or ten weeks in a year. As to my early habits, whatever may have been my shortcomings, I can still say that I have always been exempt from what may be called common vices. I was never intoxicated in my life—unless, perchance, with joy or anger. I never swore—indeed, profanity was always most disgusting and repulsive to me, and I never used the 'vile weed' in any form. I early formed the resolution to be a slave to no habit. For the rest, my public life is almost as well known to others as to myself, and, as it commonly happens to public men, *others know my motives a great deal better than I do.*"

Mr. Mann was twice married. In 1830 he was married to Miss Charlotte, youngest daughter of the Rev. Dr. Messer, for many years President of Brown University. She died in 1832. In 1843 he married Miss Mary Peabody, in whom he found not only a most affectionate and worthy companion, but an earnest assistant and sympathizer in all his educational labors.

Antioch College, of which mention has been made, and to which Mr. Mann devoted the last years of his life, was founded by a people wishing to be Christians, and to be known by that name and that only. They wished to establish a college as broad and as liberal as their own principles. They entered on the work with a zeal exceeding their wisdom, and greatly impressed the public with the grandeur of their plans.

At the dedication of the college its first President, Horace Mann, said: "It is pleasant to behold the grand and imposing edifice in which we have met; but, oh, how much more joyful to the heart to contemplate the beneficent and sacred purpose for which it has been erected! Let us dedicate it to the two great objects, which never can be rightfully separated

from each other—the honor of God, and the service of man! And while we consecrate this material structure to duty and humanity, let us renewedly consecrate our own hearts to the worship of our Father in Heaven, and to the welfare of our brethren on earth." The education and elevation of all men and women, alike and together, body, mind and morals; body and mind as powers and instrumentalities, but the moral nature, especially as their guiding will, in order that they might be powers and instrumentalities for good and not evil, as well as that man might become more Godlike in himself. These were his hopes and aims for the college.

Mr. Mann never sacrificed his conscience. As a lawyer he never took up a cause that he deemed unjust, or accepted a fee to defend a wrong. His first speech was in behalf of religious freedom; his second was in behalf of railroads, and so far as known, was the first speech on that subject made in any legislative body in the United States. He was one of the earliest advocates of temperance legislation. In 1832 he advocated a law for the restriction of the sale of intoxicating drinks, and the prohibition of its sale on Sundays. At that time only two Boston men in the Legislature stood with him,—one a physician, the other the last survivor of the old "Boston Tea Party." In 1837 such a law was passed by an overwhelming majority in both houses, and it then became his privilege as President of the Senate to sign the bill.

When Mr. Mann was appointed Secretary to the Board of Education, in 1837, he said: "I tremble at the idea of the task that possibly now lies before me. Yet I can now conscientiously say that here stands my purpose, ready to undergo the hardships and privations to which I must be subjected, and to encounter the jealousy, the misrepresentation, and the prejudice almost certain to arise; here stands my mind, ready to meet them in the spirit of a martyr. I know one

thing—if I stand by the principles of truth and duty, nothing can inflict upon me any permanent harm. God grant me an annihilation of selfishness, a mind of wisdom, a heart of benevolence. There is but one spirit in which these impediments can be met with success; it is the spirit of self-abandonment, the spirit of martyrdom. Henceforth, so long as I hold this office, I devote myself to the supreme welfare of mankind upon earth." And when he said "the welfare of mankind on the earth," he meant mankind in its broadest sense. It included "rich and poor, man and

woman, native and foreign, free and bond, white, red and black."

Physically, Horace Mann possessed a delicate constitution. He was tall and thin, with light complexion and hair; his head was high and broad in front, especially in the higher intellectual organs, Causality and Comparison, showing a large predominance of the intellectual and spiritual faculties over the animal propensities. He was remarkable for integrity, wit, logic and taste, but above all for his generosity, indomitable spirit, intensity and ardor.

(To be continued.)

CHILD CULTURE

TEACHING DEAF MUTES.

RECENT years have been marked by wonderful advances in methods for the education of children born with defects which place them at a conspicuous disadvantage in the pursuit of knowledge, or handicap them in their efforts to earn a livelihood. Prominent in this class are the blind, and those who are without the sense of hearing. Formerly the last named affliction was nearly always associated with utter inability to speak; but thanks to the superiority of modern instruction and training, a defective auditory sense is no longer necessarily a total barrier to the arts of oral communication. Miss Lillie Eginton Warren, of New York, who is one of the most noted and capable teachers in this line, has contributed a very instructive article on the subject to the *Popular Science Monthly* for January, entitled "Speech for Deaf Children," in which she explains many points of interest relating to the new methods of developing and training dormant mental powers. One

of the most remarkable achievements in the education of the deaf is the cultivation of their hearing, although the principal efforts of the teacher are directed to the art of "lip-reading or speech-reading," as it is called. We copy the following paragraphs which bear chiefly upon the problem of juvenile government, and apply in large measure to children of all classes:

"In the opinion of many, deaf persons are high-tempered, unruly, obstinate, and vindictive. The untrained, uneducated deaf may become so, just as the untrained, uneducated child in full possession of hearing may grow into a dangerous brute. It is not the deafness that is responsible. Too much stress cannot be laid upon the importance of inculcating prompt obedience. There is no reason why a deaf child should not respond quickly to another's wishes. It is impossible to explain matters to him; teach him to obey, and let him learn by observation why he is required to do so.

"Obedience implies self-control. All progress, mental and moral, must be regulated by the greater or less amount of self-control. A deaf child may give a telling blow; unable to hear it, he fails to realize the degree of force exerted. How shall he be taught he has done wrong? By a blow directed to him? That would teach him that what he gave another can hurt, but what does he think of the adult who strikes him? Would he not be likely to feel that the older person, by giving a blow practically indorsed its use? The next step would be to reason that it is justifiable to give one, but well to avoid receiving another in return. The best way to punish and thus teach the child to drop lawless expressions of his displeasure must be to show one's power without a trace of anger. If he is held firmly in a chair despite struggles and cries, he will realize he is being controlled. He is conscious of his act and knows he is deprived of his liberty in consequence. He sees determination, but no anger, in the face of his instructor, and learns that tears and screams are unavailing. There is no need to indulge in such useless efforts. He has tired himself, only to find his keeper fresh and undaunted. A slap would have suggested retaliation. Pinching could be easily returned. This superior, calm strength is something different and so far beyond his own abilities as to compel respect. In time the expression in the face is sufficient to enforce obedience, and the hands need rarely exert their firm, strong hold.

"The child's conscience is formed by the series of impressions he receives from the decided approval or disapproval in the faces about him. There may be times when more severe punishment is required, but rarely if proper training is received in early life. It should be remembered that the deaf child is not conscious of the effect of the unpleasant screams and resounding kicks he may give when he throws himself down some day in temper. All his dramatic exhi-

bition may have less behind it than has the 'No, I won't!' of the hearing child. We admit that the scene made by one and the attitude of the other are equally unpleasant, but the second may reveal greater defiance than the first. Speech is the expression of feeling, and feeling is best aroused through the hearing. Here is a means of cultivation cut off from the deaf. Can the education of the eye ever become sufficiently developed to atone for the loss in this direction? Most certainly not. The diversion made by hearing a remark, a laugh, a song, or a musical instrument, has often-times prevented a quarrel or broken a willful determination. The deaf are deprived of this means of receiving a fresh turn to thought, and this fact should be borne in mind when it is noticed that their disposition is not to give up a plan once adopted.

"What the deaf may become if untaught is not an agreeable picture to face. Some idea may be formed by recalling that they were classed among the idiotic in the years they were neglected and deemed unworthy of efforts to educate. Here is a child, bright, healthy and active, with an avenue to his brain obstructed. Reasoning from limited knowledge gathered by his observations alone, he misunderstands many efforts to do well by him. He is conscious of lack of communication with others; in a little while he may be morose and unhappy. Give him the speech he knows not, and the language that is to him a sealed book. With care during the first years it is possible to develop an agreeable voice. * * * * Speech is related to the affections more than to the intellect. The prompting of the actions of the vocal organs comes from the stirring of some emotion. If the intensity is great, cool judgment has no influence upon the voice unless long experience has developed self-control; if fear or timidity is felt, results are noticeable immediately. The deaf child's happy state is therefore absolutely the first essential."

"TEMPER" A MISNOMER.

IN the holiday number of *Childhood* one of the editors has something to say of "temper" in children, and deals with it in a judicious way, evidently recognizing the influence of factors in the organization that are but natural in their prompting to activity. In view of the far-reaching scope of these elements, we can scarcely overestimate the importance of properly understanding and training them. She says, with reference to the common view of youthful irritability:

"Nothing is more misunderstood in children, nor more injudiciously dealt with, than what is called temper. Really, temper is in itself nothing more than a form of energy, a vehemence in acting. Stephen Girard is said to have preferred as clerks men with strong tempers, and when he met one he would employ him and set him to work in a room by himself; his opinion being that such men were the most efficient, and that their energy would spend itself in work when removed from the temptation to quarrel. An irascible disposition, however, is rather different from the vehement self-will ordinarily called temper. It is usually an accompaniment of physical weakness and has to be met by the same kind of tact a nurse exercises toward her patient, while, on the contrary, temper is irritated by such soothing methods. What it requires is a chance to work off its overplus of force; it wants to charge at something, to storm a fortress, strike heavy blows, and be put in a position calling for precision and directness. Persons of this character are usually good shots, fearless riders and know how to command soldiers. In other words, strong temper is a kind of courage, a natural instinct to dominate the situation. It becomes passion when every other outlet for it is suppressed.

What should be done with a child

possessed of this self-will is to put him at some work calling for muscular effort. If a boy, let him split kindling, make a fence, drive nails, run the errands; and let his playthings be something that he can put through motions, rocking horses, swings, tools. It is unwise to make him perform labor, either physical or mental, that is monotonous in character. 'The Arab barb makes a bad roadster.' Many children that are now daily punished for some manifestation of *ill*-temper would be admired for their bright and sunny natures, if they were not driven to sullenness by having all their faculty for exertion hampered, and their fighting instinct wrongly aroused by opposition. The instinct is a proper one, in itself. Judiciously trained it becomes capacity for overcoming difficulties, not exactly after the meek and patient manner of perseverance, but with a sort of fiery resolution. Men and women of this character have their place in the world and are indispensable in some emergencies. They usually begin life with a large capacity for both love and hate, and either may be brought out by their early education.

We may develop in a child a fairly strong feeling of hatred by beginning while he is yet in the cradle to thwart his will for the sake of teaching him submission. Strong natures never can learn to submit except to two things: the force of circumstances, and love. One golden rule of the nursery is: avoid personal encounters. Rancor is a century plant; it may blossom but once in an age, but it lives and grows while it seems dull and past blooming. A fight between parent and child leaves scars that no soothing touches of kindness can quite efface, and whoever conquers loses something that never should have been jeopardized, his respect for the character of the other. For the instant we cease to respect we begin to despise and tyrannize. It is so with parent as with child."

THE SCIENCE OF HEALTH

SIR ANDREW CLARK.

THE greatest of England's physicians has just passed suddenly away at the age of sixty-seven. His intention, as well as his hope, was to "die in harness," and "in harness" he has died. The English journals cry loudly that it was from overwork. True he habitually did the work of



SIR ANDREW CLARK.

two men, commencing to see patients three hours earlier than most physicians are astir, and giving to each dangerous case as much attention as would a young man with his first patient.

But to Sir Andrew Clark, "labor was the life of life," and the aphorism, such as this, that "ease was the way to disease," that he was fond of quot-

ing to his patients, he exemplified himself.

Like Cornaro, the well-known Italian centenarian, he began life handicapped by physical weakness. It is said that when a young man he sought admission as physician to one of the London hospitals, the choice fell upon him, on the score "that such a delicate little fellow would not live long anyhow." If like Cornaro his habit of labor had been to a great extent in the open air and physical, we should not now be mourning the loss of one of the truest friends the invalids of any land were blest with. Sir Andrew had a heart for the poor sick man and found time for much gratuitous work, which was of as thorough a nature as when called upon to prescribe for the rich. He was Tennyson's physician, Gladstone's, and many of the nobility consulted him. Indeed, it was the other work and the way he discharged his duties as President of the College of Physicians that caused a certain prejudice, born originally of his amazing popularity with aristocratic patients, to die away.

This popularity arose partly no doubt from the wonderful consideration of his heart, and his courtesy of manner. I remember being greatly struck with this when, years ago, I took a little niece to see him. So differently from most consulting physicians, he seemed to think it worth while to explain some of the mysteries of science to me,—an outsider to the charmed fraternity, and a woman! I had asked if the child's tonsils could not be operated on. He told me in response that it was unsafe for so

young a child ; that he had performed the analogous operation on young guinea pigs, and that they invariably died of consumption before coming to maturity ; and with human beings the effect was much the same.

The advice he gave me for this child, about twenty-five years ago, is much the same as what he gave to a friend of mine the other day. No medicine, only a little iron, but a great deal of mother Nature was prescribed. Simplicity of living, with cheerful occupations, which last is easier for a child than for a grown up man, avoid the wear and tear, the worries and flurries of life. The advice he gave gratuitously to a nervous patient not long ago, wrote out at length, to a friend who was interested in him, may be found to have wider use : "Mr. — cannot at present be made well, but he may reach his best by a simple, regular diet, by self-effacement (dying to live), by light, regular daily occupation, by the resolution to give a deaf ear to his trying sensations, and by a determined fighting and struggling to lose himself in outward things. To do nothing would be

to go backwards and downwards. True, he may suffer if he works ; nevertheless, it is best to work. Hundreds suffer to work. I have always suffered to work, but work keeps me where I am. I have to wrestle with it, but thus my antagonist becomes my best helper."

Truly he being dead, yet speaketh. To such as read this magazine such advice comes in unison with the principles that they are generally supposed to accept.

LOUISA A' HMUTY NASH.

Sir Andrew Clark was born in Aberdeen in 1826, and educated at Aberdeen and Edinburgh. In early life he was pathologist at the Royal Naval Hospital at Haslar, but, in 1854, settled down in London, and began his long connection with the London Hospital. In 1858 he was made a Fellow of the Royal College of Physicians, and thirty years later succeeded Dr. Jenner as its President. Sir Andrew held many appointments in London and the provinces, and was the author of important medical papers and lectures. For many years he stood in the front rank of English consulting physicians, and after 1883, when he received a baronetcy on Mr. Gladstone's recommendation, he was considered one of the first two or three leading medical men in London.—EDITOR.

MEDICINE OR NATURE.

(Concluded.)

THE difference of opinion among physicians of experience is very marked regarding the value of a mooted treatment. Sometimes this difference of opinion, as expressed openly at conferences of practitioners, is so emphatic as to arouse wonder, if not suspicion. We have heard men gravely detail cases in which they had obtained good results by the employment of a certain medicament, and then other men have risen in their places and stated, with as much evident sincerity, that they had tried the same thing in similar cases, without obtaining any such effect, and they had little or no confidence at all in its power. What does such difference

of opinion argue, making allowance for the variation that may occur in dosage and manner of serving the drug, but that something besides the mixture, or tablet, was the essential factor of improvement.

A shrewd observer has said that the young doctor on beginning practice has twenty remedies for one disease, but after twenty years of practice has one remedy only for twenty diseases. This trite comment involves a simple alternative: either that there are very few remedies that are at all trustworthy, or recourse to methods suggested by a rational hygiene is followed by the most satisfactory results.

There is also the *uncertainty* of a drug's "acting" twice alike, to say nothing of differences of quality and power that may be shown by successive preparations even from the hands of the same pharmacist. Probably no drug employed in heart troubles is more commonly preferred than digitalis, yet it can not be trusted. This appears to be the opinion of the majority of experienced practitioners in this country who use it, nevertheless, because they do not know anything better. At a recent meeting of the Toledo Medical Society, one physician after another expressed opinions that reflected little credit on the use of digitalis. One said, for instance, "the drug itself is unreliable; you are never certain whether the preparation you get contains any of the active principles of the drug or not. * * * In cardiac troubles a great deal of harm is done by using digitalis in cases where it is not indicated."

Another said, "I have found all the preparations of digitalis unreliable. My experience has been that the American digitalis is unreliable," and so on.*

It would be easy to multiply illustrations of this sort inculcating every drug in the pharmacist's calendar. Current medical literature abounds with them to so great an extent that a rational inference would be expressed by the query.

These agents of pharmacy being so uncertain according to your own confession, gentlemen, why do you use them?

Let us now consider the question more particularly from the side of Nature. The experienced physician knows that fully 75 per cent. of the cases of sickness occurring in society will run a shorter or longer course and recover *if let alone*; and this fact suggests the question, whether or not, in the remaining 25 per cent. of cases with their possibilities of serious termination it would not be

the wisest course to treat them on the lines of our best sanitary experience, rather than by the administration of triturations, mixtures, and what not of chemistry?

Sickness or disease is a disturbance of organic function, caused by the introduction into the system of certain alien substances, or by the doing of something that directly or indirectly interferes with the equipoise of the organism. This disturbance of organic function is manifested by the symptoms, and from them the physician obtains the data that guide in his determination of the part or parts of the body most affected, and of the general nature and currency of the ailment. The medical attendant takes into account the "history" of the case, which he obtains from the patient, and that and the symptoms guide him in forming a judgment with regard to the severity and extent of the disease; whether he has to deal with a functional trouble, or a condition involving actual breakdown of organic structure, the latter being of course the more serious, although frequently enough functional disturbance, as in heart irregularity, may awaken grave apprehension.

Giving attention first to the relief of the patient from present suffering, the physician next attacks the cause or causes of the illness. Here his knowledge and capacity come into play, for he must not only discern the cause, but also apply the proper treatment to carry the patient onward to recovery.

The vast majority of cases that appeal to the physician owe their existence to direct violation of the simple laws of health. Their history discovers exposure to unsanitary conditions, as living in an atmosphere pervaded with foul gases, drinking impure water or toxic beverages, eating immoderately or of improper things, going about insufficiently clothed, neglecting personal necessities, etc. To the extent that

* *Toledo Med. and Surg. Reporter.*

the community becomes intelligent regarding these common causes of sickness, and endeavors to remove or avoid them, is the improvement of its health record. Catarrhs with their associated sore throats, influenzas, bronchitis, etc., are largely due to exposure to excessive heat or to cold or dampness, as the immediate cause, such exposure being, as a rule, a matter of carelessness or caprice. Then, too, most of the rheumatisms and dyspepsias we meet with are to a like extent the consequences of personal negligence, or an indiscreet challenging, as it were, of sanitary law. We need but to mention these facts to obtain the reader's assent to the principle that disease is to a great degree avoidable through observance of the plain canons of health.

When sickness occurs, however, is it not rational to draw our suggestions for its treatment from the domain of prevention? Will not a regimen founded on cleanness, neatness, temperance, disinfection, pure air, nutrition, be promotive of the desired cure? If there be functional disturbance, can we not regulate the distressed organ or organs by hygienic means, or the practice of those habits that promote its healthful operation? If there be certain elements in the body that have excited the disturbance, they must be removed or rendered inert. It has been found that toxic elements may be successfully disposed of by the use of water, pure air and sunlight. Hundreds of physicians have testified to the efficacy of water treatment in fevers of all types. That bane of modern civilization, pulmonary consumption, is best treated by natural medication, improved climatic, relations that permit an out-of-door life, good food, agreeable society.

The writer can furnish from his own observation a considerable list of cases regarded grave and of long standing that were improved or cured by hygienic measures; one of several

occurring to mind that had been pronounced beyond medical treatment was that of an Italian laborer—the disease, cerebro-spinal meningitis. All that was done for him at the hospital was to keep him on a water-bed, and covered with a wet sheet, and feed him regularly. He remained in a state of coma for several days, but, to the surprise of attendants, came out of it, and a week later was able to be up.

Another case was that of a young man suffering with bowel obstruction and enteritis. He had been treated for some time in the manner customary that employs cathartics and defervescent of the drug kinds, but rapidly grew worse and, when we saw him, was suffering with septicaemia and greatly weakened. Repeated colon douches gave him relief from the intestinal pain, and reduced the fever, and careful nursing did the rest.

The ancients worshipped water and the sun. There was good reason for their reverence of these two great agents of nature, for both are most energetic factors in the procedures of life; the physician who goes his round with an armamentarium, equipped, so to speak, with pure water and sunshine, may carry the best assurances of help to his patients. The fresh air excursions and seaside homes that have been provided by the charitable for the sick, poor of New York have done vast good, lowering the death rate among children and bettering the health and spirits of the women.

Several years ago the writer was one evening riding by train out to a suburban village. Seated near him in the car were two gentlemen, one elderly, who, by his talk, appeared to be a physician. So he proved to be. In the course of the exchange of remarks the doctor said that he had not been in his usual health for several days, when his companion said pleasantly, "Well, doctor, what do you do when you are sick?"

"I lie off mainly; keep quiet and rest," was the answer.

"So you do not take medicine?"

"No, rarely find it necessary. A little rest seems about the best thing for me."

"But, doctor," insisted the other, "is not that the best thing for others, too, when ill?"

"I don't know but that it is, and in fact I generally advise it. Yet you must know that it's a hard matter to convince people that they do not need medicine so much as rest."

If by rest he intended to be understood as including the stomach as well as the locomotive system, we are in harmony with him, as many cases of sickness are best treated by abstinence from food for a time, thus allowing the stomach and assimilating organs, lymphatics, etc., to regulate themselves, and to eliminate from the tissues such morbid agents as have become entangled in the mesh of congestion.

Pneumonia is a malady that offers an unflattering record of fatality on the side of drug treatment. It must be admitted that in most cases the element of debility or exhaustion is a conspicuous causative, and renders treatment of any kind uncertain, yet the disciples of hygiene have the better showing of results. An early inspection of the case and cold water compresses to the thorax are usually effective in reducing the temperature and easing the sharp pain. When we consider what hospital physicians have done for fever patients by baths, massage, etc., to the utter disuse of antipyretics, opium, ammonia, poultices, expectorants, antimony, potassa, etc., and that successfully, it is matter for wonder that the doctors generally do not follow the example. To be sure it is far easier and quicker to write a prescription or to leave a few tablets or drops, than to give a fomentation, or a rectal injection, or to prepare and apply a compress, yet with the probability of doing the patient no harm if he is not benefited.

All the positive advance of modern medicine has been on the line of prophylaxis or prevention. The discoveries with regard to poisonous elements that are causal to febrile conditions, and incident to systemic congestions and tissue change intimate the therapeutics that may be expected to avail, and which may be summarized in—antiseptics to neutralize the morbid process, sedative applications mainly external, and properly adapted nutrition, for the repair of waste and the upbuilding of the general organization. Dr. Beauregard stated in the *Revue Pédagogique* of Paris last October what may be considered the gist of the matter, concluding with: "No greater benefit can be rendered to humanity than to spread everywhere instruction that by proper hygienic treatment of the body, of clothing and of dwellings, all the noxious maladies of which I have spoken can be stamped out."

This being the case, and made a matter of general observance, what becomes of medicine? H. S. D.

CLIMATE AND CATARRHAL DISEASE.

MOST catarrhal troubles affecting the throat and breathing organs of persons living in the Northern States, especially in populous localities bordering on the Atlantic Ocean or on the great lakes, are relieved, to a good extent, by residence in some part of the South, particularly where the atmosphere is of an equable tone. This climatic condition is found mainly in those States that have large areas of well timbered land, and at such a distance from the ocean that the country is somewhat elevated. We quite agree with Dr. Wile, of the *New England Medical Monthly*, that there are regions in North Carolina and South Carolina and Georgia that meet the requirements of those for whom a Northern Winter is too severe a tax upon their lung power. Like him, a tour southward a while since satisfied us that the

long-leaf pine belt combines advantages that should be recognized by American physicians. For the invalid suffering with pulmonary disease the pine country should be preferred to a sojourn in some much advertised European resort. Take Southern Pines, N. C., one of several like settlements in the pine forest, its convenience of access, good water, soft atmosphere and excellent hotel accommodation, at very moderate cost, should command attention. When we were there, a year ago, it was a little town of twenty or more neat cottages, reminding us of the small country settlements which city people North build up for summer living. There was an air of enterprise and a spirit of order and neatness in the methods of improvement that contrasted with what we had seen in other parts of the South. The people with whom we came in contact, intimated their hearty satisfaction with the plan. Most of them were northern people touring in the South or looking for an abode for sanitary purposes.

The Seaboard Air Line which traverses this region not only gave us

views by the way that were very pleasant to the inquisitive eye, but conveyed us to our destination *on time*. As the road stops at important points, like Norfolk, Petersburg, Richmond, Raleigh, Weldon, Monroe, Augusta, Athens, Atlanta, it connects with steamers and railroads that reach all parts of the South and North. Time from New York City by rail is about sixteen hours, but the more comfortable way, to our mind, for the traveler *via* New York, is to take steamer for Norfolk, or if he go *via* Baltimore, to make the night trip by steamer from Chesapeake Bay. In *Food, Home and Garden* a writer speaks very cordially of the Southern Pines region as very appropriate for colony settlement and fruit growing. The soil is well adapted to vineyards and small fruits, while its easy communication with leading market centres has an advantage that the enterprising culturist can appreciate. To people of vegetarian preferences, the country down that way seems to us to offer special inducements for profitable enterprise and social independence. D.

NOTES IN ANTHROPOLOGY.

Heredity Subject to Will.—In *The Fortnightly Review*, Dr. C. H. Pearson presents the optimistic side of heredity, which is too often unthought of in contemplating the ills humanity is heir to. He says, "Science has not said its last word yet upon this question of heredity. Even history can assure us that the cumulative transmission of qualities does not always or necessarily work for evil. Every great European race has revised itself slowly out of savagery, and has gradually acquired new qualities, while it has eliminated many of the worst parts of the old. We know of our own ancestors—German and Norse—that they were prone to homicide, that they plundered and enslaved freely, that they were coarse livers, and that they

regarded technicalities more than substantial equity in their courts of justice. Their women were easy to take offence, slow to forgive, and merciless in their vengeance. We can point to no particular epoch of regeneration, but we see that at the end of a few centuries there has been an enormous change for the better in all these particulars. Neither has this been only by the gradual dying out of violent and unscrupulous men. Violent men have often been masterful, and it is the masterful men, as a rule, who are founders of families. The cause is rather what Pope has explained with his usual lucidity, that Cataline's rapacity and Cæsar's profligacy were means, not ends—ambition was the vice.

"In that remarkable series of books in

which Mr. Tola has traced the fortunes of a family, he repeatedly exhibits the changes, which may be produced by a slight modification of character and circumstances. The son of a strong woman, possessed by ambition and shrinking from no crime to attain his ends, is a man of science and a philanthropist; the daughter of the woman of the town is given up to works of piety. Higher intellectual interests and an educated moral sense qualify in Dr. Pascal, the tenacity of purpose which is common to him with his mother; and it is easier still to understand how the two sides of the historical Magdalene's character are represented in Nana and her daughter. We may accept the doctrine of heredity in its extreme form and yet believe that its apparent consequences are perpetually eluded, as new combinations of race are formed or as training and environment determine life."

Food Habits of the Indians.—

The taste for sport, for the sake of killing, seems to be cultivated and enthusiastically enjoyable to the people, who, shut in by the tame life of civilization, take periods of wild frenzy, in which success is counted by slaughter, and not by supplying the need for food. The Indian, even in the savage state, kills, as does the animal, to sate his appetite; once fed, he kills no more until again hungry. The uncomplaining manner in which Indians, in a savage state, go without food, is wonderful. To the uncultivated savage, regular meals are unknown; and as the animal feeds at any time, when food is obtainable, or if the Indian catches fish, the squaw immediately heats the stones and cooks; or if he shoots game, the meal is immediately prepared, and each will eat an enormous quantity, until sated, and there is no further need for exertion, for all are full. When again hungry, again they hunt. It is the industry of the squaws that provides grain and some reserves when the meat supply falls short, consisting of jerked meat, dried fish and acorns. When the government was colonizing the wild and savage bands taken from South Dakota, Colorado and California upon the lands in the Indian Territory, the Modocs, from the lava beds of California, and the Nez Perces,

the Utes and Sioux, from the deserts of Dakota and Utah, were of a very low type in physical development. The Modocs, short of stature, the men scarce five feet high, and the squaws about four feet, filthy and squalid, took to their new home, gathered the acorns by the bushel, economized grasshoppers, snakes and earth-worms, and besides grew fat on government rations, and by the wise help of the Quaker agent and his aids, women teachers, became peaceful and humanized, and made such rapid strides toward industry and civilized habits that they now have cultivated fields, good houses or cabins, and many herds, and in the short term of years since their colonization, have changed beyond what could have been hoped, for the better, though still governed by tribal traditions and the communistic ownership of land, and still retaining their old superstitious dances, rites and ceremonies.

The Nez Perces, the Utes, and a small portion of a tribe of southern Sioux would not take to the lands provided for them in the reservation, which was a better tract than that which the Modocs have made to smile with ripe fields of grain and wide pastures. Fierce, untractable, discontented, the bands would wander away, seeking the desert lands from which they had been removed; and when they had nearly starved, the herds of buffalo being gone and the water supply becoming inadequate to supply the increased demand made by irrigation for the cattle ranches of the white settlers nearer the base of the great mountains, they were driven to plunder to escape starvation. So persistent were they in their attempts to wander back to the barren deserts, whence they came, that most of them were indeed returned and placed upon a government reservation, served rations by the Indian agent, and have made slow progress toward civilization, if any. These Indians were of a different blood.

The Nez Perces particularly illustrated the strong bent of heredity and the result of in-and-in breeding, exhibiting marked mental characteristics of a single race in a particular line. Fortitude developed to ferocity, courage and cunning to foolhardiness, restlessness against civilizing influ-

ences amounting to animalism, blind in its striving against restraint of any kind, even to receive proper provision for nourishment. Indeed, many of the countenances exhibited the sullen ferocity of the mountain lion, combined with the cunning displayed in the countenance of the fox, and among the women especially, the snarling of the prairie wolf.—*Popular Science News*.

The Fuegians.—The *American Anthropologist* quotes the following from Dr. Rudolph Martin, of the University of Zurich, in regard to the Fuegians, with regard to whom he has published an exhaustive study based upon twenty-one skeletons, fifty-eight skulls and a considerable number of preparations of muscles, viscera, etc. The race is of short stature, with reddish brown skin, straight black hair, and small, dark brown eyes. Their skulls are mesocephalic, brachyfacial, with narrow, retreating brow, and a slight sagittal crest. The lumbar curve is slight, the upper extremity relatively long when compared with the lower. They are undoubtedly of the American type, differing, however, from their neighbors, the Patagonians, Arancanians, and Pampas Indians, while resembling more or less the Botocudos, Tapnos, Guarani, and Ayswara. They show also a certain resemblance to the fossil race of Lagoa Santa, and the hypothesis of Donikers, that these widely separated tribes are relics of a former race that inhabited the continent before the present stocks, appears probable. As to affinities with foreign races, Dr. Martin holds that it is not to the Mongols, to Japan, or to the Polynesian islands we should look, but rather to Europe. The crania appear to show relationships with the oldest type known, the quaternary skulls of Neanderthal and Spy. Geological and phytogeographic evidence show that in Tertiary times the continents were connected by a strip of land through Iceland and Greenland. No certain deductions can, however, be made until careful examinations are made of the other ethnic aboriginal groups.

Music in Wales.—In Wales, says a writer in the *Westminster Review*, every church and chapel in every village and

town has its choir, often numbering sixty, seventy, or a hundred voices, and every choir has its musical prodigies, leaders of parts, mayhap, who have never had a lesson in music in their lives, or some uncouth colliers, or tip girls, with voices which, had they been trained and developed, might have made of them Edward Lloyds or Antoinette Stirlings. District after district has its "united choral union," which will take up the study of some work of the great masters, and deliver it at an annual concert, or Christmas festival, not in the pale, flickering, dispassionate style which is common enough in the renderings of most musical societies of English cities at the public concerts or rehearsals, but in that vigorous, forcible, impetuous manner that reminds the auditors of the rush and swirl and tone of the Cambrian mountain torrents. The force of it, the emotional fervor, the richness of volume, the tone and timbre in it—these are things not to be forgotten. The same qualities in a lesser degree may be observed in the singing of any small chapel choir within the boundaries of Wales. You will never hear such singing as you may hear on quiet Sunday evenings from some Welsh hillside sanctuary, by a choir of working lads and lasses, conducted by some rough-and-ready, unkempt, self-taught musician. Music, then, we assert, is the very soul and kernel of the Welsh nature. A musical ear is the national birthright. Every Welsh preacher who immigrates to an English church finds the greatest difficulty in abstaining from that weird, peculiar intonation of his sermon, which is known as the howl, and which is often strange and objectionable to English ears. Another remarkable and subtle fact which will be interesting to the reader, and at the same time significant of the sensitiveness of the Welsh musical ear, is that it is positive discord to many among the Welsh congregations, if the minister in "giving out" the first verse of the hymn, does not so pitch his voice that it shall be in harmony with the key in which the tune has preliminarily been played by the instrumentalist. The disposition to form singing societies is a peculiarity manifested also among the Welsh residents of the United States.



*Ex fronte, ex capite, ex vultu, etiam
in ipso oris silentio natura loquitur.*

PLATO.

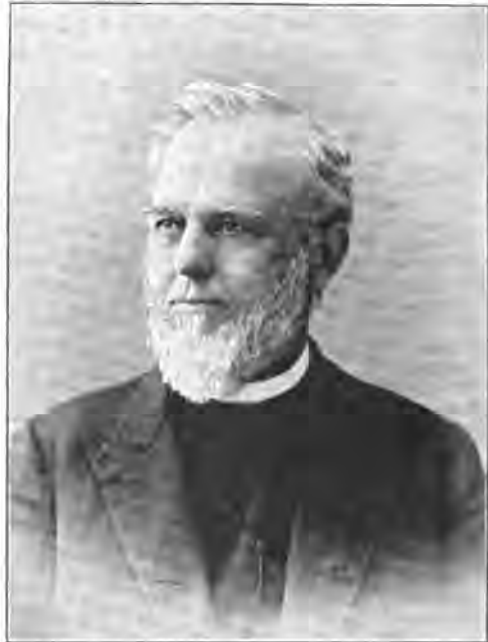
NEW YORK, February, 1894.

CHARLES F. DEEMS.

THE passing away of this earnest, spirited and industrious minister is a notable event in the later history of New York, for he was one of those who had been identified with the active prosecution of those interests that relate to the elevation of the people. Coming to New York in the prime of his manhood he at once went to work in that broad, missionary spirit which always characterized his expression. He had suffered much in the South during the Civil War, but his hopeful, cheery nature found opportunity and means among strangers for the assertion of that gospel of which the leading motive is peace and good will. A true Southerner, of warm feeling, he nevertheless adopted the better part of the reconciler, and his articles in the *Watchman* and his example had a marked effect in some quarters. He made friends and ere long had established a religious work of a unique character—the Church of the Strangers.

Dr. Deems' success in this noble effort was alone sufficient to give him prominence, but he was a busy man in all fields related to his church ministry. As an author and co-operator in public and private undertakings for the promotion of the moral and educational welfare of the masses he was energetic and efficient.

Born in Baltimore he had lived



DR. CHARLES F. DEEMS.

about forty-five years South before coming North, but here his activity had its best fruitage in the natural consequences of the preparation and discipline of the earlier years. Up to the time of the paralytic attack that finally ended in death, such was his activity and sprightliness that no one who did not know Dr. Deems would have thought him nearly seventy-five years of age. His short but very erect figure, his rapid, elastic movement, his lively, happy talk, intimated the vigor and fresh-

ness imported commonly to much younger men.

We knew him well, for among the first acquaintances made on his coming to New York were those connected with the management of the house and publications of Fowler & Wells, and from that time to the close of his career it was common for him to drop into this office almost weekly, for a talk.

One of the last, if not the very last, of his appearances in public, before the paralytic stroke, was on the occasion of the dinner given by the Alumni of the Institute in October, 1892. The happy speech that he made on that occasion was published in the *JOURNAL* of December following. So, in speaking of him we can, like many others of our community, refer to him as a friend practically interested in our work, because its object, like his own cherished purposes, is to promote the welfare of society.

He was ambitious by nature, and sought success and reputation, but he was no self-seeker in the crass meaning of the term. He sought to be useful to his fellow-creatures, and in ways that would be manifest. His organization was of a rare quality, and being supplemented by excellent vital resources, its sensitiveness and activities were well maintained. There were in his experience certain trials of a severe character that must have taxed greatly his mental and physical strength, but in his public life there was no intimation of strain. The manner and expression of the man were buoyant and cheerful, the voice kindly, and as full as ever of hopeful suggestiveness. Few men,

even of his profession, with whom we have come in contact, impressed us in so tender and lovable a way, and this opinion we share with that large circle of New Yorkers who knew Dr Deems. The portrait which we have been fortunate enough to get, is an excellent likeness of the man, in form and expression, showing his character of kindness and good will and intellectual culture; especially does it exhibit that type of organism which befits one for the place of moral and religious leader in the every-day walks of life.

SUGGESTION AND SOCIAL RESPONSIBILITY FOR CRIME.

IT needs no proof at this time for the demonstration of mental epidemics, the transference from one person to another, or from one community to another of forms of mental disease that work out most seriously destructive results. The fact has been proven many times, and latterly we have had most striking illustrations of it; all going to show that to the untrained, unstable, immoral mind there are times when its receptivity to evil suggestion is so marked that a trifling thing may set into activity excesses of conduct often of a most unexpected nature.

A writer in one of the New York journals remarked in terms that expresses the sentiment of most thinking people in the community:

"There seems to be a subtle law that controls insane demonstrations in large communities. The assassination of Lincoln by Wilkes Booth brought to light a whole hissing nest of would-be assassins. The hideous taking-off of Garfield by Guiteau seemed to stir a violent ebullition

among an uncanny crowd. The murderous attack upon Russell Sage by Norcross was immediately followed by a startling series of dangerous outbreaks on the part of the crack-brained fraternity. It will be remembered that Dr. John Hall, about that time, barely escaped the bullet of a crank fired point blank at him as he was entering his Fifth avenue residence. And now the shocking assassination of Carter Harrison by the madman Prendergast gives another stir to crankism. . . . These dangerous and often fatal demonstrations of excited cranks are occurring with a frequency that calls for extraordinary measures for their prevention. The subject presents a serious and difficult problem. The phases of insanity are so varied, and the shades of distinction between them are so thin and delicate, that at first it would seem utterly impossible to devise any means for the regulation of such a stealthy and subtle enemy. The milder forms of insanity are always the most dangerous to the public, as they are invariably accompanied with a preternatural slyness and shrewdness, and especially from the fact that the supposed inoffensive character of the supposed crank throws the public off its guard."

But in all this discussion and condemnation of the so-called "crank," with his or her liability to be set on to the doing of some criminal act, we make little reference to the proximate causation of the setting on, although in many and most conspicuous forms it stares us in the face constantly, and those who may have personal relations to the causal influences are fully aware of their insidious or direct effect upon immature and unreliable minds. As Health Commissioner Wingate, of Milwaukee, has intimated, we know that no alienist, or any one conver-

sant with the effect of suggestion upon the susceptible, will deny that many conventional and legalized practices and enterprises exist that are constantly inducing or promoting the occurrence of outlawry or disaster. The sensation mongering of the newspapers, the printing of elaborate and high-seasoned accounts of murders and other crimes, and the details of criminal prosecutions, and scattering them broadcast over city and country, what effect can these things have other than to induce unhealthful mental conditions of varying degrees of morbidity in a large proportion of their readers, and in many of susceptible and inflammable temperament to produce an excitement that on opportunity bursts out in the manner described in the published recitals. Thus it is that the report of some atrocious act of brutality or vice is followed by a series of acts quite similar in kind.

Who can doubt that the effect of the common theatrical posters, with their representation of duels, murders, and other blood-curdling scenes in the absurd plays introduced by most managers to-day, must be damaging to the moral integrity of certain minds, and furnish them the expression necessary for an outburst of criminally reckless action.

Can not something be done to stem the tide of publicity in this line? We have societies for charity innumerable, all working to better the condition of the poor. There are societies whose motive is the suppression of evil by methods more or less prophylactic. From time to time we hear of action on their part, but it would appear to be mostly of an *ex post facto* sort.

What is needed is the removal or destruction of the causes, the suggestive *modi* of vice and crime.

Our boasted civilization is remarkable for two things certainly: capacity for producing neurotic or impaired mental conditions of varied types, and for devising methods for their treatment and possible cure. These two features are correlative, the second growing out of social necessity as caused by the first; but neither may be said to glorify our moral progress.

Society has no excuse for the existence of the thousand soul-and-body destroying influences but its own toleration of them. They rear themselves aloft blatant and brutal under the protection of the very men who have sworn to care for the well being of the people. Society is responsible for its officials; it creates them as it creates the laws that they are supposed to carry into effect. The laws, good ones to a degree, exist on the statute books of the State that need but enforcement to correct the many open, self-damning abuses of decency and order.

When the causes of physical and mental corruption no longer challenge eye and ear in every highway and by-way, and the graceless minions of vice and crime are no longer permitted to spread their toils where youth and age congregate; when the liquor seller, the procuress, the showman, the charlatan, the quack, and the mercenary news-writer dare not venture out of the dark and slimy corners into which an outraged public sentiment has driven them—if indeed they survive the ban of condemnation imposed by a purified community,

then will there be good reason that modern civilization boasts of its superiority over the past. The triumphs of literature and science are empty and vain without an accompaniment of moral and spiritual uplift. True advancement means more than intellectual acquirement and stores of material wealth, for it includes that well being which reflects a practical sympathy and a sincere loyalty from soul to soul.

At such a stage of evolution there will be no need of vigilance concerning the effect of suggestion, because the trend of influence will be to elevate and refine, not to depress and debase.

WARRANTED CRITICISM.—When one has reason to believe that a writer on mental science owes much of his best thought to readings or the teaching of phrenological authors, and finds him taking occasion to say unkind and untrue things concerning them, he feels prompted to the expression of indignant criticism. Our correspondent, Mr. Howerton, whose communication is printed in this number, has something to say with reference to a recent book, which is in some respects an improvement upon the common tenor of text books relating to the study of mind. He finds that parts of special value have a kindred relation to the views and teachings of the phrenological writers, yet the author not only ignores any indebtedness to them for light and suggestion, but actually treats them with open indignity. On this account Mr. Howerton writes in the spirit of pungent criticism that characterizes his remarks and shows very clearly the grounds of his reflections.

THE REV. DR. LYMAN ABBOTT AND HIS ESTIMATE OF PHRENOLOGY.

Dr. Lyman Abbott, the editor of the *Outlook* (formerly the *Christian Union*), and successor to Henry Ward Beecher as pastor of Plymouth Church, Brooklyn, is so well known as a leader of advanced religious thought and higher educational work in this country, and has manifested by his public utterances and methods such an interest in Phrenology and evident appreciation of the subject, that we were recently led to ask him for his estimate of the science as an aid in the study of mind and character. We received the following reply, which will certainly be of interest to our readers:

DEAR SIR:—In answer to yours of Jan. 4, Phrenology may be regarded under two aspects; as a psychical system of classification of faculties, and as a craniological system, based on the doctrine that each faculty has its appropriate place in the brain, and that the capacity of the brain can be adjudged by the shape of the skull. Of the second aspect of Phrenology, I have very little knowledge, except in a very general way. But I have found the first aspect, the classification of faculties, by far the most convenient for practical use in the study of mental phenomena and in the popular treatment of mental and moral phenomena in the press and in the pulpit. For this purpose, I think on the whole that Spurzheim has been more *serviceable* to me than any treatise on psychology which I have ever read, and I have read a good many.

Yours sincerely,
LYMAN ABBOTT.

We are exceedingly pleased to note that the Doctor recognizes the two-fold aspect of the subject, which is so generally disregarded even by

those who give not a little study to the science. Having a very predominant philosophical intellect, and hence comparatively little appreciation of anatomical technicalities, Dr. Abbott naturally sees the philosophical relations of the subject first.

As a broad thinker and critic, he discerns the value of an analysis of the mental faculties, such as Phrenology affords, and it is not at all surprising that he should be unfamiliar with the details of organology, or the art of measuring and balancing the various diameters and relative developments of individual crania—an art which may be compared to the playing of a difficult musical instrument, such as the piano or the violin, the mastery of which is possible only as a result of years of patient daily practice.

This leads us to remark, and we wish to state it with distinctness and emphasis, that Phrenology may be of infinite advantage to educators in general, and also in all minor affairs of life, considered simply as a system of mental philosophy; that is, without reference to its organology, or application as an art in estimating the development of special portions of the brain in individuals. For example, teachers who, from the circumstance of their intimate daily association with their pupils, have abundant opportunities to observe exhibitions of character, may, by the aid of Phrenology, more thoroughly and completely understand the nature of those manifestations which they see constantly, but of which their knowledge would necessarily be imperfect and vague if they depended upon any other means.

PERSONAL.

THE Rev. CHARLES H. PARKHURST, the President of the Society for the Prevention



DR. PARKHURST.

of Crime, is rather below medium height, and weighs only 140 pounds, but he is exceedingly wiry; he has black hair and eyes, dense, close fibre, and is eminently adapted for any work requiring tenacity and endurance. His head is much wider in the region of the ears than one would suppose from the diameter of the forehead. He is very combative, and has the thoroughness and intense energy which come from Destructiveness, and the persistence of large Firmness, which latter quality is very noticeable in the height of his head on a line with the ear. In many respects Dr. Parkhurst's head is the opposite of that of Dr. Lyman Abbott, which is narrow between the ears and remarkably broad in front. He has rather small Cautiousness, as shown by the narrow back top head, and scarcely knows the meaning of fear. The frontal lobes are very long, and his intellect is probably one of the most penetrating, incisive, and brilliant in the country. He has great perception of detail, memory, sense of Human Nature, and marvelous powers of criticism and analysis. His brain is intensely active, and his intellect has been cultivated to a very high pitch. His forehead is not strikingly large, but it is almost entirely devoted to the intellect, and the convolutions of his brain must be compact and closely woven in the highest degree.

THOS. S. BYRNES, Superintendent of Police of New York City, is well proportioned, rather tall, and fine looking; his head is large, and for the most part typically Irish. He has the long backward extension from the ear showing the tender regard for children peculiar to those of his nationality,

also a good deal of Friendship and love for the opposite sex. He is a very fatherly man, and cares for the criminal class over which he has jurisdiction with as much sympathy as is consistent with the ends of justice. He has a good degree of Combativeness, and enough Destructiveness for ordinary needs, but the latter quality never becomes cruelty. He is also very secretive when he wishes to be, but not without occasion. That is, he can be very non-committal and evasive if he has a secret which he ought to keep, but he does not care for mystery on its own account. For example, he is a Freemason, but does not often attend the lodge. Caution is large; he is very guarded, careful and considerate. Acquisitiveness is very moderate. He can appreciate the power of money, but he is not miserly. He has more self-esteem, independence and self-reliance than Irishmen generally, and from the appearance of his head, it was not natural to him, but is a result of his long years in the exercise of authority. Approbativeness is fully developed, but he is not carried away by vanity. He has a great deal of Benevolence, and his intellect is well balanced; the Perceptives are especially large, which give him wonderful capacity for detail. The sense of Human Nature is very keen; his hair, which was naturally black, formerly came down very low in the center of the upper forehead, which is the sign of detective talent. He has also enough planning ability to anticipate the future. His success is largely the result of the perfect health and symmetry of his brain; no one element unduly controls another. Altogether, the organization is strong and eminently practical.



SUPT. BYRNES.

JOHN R. FELLOWS, District Attorney of New York city, has a superb organization as to health, vigor, elasticity and general

working facility. His brain appears to be a hemisphere in form, nearly everything in the basilar regions being large. He has the mental vital temperament; is rather



J. R. FELLOWS.

stockily built, and has great capacity for enjoying life, but is not remarkably mellow, genial or sympathetic. His activity and intensity in expressing his interest in people may convey the idea that he is more friendly and affectionate than he really is at heart. He has tremendous energy and ability to grapple with intricate matters. But he is probably in danger of attempting too many things at one time to secure the best results. He seems to have money-making talent, and bends most of his strength to the execution of practical affairs.

The perceptive are enormous; he has great memory and Constructiveness, which give him almost boundless capacity for executive management. Such a man would be exceedingly efficient in a large manufacturing business, or in superintending lines of railroads, ships, or any form of transportation machinery; he would be able personally to inspect all the details pertaining to the rolling stock of a railroad, and in whatever he would undertake he would be a veritable engine for work.

From the phenomenal smoothness and roundness of his top head we should infer that in morals, religion and matters of reform he would be a utilitarian, and but little interested in any purely theoretical views or methods. He should be sharp and incisive in his logic, keen and penetrating, and eminently adapted to any labor requiring knowledge of the concrete or actual world, and he doubtless might have become as eminent in surgery as he has done in law.

DELANCEY NICOLL, Ex-District Attorney of New York city, is a fine illustration of the Mental Temperament; he has remark-

able fertility and activity of brain, and is able to work with rare brilliancy, enthusiasm and effectiveness, although his endurance is not so great as could be desired.

His social feelings are responsive and warm; he is very magnetic, and will make many friends; he should be on his guard as to all his appetites. He is singularly sensitive as to all sights and sounds, and everything that happens within the scope of his perceptive faculties.

He is courageous and rather relishes a battle; but as his brain is his strongest weapon, he will prefer it to any other. His head indicates great appreciation of and power to please the opposite sex. Approbation is evidently large. His frontal lobes are both large and active, well

balanced and highly cultivated. The outer angle of the eyebrow does not show very large Order, but in the main the forehead is finely balanced. The prominent eyes indicate fluency in speech, and with his temperament he should



DELANCEY NICOLL.

be a fine orator. The fullness over the eyes and the general plan of his organization betoken great power to receive impressions, gather facts and information of every kind. The middle section of the forehead shows memory, and the upper portion is also full at Causality and Comparison, which, combined, would make him comprehensive in all his mental operations.

JAMES R. SOVEREIGN, the new General Master Workman of the Knights of Labor, Terence V. Powderly's successor, appears to have almost a typically American temperament; that is, a predominance of closely woven brain and sharply defined muscles, with a good degree of bone. At least his head shows the qualities most conspicuous in the American character. There is not much Friendship or attachment. He may make numerous friends, but it will be done

on the line of moral force, and by industry and devotion to some principle. He does not seem to have as much attachment for individuals as enthusiasm for the many. He has more love of children than adhesive-



J. R. SOVEREIGN.

ness to friends in general, and will be interested in protecting and helping the cause he advocates with much the same feeling that a mother bird has for her brood.

He has large Firmness and small Continuity, which, in his profile portraits, are conspicu-

ous in the height of the head on a line with the ear, and the falling off at the top of the back head. He is evidently a man of immense will power, and able to accomplish a great deal in the face of opposition. This quality of persistence is augmented by the sloping off of his frontal top head at Reverence, Imitation, Spirituality, Mirthfulness, Suavity and Ideality, which have a great deal to do with the disposition to submit to existing conditions. His head is of a form frequently seen among free-thinkers and workers in various phases of reform.

In the sharply defined lower forehead are the unmistakable indications of great practical talent, keen observation, power to estimate facts, and physical conditions of every kind, events, and especially all phenomena pertaining to Human Nature.

The upper forehead is not wide at Causality, but there is that appearance where the hair begins which shows judgment of Human Nature. He should be a sharp, quick and ready man in all intimate relations with people; and as an executive manager in charge of correspondence, obtaining supplies, as a worker in establishing ways and means, particularly in inspecting work and workmen in a practical way, he would be remarkable. Without being profound, original or heavy in his methods, he has extraordinary availability of talent, and will accomplish more than would be expected of him from the mere size of his hat. The brain he has he can

and does use, and the brain he lacks is chiefly of a kind which, in his work, is not likely to be missed.

Another American is immortalized among the great men whose monuments make Westminster Abbey a sacred spot to the two nations that have a common language. The unveiling a month ago of the memorial windows to James Russell Lowell, in the Chapter-house of the Abbey, is an incident in the life of these kindred peoples that should give actual pleasure to every right-minded man and woman among them, not only in its recognition of a poet and scholar whose work belongs to both nations, but in its indorsement of the man who has done so much to bring each closer to the other. The names of Great Britain's distinguished men who subscribed to the memorial fund indicate the estimation in which the American diplomatist was held among them; for not only the great nobles of the kingdom, but leading members of the higher aristocracy of science, art and letters united in the testimonial. We read among these the names of Professors Tyndall and Bryce, Sir John Lubbock, George Meredith, Alma-Tadema, Sir Frederick Leighton, Leslie Stephen, Dr. Conan Doyle, Canon Farrar, Chief Justice Coleridge, the Dukes of Westminster and Argyll, Earl Rosebery and Lords Brassey and Playfair.

The New York Independent has just completed its forty-fifth year. The personal history of this old weekly is interesting. The original proprietors were Messrs. Seth Hunt, Jonathan Hunt, Simeon Chittenden, Theodore McName and Henry Bowen, of whom only Mr. Bowen, its present proprietor, is now living. The first editors were Dr. Leonard Bacon, the Rev. Joseph P. Thompson, Dr. Richard S. Storrs and Dr. Joshua Leavitt, of whom Dr. Storrs is the only one left. In the days of the late war this paper exercised a very important influence, Mr. Beecher being the chief contriutor. Behind him stood, it might be said, all New England sentiment.

Our Mentorship Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed directly to the Editor will receive his early attention.

DOES NOT "MIND."—*Question.*—My boy is three years old and has a habit of not minding when spoken to until repeated a number of times. What is the best means of overcoming this tendency? L. W. T.

Answer.—You should carefully look into the character of his organization and temperament. Having ascertained the peculiar qualities of his disposition, you have then a basis for endeavor to correct the habit of which you speak. He may be of slow susceptibility by physical constitution. He may have large Concentrativeness naturally, so that it is not easy for him to turn his attention easily from one thing to another. His age implies lack of development in those faculties that induce deference and respect. Yet a course that invites his confidence and love should tend to render him obedient. You should be sure that all the senses are normal. It often occurs that there is some unrecognized defect that has much to do with what is interpreted as wilfulness or stubbornness in a young child. Assuming that his endowments are normal, we should advise care

and patience in dealing with him. Be kind and firm on all occasions, but avoid severity and fretfulness. Enter into his little life, learn his feelings and desires and gently counsel him how to express them. Get his confidence through a live interest in his welfare, and he will then be most likely to be responsive and obedient.

VOICE QUALITY AND CHARACTER.—A. E. H.—The liquid quality of the singing voice which you note in some people has a double relation, first to the structure of the larynx, second to the mental organism. Without the first it matters not what the character is, the quality can not appear. We have known good natured, indolent, careless girls whose bird-like notes charmed the hearer, and we have known spirited, energetic, dark-haired women who possessed the same quality of tone. As a rule, such a voice is associated with good health which supplements facility and laryngeal endurance. Many voices are spoiled for singing because of a catarrh that has become chronic and renders the owner susceptible to colds and other annoyances that affect the vocal expression.

PIMPLES ON THE FACE.—New Zealand.—Are due in most cases to a disturbance of the skin excretion. The glands becoming over-crowded with waste products cause congestion with resultant papular eruption. Care in diet, freedom in the digestive functions, bathing and out-of-door exercise should improve the condition. Sometimes the skin trouble is due to reflex disorder and so is of a nervous type. The cause should be ascertained and removed.

PUBLIC FINANCE AND CAUSES OF OUR TROUBLE.—Our correspondent, I. S., of Ohio, is, in the main, just in his views, and we find little to criticise aside from the inferences drawn from our remarks on the late silver legislation. Mr. S. will note, if

he re-read our article, that no "attack" was made on bimetallism, but the force of our argument was expended upon the character of the legislation that compelled government to subsidize a department of labor, silver mining, in spite of the fact that its product appeared to be subject to changes of value, and the coinage of cheap dollars had assumed proportions so great as to embarrass the Treasury. Our contention was directed solely against the principle involved—class or special legislation. We are just as strongly opposed to any legislation that does or would endow the gold manipulator with special privileges. Governments from time immemorial have shown a weakness toward favoring the banker because in time of need they might turn to him for financial help, irrespective of the fact, however, that he would afford that help only upon the promise of a nation to reimburse him with a good interest. It has been the gold in the capitalist's coffers that has made him an object of national respect, and the glitter of that gold has led to the establishment of the so-called monometallic standard.

The financial weakness of governments has opened the way to abuses that have become engrafted upon the relations subsisting between them and the capitalist in such a way as to appear just and necessary, so that any effort to reform or improve the policy of the fiscal department finds objection if not actual ridicule at the start. The Government of the United States ought to be independent of any involvement with the money dealer, but borrowing its methods in great part from trans-Atlantic countries, it has become, like them, enmeshed with the movements of the Bourse.

We trace our present business troubles to other causes than those mentioned or suggested by our correspondent. Tariff tinkering has something to do with them, of course, but social unrest, and the thousand cases of fraud and crime in private business and corporate enterprises during the past few years have far more to do with them. There has been so much abuse of public confidence by the managers of railways, banks, investment enterprises, trust companies, and "combines," that people have

become shy and fearful. They have lost so much by the failure or suspension of a thousand of these that they are reluctant to risk more. Doubtless a settlement of the tariff question one way or the other, with some prospect of permanency, would go far to resolve our difficulties, for then our industrial and commercial interests would be relieved from the suspense of uncertainty that has continued so many years. Business men, manufacturers, and the great agricultural class have been hampered and worried by this uncertainty, and the losses to the country at large by reason of it have been incalculable.

It is to the tariff legislation that public attention is for the most part directed, and when the people know that they can depend upon what Congress does in the matter they will not be slow to adjust themselves to the conditions.

"A STRANGE ADVENTURE."—B. V. W.—The article in the August and September numbers of 1886 was written by a lady of New York City, and is based upon the principles of hypnotism. It can not be called a "fancy sketch" since it embodies truths of observation, which had been realized in the writer's experience.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred

"PROFUNDITY OF IGNORANCE."

IN "Mind Studies for Young Teachers," Chapter VI., Dr. J. Allen takes a turn out of his way to say an unpleasant thing about the Phrenologists. Here it is: "A diligent study of what we give below, with the help of an honest friend who is courageous enough to tell the truth, however unpleasant it may be, will reveal more than a hundred phrenologists, whose self-assumed assumptions are only equalled by the profundity of their ignorance."

Now, I have been an admirer of Dr. Allen for eight years, but when I read this my admiration for him fell off several points. Why? Because I see in this the

prejudice of a great mind. Such an assertion could come from nothing else, and if the doctor is so prejudiced in one thing he may be in another. Had I not known better he might have misled me in this, and if he would mislead in one thing he might in another. When a man says that George Combe was "profoundly ignorant," he shows a strong prejudice against Mr. Combe or the truth he advocates. When a man can say that Dr. Spurzheim was "profoundly ignorant," he says it out of a heart of prejudice. Who has ever said that Horace Mann was "profoundly ignorant" save some one who was opposed to his teachings and did not have the argument to meet them? And Horace Mann was a "Phrenologist." Who has said that Horace Greeley, Henry Ward Beecher, William C. Bryant and Chas. F. Deems were "profoundly ignorant"? Dr. Allen says so, for they were all "Phrenologists." How prejudice can make a great mind little!

Hear the doctor again, on page 28: "It is wrong to confound the study of temperament with the study of Phrenology. The one takes cognizance of the entire body, the other confines its inquiries to the cranial and facial development." Now, I would be glad to know that the doctor wrote this in the "profundity of his ignorance." But it would require such a dense "profundity of ignorance" of the teachings of Phrenology to be able to make this statement, that I can hardly believe it possible in one so learned. May be it can. I hope so. If the doctor does not really know any better, I would be glad to tell him that phrenology relates to the entire man, and it is the only science of human nature that does, so far as I know. It explains the manifestations of mind more closely and much more satisfactorily than the old Psychology. Phrenology is the science not only of the radical faculties of the mind, but its teachings include the size, shape, quality and health of the brain, and also the temperament. Phrenologists have given to the world by far the most satisfactory exposition of the temperaments. To this writer the subject was never clear until he studied it as taught by the phrenologists. Quality of organization influences mental manifestation more than temperament. A proper

mixture in the human being is a good thing, and this is what all mean by "temperament." But much more depends on the quality of the material mixed. If Dr. Allen will study Phrenology he will find that every writer on the subject puts stress on quality. He will find in every phrenological chart, so far as I know, attention devoted to quality. If the doctor wrote the above lines in ignorance, I commend him to a study of Phrenology; if he wrote them in prejudice, as one would infer after reading the first extract, then I commend him to a faithful introspection, a genuine reflection on his conscience and to his prayers.

G. T. HOWERTON.

EDITOR'S QUERY.

In pursuance of the invitation made in the JOURNAL last month, a considerable number of our readers have sent answers to the question then propounded, viz: "What produces the sentiment of gratitude?" We are glad to know that so many have manifested an interest in this new feature, and we publish such selections as our space warrants, and which will give an idea of the variety of opinions held.

The question for this month is "What mental and temperamental elements produce Jealousy?"

We request that the answers be as concise as possible, distinctly written, and made to specify definite factors in the mind or temperament. In other words, the answers should be strictly phrenological, and not speculative.

The following are replies to the question of last month:

GRATITUDE.

The mental sources of gratitude can be best understood by analyzing its elements. It is a benevolent feeling in the mind of a recipient of favors toward the donor, and does not exist in a business transaction where each party is supposed to be seeking his own gain and where a just equivalent of goods or value is given for value received, though both parties may reap advantages by the operation.

But it does exist where one receives a favor of any kind which, for the time being, he is unable in any manner to repay, provided the motive appears to be divested of all selfish considerations and proceeds simply from the donor's benevolence toward the recipient.

There are degrees of gratitude. It is last felt in small favors—aids, presents, opportunities of causing success, unexpected business advantages, etc., in which the recipient feels himself gratefully obliged for the present, but for which he may in the near future make ample return to the benefactor, and thereby acquit himself of his obligation. In such cases gratitude is a sort of social promissory note, acknowledging indebtedness, bearing interest of good-will and remaining in the hands of the maker to be paid as a point of honor at a date unnamed, and to the payment of which the holder disclaims any right and refuses receipt.

The feeling is most pronounced where favors are largest, as in the case of a life saved at great danger, honor defended in adversity, care given in sickness or helpless suffering; when such acts proceed from the most unselfish considerations of love and personal loyalty in the face of danger, trouble or loss, and where the recipient, for any reason, cannot possibly make any return for the loving sacrifices of his friend. In this case it is an unredeemable obligation, and gratitude is often so great that it would offer a life's service in requital if it were possible to requite.

There are, then, two elements of feeling in gratitude: One of *good-will*—love called forth by loving intentions on the part of the benefactor, and one of *obligation*—a sense of having received something for which a just equivalent is due to the giver, but which cannot be requited immediately. When the first element is wanting, it is no longer gratitude, but business exchange. When the second element is wanting, as after making a requital which the recipient himself deems just and complete, it is no longer gratitude, but mutual good-will and fellowship, the good-will persisting after the sense of obligation ceases.

I should trace the good-will and a large share of the active desire to make a requital, to Benevolence. I should trace the strong sense of personal obligation for a favor to Conscientiousness.

When we say "gratitude is a debt," or "we ought to be grateful for favors," we are simply announcing an intellectual proposition, suggested by conscience alone, for

it here concerns only an intellectual question of duty. No feeling is involved. But when we are personally made sensible of the receipt of unrequitable favors, intellect is but slightly involved; we *feel* gratitude, which is the combined action of Conscientiousness and Benevolence.

JOHN W. SHULL.

1. Intellectual conviction that some kind heart has sought to bless one.

2. The organ of Benevolence appreciates the kindness; while those of Self-esteem and Approbativeness are pleased over such attention bestowed.

3. If the kindness is referred ultimately or immediately to God's kind heart, Veneration is sweetly active also.

4. The organ of Friendship is happy in loving that kind heart. Gratitude is thus a compound product.

DANIEL H. CHASE.

God is love; and love is what produces the feeling of gratitude.

Whatever we love we feel grateful for to Nature's God. If anything sacred to us is in danger and rescued, we instinctively feel the sentiment of gratitude.

Only those devoid of love feel ingratitude.
S. J. H.

Gratitude is a due sense of benefit; a feeling of love, thankfulness and tenderness. It is produced by kindness, benefits conferred, help and relief to those in misfortune, or a deliverance from great trouble.

DR. JAS. C. KENNEDY.

I would say, that the gratification of a desire or wish by another person produces the sentiment of gratitude. For instance, if a man is very hungry he has a desire to eat. Now, if the desire is gratified by another person he would be pleased, consequently he would feel grateful to that person. I could go on and tell you that to gratify the desire of any faculty produces the sentiment of gratitude. The degree depends upon the development of certain functions or faculties.

W. C. MEYER.

JAN. 4, 1894.

As to your question, "What produces the sentiment of gratitude?" I judge it is being the recipient of a favor.

L. C. BEISING.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

OUR PLAN.

We propose to make reports of the work done by the Phrenological Societies, giving notes of meetings, topics for discussion, etc., when received in time for publication in advance; and to make notes of the work done by those in the field.

Where advance dates for lectures can be sent in time for publication, we shall be glad to announce them.

PITTSBURGH, PA., JAN. 12, 1894.
Fowler & Wells Co.

DEAR FRIENDS:—As I promised, I will now give you some items in regard to the new "S. R. Wells Phrenological Society."

On invitation the members of the "Eureka" Society spent last evening with us, and very pleasantly. There were eighteen in all, including visiting friends. After concluding the business for the evening of the "S. R. Wells Society," our President made a short address of welcome to the "Eureka," and the following of its members were called upon to speak: Prof. Markley, Mr. Devlin, and Mr. Trawatha, Sr. Prof. Markley told how many years he had made Phrenology a study, and how it had changed his views in regard to mankind. He told of the great good he had received through it, and gave some wholesome advice to the new society. Mr. Devlin told of where and how Phrenology found him, of how dissatisfied he was when a friend introduced the subject to him. He said that from then until now he had lived the only real years of his life. He exhorted the new society not to grow weary in well doing, as Phrenology was not learned in a day or a week. As an example he cited a former member of the "Eureka" who was not satisfied to have the society meet but once in two weeks, so he organized a little society at his place of employment which met each noon for about two weeks; then it ceased, as did also, after a few months, his attendance at the Eureka's meetings. Mr. Devlin also advised the new society against having much to do with any other subject, such as clairvoyancy and mesmerism, etc., but to cling to Phrenology, as that would prove most beneficial.

Mr. Trawatha spoke briefly in regard to the great pleasure it afforded him to be associated with these phrenological societies. He told of his sojourn in New York at the Institute, of the great satisfaction it has always been to him to look upon that time as the best six weeks of his life.

We also had a very able and interesting

address by J. C. Kennedy, M. D., a much valued friend of the "Eurekas."

Last but not least was the instalment of the officers of the "S. R. Wells Phrenological Society," which was performed by Prof. Markley, of the Eureka: L. B. Trawatha, President; James Fellows, Secretary; Samuel Wood, Treasurer. "The S. R. Wells Society" will be glad to correspond with any of the now many sister organizations. Address all communications to the Secretary at 213½ Forty second street, Pittsburgh, Pa.

I will only take occasion to say that whatever you may have of advertising matter in the shape of little books, etc., such as you always enclose in your letters to me, will you please send some of them to these young folks? They receive all you send to me, and are received very gratefully.

Yours with respect,

ANNIE TRAWATHA.

THE NEW YORK ASSOCIATION OF GRADUATES.—At the January meeting of this association, the question of the Vital Temperament was very thoroughly considered. Dr. Branderburg, class of '89, described the Indications of the Vital Temperament, and Dr. Beall, class of '77, considered the Relation of the Vital Temperament to Character. This was followed by a very animated discussion, in which a large number of those present took part. At the February meeting Mr. Chas. E. Cady, class of '85, will consider the Motive Temperament and what constitutes it. Dr. Drayton, the editor of the PHRENOLOGICAL JOURNAL, will consider the Relation of the Motive Temperament to Character. The readers of the PHRENOLOGICAL JOURNAL, and all interested, are cordially invited to these meetings, and as far as the hall will accommodate them every one will be welcome. At the March meeting the question of the Mental Temperament will be considered.

ST. PAUL, MINN.—The secretary of the St. Paul Phrenological Society informs us that it is proposed to furnish each member with a copy of Heads and Faces, as a preliminary work to further reading. This would be an excellent plan for every society to take up.

THE CHICAGO PHRENOLOGICAL SOCIETY will meet at 118 Oak street, until further notice. On the second and fourth Tuesday of every month we usually have a lecture, discussion or debate, and at every meeting free examinations of heads. Visitors are always welcome. DORA CARPENSTEIN, Secretary, 1531 Oakdale Avenue.

SCHENECTADY, N. Y.—A letter from Mr. Chas. F. Scott, the business manager of the *Evening Star*, says: "A considerable interest is being awakened in this city in relation to Phrenology, and in this evening's paper will appear an invitation to such of the public as are interested, to send their names to this office for the purpose of forming a Phrenological Club for Free Instruction. C. H. Newman, class of '91, will be the instructor." Mr. Scott has been very much interested in the subject for many years, and with his enterprise and push no doubt this new Phrenological Club will meet with success.

DETROIT.—A Phrenological Society is being organized in Detroit; a large number of names have been enrolled, and the plan requires each member to procure a copy of *Heads and Faces* and subscribe for the *PHRENOLOGICAL JOURNAL*. This will certainly put the membership on a working basis, and secure and maintain the interest. We shall hope to hear frequently of the work being done.

THE SANTA ROSA (CALIFORNIA), PHRENOLOGICAL SOCIETY.—A Phrenological Society has been organized in this far off Western city, of which Mr. Clarence Southerland is president, and Chas. F. Remdollar the secretary. They report that there is a great deal of interest manifested, and that the subject is being taken up in a practical, earnest manner.

LECTURES WANTED.—Mrs. H. L. Towner, of Athens, Pa., writes: "I am so anxious to have a first-class lecturer come here. I know a great many who are interested in Phrenology, but it is seven years since a phrenological lecturer was here, and he was not very competent." If any of the graduates in the field are in the vicinity of Athens, it would be well to communicate with Mrs. Towner, and very likely through her co-operation lectures might be made successful there.

GEO. MORRIS, class of '78, writes under date of Jan. 12th, that he has received much encouragement in his course of lectures at Austin, Minn., and will continue there to the end of the month, but does not give his next town.

G. T. HOWERTON, class of '91, is preparing for a campaign of work. He is now in Tennessee, and we bespeak for him attention wherever he may go. He has an intelligent comprehension of the importance of the subject and will present it in a practical way. He will take orders for his book, "Short Talks on Character Building," which should have a large sale.

N. S. EDENS, class of '91, writes us from Florida for an increased outfit, and expressing great interest and confidence of his success in this new field.

(Extract from a letter from Miss Harwood, class of '91, to Mrs. Wells:)

"I was recently invited to a party of school girls and their escorts. Being the only 'full-fledged bird' in the party, I took them kindly under my wing and held their attention for more than an hour by examining heads. They seemed intensely interested. After examining a few persons, I contrasted two at a time and explained how I told what I did about them, and allowed them to examine one another. This was quite a lesson in Phrenology. Some of them were total strangers, and I was only slightly acquainted with most of them. I called two young men up, one a total stranger and the other only a speaking acquaintance. I said, 'If these two young men were traveling together, this one (the acquaintance) would sometimes say, "Don't you wish we could just drop in at home, and spend the evening and see the folks?"' And this one (the stranger) would probably reply, "Oh, pshaw! don't be a baby. Are we not having a good time?"'. All laughed, and looked for the young men to speak for themselves, when the first one said, 'I have made the remark often when I was away from home, "How I wish I could be at home for a little while!" I am naturally homesick.' The other one said, 'I never was homesick in my life, and could never understand what made people feel so.' Then I showed them the contrast in the two heads, and some of them declared they were going to learn something about Phrenology, so that they could tell such things themselves."

C. P. Holt, of the class of '75, announces in the last number of *Human Nature* his withdrawal from the associate editorship, on account of other demands on his time and strength.

Pearle Battee, class of '90, writes us from Baltimore that she has obtained a charter for an institute to be called "The Battee Institute of Self-Knowledge, for the Promotion of Physical, Mental, Moral and Psychical Culture." Miss Battee has made a strong and well-directed effort to establish Phrenology on a respected basis in the Monumental City, and we congratulate her on her success.

MRS. IDA V. DAVIS, class of '88, was at last accounts at work in Nebraska. Mrs. Davis has done excellent service for the cause in many Western cities, and we predict for her a good hearing wherever she goes.

A. W. MASON, M.D., class of '74, who has been settled in Cleveland, O., for several years, writes us that he is going back to Toronto for a time at least, where he expects to teach classes, and so interest others in the subject.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

THE LUNGS. BASIC PRINCIPLES FOR THEIR HEALING AND DEVELOPMENT. By J. J. FOX, M.D., 12mo; pp. 217. Price, cloth, \$1.50. C. T. Hurlburt & Co., New York.

This clearly printed volume is distinguished in the main by that common sense that is incident to experience and candor of observation. It is a practical book free from technical obscurities of every sort and adapted to popular use. The truth is very clearly told regarding the causes of consumption, and the advice for its treatment and for lung development in general is that of the hygienist and physiologist who recognize the relation of habit to sickness and disease. We are inclined to take exception to the author's views as expressed on page 13, where certain references intimate a non-acquaintance with the speciality of the rhinologist. But this, however, is a minor matter, and may be easily excused because of the general value of the book.

The author's purpose is honest and direct—to instruct the invalid and to warn the well, and to advise such treatment that may be undertaken by those having enfeebled lungs in the assurance that it is based upon rational and natural principles.

THE SISTINE MADONNA. A Christmas Meditation. By AMORY H. BRADFORD. Fords, Howard & Hulbert, New York.

This choice brochure of forty-one pages merits more than a passing mention. The marvellous painting by Raphael is well taken by the eminent Montclair clergyman as his leading motive, and as he describes

the characteristics of that in a style calculated to fix the attention of a reader, the description is interwoven with reflections that should inspire feelings of warmth and devotion in those even who incline to regard religious things coldly or indifferently. It is an artistic little souvenir of the holiday time that should be welcome in every Christian home.

SECOND ANNUAL REPORT of the New York Practical Aid Society, rendered October, 1893. An excellent showing of work done by an extremely useful society among the worthy poor of New York City. No one can read the earnest language of the superintendent without feeling that there is an ample field for the activities of such a society, and its beneficence is well applied. Dr. J. A. Sanders is President and several prominent men serve on its board of management.

NOT ANGELS QUITE. No 30. "Good Company" Series. By NATHAN HASKELL DOLE. Price, 50 cents. Paper. Boston: Lee & Shepard.

Without much continuity of plan this new book offers a variety of incident that is inviting to the reader of society novels. Boston seems to be contrasted with Chicago in the delineation of character, as we have two marked phases of conduct and talk shown by the personalities of the story. For the most part it would appear that the author has sought to adopt real scenes and conversations in which he had participated, or of which he had been a near observer. The detail is considerable, and of a realistic nature. In which respect, of course, the book accords with the later type of novel.

THE CHILD PHYSICALLY AND MENTALLY. ADVICE OF A MOTHER. By BERTHA MEYER. London: L. N. Fowler & Co. New York: M. L. Holbrook Co.

This translation from the German sets forth in a concise form the management of young children from birth, in the cradle and nursery, the principles of hygiene being chiefly followed by the author and English reviser. It is a practical book and evidently based upon personal experience.



THE REV. JOSEPH COOK.

See page 122.

THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

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MARCH, 1894.

[WHOLE NO. 663.]

A LADY OF THE ELEVENTH CENTURY.

IN the field of anthropology few subjects are more interesting than comparative views of the physical organization of archæic forms and modern. Especially is this the case when we have at command some example of human being so well preserved and complete that no uncertainty may be suggested as to its authentic value.

In a number of *Ueber Land und Meer*, of recent date, Gustav A. Muller gives a striking description of a discovery made in 1892, at Schlettstadt, in the province of Alsace, which has naturally enough attracted great attention from scientists and historians, but of which the public at large has heard comparatively little. Herr Muller states, by way of introducing the discovery and explaining the extraordinary character of its preservation that the bodies of the old dwellers in Pompeii have been occasionally discovered, imbedded in the lava mass which overwhelmed them, and we have also some remarkable naturally-preserved remains of the dead of prehistoric times, from the moorlands of Denmark and Sweden, which have furnished valuable records of the habiliments of the age. In the artistic mummies of Egypt we have the bodies and habiliments of the times of the Pharaohs in almost perfect preservation; but funereal finds with con-

temporary apparel from the early Middle Ages are extremely rare; and instances of the preservation of fine textile fabrics such as the writer possesses from a Moorish grave of the



THE ORIGINAL BUST.

twelfth century are very exceptional. The discovery in Schlettstadt, however, is of a natural lime-cast of a well-preserved female body of the eleventh century along with the dress

characteristic of this epoch; a remarkable record of an age of which but few memorials have been handed down to us. A glance at our illustrations will suffice to convince any one that the



THE BUST AS RESTORED.

discovery is not one of everyday occurrence.

Schlettstadt, a free city of great intellectual and social vigor in the Thirteenth, Fourteenth and Fifteenth Centuries, possesses, in addition to its grand old Gothic cathedral, one founded by the Hohenstaufen in 1094, but finished later in the Roman-transition style. This church, known as St. Fides, was undergoing a thorough renovation in 1892; and, in the course of it, a vault was discovered under the altar, which, beyond all question, dates from the original building of the church, which, as is well known, was a votive-offering of Hildegarde, of Swabia, the great-grandmother of Barbarossa. This vault was inclosed by a wall with numerous recesses, from three of which empty coffins were

exhumed. Further search discovered, in the basement of the vault, a grave belonging to the Seventeenth Century, which, strangely enough, concealed funereal remains of a much earlier date. The grave was filled with modern building rubbish, from the midst of which was exhumed the natural lime-cast of a female body of the Eleventh Century. Unfortunately, the whole body could not be found, only the head and upper portion of the trunk. The left arm was pressed tightly to the breast, the left hand being visible under the right arm-pit. These portions presented the garments of the dead with remarkable distinctness.

The report of the architect, Winkler, of Colmar, can be relied on confidently only in so far as he says that the body was originally laid in a wooden coffin and embedded in mortar which must have hardened immediately, as is evident from the perfect preservation of the features. The original motive of this imbedding of the body in mortar may be ascribed confidently to the presence of some epidemic disease, but we have evidence that in many old monasteries the custom was adopted on purely sanitary grounds. The body had probably been in some other place; perhaps in the ante-room of the newly discovered crypt, until the Seventeenth Century.

The sculptor Stienore in Strassburg undertook the reconstruction of the natural cast, and carried out the task with great ability, especially the much damaged left side.

Professor Anton Seder, commenting on the figure, said: "I cannot possibly describe the ineffaceable impression which this cast has made on me. Renunciation of all worldly characteristics is the predominant expression in this beautiful face, an expression which appeals to the sympathetic beholder like a vision from another world." And this is no exaggeration.

Who is this woman of noble countenance, with the two long tresses

wound around her head, with the long white chemise of finest linen such as was worn only by persons of distinction; the woolen stitched jacket, the linen underclothing, and the many-folded mantle, suggestive of the garb of the cloister? From the fashion of dressing the hair and from the drapery, Professor Seder decided that the body dates from the Eleventh or Twelfth Century. He estimates the age of the subject at between thirty-eight and forty-five years, an estimate which precludes the view that it is the figure of Hildegarde herself, for she died at a much higher age. It seems much more probable that it was Hildegarde's noble daughter and nurse in the days of the pest, the Duchess Adelheid. History narrates that both Hildegarde and the daughter who attended her so faithfully died of the plague, and tradition will have it that they were buried in Schlettstadt.

If anything, the contour of the head, as shown by the relic in its original state, exhibits the stronger features of mental constitution. It is a finely formed head, of the feminine type, yet exhibiting more than average fullness in the frontal region, a development of intellect due to a good inheritance and culture. The artist in his restoration has not only softened the lines but we think effaced some of those indicia of character that are of value to the student of physiognomy. The gentleness and grace of the artist's work is undeniable, but the original mold impresses us far more—as we discern in it strength, spirit, intellectual discernment, and a decided personality. We can easily believe that such a woman occupied a place of dignity and influence in the period that is ascribed to her existence.

D.

HOW ONE WOMAN FOUND HER PLACE IN LIFE.

BY MARION EDMONDS ROE.

DISCOURAGEMENT and misery were expressed in every feature of Mildred Powerscourt's face. She was aspiring by nature, though very sensitive, and to those who could pierce the depths of her earnest blue eyes it was easy to discern in her the elements of a refined and noble girl.

But here she was in a hotel kitchen washing dishes. She had long excited the jealousy of the other servants, and to-day she had offended the housekeeper by declining to do more than her rightful share of drudgery. To live in open enmity with the only human beings around her seemed more than she could endure. She retired with a heavy heart, and on the following morning she was informed that her services were no longer needed.

A wild, appealing look came into

her eyes. Hateful as her duties had been they had at least afforded her food and shelter, and she knew by experience how selfish and cruel the world is to the homeless. "Will you give me a recommendation?" she faltered.

The woman only sneered and turned away. However, Mildred's sense of justice gave her a certain courage, and she went with her troubles to the proprietor. He was a German by birth, and not very familiar with English. He refused to interfere with the decision of his housekeeper, but with the sturdy honesty so characteristic of his nation, he was quite willing to testify to her good morals. After scribbling a few lines in German, the only language he could write, he handed the paper to the girl without another word.

She thanked him with a tear in her eye, and then returned to her room.

There was now only one thing for her to do—go to her sister's until she found another place. How her pride rebelled against the alternative! Oh, if she only had a home of her own, however humble, where she could be at peace.

Anna, the only near relative Mildred had in the world, had married a grocer by the name of Jenkins.

As baby-tender and general help she had been tolerated in her sister's house, but she came to realize, as time went on, that she was unwelcome.

Almost in despair, she had taken the place of dish-washer at the hotel. She had very little self-esteem, and from her sister's snubs and scoldings she had come to believe that it was about the only occupation for which she was fitted. When she went back to her sister's house she took care to explain, "It is only until I find another place. I will go out to look for one to-morrow."

Anna said nothing, but long after Mildred had retired the sister went into her room and saw that she had cried herself to sleep.

"Poor girl," she murmured, "I would be kinder to her if I could, but Mr. Jenkins is so particular."

Early next morning Mildred started out, not knowing where to go. She had prayed earnestly for guidance, and was waiting to be led. Coming opposite the window of a bookstore, she paused and looked in. A small volume entitled, "Your Place in Life," caught her attention, and she decided to enter. In discussing the book, she heard for the first time a few really intelligent words about phrenology. The salesman recommended a phrenologist whom he had consulted to his great advantage, and Mildred seemed to accept the idea as an inspiration. She hailed the next street car, and soon found herself in the presence of the man who was said to possess such a mysterious art,

"So you pretend to tell people how to find their place in life, do you?" inquired Mildred, with a smile.

"We make no pretensions to do more than we can do," replied the phrenologist, in a serious, but kindly tone.

"Well, I'm afraid you will not find many bumps on my head," said Mildred. "It always seemed to me to be very smooth."

"Allow me to say that we do not estimate your talents by projecting knobs on the skull as you seem to imagine. People have that notion who have never read our books, or seriously inquired into the subject. We judge the developments of your brain in the same way that you tell which end of an egg or a pear is larger, that is, by the diameters. We consider distance or expansion from the ear also, besides quality and temperament. Character reading is an art, and requires long practice, just as the mastery of a musical instrument."

"Well, then, please tell me where I belong in the world; but before you begin, I must tell you that my education——"

"I beg your pardon," interrupted the phrenologist, with a smile, "you will be better satisfied to let me describe your character first, and then ask any questions, or give me any of your history afterward. We do not need any hints as to your experience."

When Mildred Powerscourt arose from the chair which had been placed for her, she had a much higher opinion of herself than when she sat down, and yet she knew that she had not been flattered; every word spoken to her carried conviction with it. For the first time in her life she saw herself as she really was. All the years she had been taking some one else's contemptuous estimate of her as true, but to-day the scales fell from her eyes, and she saw how much more beautiful and successful life might be to her.

He spoke of her refinement, her

love for the beautiful, her mental temperament, her taste for literature, and she mentally responded, "It is God's truth."

"You are sympathetic and impressionable," he continued, "and yet there is not more than one man in a thousand who would be attractive for you on account of your extreme fastidiousness. But that one man would be all the world to you, so that you need to be very careful about bestowing your affections unless you are sure that they would be reciprocated. You are a thoroughly conscientious and devoted woman, and I say again, be very cautious about falling in love, for you will never love but once."

"You worship the beautiful, and can never be happy amid ugly surroundings. You can manage to exist better without most necessities of life than you can without the luxuries. If you could have but two rooms in your house you would want one of those to be a library and the other a picture gallery. You have a passion for handsome human faces, and you could sketch portraits without the aid of instruction. You have always underrated your abilities, and it is no flattery to say that with proper education and training, you could easily become a successful author or artist."

"I admit," said Mildred, "that those professions are exactly to my taste, but I have neither leisure nor money to pursue them. I must decide what to do in my present condition. I am willing to work if you can suggest something that will not be too distasteful."

The phrenologist replied: "I would advise you to seek a position in some wealthy family where two or three servants are kept to do all of the work, and where you could have in charge the artistic arrangement of beautiful rooms and the ordering of dainty meals. You would be an exquisite home-maker, and the best place of all for you would be that of wife and mother, but you would not

be a good housekeeper if the actual labor all depended upon your own hands."

"That is true," replied Mildred. "I believe I could oversee a fine house where there were others to do the work, but I fear that such a place will be difficult to find."

"Oh no, there are many wealthy women who are either incompetent or otherwise too much engaged to attend to their beautiful homes. Such a woman would be only too glad to pay you a handsome salary to relieve her of the care. But do not let the position of lady housekeeper be the goal of your ambition. If you have any leisure, read the best books you can obtain, and as soon as your means will permit, take lessons in drawing."

"A lofty ambition for a servant girl," laughed Mildred, more joyous at heart than she had been for many a day. The phrenologist had inspired her with hope—without which there can be but little happiness or success.

On returning home, Mildred gave an account of her morning at the phrenologist's.

"Did you tell him," asked Anna, "that you had a trunk full of sketches, and that you had wasted reams of paper in writing verses, when you might have been better employed? Did you tell him that you spent your last dollar for a ring with a pretty set in it, when you didn't have a decent calico dress to your back?"

"No, I did not," rejoined Mildred, flashing with anger at her sister's taunts. "There was no need to tell him. He knew me better than I knew myself, and I'll take his advice."

Most things are easier said than done, and it was sometime before Mildred found a place at all like the one which the phrenologist had advised her to seek.

But one day when Jenkins came home at noon, he did not wait for Anna and Mildred to get the dinner on the table before he began telling about a new customer of his.

"I tell you, Anna, he's rich," said the voluble Jenkins, "and I hope to make a lot of money out of him. He's just bought that big house of Tyrrell's on the hill. He noticed those early strawberries outside my door, and he never asked the price, but told me to send up a dozen boxes. He was quite sociable, and looked all around the store to see what I had that was choice, and before he left he asked if I knew of any woman he could get for a housekeeper. He said his wife had gone to Florida, and he had two or three servants but no one to oversee them and order the meals to suit him. Just as he was going he took a paper out of his pocket and said, 'There's my advertisement. If you happen to think of any person let me know.'"

"Please let me see it," said Mildred.

The advertisement read:

"A wealthy gentleman whose wife is spending the winter in Florida, wishes to employ an elderly woman as housekeeper. She must be domestic in her tastes, and thoroughly familiar with housework."

At 4 o'clock the eager girl was on her way to apply for the position. She had combed her hair down smooth and plain to make herself look as old as possible.

The house was large and handsome and surrounded by beautiful grounds. Mildred rang the bell and then waited with a beating heart. Presently the door opened and a business-looking gentleman stood before her.

"I saw your advertisement"—began Mildred.

"Well, are you an experienced housekeeper?" he interrupted.

"No, I am afraid not."

"Then, why did you come?"

"Because I was very anxious for the place."

"But you are rather young," objected the man.

"I am quite old," urged Mildred, "and every day I'll be getting older."

"That's so," responded the owner

of the mansion, resisting an inclination to smile.

It was no laughing matter to Mildred.

"Have you any references?" inquired the gentleman.

Mildred handed him the paper which the German hotel proprietor had given her.

"Please step into the library while I read it."

How good it was even to see so many books! The furniture was rich, but, somehow, the room was cheerless.

Mr. Fredricks seemed to have some difficulty in reading the recommendation. He went to the window, and, with his back to Mildred, finally deciphered what her former employer had to say. Then he thrust the bit of paper into his pocket, and, turning to Mildred, said, "You may stay for a while, but I am very difficult to please. There is one thing which I cannot endure, and that is much noise. You are to keep this room and the dining room in order and see that appetizing meals are served for me three times a day. If you have any lengthy communications to make to me, either about the servants or about supplies, I prefer that you should make them in writing. When I go down town you can put this room in order. If you wish to know anything further about your duties, Mrs. Hobson will probably be able to give you the desired information."

Mildred bowed in silence.

The master of the house rang a small silver bell and a large framed English woman appeared.

"Mrs. Hobson," said he, "this is the new housekeeper. Please give her the keys and obey her orders."

Without a word, the old woman motioned Mildred to follow her. Down the wide hall and up the softly carpeted stairs they went, into a beautiful room overlooking the river.

"This is the housekeeper's apartment," said Mrs. Hobson. "Will you stay 'ere a bit or coom down an'

give horders for the master's supper?"

"I'll stay here a few moments, and then I will be down," replied the girl, closing the door of her room.

Mildred knelt by her bedside and covered her face with her hands. How strange it all seemed—and yet she was thankful, oh, so thankful, to have a place at last. With a little prayer that she might have wisdom and tact to perform her duties aright, she hastened to the kitchen.

"Now, Mrs. Hobson, you will have to tell me what the master likes for his supper, and show me where things are until I get a little used to the place."

"Well, miss, 'e's that fussy that 'e don't eat much; 'e's got some strawberries to-day; mebb'y 'e'll eat a few o' them."

"Well, we will see what can be done; have the girl polish this glass dish and wash her hands, and look over some of these berries; now, come with me to the dining room." This apartment had the same cheerless air that prevailed in the library. Swiftly and deftly Mildred went about giving orders and bringing comfort and tidiness out of the chaos. A bright fire was kindled in the grate, the hearth cleaned, the glass chimnies of the chandelier polished, the crimson curtain shaken down into long graceful folds to shut out the night. A spotlessly clean cloth was put upon the table to give the master an appetite, and it seemed to succeed, for when Mrs. Hobson went to remove the tea service she declared that "'e 'ad et amazin'."

Mildred slept but little, so eager was she to dust and arrange the dingy library. Long after midnight she heard the master walking up and down the floor of the room below. She wondered greatly that a man with such a beautiful home should be so restless and seemingly troubled.

Under Mildred's management the gloom and disorder vanished. The table with its flowers and silver was as

exquisite as a painting. Six months passed quickly and happily away.

One Saturday the master came home quite unexpectedly and found Mildred in the library. She arose hastily to leave the room. "Don't go," said he, "I wish to ask you something. You seem to be a woman of sense, and I am in financial difficulty. I want to ask your advice. I suppose you imagine that I am a rich man. Well, I have considerable money, but my expenses are greater than my income. I do not know that I should have confessed all this, but to-day the servants' wages are due, and I have no money with which to pay them. What would you do in a case like that?"

Mildred's face flushed. She knew her duty, but, oh, it was hard to say what she thought was best to do. He was waiting for her to speak. With a great effort she steadied her voice and replied: "Mr. Fredricks, in regard to the servants, I would dismiss them all except Mrs. Hobson, and I would cut down her wages at least one-third. She is perfectly competent to do your work, and if she did it all she would not earn the amount you pay her at present."

The master rose and began to pace the floor. "Your plan does not suit me at all. I would be very sorry to have *you* go; the house never seemed like a home until you came. I think I can somehow manage to pay you and Mrs. Hobson unless you are tired of the place."

"Oh, Mr. Fredricks!" exclaimed Mildred impulsively. "I have been so happy here, and if you will let me stay I shall not want any wages for ever so long. I have saved a good deal of money since I came here; you have paid me twice as much as I have earned."

"Miss Powerscourt, I certainly cannot allow you to work for me without paying you, but perhaps you will trust me until I get my financial affairs untangled a little?"

Mildred went to her room utterly

miserable, for she felt that she must soon find another situation. Mr. Fredricks would not allow her to work for nothing, and she could not stay and add to his expenses. She scarcely knew whom she pitied more, the master or herself. She wondered if the hundred dollars which she had saved would help him much. It seemed like a large sum to her.

She got out her sketching materials. She drew slowly at first, then more eagerly—a pair of dark eyes, a drooping moustache, a broad, white forehead upon which lay a careless curl of dark hair. The portrait was complete, and the face was very like the face of Irving Fredricks. She kissed it softly, put it away in her volume of Tennyson, and then went to bed and cried herself to sleep.

In the morning a new thought occurred to her, and along with her questions as to what Mr. Fredricks would like for dinner, she ventured to write: "I beg your pardon if I seem foolish. I know that my ideas were of little account, but if you would consult a phrenologist, I think he could give you advice that would help you very much. I enclose his name and address which are probably familiar to you. I feel greatly indebted to him myself, and I am confident that he could tell you what methods you ought to pursue in your business. M. P."

When Mildred went to put the library in order, this is what she found upon the desk:

"MY DEAR MISS POWERSCOURT:—Your advice was of much service to me. I dismissed Eply and James this morning. I will see the phrenologist to-day and report at six o'clock dinner, which I hope you will do me the kindness to share with me. I. F."

This friendly note had a strange effect upon Mildred. She went to her room, pale and trembling. "Oh, I must not stay here! I think too much of him already, and his kindness makes me see my danger. He is not free to love me. I must go away, and yet my heart is breaking."

When Irving Fredricks came into the cheerful dining room that evening, a dainty dinner was on the table, but it was evidently not intended for more than one. On his plate was a note. He read it hastily.

"DEAR MR. FREDRICKS:—Please pardon me for not accepting your kind invitation, but I am sure *Mrs. Fredricks* would not approve of your friendliness to a young woman in my position. I am sorry to disappoint you, but I think it best to go to my sister's to-night. With many thanks, "M. P."

Mr. Fredricks hastened to the kitchen. "Mrs. Hobson, where is Miss Powerscourt?"

"I don't know, sir, she was getting ready to go out."

In the hall, Mildred came face to face with the master. He placed himself between her and the outer door. "Miss Mildred, you are not going to leave if I can prevent it. This house is your home; Mrs. Fredricks is a myth; there isn't any Mrs. Fredricks, and never will be unless you consent to bear that name; stay here and make me happy by never saying anything again about going away."

His arms were about her and she was being gently drawn toward the dining-room.

"But—but Mrs. Fredricks in Florida, you know"—stammered Mildred.

"Well, if there is any one there of that name let her remain there. I have no wife and only advertised myself as a married man as a protection against designing housekeepers."

"Oh let me go," pleaded Mildred.

"No, indeed, *you* are not designing; but my former housekeeper was a widow who was determined to marry my property. She nearly talked me to death, and that is one reason I asked you to write your questions. But take off your hat and let us have dinner. I have some good news."

When they were seated, he continued: "First, I am glad that I got here in time to prevent your escape;

then your phrenologist put me on the right road. You see I had twenty acres of land close to the city. Some agents induced me to divide it up into small lots, and have the streets paved, sewers put in, sidewalks built, etc. The result was that I spent vast sums of money and received very small returns. Worst of all, the endless details of the business were killing me.

"But I had the property, and it seemed the only way to do. Well, I went to the phrenologist, more to please you than anything else. He read me like a book, and I saw my way clear. 'Young man,' said he, 'I advise you always to do a wholesale business. Your acquisitiveness is deficient, and also your perceptive intellect. This is shown by the narrowness of your side head a little above the ears, and by the comparative depression of your lower forehead. You care too little for money to be interested in picayunish transactions. Details annoy you exceedingly, and you should confine yourself to large affairs. For instance, you would do well as a wholesale dealer in sugar and flour, but you would never be satisfied to retail gum drops or cookies. Your broad upper forehead makes you a manager, a thinker and a planner. Engage in a pursuit that relates to bulky materials.'

"Wasn't that a hit? But what do you think he said about the kind of wife I ought to have?"

"Oh! surely he didn't describe me, did he?" asked Mildred, with just a little echo of hope in her voice.

"Yes, he did. He said that I was philosophical and critical, and that my wife should be artistic; that I would be logical and severe, and that my wife should be emotional and sympathetic. He said, too, that I should be most likely to find such a person among the blondes, and not among

the brunettes. I thought to myself, 'Well, I shall not have to look far for the golden-haired girl I want.'

The color came into Mildred's cheeks, but she could no longer refuse to believe the blissful truth.

Acting upon the advice of the phrenologist, Mr. Fredricks sold his subdivision in a lump, and gave his business hours entirely to a few investments that required simply a comprehensive judgment. And now that the rich, warm sunshine of love had come into his life, he was truly happy.

A few days after they were married, Mr. Fredricks reminded Mildred of the "recommendation" she had brought to him, and asked her if she knew just what it contained. With a look of surprise, she answered, "no, I was in such trouble then that I did not even think to ask any one to translate it for me." "Well, here it is," and Mr. Fredricks produced the paper from a little drawer in his desk. It read as follows:

"Ueberbringerin Dieses ist wohl ehrlich, und geeignet als eine Hofdame eine glänzende Rolle zu spielen. Aber zur Hausarbeit hat sie weder Lust noch die richtige Fähigkeit." [The bearer of this is no doubt honest, and adapted to play a brilliant rôle as a court lady. But for house work, she has neither inclination nor proper talent.]

Mr. Fredricks translated the very candid statement, and then laughed heartily, while Mildred's face wore a mixed expression of embarrassment and mirth.

"Why, how could you take me after reading that?"

"Well, it was very close to the truth, and the humor of it struck me so that I should have been tempted to employ you even if I had not been pleased with your face."

Then Mildred laughed too. She could afford to be merry now, for she had truly found her place in life.

THE REV. JOSEPH COOK.

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

By EDGAR C. BEALL, M.D.

THE position occupied by Mr. Cook in this country for nearly a score of years as a social reformer and a teacher of what has been termed "scientific religion," has been in many respects unique, and from many points of view renders him an exceedingly interesting figure.

As to the value of his mental power and the extent of his influence, there are doubtless differences of opinion. Those who oppose him in belief probably deny that he is *un grand homme*; but no one can dispute the fact that he is *un homme grand*, for he is six feet in height and weighs two hundred and seventy pounds, while his head has the extraordinary dimensions of twenty-four and a half inches in circumference, by a trans-frontal measurement from ear to ear of fourteen and a quarter inches.

His temperament is the cerebro-vital, and the elements which constitute the nutritive system are almost equally balanced. He has prodigious capacity for both digestion and respiration. His eyes are blue, his skin clear, and his chestnut-brown hair is peculiarly fine and soft. In this unusually fine hair we have perhaps the best indication of the activity of his brain, although the condition of the cranial integuments, especially upon the forehead, and the keenness of the eye, admit of no doubt as to the great number and depth of the cerebral convolutions. We infer, therefore, that the possessor of such an organization must be capable of a great deal of work, and that he can perform it in much less time than would be required by the average individual.

As in the case of the majority of men who are eminent in the pulpit or upon the lecture platform, Mr. Cook

is characterized by strong masculinity blended with an almost equal number of elements peculiar to the female sex. This will account for the singular union of severity and gentleness, ruggedness and delicacy, strength and refinement, which are observable in his character. There are lights upon his face at times which are the expression of a lofty, pure and noble life. Again, like clouds upon a clear sky, shadows appear which plainly bespeak his kinship with the earth. To use one of his own similes, he has "a tempest in the lower half of his brain and a hurricane in the upper half," so that it will depend largely upon circumstances as to which side of his character will seem more conspicuous.

The same is true of his beliefs, opinions, and methods of work. He is like a great lake whose thousand happy wavelets gently kiss the zephyrs in the summer sunshine, but which, if swept by angry winds, rises in vast billows of tumultuous rage. He loves the melody of the Sermon on the Mount, but as a prelude he enjoys the thunder of Sinai. The sacrificial blood on the altars of the ancient patriarchs would neither shock nor wound his sensibilities, but he would soon turn his head to catch a tender word from the lips of St. John.

Mr. Cook's brain presents strong contrasts of development and deficiency. Looking at the back of the head, from the opening of the ear to the nape, the depth and extension of the cerebellum are very considerable. He will appreciate woman, and, as he has many feminine elements in his own nature, he should be a congenial and agreeable companion for the opposite sex. Friendship or attachment is only average. It will not

disturb him, for instance, to travel alone, or at least to start upon a journey without companions, and take his chances of forming sufficient acquaintances on the way. He can be exceedingly genial, loquacious, communicative, and affable to those he likes, and he can easily gain friends with reference to his chosen work as a public teacher. But to his opponents he is direct and blunt. He has a fair degree of attachment for the young, and would doubtless be tender as a parent, but he is not remarkable for the love of children. Attachment to home is of only ordinary influence, and he can easily be satisfied in an itinerant vocation provided he is accompanied by his family or enabled to see them occasionally.

The development just behind the ears is very marked at Love of Life. Above and back of this point the diameter at Combativeness is a good deal less. He is not fond of contention or strife, as regards the abstract idea of war or the exercise of his faculties in the labor of defending his principles. But the unusual width of the head immediately over the ears shows Destructiveness to be one of his most conspicuous qualities. He does not relish the interchange of bullets, sword thrusts, stinging blows or caustic words which are delivered merely from a desire to conquer or subdue an enemy. The thought of victory does not often come into his mind with relation to a combat. He is impatient of the delays and the protracted efforts incident to a fight. He would enter a long contest with repugnance if he could foresee its dreary length. He is glad enough to feel himself master of his position, or to know that his cause is sustained and secure from the attacks of opposing forces, but it is annoying to him to be obliged to engage in actual warfare.

However, he has tremendous energy and crushing force which he delights to expend in the rôle of an exe-

cutioner. He does not strike to convince his adversary of an error or to impress him with the necessity or advisability of an opposite course, but to put him in a condition which will preclude any repetition of his offence, and render him a warning to others. In other words, he is adapted to crush out evil, as he understands it, by radical measures rather than to dally with the slow and uncertain vehicles of conventional litigation, persuasion, diplomacy or compromise. Where his feelings are thoroughly wrought up and his convictions are marshalled into line he can be formidably severe; but the activity and culture of his anterior brain will lead him to use his destructive vehemence chiefly in the prosecution of noble work. His literary style is also made vigorous and effective largely as the result of his Destructiveness.

As a near neighbor to the faculty described in the preceding paragraph, his sense of the necessity for and justification of liberal alimentation for the corporeal man is quite pronounced. He believes truly that we should not live by bread alone, and he is also appreciatively certain that the "*sthula sarira*," or physical body, should not depend upon a supernal diet. In this connection it is pleasing to note that few men are so entirely free from the desire for tobacco or alcohol.

Acquisitiveness and Secretiveness are very moderate, and he will have but little impulse either to hoard or hide. Cautiousness is fairly developed, and the love of approbation is quite strong. The line from the opening of the ear to Self-esteem, however, is quite short. It is a surprise to many people upon meeting Mr. Cook to find him so approachable and free from that pompous dignity and reserve which are supposed to belong to the learned class. He is equally unaggressive as to the element of Firmness. Mr. Cook may appear obstinate when the intense current of his sympathies or convictions is turned upon a special proposition, but

as soon as the opposing influence retires his feeling of resistance very quickly subsides. His Destructiveness, the volume of his brain, the extent of his information, and his general culture will constitute a volume of force sufficient to sustain him ordinarily without the need of the mental quality of determination, or stability *per se*.

Continuity is also weak. He has the trained intellect of a scholar, which enables him to study coherently and connectedly enough when it is important that he should do so. At other times he can easily vary his avocations and pursuits without embarrassment or confusion. This will also enable him to become familiar with a great many branches of science which the average man in his profession would be likely to leave untouched.

The developments in the top head are chiefly in the regions farthest upward and forward from the base. Benevolence is strong, and together with Veneration determines the color of his moral and religious life. Faith is rather strong, and there is that subordination of the sense of justice to sympathy and reverence which is characteristic of the feminine nature in general, and of those men whose genius lies in the sphere of oratory, poetry, music, or religious teaching.

Mr. Cook is an eloquent, impressive speaker, and capable of sublime heights of sentiment and rhetorical diction. But he is more. He is also keenly alive to the tangible machinery of the gross, physical world. The remarkable diameter of his forehead in the temporal region indicates a genius for mechanics. If he had chosen the profession of engineer, he could have become renowned as a projector and builder of immense public works. He could have duplicated the achievements of a Krupp, a Roebling, or a Cyrus Field.

The forehead for the most part is symmetrically developed. Individuality, or the sense of objects, is

rather weak, and will lead Mr. Cook to take general rather than specific views of things. For instance, in the study of Phrenology, he says he has always been able readily to appreciate the theory rather than the practice of the science. In learning the locations of the brain centres, he could always understand the groups more easily than the individual areas, or as he expresses it, he could learn the states but not the counties. His judgment in matters of distance and motion must be excellent. The almost unbroken continuity of the outer angle of the forehead with the upper eyelid, evinces a deficiency of order which seems to be an inseparable concomitant of genius.

The centre of the forehead at memory of events, and a little higher at Comparison, is remarkable. He is able to carry in his mind almost the entire written history of the world, and his fund of illustration is well nigh exhaustless, although his metaphors are drawn rather from classic lore than the immediate sphere of every day life. This is because of his lack of specific observation, and the habit of relying chiefly upon books for information. The prominent eye shows readiness in the use of words, and with his large Constructiveness, he should excel as a linguist. Causality is also well developed, though less in size and influence than the distinctively literary faculties.

Altogether, the organization is a rare combination. Mr. Cook might have accomplished more, perhaps, and made his work more efficient if he had had more commercial shrewdness, practical judgment of human nature upon the business plane, and a more strictly or closely logical cast of mind, with less enthusiasm and impulsiveness. But inequalities such as these are peculiar to distinguished men as a rule, and the conditions of absolute harmony and smoothness of character are almost fatal to great originality or force.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XV.

PERSONS OF EMINENT SUCCESS A PUBLIC BENEFIT.

IN every age a few persons by force of genius, talent or powerful character, rise above the level of the rest and make themselves conspicuous marks of historic interest, and masterful benefactors of their race. Before the modern craze for high houses which piled up structures in cities twenty stories high, the church spires were the first objects seen of a distant city,—and the men of eminent capabilities in those cities, like the spires of the churches, were alike elevated in public esteem.

Greatness is not all comprehended in the word talent, which refers to the intellectual and to the æsthetical elements; nor is it due to mere physical strength, although some become notorious through it, like the athletic giant or the master bullock in a drove of buffaloes. Greatness is sometimes attributable to superior moral elevation, and sometimes, too, greatness means capability in a practical way. In other cases the governing spirit, the masterful energies involving courage, pride, determination and thoroughness, make a man conspicuous. Sometimes, too, the social affections wed a man to the world's admiration, and make his name immortal. Greatness, therefore, may have diverse sources of manifestation.

No field of contemplation is more interesting and pleasant than that of biography, as it relates to the men and women of the world who have made themselves known for useful and dominant qualifications in the business world. It is interesting for the great masses to recognize and to

render a kind of submissive homage to the power in some men that can push civilization into the wilderness, that can span rivers, traverse oceans and control mills and machinery, and so widen human prosperity and enlarge human achievements.

Fig. 126, Cornelius Vanderbilt, was called the "Railroad King," but previously, while he was devoting himself to ships and water navigation, he acquired the name of "Commodore," not by the regular line of promotion, for he promoted himself, and he was commodore before he was 18 years old. He rode the bay and harbor in darkness and in storm when others dared not venture forth, and later as a steamboat man his talent and pluck made him seem a commodore. It is doubtful whether this country has ever raised a man who had as much comprehensive business capability combined with such practical tact and executive courage as Commodore Vanderbilt. He had not the culture of the schools, nor the polish of the salons of fashion, but he was among men the master. If he lacked learning, he knew somebody who possessed it, and paid him well for the use of it. He understood human character as well as any man of his day, and how to impress his own personality, his thoughts and his purposes upon men of capability. He knew how to select men for positions, and how to be the controlling spirit of their efforts. He was six feet high weighed 180 pounds, and had as good a temperament and constitution as could be found in ten millions of

people, and originally and naturally, he was a many-sided man, and able to cope with men of eminent ability. He was not a scholar in mathematics, in chemistry, in literature or science, but he had wonderful common sense, and the power to adapt what mankind knew to the practical duties relating to success in life. That tall head indicated wonderful Firmness and strong Conscientiousness. He had ambition and self-reliance, Self-esteem ruling over Approbativeness. He had Benevolence enough to make him generous; he had a strong intellectual endowment. Across the brow the head was prominent; he took in all the details. His memory was capital, and his ability to classify, to use his comparison in choosing the best and adjusting that which was not desirable, was instinctive, and nearly faultless. His Human Nature was eminently developed; he knew how to study men, how to select them, and how to relate himself to them so as to get them allied to his interests in the best way. He had large Language, and though he made no speeches, he talked to the point, and people knew what he was talking about. His head was broad enough to give him courage and force, and his temperament was such as to enable him to manufacture healthy blood and vivify the whole system to do the hard work of life, and the thinking that belongs to the guidance of hard work and complicated business. He was a man of wonderful activity, as well as courage, and his intellect was undimmed at 83 years of age, when he died from a local difficulty. If the true history of Mr. Vanderbilt could be set forth, it would scarcely be credited outside of the realm of his own enterprise and acquaintance. No doubt there is much in blood, in original capability and tendency as applied to human achievements. Heredity does not all begin and end with horse flesh and game chickens. Talent, skill, and hard work were the basis of Vanderbilt's success, and

that wonderful vitality which enabled him to maintain his clearness of thought and his power to old age. His hair was dark, as were also his eyes. He had a fresh complexion, and looked as healthy as a youth of 18 when he had passed his 75th year. He was a long headed thinker, a quick and accurate observer, and remarkably intuitive in forming business judgments, and he had the courage of his convictions.

He was born on Staten Island, May 27th, 1794. His father was a farmer, and carried the products of his farm to the little town of New York by water. He finally established a ferry, and Cornelius spent most of his time on the water. He carried pleasure parties to picnic places, boarded ships, for there were no steam tugs in those days, and in heavy Winter storms anxious ship owners sought out the youthful Vanderbilt to enable them to communicate with their incoming ships. At eighteen years of age he found himself part-owner and captain of one of the largest periaugers in the harbor. During the war of 1812 he rendered material service in furnishing supplies by night to the forts about New York. At one time during the war, in September, 1813, the British fleet had endeavored to penetrate the port during a severe southeasterly storm, just before day, but were repulsed from Sandy Hook. After the cannonading was over it was important that some of the officers should proceed to headquarters to report the occurrence and obtain the necessary reinforcements. The storm was fearful, and all felt that there was but one person capable of undertaking the trip; accordingly young Vanderbilt was sought out, and upon being asked if he could take the party up, he replied promptly, "Yes, but I shall have to carry them under water part of the way." They went with him, and when they landed there was not a dry thread on the party. The next day the garrison was reinforced.

The same year he married Sophia Johnson and moved to New York. As a boatman, at the age of twenty-three, he was making \$5,000 a year, but perceiving that steam would soon become the great agent of navigation, he studied its application to motive power, and for that purpose he

to \$5,000 or more if money was his object. But Vanderbilt had thought well before he decided on the step he was about to take, and at once refused the offer. Finally Gibbons told him that he could not run the line without him, and he said: "There, Vanderbilt, take all the



FIG. 126—COMMODORE VANDERBILT.

entered the service of Thomas Gibbons, then proprietor of a line of steamboats running between New York and Philadelphia, and took command of a small steamer. Vanderbilt remained in his employment about twelve years. He now felt at liberty to look after his own interests more closely, and he desired to commence business on his own account. Therefore, in 1829, he informed Mr. Gibbons of his plan to leave him. "You must not," he replied, "I cannot carry on this line a day without you." He then offered to increase his salary

property and pay me as you can make the money." This tempting offer was also declined, as he was unwilling to put himself under any obligation to any one. Now Captain Vanderbilt was his own master, and the next twenty years of his life we must pass over rapidly. During this period he built a very large number of steamboats and established steamboat lines on the Hudson, Long Island Sound, and elsewhere, in opposition to corporations and companies having a monopoly of the trade. He built better and faster boats than his com-

petitors, and run them at the lowest paying rates, thus furnishing passengers the best and cheapest accommodations.

About 1850 the Nicaragua Transit Company was organized, and Mr. Vanderbilt was chosen president. The object of the company was to find a shorter route to California than by way of Cape Horn, and Vanderbilt planned a route so that steamships were sent to the Pacific to run in the line from the harbor of San Juan del Sur to San Francisco, and soon the entire line was in efficient operation. In 1853, Vanderbilt having become a man of great wealth, built his celebrated steamship, the "North Star," in which he took a tour to Europe with his family, and everywhere the vessel, with her splendid appointments, elicited profound attention. The "North Star" was the first steamer with a beam-engine to cross the Atlantic, and the English people treated him as a commodore. In 1862, when the Government needed a large addition to its Navy to aid in carrying out its operations, Commodore Vanderbilt illustrated the nature of his whole-souled patriotism by making a free gift of this splendid ship to the United States. He built and owned exclusively himself, upward of a hundred steamboats and steamships, and never had the misfortune to lose one of them by accident. In 1865, seeing that the railroad interest was to be the major factor of the world's transportation, he sold all that were left of his vessels and transferred the greater portion of his wealth to railroads. He bought the Harlem Railroad, which was run down and never had been more than half built, as was the case with most other railroads of that day. He reorganized it, put his master spirit into it and made it a paying concern, and thus it was a rival of the Hudson River Railroad.

The owners of this road desired Mr. Vanderbilt to take charge of it, in order to secure its success, and we

have heard the story that he said to them: "Gentlemen, I do not have any partners, if you want me to manage your property, sell me fifty-one shares of it." And they were very glad to do it; so they made Vanderbilt president of the road, and he in return made the road one of the best on the Continent. The stockholders of the Hudson River Railroad were entirely willing that he should manage everything exactly as he pleased, they knew that he was better able to do so than the rest of them, and they knew, moreover, that he was honest and that they could trust him.

Mr. Vanderbilt desired to come into the heart of New York city with the northern trains, and there must needs be a great railway station. To get it on equitable terms, and do a great public benefaction at the same time, he planned a method of achieving it. The story is told in this way. Somewhere up in the mountain gorges near the Erie Railroad, a man living away from the Delaware river had a farm, which was never worth more than five thousand dollars. One corner of his farm ran over the mountain side, and was so steep that a goat could not climb it either way, and at the foot of this there was about one-third of an acre of ground which the Erie Railroad wanted for a watering station; and this man would not sell this third of an acre for less than five thousand dollars, and the whole farm, of which that was a part, was never worth a cent more than that sum. A bill was then drawn up for enactment in the Legislature, and read thus: "Whereas railway traffic needs more than mere right of way for their track, they need also room for stations, watering tanks, turn outs, and the like. Therefore be it enacted that, if a railway desires such facilities and cannot come to terms with the owners thereof, a petition to the Supreme Court for a commission of dis-interested parties to assess the value of such lands shall be appointed, and their decision, when confirmed by the Supreme Court,

shall be final." That secured the patch of land for the Erie Railroad. The ink was hardly dry when Mr. Vanderbilt went up to Forty-second street, New York, and had planned to have the owner of a row of tenement houses come there to see if they could arrange about a sale of the property. Mr. Vanderbilt asked the owner: "How much do you ask for this property?" "It is not for sale," said the man. "Well, what will you take for it?" "I do not want to sell it," said the man. Mr. Vanderbilt then offered him a certain amount, but the man declined the offer, and Mr. Vanderbilt went away. The next day there were half a dozen men on the ground with crow-bars taking up the sidewalk. Of course, the owner of the property was sent for, and he came frothing with anger, and wanted to know what they were doing. Mr. Vanderbilt looked him quietly in the face and said: "I am going to build a depot here, these houses are in the way, and so they will have to be removed." "But I have not said that I would sell them," said the man. Mr. Vanderbilt then said: "Do not let us have any words on the street, go to your lawyer, tell him what is happening and he will tell you your rights, but there is going to be a depot here, you may understand that." The next day the owner of the property came to Mr. Vanderbilt and told him he would sell the property, but Mr. Vanderbilt then said: "No, I made you a liberal offer and you declined it, now we will let the law take its course." He then stopped his work there, for that had only been commenced to bring the matter up. The Court appointed a commission, who assessed the property for more than it was worth, but for considerably less than Mr. Vanderbilt had offered in the beginning. The Grand Central Station is now the pride of New York.

As an evidence of the public confidence in Mr. Vanderbilt, and as a testimonial of the power of his

character, as well as of its integrity, when the railroad from Harlem to Forty-second street was to be sunken below the surface, the city of New York had her engineers and Vanderbilt had his. They ascertained as well as they could the cost of the enterprise, and the city of New York requested Mr. Vanderbilt to go forward with the work and sink the road. The city of New York was to bear one-third and Mr. Vanderbilt two-thirds of the expense, and the authorities of the city went to Mr. Vanderbilt and asked him to build it and do all the work as it should be done, to keep an account of expenses, and then to render the bill to the city for one-third of the amount, and they would pay it. As we understand it, the bill for the city to pay was a million dollars, and they had the confidence in him to believe that every cent of the cost would be wisely expended and faithfully reported, and this one fact is a memorable tribute to his capacity and to his integrity, and of the wise confidence which the public reposed in him. It was the same character that as a boy of eighteen, enabled him to bring the passengers from Staten Island in a wild storm in an open boat, to report the arrival of the British fleet. He was trusted in both cases. In the first case they said, "No one but Cornel. Vanderbilt can do it." And in the latter case the same spirit seems to have been manifest. They trusted his word for a million dollars, and his skill to do a great work through the heart of the city.

Let the reader look again at his head, note its elevation, its length from the ear forward, and see the physical and the mental harmony of the temperament and the constitution. Think of the life of toil, care and responsibility during the early years of his life, and the opening remarks of this chapter will be verified;—that blood tells, and a man well organized is capable of manifesting power and of securing success.

Fig. 127—Mr. Corbin—is a large man, he has ample proportions, a large head and especially a large face. His perceptive organs are very large; he possesses great practical talent, gathers knowledge rapidly, and as Vanderbilt had, he has an intuitive sense of the present and a far-reaching talent to understand what ought to be done in the future. He has also a great deal of the aggressive, a force of character and self-esteem that enable him to put into execution new plans. He has strong vitality, that long, strong nose, the broad cheek bones, the long upper lip and the height of the head from the opening of the ear to the top, show firmness, determination and self-reliance. He is one of the healthy men of the world, and so is always able to push his cause without assistance. Consequently he is a leader, a pioneer in departments that require peculiar boldness and force to conquer and overcome obstacles. He is methodical and decided. He does not temporize, and he is not inclined to make concessions. He is not soft and is not considered amiable nor plausible, and is not slippery nor oily in his speech. When he decides what he wants to do he talks to the point about it and then stops. With his powerful body, his large head and his wonderful vitality, he is forcible, positive and imperious;—those who admire courage, follow him. It is said that although he is imperious and brusque in his manner, he is capable of winning, not only the loyalty, but also the esteem of those who come in close contact with him. Few men have his iron will, few have his arbitrary spirit in their transactions with the world, yet the open candor of his conduct wins respect for itself and secures success on the practical side.

Austin Corbin was born in Newport, Rhode Island, July 11th, 1827. He chose law for a profession and was admitted to the Bar, having attended a course at the Harvard

Law School. He practiced for a while in Davenport, Iowa, and then entered a banking house, the only one that did not suspend in the panic of '57. He organized the first bank that commenced business under the National Currency Act in 1863. This proved a quick and ready fortune, and in a few years Mr. Corbin came to New York and commenced his career in the Metropolis. He founded the Corbin Banking Co., and acquired success because of his quick and shrewd appreciation of particulars. He afterwards took such an interest in railroad affairs that he may fairly be called one of the "Railroad Kings" of the country. He has paid special attention to the railroads on Long Island, and has thereby enhanced real estate there, and made it a desirable place for summer residences. He organized a plan whereby Long Island was made into a territory of homes, hotels and club houses. He has planned new ferries, bridges, and proposed tunnels under the rivers whereby Long Island can be made the garden of this region, and readily and rapidly accessible to the world.

It has come to be the fashion of late years that men like Mr. Corbin, and other men of brains and capability who undertake to develop resources for the public, have to meet stupid tirades of opposition, the public inclines to work against the monopolists, as they are called. It may be true that a railroad, by setting its price for the transportation of the products of the farms, may get the lion's share, but the history of the Erie Railroad from New York through a wild, mountainous section of the country to the Lake, shows that it has been a costly job for the promoters. It has been sold out three times under bankrupt proceedings, and yet the strip of land sixty miles wide, between New York and Dunkirk, through which the railroad winds its way has been enhanced in value by means of that railroad, sufficiently to have paid all the cost of making and maintaining

the Erie Railroad system. It has made many miles of that which was at the start a howling wilderness, a garden, with bright homes which tell of success and prosperity and happiness. Yet the very men whose fortunes have been made by the Erie Railroad, by enhancing the value of their property,

rural districts and converted farm land into city lots, a day's horse journey from the centres of business.

In the month of January, 1894, a boy was stealing a ride on the rear of a wagon in Brooklyn, and the driver "cut behind," and the boy jumped off under a trolley car approaching from

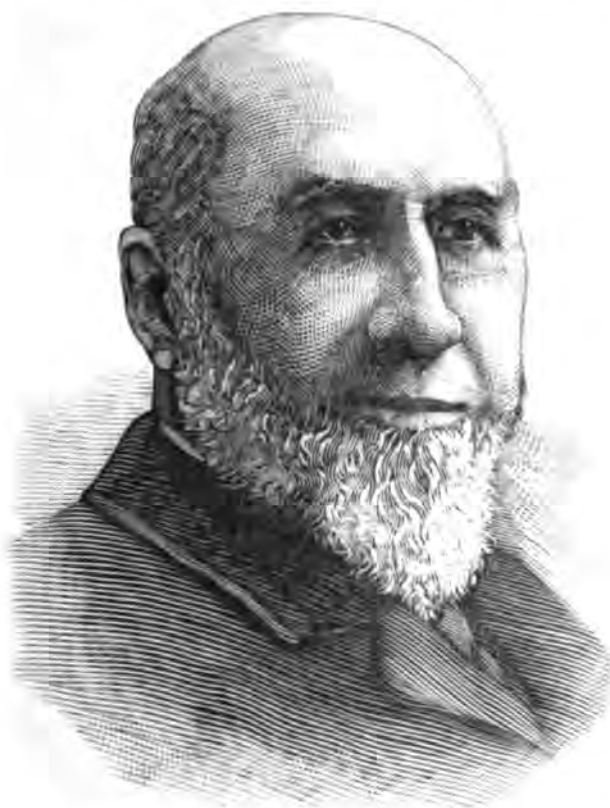


FIG. 127.—AUSTIN CORBIN,

A man of our own day.

cherish a feeling of selfishness towards the road which would lead them to do everything but that which is absolutely dishonest to increase their own prosperity, and cripple the road. The public is willing men of brains and courage shall use their earnings to develop the wild and remote regions, and while all are benefited by the improvement, there is a disposition to regard the corporation as an enemy to be plucked. Railroads have spread all our great cities into the

the other way and was killed, and would have been by a milk wagon or butcher's cart, as the boy behind the wagon did not see the car approaching nor the motorman see the boy till he dropped from the wagon under his car. The accident was purely the boy's fault, while he was committing an unlawful act. The jury, however, brought in a verdict against the railroad for \$5,000. The usual reason among such juries is "the corporation is rich and the family is poor." A

shyster lawyer often takes such a case for half the verdict, the public is taxed to maintain the court and unjust verdicts are often secured and the plunder divided.

Fig. 128—Prof. Morse—came from good, solid stock. He was the oldest

Motive temperament is shown in the amount of bony development in his figure and face. He was amply developed across the brows, and was inclined to be a scholar and an artist. He was a graduate of Yale College, and he studied art in Europe, to which



FIG. 128. SAMUEL F. B. MORSE,
The Inventor of the Telegraph.

son of the Rev. Jedediah Morse, D.D., the author of Morse's Geography, a school-book universally known. He was born at Charlestown, Mass., on the 27th of April, 1791. His mother was a descendant of the Rev. Samuel Finley, D.D., a former President of Princeton College.

Prof. Morse had the Mental, Motive temperament. The Mental temperament was indicated by the sharpness and activity of his make-up, and the

profession he desired to devote his life. His organ of Constructiveness is shown by the fullness at the region of the temples, partially covered by the hair. Then he had large, perceptive organs. He had uncommonly large Comparison, which gave him a relish for science for mechanism and for art. During his college course, under Prof. Silliman, he learned all that was then known on the subject of electricity and the formation of

electric batteries, and he took opportunity to listen to lectures by the best informed men on electricity and chemistry after he had left the college. The little that was then known on the subject of electro-magnetism suggested to him the possibility of using it to make permanent marks at great distances, so varied as to communicate ideas. He invented an alphabet of straight lines and dashes for telegraphic purposes, and his letters and figures were made up of various combinations of these elements.

In 1835 Mr. Morse was appointed a professor in the University of New York. Having a room in the University, he constructed, of rude materials, a miniature telegraph, embracing all the elements of an electro-magnetic telegraph, composed of a single circuit, which he afterward patented.

In 1838 he petitioned Congress for means to construct an experimental line from Washington to Baltimore. Though men saw the apparatus work, and messages were sent through its short wires, many were skeptical as to its power to work at any considerable distance, and the majority, as it usually treats its greatest benefactors in every age, ridiculed the whole project as the fanciful dream of an unsound mind. He turned to foreign countries and could obtain, even in England and France, no substantial guarantees, and he came home to battle for four weary, poverty-stricken years. The session of Congress of 1842-3, however, was memorable in Morse's history. He had worked, watched, and waited till late into the last night of the session, and, believing his prospects to be crushed in the scramble of a closing Congress, he retired, like a repulsed hero, to his bed, but was awakened on the morning of the 4th of March, 1843, by the announcement that the bill had passed at midnight appropriating \$30,000 to be placed at his disposal to make his experimental line to Baltimore. In 1844 the line was com-

pleted; the experiment was a success, and the world was thus made a compact brotherhood by the practical annihilation of space and time—at least for thought—civilization was set ahead a century in a day, and the name of Morse and telegraphy were wedded for all future time.

Prof. Morse realized a handsome fortune from his telegraphic patents, and lived at a beautiful place of his own near Poughkeepsie, N. Y., on the Hudson.

Foreign nations loaded him with medals and decorations, and vied with each other in doing him honor, while his proud and grateful countrymen have erected statues and monuments to his memory, and enshrined him in their reverence and love.

Happily he lived to see and to know that he was thus appreciated, and blessed with ample wealth, with honor and with world-wide esteem, he died, April 2, 1872, aged eighty-one years.

Fig. 129—Elias Howe.—We give an excellent engraving of the great inventor. Nearly every great invention has been born of necessity in the vale of poverty, if not of suffering. Fulton, Goodyear, Morse and Howe passed through a similar "Red Sea" and "wilderness" to the land of hope and promise. He who has the fortune or the misfortune to think much in advance of his fellow-men, rarely finds those who can or will appreciate and help him. Inventors not only have to eat the "bread of carefulness" but often their care is taxed to the uttermost to get bread, and our subject was no exception to the general rule. He was born at Spencer, Mass., in 1819.

The fulness in the upper and back region of the temples in the portrait before us, shows immense Constructiveness and Ideality. He had large perceptive organs indicated by the prominent fulness across the brows, which qualified him for observation and critical thinking; and the massive upper forehead shows inventive and reasoning power in a high degree. As a child he was made familiar with

machinery as his father owned a saw-mill, a grist-mill and a shingle machine on the place where he lived. In 1835, at the age of sixteen, he went into a cotton factory at Lowell, Mass., where he learned to use machinery. The crash of 1837 closed the mills at Lowell and sent him adrift to seek work, and he found employment in a shop in Boston. Some men appeared at the shop once with some parts of a machine which they were trying to construct for the purpose of knitting, and Davis, the proprietor of the shop said to them, "Why don't you make a sewing machine?" "Oh," replied the mechanics, or would be inventors, "We would like to, but it is impossible." "No, it is not," said Davis, "I could make one myself." "Well," replied the other, "if you do, it will insure you an independent fortune." There the conversation dropped, and it was never resumed. Among the workmen who stood by and listened to this conversation was Elias Howe, then twenty years old. The idea thus picked up by Howe was not forgotten, but it induced him to reflect upon the art of sewing, watching the processes as performed by hand, and wondering whether it was within the compass of mechanic art to do it by machinery.

At twenty-one years of age, being a journeyman machinist and earning nine dollars a week, he married. The little mouths that came to be fed and the nine dollars a week not increasing as fast as the hungry mouths did, he was kept poor, but he still studied at his sewing machine. He had heard that it would be an independent fortune to the inventor, and this gave him the inventor's mania, which gives its victims no rest and no peace until they have accomplished the work to which they have abandoned themselves.

His only thought was to invent a machine which should do what he saw his wife doing by hand when she sewed. He took it for granted that sewing must be that, and his first

device was a needle pointed at both ends, with the eye in the middle, that should work up and down through the cloth, and carry the thread through it at each thrust. One day in 1844, the thought flashed upon him, is it necessary that a machine should imitate the performance of the hand? May there not be another stitch? This was the crisis of the invention. The idea of using two threads, and forming a stitch by the aid of a shuttle and a curved needle, with the eye near the point, soon occurred to him, and he felt that he had invented the sewing-machine. Mr. Howe, by years of study, labor, night-work and poverty had made his sewing machine, and then the trouble was to get anybody to look at it, except as a mere curiosity. Nobody wanted it, the old fashioned way was good enough for them. He went to a clothing house in Boston and challenged five of the best seamstresses there to run a race with the machine. Ten seams of equal length were prepared for sewing, five of which were laid by the machine, and the five were given to the girls. The gentleman who held the watch, and who was to decide the wager, testified upon oath that the five girls were the fastest sewers that could be found, and that they "sewed as fast as they could—much faster than they were in the habit of sewing,"—faster than they could have kept on for an hour. Nevertheless, Mr. Howe finished his five seams a little sooner than the girls finished their five; and the umpire, who was himself a tailor, had sworn that "the work done on the machine was the neatest and strongest." But not one machine was ordered. No tailor encouraged him by word or deed. "We are doing well now, we are afraid to make a change."

Now we have great sewing machine companies, and this wonderful aid in the construction of clothing is found in the houses of the poor, from ocean to ocean, all around the world.

Attempts have been made to esti-

mate the value in money of the sewing machine to the people of the United States. Professor Renwick, who has made the machine a particular study, expressed the opinion thirty years ago, on oath, that the saving in labor then amounted to nineteen millions of dollars per annum, and ten times as much is now saved.

traffic, if the invention of Morse has sent intelligence all around the world, under the ocean as far as human thought could delve, Elias Howe invented a machine by which nearly one-half of woman's weary, unremunerative labor was annihilated, and he was a public benefactor. We erect costly mausoleums to the victor of



FIG. 129.—ELIAS HOWE,
The Inventor of the Sewing Machine.

By means of the various improvements and attachments the sewing machine now performs nearly all the needle ever did. It seams, hems, tucks, binds, stitches, quilts, gathers, fells, braids and embroiders, and makes button holes. It is used in the manufacture of every garment worn by man, woman or child.

If Vanderbilt gave wonderful impulse to railroad construction and

human battles; we ought also to remember that there are victories over ignorance and poverty that engender no animosities and shed no blood; victories that brought wealth and comfort, and evoked neither tears, sighs, nor orphanage.

Mr. Howe died in Brooklyn, N. Y., October 3d, 1867, aged forty-eight years, and his remains were taken to Cambridge, Mass., for burial.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

HORACE MANN, LL. D.

TO those who knew Horace Mann best he was one of the strongest and most strenuous advocates of Phrenology in the educational world. In a letter written to my husband, S. R. Wells, Mr. Mann used these words: "I look upon Phrenology as the guide to philosophy and the handmaid of Christianity. Whoever disseminates true Phrenology is a public benefactor."

This shows the high opinion he had of the science. Indeed, early in life he embraced the general theory of Phrenology as to the relation of brain to mental characteristics, and in its application to education.

"Soon after his acquaintance with George Combe, Mr. Mann's phraseology concerning mental operations underwent a striking change, due to his interest in phrenological science and philosophy. There was a peculiar pleasure to him in giving a definite expression to his ideas upon a subject which he felt to be satisfactorily cleared up by that nomenclature. Some of his friends used to tease him a little for having adopted this mode of expression from his excellent friend Mr. Combe; but he would reply that he had been so long bothered by metaphysicians and their systems, that he enjoyed speaking wide of them all. He enjoyed that philosophy which recognized the adaptation of every faculty to its appropriate object. It simplified to him the whole theory of mental phenomena." *

But in his day Phrenology was not popular, and he was ever anxious to keep his work free from all prejudicial influences. This may be one reason why so little mention is made in his

biography of his connection with Phrenology. He was a personal friend of Dr. Spurzheim, and a very intimate friend and great admirer of George Combe. He prized highly the pleasures of intercourse with cultivated minds, and especially those deeply interested in mitigating the evils of society. The acquaintance with Combe and his works, which began in October, 1838, was an important epoch in Mr. Mann's life. He found in Combe one as enthusiastic as himself in the cause of education, as well as an able instructor in the means to that end. Hence they were in entire sympathy with each other's thoughts and aims. "He is a delightful companion and friend," Combe said, "and among all the excellent men whom we met in Boston none entwined themselves more deeply and closely with our affections than Horace Mann."

It had been suggested to Mr. Combe that he should give a second course of lectures in Boston, and he left that city with a strong desire to return to it, should circumstances permit; and in that event he intended to lecture in several of the minor towns of Massachusetts. "I shall rejoice," said he, "to sow seeds which Mr. Mann may ripen into a lovely and abundant harvest of morality and intelligence." Again, in a letter to his brother, Dr. Andrew Combe, November 25, 1838, he said: "I could fill many sheets with an exposition of the advantages of a commonwealth where the people are moral and enlightened. The State of Massachusetts raises a tax for common schools, and appoints commissioners, with a secretary—the Hon. Horace Mann, whose head is like

* Life of Horace Mann.

your own, and who is full of our philosophy—to administer the funds."

The following are extracts from Mr. Mann's Journal :

"Oct. 8, 1838.—I have had the pleasure of being introduced to George Combe, Esq., of Edinburgh, who has lately arrived in this country, the author of that extraordinary book, 'The Constitution of Man,' the doctrines of which, I believe, will work the same change in metaphysical science that Lord Bacon wrought in natural science.

"Oct. 10.—Last evening went to Taunton. To-day have had a grand convention there. Had the good fortune to be accompanied by George Combe, Esq., and lady. Found them most sensible people; and him, whom I saw most, full of philosophy and philanthropy. He has this evening delivered the first in his course of phrenological lectures in this city—a good lecture to a good house. I am rejoiced at an opportunity to form an acquaintance with a man so worthy and so profound.

"Oct. 12.—Have heard Mr. Combe lecture again this evening. He considered the effects of *size* in organs, and of *temperaments*—all very well. I hope, if I get no new ideas from him, I shall at least be able to give some definiteness and firmness to existing ones. He is a man of a clear, strong head, and a good heart.

"Oct. 27.—Have attended three excellent lectures by Mr. Combe. They are very interesting, drawing clear distinctions between the mixed up virtues and vices of men.

"Oct. 29.—Have heard Mr. Combe again this evening. He is a lover of truth. If any man seeks greatness, let him forget greatness, and ask for truth, and he will find both.

"Nov. 15.—Constant engagements prevent my centering my thoughts lately as often as I would. Mr. Combe's course of lectures, which is just finished, has occupied me a good deal, and to-night a splendid entertainment has been given him. To-morrow evening I lecture at Chelsea; and so the time flies; and every day I have to ask myself what impressions I am making, what I am doing in the great cause I have in hand. God prosper it, and enable me to labor for it. Oh give me good health, a clear head, and a heart overflowing with love to mankind."

From the year 1839, Horace Mann and George Combe corresponded frequently until the death of the latter in 1858. There is so much of interest in these letters, that extracts from them will be given, thus allowing Mr. Mann to tell in his own words his deep and abiding interest in Phre-

nology and its distinguished exponent. Writing from Boston, Feb. 11th, 1839, he says:

"We are all very glad to hear of your success and acceptability where you have been. When any meeting occurs among the members of your class you are always remembered. We see that there will be a new earth, at least, if not a new heaven when your philosophical and moral doctrines prevail. It has been a part of my religion for years that the earth is not to remain in its present condition forever. You are furnishing the means by which the body of society is to be healed of some of its wounds heretofore deemed irremediable. They are doctrines which cause a man's soul to expand beyond the circle of his visiting cards; that recognize the race as being capable of pleasure and pain, of elevation or debasement.

I am a better man for having become acquainted with your mind and yourself."

"March 25, 1839.—There have been some striking conversions since you were here, to the religious truths contained in your 'Constitution of Man.' Some of these have happened under my own ministry. A young graduate of one of our colleges wrote me, a few months ago, to inquire in what manner he could best qualify himself for teaching. He had been employed in teaching for two years, after having received a degree. I told him that, in the absence of Normal schools, I thought he had better take up his residence in this city, visit the schools, make himself acquainted with all the various processes which various individuals adopt to accomplish the same thing, and read all the best books that can be found on the subject. He accordingly came; and when he applied to me for a list of books, I, of course, named your 'Constitution of Man' as the first in the series. After about a fortnight he called on me, and said he had read it through with great pleasure, but did not think he had mastered the whole philosophy. A few days after, he came again, not a little disturbed; he had read it again, comparing it with his former notions (for he was highly orthodox), and found that the glorious world of laws which you describe was inconsistent with the miserable world of expedients in which he had been accustomed to dwell. I spent an entire evening with him, and endeavored to explain to him that your system contained all there is of truth in orthodoxy; that the animal nature of man is first developed, that, if it continues to be the active and the only guiding power *through life*, it causes depravity enough to satisfy any one; but if the moral nature, in due time, puts forth its energies, obtains ascendancy and controls and administers all the actions of life in obedience to the highest laws, there will be righteousness

enough to satisfy any one; that, if he chose, he might call the point where the sentiments prevailed over the propensities, the hour of regeneration; nor was the phrase, 'a second birth' too strong to express the change; that this change might be wrought by the hearing of a sermon, or when suffering bereavement, or in the silence and secrecy of meditation, or on reading Mr. Combe's 'Constitution of Man'; and as God operates on our mental organization through means, these might be the means of sanctifying us. He adopted my views on the subject, and is now, I believe, a convert beyond the danger of apostasy."

Under date of Aug. 11, 1839, Mr. Mann wrote in his journal:

"Still at Cape Cottage, near Portland, where I have been enjoying the society of Mr. Combe, who is, on the whole, the completest philosopher I have ever known. Ideas so comprehensive and just, feelings so humane and so true, I think I have never known before combined in the same individual. It has indeed been a most agreeable, and I think instructive, visit to me. . . . Mr. Combe comprehends how he is made, and why he was made, and he acts as the laws of his nature indicate; and, by submitting to the limitations which the Deity has imposed on his nature, he is enabled to perform the duties which the Deity requires of it."

"Boston, Sept. 11, 1839.—Since I had the pain of parting with you and Mrs. Combe, I have been realizing the existence of perpetual motion; otherwise I would not have allowed so much time to pass without reminding myself, by writing to you, of the pleasant and instructive visit which I made at Portland. Never have I passed a week in my life more congenial to my coronal region. The quiet cottage, and the half-earth, half-ocean landscape, are vividly present to my view; and the old rocks upon the shore, where the philosopher sat and discoursed wisdom, are as firmly fixed in my memory as they are in their own bed. It will take a long time, and much beating by sorms, to wear them out. And when I think of the sail in the boat, and the rides in the old chaise, I will not say that I grow sentimental, but I regret that I had any other brain work to do, which prevented me from enjoying them as I ought. . . . I cannot express to you my sense of undeserved honor for the insertion of my name in the new edition of your lectures on education."

The following extracts from Mr. Mann's journal show his enthusiasm for the cause of education:

"Sept. 24.—The day is over; as miserable a convention as can well be conceived. If

the Lord will, I will; that is, I will work in this moral, as well as physical, sand-beach of a country until I can get some new things to grow out of it.

"Oct. 27.—To-morrow I begin the great work of getting out the abstract of school returns—a gigantic labor, but I go into it 'chock full' of resolve. Come on, labor, if you will bring health in your company."

"Nov. 17.—Laboring at my abstract and report with unabated vigor. How the granite mass gives way under the perpetual droppings of industry! Oh, for continuance in a good degree of health! And then exertion in this glorious cause will be a pastime. Neglected, lightly esteemed among men, cast out, as it were, from the regards of society, I seem to myself to know that the time will come when education will be revered as the highest of earthly employments. That time I am never to see except with the eye of faith; but I am to do something that others may see it, and realize it sooner than they otherwise would. Their enjoyment may be greater than mine, but if my duty hastens that enjoyment then that duty is greater than theirs. And shall I shrink when called to the post of the higher duty?"

"March 21, 1840.—Yesterday Mr. and Mrs. Combe arrived here from New Haven, and we soon struck up a bargain to travel together to the West. From this I promise myself great pleasure and advantage. To be able to enjoy, for a month, the society of that man will familiarize great truths to my mind, if it does not communicate many new ones. I have never enjoyed, and at the same time profited so much by the society of any other individual, with whom I have met, as by that of Mr. Combe."

George Combe says in his "Tour," under date of March 25, 1840:

"This day we left New York, accompanied by a much valued American friend (the Hon. Horace Mann), on a visit to Cincinnati and Kentucky, not with the view of lecturing, but to see something of the interior of the country before returning to Europe."

"April 15.—We sailed down the Ohio to Louisville, in Kentucky. . . . My chief object was to pay a visit to Dr. Charles Caldwell,* with whom I had corresponded for upwards of twenty years, but whom I never met. . . . To our regret he was still suffering from the effects of a recent severe indisposition, and was able to see us only for a few minutes, a circumstance which on every account we deeply lamented."

Mr. Combe and Mr. Mann visited General William Henry Harrison,

* The earliest American Phrenologist.

who was in the following year elected President of the United States. Upon arriving home at the conclusion of the tour, Mr. Mann writes to his friends, Mr. and Mrs. Combe, under date of May 9, 1840:

"I am suffering under a malady for which there is no prescription in the pharmacopœia nor any skill in the professors of the healing art. It is an intellectual and moral atrophy. After being high fed for five or six weeks, I am suddenly put upon the teetotal system. How I long for the *noctes et dies deorum* again. For a renewal of this wise pleasure, or pleasant wisdom, I would sleep with a steam-boiler breathing in my face, or 'lie over' in that odd caravansary where Jonah took lodgings for three days and nights; or, if nothing else would procure it, I would again enter a canal-boat. I am reminded of what Lord Byron said—that hearing Mrs. Siddons had disqualified him from enjoying the theatre forever. . . . "Well, my dear friends, I must bid you farewell. Had I control over the laws of nature, I should fill not only the month of June, but all the rest of your days, with special providences in your behalf. Whatever words are the strongest to express my esteem and affection, consider me as saying them."

The following is an extract from his journal:

"May 10.—I arrived in Boston a week ago, after a journey of three thousand miles. In Philadelphia I parted with Mr. Combe, who seems to me to understand, far better than any other man I ever saw, the principles on which the human race has been formed, and by following which their most sure and rapid advancement will be secured. I have never been acquainted with a mind which handled such great subjects with such ease, and, as it appears to me, with such justness. He has constantly gratified my strongest faculties. The world knows him not. In the next century I have no doubt, he will be looked back upon as the greatest man of the present. But he has a mind fitted for this extensive range. I have no doubt it would cause him great pain, were he to believe that his name would never emerge into celebrity; but he has an extent of thought by which the next age is now present to him, and he sees that his persecuted and contemned views will then be triumphant; and with that assurance, he can forego contemporary applause. Let me, too, labor for something more enduring than myself."

(To be Continued.)

THE OUTER AND INNER LIFE.

"That within which passeth show."—Hamlet.

There is a song within the lyre
That never yet was sung;
Unborn it lies upon each wire
That loosely hangs unstrung.
Until the minstrel's hand shall strain
The slackened cords in tune again,
The bard's creative spirit give
That song a vocal soul to live.

There is a form that marble holds
Beneath its surface rude,
Deep in the unhewn heart it folds
Beauty no eye has viewed,
Until the sculptor's hand shall scale
Each layer off that stony veil,
Until at last shall stand displayed
The perfect form of loveliest maid.

There is a poem never told
Within the poet's soul,
Like fabled streams o'er hills of gold
Beneath the earth that roll,
Until some spell resistless wake
The soul in rhythmic song to break,
As bursts the stream into the light,
Bubbling with golden glory bright.

There is a love—nor tongue nor lips
E'er told its deep desire;
Burning the heart, its silence keeps
Like subterranean fire,
Until some mighty passion-gust
Breaks through the outer icy crust,
And burning lava-words reveal
That love the heart would fain conceal.

The song's unsung, unhewn the stone,
The poet's rhymes untold,
The hidden fire of love unshown
Beneath the surface cold.
'Tis better thus, the secret kept,
The wound unseen, the woe unwept,
The outer life's deceitful show,
The inner life that none may know.

CHILD CULTURE

WHY CHILDREN TEASE.

IN a general way it may be said children tease because they usually get what they want by it. H. Clay Trumbull considers the subject in *Good Health*, and gives grown-up people some excellent advice:

It is a misfortune to a child to suppose that teasing is essential to his gaining a point that he ought to gain. A result of such a view in his mind is, that he looks not to his parents' wisdom and judgment, but to his own positiveness and persistency, as the guide of his action in any mooted case of personal conduct; not to principles which are disclosed to him by one who is in authority, but to impulses which are wholly in his own bosom. Such a view is inimical to all wise methods of thinking and doing on a child's part. And it is even more of a misfortune to the parent than to the child, for a child to have the idea that the parent's decision is a result of the child's teasing, rather than of the parent's understanding of what is right and best in a given case. No parent can have the truest respect of a child, while the child knows that he can tease that parent into compliance with the child's request, contrary to the parent's real or supposed conviction. For the child's sake, therefore, and also for the parent's, every child ought to be trained not to tease, and not to expect any possible advantage from teasing.

Susannah Wesley, the mother of John and Charles Wesley, was accustomed to say of her children, that they all learned very early that they were not to have anything that they cried for, and that they soon learned

not to cry for a thing that they wanted. Who will doubt that John and Charles Wesley were stronger men for this training than they could have been if they had been trained to look upon crying as a means of securing what was the best for them? Who will doubt that Susannah Wesley was more of a woman, and more respected by her sons, because of her unvarying firmness at this point, than would have been possible if she had frequently yielded to the pressure of their piteous crying for that which it was against her judgment to give to them? Any parent who would apply this rule of Susannah Wesley's to the matter of teasing might be sure of a corresponding result in the children's estimate of the practical value of teasing. Any child who finds that he is never to have anything for which he teases, will quickly quit teasing. How simple this rule for this department of child training!

Simple as it seems, however, to be uniformly positive in refusing to give a child anything for which he teases, it is not an easy thing to adhere to this rule unvaryingly, and to do it wisely. And the trouble in the case is not with the child, but with the parent. In order to give promptly, to a child's request, an answer that can rightly be insisted upon against all entreaties, a parent must do his thinking before he gives that answer, rather than afterward. Too often a parent denies a child's request at the start, without considering the case in all its bearings; and then, when the child presses his suit, the parent sees reasons for granting it which had not been in his mind before. The child

perceives this state of things and realizes that the question is to be settled by his teasing, rather than by his parent's independent judgment; and that, therefore, teasing is the only means of securing a correct decision in the premises.

Training a child not to tease is a duty incumbent upon every parent; but as a prerequisite to this training of the child, the parent must himself be trained. When a child asks a favor of a parent, the parent must not reply hastily or thoughtlessly, or without a full understanding of the case in all its involvings. If necessary, he may question the child, in

order to a better understanding of the case, or he may postpone his answer until he can learn more about it; but he must not be over quick to reply merely as a means of pushing away the request for the time being. He must consider carefully what his final answer ought to be, before he gives an answer that the child is to accept as final; and when the parent gives that answer, it ought to be with such kindly firmness that the child will not think of pressing his suit by teasing. And thus it is that any well-trained parent can train his child well in this sphere.

EFFECTS OF CLIMATE ON THE DEVELOPMENT OF CHILDREN.

T. C. DUNCAN, Ph.D., M. D., discusses this topic in *American Climates and Resorts* in a comprehensive manner. He says:

The effect of climate on the development of children deserves more attention than it has received, not only from those devoted to the higher education of children, but from statesmen as well. The higher education of the child is so dependent upon the health of the child that the factor of climate must be taken into account if the best and highest attainments are to be reached. In the inclement and cold North the school education of young children, especially in the rural districts, is almost entirely restricted to the Summer months. Young children, like young animals, have also a stunted growth in this cold region of the North during the Winter months, particularly if they are below the standard of health. Children, like plants, are affected by their environment.

The physical growth of children takes place chiefly during the warm months of the year in the temperate regions. The extremes of both heat and cold stunts the development, as was apparent at the World's Fair, in the Esquimaux from near the North Pole, and the Javanese from near the Equator.

The southern border of the Temperate Zone seems most favorable to the physical development, while the northern border seems most conducive to activity, and it is not an accident that Kentucky should produce the fleetest horses, as about in that region meet the conditions favorable to both physical and nervous development. If all men could migrate like the birds and thereby keep themselves between the extremes of temperature, the effects of climate would not be so marked.

The mental development suffers like the physical from the extreme. The progress of higher education is most apparent in the Temperate Zone, or what amounts to the same thing, a higher altitude in a warmer zone. * *

The more this subject is investigated the more it will be apparent that those who can should give growing children the best possible situation for both physical and mental development, which means a semi-annual change of climate, or if that be impracticable, other things being equal the temperate plateaus of the continent will prove the best for permanent residence. Virginia was for years the mother of presidents. Ohio keeps well to the front with men of note. The Mississippi Valley seems to

turn the tide northward somewhat and Iowa develops a type that is both aggressive and stable. The next western section will likely be the plateau of medium elevation extending from Texas northward. The conditions change as the Rocky Mountains are approached, and we may expect that sections of the western slope will develop healthy and bright children and brainy men and women.

Moisture on the one hand and aridity on the other are weakening factors that will have an influence upon both physical and mental development.

Physicians who have made special observations on the difference between American and English children report that the children in England are more substantial, thick-set and less bright and active. Let us compare the climates. England has many rainy days and little sunshine. America has much light and comparatively little rain. England has an equable temperature. America has very changeable seasons. The effect of these influences upon grain also is apparent. In England it grows heavy and matures late. In America it grows light and matures rapidly. The same rule must hold with the vegetative life of the infant. The equable temperature has its equable mental as well as physical effect. The English are slow to move and unchangeable, while there is a marked changeableness in the workings of the American nervous

system. And as this difference is apparent between the inhabitants of the two nations, so will it be observed to exist between the inhabitants of different sections of the United States as they may differ in climatic characteristics. Indoor life produces an artificial climate that has a marked effect upon the problem. This may explain the mental activity so characteristic of the inhabitants of the Temperate Zone during the cold months.

Humidity is a factor of great interest in the study of climate and child development in the South, particularly of the Gulf section. Thus the high degree of humidity pertaining to the south coast region of Texas, due to moisture-laden breezes from off the Gulf rather than to an excess of moisture evaporation from the land, is tempered by a large proportion of sunshine. This condition should be generally known and should be favorable to a good development of both physical and mental powers, although the activity of either is likely to be somewhat lessened by the long continued high temperatures of the Summer which are characteristic of this section. This again is tempered by the sea breezes that spring up in the after part of the day and last until in the forenoon. Each section of the United States should be studied separately from a local climatic standpoint upon the development and health of the people. Taken altogether this is a most interesting study.

WHAT OUR CHILDREN SHOULD BE.

THE energetic conductor of *Humanity and Health* expresses her concern with regard to the status of the modern child in the following pointed manner. She would like to see:

"Every child obedient, loving, trustful; every parent rule their children by reason and affection; never demanding obedience as a right, but through the wisdom of their judgment, and larger experience,

"The inquiries of little ones respectfully listened to, and intelligently answered; children's rights as carefully observed by parents, as parents expect their's to be considered by their children.

"No child repulsed when it desires knowledge, nor snubbed, nor evasively answered when it seeks information.

"Children truthful in word, act

and deed, because they had not been deceived by parents, nurses or play-mates."

She also would have:

"Parents realize that the true foundation of their children's future goodness and usefulness depends on heredity and a proper direction the first ten years of their youth.

"Fathers and mothers live up to their highest conviction of duty to each other, and to their little ones. Children render a willing obedience to parents, and cheerful consideration of their wishes, not through fear or

policy, but because of love and respect.

"All children welcomed because desired, chance children cease to be born, as their existence is an injustice. Every child has the right to be well born, well loved, well cared for.

"All children possess superior natures when born, and progress toward a higher degree of development, as each generation should and will do, when the laws of HEREDITY or transmission are understood and obeyed."

To all of which the JOURNAL readers will probably say Amen.



NATURAL TREATMENT FOR LA GRIPPE.

AS "a weakly man is already half sick," according to the maxim of Dr. Felix Oswald, so the vitality of the tender man, the man who has made no effort to toughen himself by a rational degree of "roughing it," is like a feeble flame that may be extinguished by a puff of air that would serve only to stimulate to brighter burning a well-laid fire. Not every man could cure himself of "Grip" as did the eminent Dr. Winternitz, though it is evident to my mind that the treatment which worked so charmingly in his case would save a larger proportion of lives than at present escape the fatal tendencies of the usual drug-slugging, "stimulating," shin-toasting treatment that so often develops simple influenza into pneumonia.

Prof. Winternitz relates in the *Internationale Klinische Rundschau* how he contrived to cut short an attack of influenza in his own person. Several members of his family having suffered from the epidemic, he himself was suddenly seized two days before Christmas with severe headache,

which was frontal at first, but rapidly spread over the temporal region and vertex, rendering all attempts to think almost useless. A cold feeling then came over the back, the hands and the feet, and the whole body shivered with cold; there was great dullness, and a painful lassitude in all the limbs and about the pelvis, with sneezing, and a profuse watery discharge from the nasal mucous membrane, then manifested themselves. The pulse was 104, the temperature 101.6F. It was now 8 P. M. and the weather exceedingly cold (22 F.), with snow on the ground. Prof. Winternitz wrapped himself well and went out into the open air, walking at first with great difficulty. Soon, however, he found he could walk more easily and more quickly, and he began to get warm all over. Breathing, which had been labored, soon became freer, and the pains in the head and limbs began to give way. He walked as fast as possible, in order to induce free perspiration, which commenced in the head, and soon the whole body was bathed in

moisture. As soon as he got home he dried and rubbed the body all over with a rough towel and got into bed, where he was well covered up. His pulse had fallen to 84, and the temperature to 100, the respiration was quiet and deep, and altogether he felt warm and comfortable. In another hour the temperature had fallen to 99. He went to sleep, and awoke in the morning quite well, without sneezing or catarrh. (*The Lancet*, Jan. 18, '92.)

For a fairly robust man, doubtless the above described remedy for grip (influenza fever) would always prove satisfactory, but the average man will hardly adopt the plan. In the first place he has no knowledge as to its merits, and if he had it is so much against his inclination at the moment to act upon the plan that he is pretty certain to falter and take the chances of indoor treatment. This he may safely do, providing he acts under wise advice. The following treatment has been found quite satisfactory in a very large number of cases:

1.—Hot foot-bath at bed-time to the point of profuse perspiration followed by a thorough sponge bath with white vinegar (acetic acid diluted to the strength of weak vinegar).

2.—Abstention from food till the crisis is safely passed, the fluidity of the blood to be maintained by liberal supplies of hot water, say a half-teacupful as often as every hour or half-hour. Fresh water whenever demanded by thirst.

3.—For catarrhal symptoms there is nothing to compare with the cold compress, frequently changed, or

profuse cool head-bathing with a good degree of scalp-massage.

4.—For lung complication the chest should be *cooled in and in* by means of the heavy cold compress until marked relief is felt. The more serious the local congestion ("lung fever") the more frequent should be the changes of the compress. This should never be allowed to become hot. A mild form of chest cooling, sufficient in very mild cases, is found in simply leaving the chest exposed to the air, the patient's *back being warmly wrapped meantime*.

Under the above described management few cases could develop into serious sickness. Skillful general massage would always be a very helpful addition to the treatment, such passive exercise being vastly better than no exercise at all, and the physician who has reason to fear that his patient may seek other and harmful counsel unless medicine is prescribed may well administer a placebo in several, or all, of the draughts of hot water.

The blood of a fasting patient is being constantly enriched with solid constituents, and it is as constantly being depleted of water which must be amply supplied, the complexion and quantity of the urine being sufficient guide as to the amount of water required. Too much stress cannot be laid on the importance of *soft* water, whether as a medicine or ordinary drink. So long as the urine remains dark or scant the water should be given in moderate amounts, and at frequent intervals.

CHARLES E. PAGE, M.D., Boston.

A COMMON SIN.

IT is one of the most disastrous effects of the mediæval misconception and degeneration of the body that men and women abuse and misuse their bodies without any sense of criminality. This *The Pacific Health Journal* earnestly condemns in fitting

terms. There never was a worse heresy than the shame put upon God's glorious handiwork by a shallow and inadequate conception of the nature and universality of the divine; it has led to all kinds of mischievous errors and to all manner of violent reactions

Not until men comprehend that the body is a divine creation can they rightly value the spirit. The body shares the sanctity of the spirit. A broken world, touched here and there fitfully and provisionally by the divine influence, is no longer credible to thoughtful men. If there is a God, the entire universe is His work, and every aspect of life is a revelation of Him, and there is nothing unholy or unclean unless men choose to make it so. But it is difficult to make this evident truth real to men and women still saturated with the mediæval atheistic view of the body. There are many who would lose a right arm sooner than violate a law of the spirit who constantly violate the law of the body. Ignorance of the laws of physical life was not long since so universal and so dense that there was, if not an excuse, an explanation of this anomaly of conscientious obedience to one set of divine laws and flagrant violation of another set. In these days, however, no intelligent person can plead ignorance as a justification of disobedience. Knowledge of the conditions of bodily well-being is accessible to every one.

What is now needed is the education of the conscience to the point of realizing that a sin against the body is a sin against the soul, and that to misuse or abuse the body is to commit a sin as heinous as theft or falsehood. The man or woman who goes on working to the point of breaking down, in face of knowledge and experience, is guilty of a grave sin against the Maker of the body. It is not a matter of personal loss only, a piece of individual folly to be paid for only by well-deserved individual suffering; it is an act of gross impiety which betrays mental dullness and moral obtuseness. It is high time that these crimes against the body, so prevalent in our times, should be called by their right names. They are sins as distinctly as the grosser offenses against good morals. The man or woman who, in face of

those notifications which the abuse of the body always gives, persists in driving the physical forces to the breaking point is a lawbreaker in the sight of God, and the terrible physical penalties which follow attest the divine wrath against the moral anarchist.

It is sometimes necessary to sacrifice the body by the slow martyrdom of overwork, as it is sometimes to give one's life in a swift and noble sacrifice; but the vast majority of those who overwork are not martyrs; they are deliberate and persistent violators of their own natures. In most cases it is no exaggeration to say, nervous prostration is the physical penalty of a moral offense. The man who drives recklessly over the precipice opening in his path is not more foolish or more criminal than the man who keeps on the road of overwork after the danger signals have begun to multiply. The waste of spiritual and moral force through overwork is incalculable; for the mind and the spirit are the real sufferers when the body ceases to keep them in harmonious relation to the word, and to furnish them with a superb instrument for work and growth. There could be no greater vandalism than breaking the pieces of a noble organ and wrecking its keyboard; but the man who destroys the sanctity and harmony of his body adds to vandalism sacrilege; he lays his hand on the only real temple of God in the world.

MESMERISM.

"Without the teachings of Mesmerism human existence is almost a chaos."—STINTON JARVIS, in the *Arena*.

EIGHTEEN years ago I was engaged as lecturer for Dr. W. Snow, at Bradford, Yorkshire, England. In those days medical men did not look upon Hypnotism with much favor. In fact, the number that acknowledged the truth of Mesmerism were few and far between. I lectured to some extent on Mesmerism, and drew large audiences for the fun mostly that the people could get

out of the mesmerized subjects. On these occasions I had a young man who had often been under my influence. One afternoon he was hypnotized and left to sit a while. I thought I would see how long he would sit without any movement. Meanwhile, I read a book and tried to influence him mentally at the same time, and as I was about to suspend the effort as a failure he began to recite the passage I was reading. At my evening lecture I produced this, to me, strange discovery before the audience. There were medical men present on this occasion. Several trials were suggested by them. For instance, I was requested to go from the stage up to the gallery, which I did, and while there I was asked to transfer the written matter which they furnished me to the subject, the idea being to prevent any form of fraud. What I wish to say at this time is that Mesmerism is coming before the world as never before. We well remember the strong opposition made against the science of Phrenology years ago, and by many wise men, yet Phrenology is with us, and thousands of the learned have come to acknowledge its truth.

Mesmerism has been examined by the French savants of a later day, and they have reversed totally the opinion of the commission of a hundred years ago, finding it crowded with most wonderful features. We are told that every one has this power, more or less, and that every one can mesmerize some one. This is a broad assertion, and, as I believe, lacks confirmation. When the hospitals in France, before the French Revolution, were mobilized, we learn that hypnotism was used, but they failed to find persons able to mesmerize the patients.

Two causes stand out in bold relief why Mesmerism lacked support for so many years—the violent opposition by the medical societies and the French Revolution. In Mesmer's day the civilized world were seeking blood, there were wars and rumors of wars throughout Europe. Psychic phenomena were pushed aside. Men did not have time to investigate, and did not wish any new truths. "Truth for authority, and not authority for truth," was the cry. We are now rising from the physical plane to a higher stage. Man's brain, and woman's also, is developing the higher organs, the mental and spiritual. If we can but get "peace and good will towards men," and nations, with no war not for a hundred years, our social, moral and intellectual development will be such as history has never recorded.

Some observers in this line hold to the old idea of a magnetic fluid. W. H. Myers, M.A., of London, says: "I still hold to the view of Cuvier, that there is in some special cases a specific action of one organism on another of a kind as yet unknown. This theory is generally connected by the term "Mesmerism." Also Dr. Liébault, of Nancy, one of the oldest hypnotists, has "after twenty-five years arrived at the conclusion that such a specific influence does exist which he terms Zoo Magnetism." It is a well-known fact that the knowledge of magnetism was lost for ages, and if this were not a power lying dormant meanwhile, how came we to regain it? I mesmerized when I was sixteen, and had never seen a person mesmerized before. My mode of procedure was a true copy of a cast in bas-relief taken from an ancient tomb in Thebes. How came it?

WM. MASON, B.S.

NOTES IN ANTHROPOLOGY.

Ancient Underground Refuges.

—Cæsar and several other Roman writers have made mention of the skill of the inhabitants of Gaul in mining and other subterranean work, and describe the galleries which they constructed at places of refuge from their enemies. In recent times quite a number of these galleries have been discovered, and a description of a quite perfect and extensive one near the city of Chartres is given in *La Nature*. The excavation consists of a long crooked gallery extending under a modern building with numerous chambers opening out from it, at more or less regular intervals. Access to the gallery was obtained through an opening or well, and there were also other openings, but these were evidently only intended to admit light and air, as they were purposely filled up with large stones, which concealed the openings from persons approaching them from above. A seat was found cut into the wall directly under the opening. There was also a subterranean well about nine feet deep, in which the level of the water was only a little below the floor of the gallery. The gallery is arched at the top and has a width of about three feet with a maximum height of five feet, and the connecting chambers are of the same height and about six by five feet, in dimensions. One of the most curious features of this gallery was an abrupt narrowing of the passage. At one point the gallery was suddenly reduced to a circular passage about two feet in diameter and slightly inclined downward. The use of the passage is evident. The Gauls, fleeing from the Roman invaders, could easily pass through the opening, knowing that they would find only friends on the other side, but the enemy, if he possessed the courage to follow them, on reaching the end of the passage would find himself at the mercy of his foes, in a perfectly defenseless position from which it was almost impossible to retreat. In those early days, before the invention of gunpowder, a few men could

hold a position like this against an entire army. These galleries certainly date from the Gallo-Roman period, and probably much earlier. Roman coins, principally those of Nero, have been found in them, and it is evident that they were occupied for considerable periods of time. Some of the chambers had served as stables for domestic animals, while others had been occupied by the women, children and aged persons of the tribe. They were often of considerable size; one at Hormies had eight galleries and three hundred chambers, while one at Marchies consisted of three different stories placed one above the other. The resemblance of these subterranean refuges to the cave-dwellings of Europe and the cliff-houses of our Western country is noticeable, and it should also be remembered that up to the present day there are artificial excavations in the soft rock of the cliffs bordering certain French rivers which are still used as dwelling places. It is in these localities that the ancient subterranean galleries are most abundant, and the habitation of the modern French peasant, half cave and half house, is doubtless a direct survival from the underground refuge to which his ancestors fled for safety from the attacks of the invading Roman soldiery.—*Science News*.

Eating Habits of the Hindus.—

Few people in India eat more than twice a day, and thousands only once. The Brahmin himself rises very early, at four or five goes to the river or bathing *ghat*, performs his first ablution; he most likely washes his simple raiment, which consists of two straight pieces of very fine and thin white cotton cloth five yards long; he spreads these on the ground to dry, or holds them at arms' length in the wind as he returns home. He then spends one or two hours in contemplation and the intoning of such parts of the *mantras* as suits his daily needs. At nine or ten he goes to his school, his office or desk—whatever busi-

ness his caste allows him to pursue. He constitutes the educated class, and in times past was supported by the government and employed mainly as priest or teacher. Now he must support himself. After the sun has passed its meridian, he returns to his home for his first simple meal, or if he can not return it is conveyed to him. After dark he partakes of his principal meal, and often this is his only one. So, too, the Rajpests, or warriors, the Vaisyns, or farmers, the Sudras, a caste that includes traders and working people, and many grades clear down to the Pariah; they all usually have their principal meal after the day's work is done. Their morning meal is generally composed of what is left from supper and is taken somewhere from 10 to 12 o'clock.

All Hindus are not stalwart men, but the Brahmins, who are most abstemious in their living, and must from the fixed law of their caste adhere to a rice diet, furnish samples of as fine physique as any people in the world. They stand straight, are broad chested, lithe and supple of limb, and in no way give any impression of weakness. The men from Punjab and Rajputan, northern provinces of India, are noted the world over for fine physiques, for strength and endurance. Now the question is how these millions upon millions of people feed mainly upon rice, and still have strength and endurance, and are not only the peers of meat-feeding nations, but can do even greater things than they. I believe the teachings of the subjective world and its laws furnish a key to the mystery. The Hindu has had ages of training in self mastery; he has put the objective world under his feet, and his subjective, his mind, his spirit, his ego, is the master. He lives his life, he does what he has to do, he performs any service however difficult and does not consider his body. The Hindu knows not heat or cold, he never speaks of weather; if he has no other subject, he is silent. The whole life of a Brahmin is one of training to make the body serve *him*—the *master*. Not the body only, but every desire, every ambition, every self interest is denied until he stands alone with Atma-Buddhi, until he is at one with the creative principle, and

indeed all Hindus feel that to be a slave to bodily wants, to physical necessities, is not only deplorable, but despicable.—*Alice B. Stockham, M.D.*

Decrease of Parental Cruelty

—From the report of the English National Society for the Prevention of Cruelty to Children it appears that poverty and large families are not a common cause of cruelty. On the contrary, the worse the cruelty, the better, on the average, were the wages of the cruel parent and the fewer the children to whom the cruelty was displayed. The report further shows that the effect of warnings and even of prosecution and conviction on cruel parents is not to inflame their passions against the children, who have been the occasions of their alarm and punishment, but to increase the regard of the cruel parent for the children and for those who interfered to protect them. The cruel parent becomes less cruel when he finds that the law concerns itself with his children, and often seems to discover now that there is a good deal more to like and respect in the children who had been cruelly treated and in those who took the children's part than he had perceived before.

A mother said to one of the secretaries of the Society, "it is like courting over again." In other words, as an English journal views the case, the woman had risen in the estimation of her husband as soon as he found that the law and public opinion of the neighborhood were on her side. Instead of increased irritation against his wife for not siding with him he felt her to some extent raised above him, and began to see her with new eyes as a person whose approbation it was worth while to gain.

The prevalence of cruelty among well-to-do parents rather than among the lowly is perhaps to be explained on the same principle. Cruelty is favored by the sense of arbitrary power, and by the absence of any feeling of responsibility to others. Anything that stimulates the sense of irresponsibility and independence increases cruelty; anything that diminishes that sense, anything that brings home to the heart the feeling of a social or physical yoke, diminishes it.—*Popular Science Monthly.*

The Doubtful Supremacy of Man—There are grounds for believing that man's present so-called supremacy is only a phase of evolution, for which he is not wholly responsible. In barbarous times and races his position was not by any means uniformly that of headship. If the truth could be arrived at it might appear that the opinion of the woman of man then was about what it is to-day. Man, because he was physically strong (and that was not primarily his fault), was put forward to do the fighting, but the women often went along to finish up the wounded and to help torture the captives, and sometimes, bless their feminine hearts, to shield them. In the process of the evolution of society the position of the sexes changed somewhat. More manual labor was put upon man, though there is no evidence that he ruthlessly usurped the right to work. The proportion of agricultural labor, mining, carrying heavy burdens, and rough work generally taken on by man gradually began to be the test of the civilization of a community, and it is so to-day. With the growth of commerce and the necessity of a seafaring life, women, by circumstances, were shut out of another occupation—there seemed to be good reasons why women would not be dependable sailors, ready to climb the mast in a gale of wind, or make the crew for a three year's whaling voyage. Probably she never wanted to go into the navy any more than she wanted to go into the army. The army and the navy, we trust, are only incidents in the progress of the race, but so long as they exist, man has a prominence in the affairs of life. He is the executive arm in war, as, figuring as policeman, he is in civil processes. And perhaps it was inevitable that, having this responsibility, he should make the laws regulating national life, and gradually all sorts of laws. If we could get rid of the tremendous war and governmental machinery, life would be a sort of picnic, and then women would come to the front again, for they manage a picnic much better than men can. This is the highest sort of compliment, for woman has a head for organization and details and economy, as is sufficiently evident in the most highly civilized nation, France, where she is pre-eminent in business matters.—

CHARLES DUDLEY WARNER, in the Editor's Study in *Harper's Magazine* for January.

Etruscan Tombs.—The tombs of Etruria are of several kinds, with many differences between them. These differences are believed to indicate different epochs of civilization, and by study and comparison archæologists have been able to decide upon some chronologic order to those tombs. The earliest belonged to the bronze age and are not all Etruscan, although formed in Etruria. They are distinguished as places of sepulchre by the presence of incinerated bones placed in what are called "hut urns," accompanied by the cutting implements peculiar to the bronze age. These urns were made of clay, baked black, in the form of a hut, round, though occasionally oval, from one to two feet in diameter, with a conical roof nearly the same height. They had a large door or opening in the side by means of which the ashes were placed within. The first and earliest of the Etruscan tombs is called a well-tomb—so named from being in the form of a well. A circular hole was dug, say three feet in diameter and four or five feet in depth. The bottom was paved with pebbles, and around the sides to a certain height, leaving a hole in the centre, in which was placed the pot or urn containing the incinerated bones. The hole was then covered with a large flat stone, more pebbles were laid on its top, first regularly, then irregularly, and then filled up with earth. There is no indication of any monument or mark having been placed over such tombs. Apparently the next in chronological order are the ditch tombs. These are made after the manner of the usual grave of the present day. The burial was by inhumation and not by incineration. A smaller ditch was made at the bottom of the grave, leaving a ledge along each side; the body was placed in this smaller ditch, in a recumbent position, with the intended offerings or objects; and the ditch was covered with stone slabs fitting closely and supported on the ledge on each side. Succeeding these is the chambered tomb. This was made in the form of a chamber or room, with a horizontal entrance through the door on the same level as the bottom of the tomb.



*Ex fronte, ex capite, ex vultu, etiam
in ipso oris silentio natura loquitur.*

PLATO.

NEW YORK,

March, 1894.

PERVERSION OR ASYMMETRY.

IT would appear from the many statements in circulation that atrocious criminality is associated not only with an unbalanced mental condition but a misshapen or asymmetrical form of head and brain. We will grant that in the case of those whose career from youth has been that of an almost continuous display of vice and lawlessness, the cranial development will usually predominate markedly in the region of propensity, and intimate the leaning of the character, but the majority of those who show perversion by some act of a criminal nature may not have heads that are notably irregular in contour.

The remarkable trial of Charles J. Guiteau for the murder of President Garfield induced much discussion of the effect of physical organism on the character. Several experts in neurological science and insanity, who gave testimony therein, declared that they had found a lack of symmetry between the hemispheres of Guiteau's brain, and upon that founded conclu-

sions of mental unbalance. To some of the doctors the fact of inequality in the contours of the cranium seemed to be a revelation, and they took it for granted that irregularity of cranial form indicated a phase of abnormality in brain development, and the existence of such abnormality was a sufficient cause for mental disorder. Now while it can not be disputed that abnormality of brain structure is usually associated with constitutional insanity, the statement that irregularity or want of symmetry in the form of the head indicates a brain necessarily abnormal on that account, and a mind unbalanced to the degree of unsoundness or insanity, is altogether unwarranted. To accept it would be to declare the great majority of people, especially those who are the leaders of thought, in all its phases, to be more or less demented. Had a practical hatter been called into the court room at Washington, and been required to produce drawings of the horizontal profiles of his customers' heads just as that convenient instrument he uses (the conformator) shows them to be, he would probably have given judge, jury, counsel, "experts," and the irrepressible prisoner an instructive lecture.

The heads of well matured and educated men—for instance President Garfield, General Hancock, President Arthur and Mr. English, as shown by the conformator, were decidedly irregular; but to say that these gentlemen were in any way demented would only excite derision. It is exceedingly rare to find an adult head that is perfectly equal in development on both sides; the left hemisphere usually predominates in correspond-

ence with the larger and stronger right side of the body to which it is chiefly related in function through the crossing of the cerebral fibres.

As a matter of fact Guiteau's head as shown by the conformation more nearly approached symmetry than the heads of the eminent men mentioned, but its development in certain regions, notably the ear, temples, and upper back parietal, was predominant, giving him the excitable, egotistic, cunning, unscrupulous traits for which he was remarkable. But Guiteau owed his erratic character more to the unwise or negligent training of his childhood and to the irregular associations of his early manhood than to any conspicuous defects of original organism. Being naturally restless, impatient and irritable temperamentally, he was permitted to live in such a way as to increase these qualities until they obtained the mastery of his mental economy; indeed, qualities which under discreet guidance would have aided a good intellect toward making his name respected and his vocation successful, were rendered elements of discord and perversion in the whole organism.

GEORGE W. CHILDS.

THE death of this man, on the 3d of February, renders it incumbent upon us to speak of a career strikingly illustrative of perseverance and integrity. From boyhood to the closing hours of his life, Mr. Childs was distinguished for industry, and for that spirit which falters not because of obstacles and set-backs. Beginning with a school preparation that would be regarded with a sneer by most of our young men to-day, the

youthful Baltimorean availed himself of such humble opportunity for employment that could be obtained, and was found at 15 years of age working early and late in a small Philadelphia bookstore. With a discernment quite uncommon among boys in their teens, he devoted himself to a mastery of the business, and in a short time was capable of duties that are usually intrusted to grown men.

At 21 we find him a partner of the



GEORGE W. CHILDS

once widely-known publishing firm, Peterson & Co., where, in a broader sphere, he exhibited rare tact and judgment in the exploitation of books adapted to popular circulation. In December, 1864, the great opportunity of his life came, an opportunity to which he had aspired, it seems, from youth, the possession of the *Public Ledger* newspaper, and the control of which he maintained until called upon to relinquish all earthly ties.

As the manager of a newspaper Mr. Childs exhibited the best elements of his nature as a business man and member of society. Assuming charge of the *Public Ledger* at a time when its affairs were considered in a state of serious embarrassment he soon reorganized them, and ere long the enterprise was firmly placed upon a profitable footing. He worked with all the energies of his powerful nature to make the matter and form of the newspaper acceptable to the better class of Philadelphia readers, and gradually built up one of the best-known and characteristic dailies in America. His business success, however, was not the only feature of this publisher of newspapers that made him a conspicuous object in American life. There was one other more important in itself than mere money-making sagacity. It was the disposition to share with others the results of that sagacity—to regard his associates and employés as having a lawful interest in those results, to the extent of a participation. A glance at the portrait shows that we have to deal with a practical, careful, economical, systematic, as well as energetic, executive man. We are not impressed with any expression of effusiveness of feeling: no exuberance of emotion is depicted upon the face; but there are indications of good nature, kindness and fairness. He expected every man to do his duty, but was not severe or exacting, and he knew well the value of a service, and was ready to pay for it.

The brain development shows force in all the faculties that relate to physical personality, and the man was

impressed upon everything that he did. The characteristics of George W. Childs, it need not be said, were familiar to every Philadelphian. He was a natural organizer, but his plans were typically his own; so as an executant the methods were peculiarly his own. His motives were specific; so were his aims. Yet there was breadth in the manner of attaining them, because he was a master of mechanical details and his great perceptive vision enabled him to survey a very wide field in the material and economical world. He was an acquisitive man in many respects—loved wealth, loved reputation and power, but not so as to be exacting, or harsh, or overbearing. He had much of sympathy, and that sympathy partook of what is called altruism; led him to entertain views of co-operation, and to be generous in lines that were neglected by most philanthropic people. So we find him helping worthy people who were in trouble to get on their feet; pensioning some superannuated literary worker, and making him comfortable for life; erecting monuments in different parts of the country and in Europe to the honor of neglected or forgotten greatness or goodness; providing for the education of deserving but needy young men and young women, and so he was doing some practical good for some one nearly all the time, and meanwhile experiencing a hearty inward satisfaction that was reflected through his face. We opine that George W. Childs has left a deep and wide vacancy in the life of Philadelphia, and that thousands of people, young and old, will regret his death at the comparative early age of sixty

five. The great middle class, of which he was one, and to whom his heart and hands were open, have indeed lost a friend.

THE REV. DR. BRADFORD'S OPINION OF PHRENOLOGY.

IN the February number of the JOURNAL, we published a letter from the Rev. Dr. Lyman Abbott, in reply to an inquiry asking for his opinion of the value of Phrenology as an aid in the study of mind and character, and on submitting the same question to the Rev. Dr. A. H. Bradford, pastor of the First Congregational Church at Montclair, N. J., the largest of the denomination in the State, and associate editor of the *Outlook*, we received the following letter:

DEAR SIR:—I have never given very much attention to the study of Phrenology, but have personally received great benefit from it. When I was a boy of fourteen, Mr. O. S. Fowler gave a course of lectures in the town where I was living, and also gave me a chart as the result of an examination. I still have that, and have always recognized it as a great blessing to me. Weaknesses which he pointed out I have been enabled to guard against, and am far stronger in some lines than I ever should have been without those lectures and that interview. I can say little of it as a science, and yet in many ways I have been influenced by it, and find myself unconsciously using it. I am glad to acknowledge myself a debtor to what, if this world were not so busy, I should be glad to study more carefully. Very sincerely yours,

AMORY H. BRADFORD.

The comparison of this letter with that of Dr. Abbott shows another phase of the subject, the practical, which Dr. Bradford has reason to es-

teem highly. We are glad to know that a man of such prominence in the religious world is able to see even this partial phase of the subject, and we can readily understand that his attention has probably never been directed to a consideration of its philosophical side. The testimony of Dr. Bradford is also interesting as an evidence of the influence which phrenology exerts in moulding the lives of people who ordinarily make no announcement to the public of their indebtedness to the science. All that this gentleman has stated with regard to the benefits he has derived from a phrenological analysis of his character, could be repeated by hundreds or thousands of other men and women in every part of the land.

That the professional work done by many phrenologists is not scientific or accurate is not to the purpose of our present discussion. We are more interested to have the world know what the science may do than what it has done. When the popular appreciation of it rises to the proper height there will be no lack of response in the form of thorough and conscientious work on the part of the many where it is now performed by comparatively few.

THE CHINESE EXCLUSION LAW.

As our opinion has been asked about this matter we feel it incumbent to venture a remark or two upon it. It is an extraordinary thing that this act should have found such ready acceptance by both the Republican and Democratic members of our National legislature. Although to the credit of a few of our older and more experienced statesmen, Senator Sher-

man among them, objection was made to it. President Harrison signed the bill, however, and thus sealed its character as a law of the nation.

Looked at from a party standpoint this bill was evidently a measure sanctioned by both Democratic and Republican officials, with the view to secure the vote of the Pacific States in the then approaching election for President. It was a double partisan measure, and like most partisan measures did not fairly compute the cost to the nation at large, and the discreditable complications that might follow attempts to put it into operation. Public sentiment, irrespective of party, and sentiment outside of certain classes whose prejudices and habits limit the exercise of their mental faculties, has shown a decided dislike of the law, and stamps it as altogether unworthy of the greatness that is claimed for the United States. In view of past treaties with the Chinese Government and of privileges accorded by that government to American residents in China, the law is unjust and impolitic, to say nothing of the direct breach of international courtesy that it implies.

A word on the discrimination shown by this law in regard to immigrants would point to the fact that while the Chinese laborer is to be excluded, swarms of the most ignorant and vicious people are permitted to come from all parts of Europe, bringing habits and motives that render them exceedingly dangerous in many ways to the social and industrial interests of the United States.

The Chinamen, such certainly of them as we have come in contact with, are in comparison with the European lazzaroni a harmless, orderly class—and contribute by their inveterate industry to the wealth of the nation. If they can not vote—which seems to be the sum and substance of their offending—they offer in many respects, certainly, as regards intelligence and willingness to respect the customs and usages of American life, a good example to the great herd of other foreigners of low class among us.

The objection made to their toleration that most of the common Chinese laborers are little more than slaves to the powerful "Six Companies," might be made also to certain importations of human stock from the south of Europe. There is a national enactment against the importation of foreign labor, and it seems to us that the terms of that should be sufficient in the premises, and so apply as much to the Mongolian as to the Latin, without the necessity of leveling a special act at the former. At any rate, our Government should not render itself subject to sneering reflections by unjustly discriminating between classes of foreigners.

NOTE.—By an unfortunate loss or miscarriage of copy, an article on Graphology; or, Character in Handwriting, intended for this number of the PHRENOLOGICAL, can not appear. Its recovery or reproduction may be in time for the next.

PERSONAL.

MISS ELIZABETH PALMER PEABODY, who died Jan. 4th at her home, in Boston, was



MISS PEABODY.

born May 16th, 1804. She was the daughter of a physician, and her sister Sophia was the wife of Nathaniel Hawthorne. Another sister, Mary, married Horace Mann. Miss Elizabeth was thoroughly

educated, not only in the ordinary branches, but was familiar with several languages. Her personal acquaintance was large among eminent educators of her age, and included Channing, Emerson and Thoreau.

As an instance of her studiousness, at the age of sixty years she learned Polish simply because of her interest in the struggles of that people. Her literary productions were very numerous, though most of them were in the line of educational work. She was associated chiefly with the development of the kindergarten in this country.

Her organization was very remarkable in many ways. She was unmistakably her father's daughter. With the exception of the eyes, her features were very masculine. But, overlying the rugged strength of the paternal nature, there was a feminine mellowness, sympathy, emotionality, vivacity and responsiveness which we expect to find in her sex. These latter qualities gave her talent and taste for her work as a teacher, and her masculine strength made her efficient and thorough in execution.

The head was evidently high at firmness and rather broad in the base in the region of courage and force. Her forehead was evidently very well balanced, the literary faculties in the lower part being, however, especially marked. Few persons could furnish a better illustration of large Language, as shown by the fullness of the eye.

The expression of the upper eyelids in the portrait denotes shrewdness, criticism, penetration and that kind of tact and intelligence which result from long continued dealings with people in a practical way. Her nose and mouth are from the father, and evince executiveness and determination, while the breadth of the cheeks and the size of the head as a whole would leave no doubt as to her capacity for extraordinary physical and mental exertion.

THE HON. W. L. WILSON, of "Wilson Bill" fame, has a fine head and face. He illustrates the Mental Temperament. The brain is largely developed in the upper and anterior portions, showing a predominance of the higher forms of sentiment and intelligence. The head is narrow in the central side region, denoting a very moderate sense of property. He may earn a great deal of money as a result of his intelligence, but he is not a man of commercial instincts. The depth of his ear-opening in relation to the level of his eye, shows much latent vitality, courage and energy. In this respect he resembles Gladstone. In both men the top of the ear is on a line with the edge of the upper-eyelid.

Mr. Wilson has the forehead which insures judgment in practical affairs, strong Human Nature, but not mechanism or art. He should be a brilliant scholar, keen as a lawyer, an excellent historian, a shrewd politician, and from the expansion of the upper forehead at Causality and Comparison, he should have great breadth of mind, farsightedness, philosophical power, and general capacity for the higher problems of statesmanship. The mouth is firm; the straight nose shows precision, taste, refinement and mental activity. The eye is very intelligent and logical. The upper forehead also



W. L. WILSON.

indicates suavity, sense of motives, adaptiveness and sympathy.

Mr. Wilson's personality is said to be one of the most engaging in the political world. He left the position of President of the University of West Virginia to enter Congress, and thus carried into the new field a rare equipment of scholarship and culture.

THE HON. JAMES H. BLOUNT, the recent Minister to Hawaii, is interesting to the phrenologist as an almost typical Southerner in appearance. There is that abundance of hair growing low upon the forehead, with the dilated nostrils and drawn upper eyelids which bespeak the intensity so characteristic of the southern races.



JAMES H. BLOUNT

While the forehead is not imposing as to breadth or height it is evidently associated with a very densely woven and deeply convoluted brain. It is well developed in the central region between the eyes and eyebrows, which insures available, practical intellect, and the indications are very marked as to the sense of human nature. His ability to read men is shown in the perpendicularity of the central forehead where the hair joins it, also by the drooping upper eyelid, and by the temperament. In the width of the head just above the ears, and width of the nostrils, closed mouth, and expression of the eyes are pronounced signs of large Secretiveness. He would be diplomatic, shrewd, and adept in the arts of his profession. But he is also a man of great courage, firmness, will-power and intensity of purpose.

We are indebted for the portrait of Mr. Blount, and also that of Mr. Willis, to the *Review of Reviews*, and our comments are based upon the assumption that the pictures are correct.

SANFORD B. DOLE, Minister of Foreign Affairs.—Judging from the accompanying portrait, Mr. Dole has a rather long, narrow head, which largely resembles the feminine type. He is evidently a man of strong domestic attachments, devoted to his chil-

dren, wife and friends. The narrowness at the sides indicates that he would depend upon intelligence, personal magnetism and the arts of persuasion rather than upon force, subterfuge or the policy of economy. He may possess great wealth, but he is far from being a miser. His



S. B. DOLE.

forehead is especially developed in the lower part, showing great powers of observation, judgment of detail, phenomena, happenings and everything that can be expressed by the verb. He would make an excellent traveler, navigator, explorer, statistician, historian, or critic in science, literature or political affairs. The temples are too narrow, as shown in this picture, to give him much skill in mechanism or art. He should be a ready speaker, plausible, fluent, and ever ready with an abundance of material at his tongue's end with which to support his opinions.

THE HON. A. S. WILLIS, Minister to Hawaii.—In this head there are indications of energy, executiveness, diplomacy and general brilliancy of mind. This is a man of extraordinary nerve under circumstances requiring a radical policy. From the width between his ears we infer that he would be



A. S. WILLIS.

able to wield the axe in political reform without flinching or shrinking.

The frontal lobes of the brain are expanded in nearly every region. He should be a versatile scholar, fluent and eloquent as an orator and fertile in resources. The diameter in the temples shows great mechanical ingenuity, and the

width between the eyes indicates an appreciation of everything artistic as expressed in form. He would probably have attained success if trained in the sphere of sculpture, architecture or painting.

QUEEN LILIOUKALANI has evidently a strong constitution, great vitality and capacity to enjoy all the good things of the physical world. She has evidently a predominant vital temperament, and from the fullness of her lips and the form of the upper eyelids, the breadth of the nose and the general puffiness of the face, she is evidently not a person of great refinement or delicacy of feeling. No doubt she appreciates power and authority, but would not be likely to exert it with a view to the moral and intellectual elevation of those under

her control. Not that she would begrudge happiness or comfort to others if they could secure such advantages without her aid; but her instincts would be to consider, first and last, her own interests. Her face is voluptuous and shows little trace of the refining influence of the higher forms of Caucasian civilization.



LILIOUKALANI.

Cau-
B.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed directly to the Editor will receive his early attention.

DO ADULT HEADS INCREASE IN SIZE?—*Editor PHRENOLOGICAL JOURNAL.*—About two years ago an item went the rounds of the papers to the effect that Gladstone had recently put on his old hat—one not worn for twenty years—and had found that it was uncomfortably small. As the hat had once fitted him, the inference was drawn

that his head had grown. Taken by itself this seems to be an illogical conclusion. Assuming that the facts are as stated, and leaving growth of hair out of the question, would it not be just as logical to conclude that the hat had shrunk? Any one who has tried it knows that both his four-year-old hat and his five-year-old hat are too small for his head. For that matter, last year's hat is no exception. Now in what year or years did his head grow? Indeed the shrinkage of moist wool and a leather band would be more reasonable, as an off-hand conclusion, than the theory of growth. Except as probable corroborative evidence, either conclusion—considering the circumstances under which the experiment was made—should have little weight. This item would not be of much significance, perhaps, if certain phrenologists did not apparently herald it as a proof of their doctrine that heads grow through mental exercise. Are there not additional or better grounds for the support of this doctrine? Will you kindly tell your readers how this has been substantiated? Yours truly,

G. T. C.

Answer.—The story of Mr. Gladstone and his hat would certainly be insufficient to support a theory of brain growth, but the observations of phrenologists include so many well attested cases, that there can be no room for doubt in the matter. Mr. Gladstone is probably a man of enough practical judgment to take into consideration the possibility of shrinkage on the part of the hat, and if he really made the statement credited to him, we are disposed to favor the theory of an increase of brain. Henry Ward Beecher's head grew nearly an inch after he came to Brooklyn. Prof. L. N. Fowler had a similar experience, and we could cite scores of other examples. There is no reason why the brain should not increase in absolute volume. All other plastic tissues vary according to the habits of the individual, and we see instances almost every day of increase or diminution in special areas of the brain. If in a part, why not in the whole? However, the tape line and plaster casts have furnished an abundance of evidence which cannot be gainsaid.

INSANITY.—*Question.*—Is there any book that the editor of the JOURNAL could recommend as giving information concerning the cause and right treatment of Insanity? H. B. S.

Answer.—Dr. Clouston's work on this subject is one of the best.

HONESTY.—*Question.*—Are all persons dishonest who have small Conscientiousness? S. S. R.

Answer.—Not necessarily if they are properly trained, and intelligent enough to see the advantages of a policy of integrity. In the latter case, they will do right, though not *con amore*.

TOOTH WASH.—*Question.*—What is the best preparation for the teeth? T. H.

Answer.—We do not advise the use of any of the soapy mixtures for cleansing the teeth, but consider tepid water far better; besides it does not injure the gums or affect the enamel of the tooth as soap may do. Once a week a little fine powder, say precipitated chalk, may be used to clean the teeth. Harsh brushes should be avoided because they irritate the

gums. If convenient the brushing should be done after each meal, and an abundance of water used for rinsing out the mouth. It is the decomposition of food remains that causes tooth decay largely, not frequent cleansing, as some people appear to think.

EDITOR'S QUERY.

We have received a number of answers to our question of last month, and we have selected a few for publication which illustrate the different points of view from which the subject may be considered. One purpose we have in calling out these replies is to awaken an interest in the study of various mental qualities which result from a number of the radical faculties acting in concert, or as colored by the temperament. Our editorial opinion, for which there have already been several requests, we will give in a future number of the JOURNAL.

The question for this month is, What mental or temperamental elements produce Magnanimity?

We repeat the request that the answers be as concise as possible, legibly written, and made to specify definite factors in the mind or temperament. In other words, the answers should be strictly phrenological and not speculative.

The following are some of the replies to the question of last month:

JEALOUSY.

Using the term jealousy in the common sense of distrust or suspicion with reference to the regard that others are expected to exhibit toward us, the feeling so named largely depends upon the action of Approbativeness, the social organs (one or more according to the particular social color of the feeling), Cautiousness and Secretiveness. The strength of the emotion depends upon the temperament and the degree of influence acquired over the general mental disposition by the particular sentiment excited. The most extreme and violent manifestations usually arise from an undue activity of the amative feeling, which has given poets and romancers their richest suggestions for plot and incident, and imparted a very popular significance to the word itself. D. S. McL.

As there is no especial faculty of the mind set apart for jealousy it has always seemed to me that the temperament must cause it at least to a great extent. I have noticed that people of a very energetic disposition were more jealous than very soft-spoken, quiet, easy-going people. I should say, therefore, that the motive temperament, with large Combaticiveness, Approbateness, Self-esteem, and Firmness, would produce the greatest amount of jealousy, because such a person would be impatient of any restraint, opposition or competition of any kind. He would want to be master of the situation at all times, and would dislike to share his advantages with others.

M. F. WILLIAMS.

Jealousy is a mental trait which, in its diversities of form, involves a great many faculties of the mind. But in the majority of instances we believe Self-esteem and Approbateness large and over active to be the leaders in this mental defect. If, in addition to these two elements, we add large Acquisitiveness, we have jealousy of wealth or property. Or we may add large Adhesiveness, which may cause jealousy of another's friends or associates.

We may add Language (deficient), which may cause jealousy of another's speaking talents or fluency of speech, etc.

J. A. KAUFFMAN.

I am now an old man, and I have read the JOURNAL since 1857. I have often studied on this question of jealousy. Among the jealous men I have known, and women, too, as nearly as I could learn the facts those who were most jealous were the very ones who most needed watching themselves. My conclusion is that Friendship, Conscientiousness, Benevolence, Hope and Conjugalitv small, with Approbateness and Amativeness large, would produce the most jealous disposition.

A. J. WHARTON.

Large Conjugalitv must be the source of jealousy, because it is the desire to love one only, and cannot bear the thought of a rival.

GEORGIA E. HULL.

If the first fold of the upper eyelid falls down over the eyelashes, does it not indicate a jealous disposition? I have always found people with such eyes jealous.

I have asked different ones if they knew of a person that was jealous and if they would describe the eye, and it was always with the fold of the eyelid hanging low on the outside; the fold was not even all around.

I can not find anything about it in any work upon physiognomy. T. W.

Jealousy is produced by a strong, deep love nature. I have always heard, and I believe it is true, that "where there is love there will be jealousy." It would seem from this that the stronger the love the stronger the jealousy. How can a person be profoundly attached to another and not notice whether he has rivals or not?

ELLA W. CIDDY.

Judging from some of my acquaintances that were unusually endowed with the feeling of jealousy, I should think the organ of Veneration was low, Combaticiveness large, the lower part of the social organs small, the perceptive large, and the eyes, when opened wide, showing all of the iris which is somewhat contracted.

The under lip is full, and drooping at the corners of the mouth. The temperament is the vital-motive, with the animal passions strong. The shoulders are square, and the body inclined to be thick set. Such persons are rather reticent, as a rule. When the reverse they go to extremes.

S. J. H.

Jealousy is produced by the organs of Conjugalitv and Veneration being small, and the organs of Acquisitiveness and Cautiousness being large. Thus the person becomes so that he cannot trust himself or any one else.

G. W. GROSS.

Jealousy comes from a disappointment, or an aggrievement, of certain phrenological organs, the chief of which are Conjugalitv, Amativeness, Friendship and Approbateness.

T. M. C.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

THE CINCINNATI PHRENOLOGICAL SOCIETY. —Our society is getting along nicely; the membership is increasing and everybody is interested. Pending arrangements for a hall we are meeting at the residences of members or wherever they will have us. Last evening, by an invitation extended through Dr. Kinney, of the Phrenological Class of '92, we met in the lecture room of a prominent medical college.

After the business of the society was finished and the lectures for the evening delivered, the president, as is our custom, declared the asking of questions by any one present in order. The students of the college began asking them quick and fast, all of which were appropriately answered. Finally they brought out a skull which they wanted read. I asked Miss Keller to delineate it, which also proved quite satisfactory. Finally the president of the college picked up a cast, saying with a peculiarly exultant feeling that he also wanted to ask a question, and with a significant glance at the students, said that the cast which he held in his hand was considered a perfect and anatomically correct model, adding that he would like to have something explained to him upon which some of their best professors, and "they had the best in the country," mentioning names, had passed their opinions to the effect that, owing to these stumbling blocks which he was about to present, Phrenology could never be a correct science.

His question proved to be only the old objection about the frontal sinuses and cavities sometimes found in some other parts of the skull. I was, as you will understand, master of the situation, and explained the difficulty, apparently to the complete satisfaction of all, the president of the college included. As a result I think we shall have some of the students as members of the society. I am,

Yours truly,
J. F. BIENZ.

THE WASHINGTON PHRENOLOGICAL SOCIETY held its first meeting for the year on Jan. 12th in the spacious parlors of Mr. Henry Steinburg, 506 Twelfth street, N.W., on which occasion the President of the Society, Dr. T. A. Bland, gave an address on the relations of Phrenology to the intellectual, moral, and social progress of humanity. The lecture was replete with philosophical argument and practical suggestions, and was heard with deep attention by the audience. Quite a number of invited guests were present, most of whom

expressed themselves delighted with the meeting and became members of the society.
M. L. MORAN, Sec.

THE EUREKA, OR SENIOR PHRENOLOGICAL SOCIETY, of Pittsburgh, continues to hold regular and interesting meetings, the last being held at the home of S. C. Trawatha, Monday evening, Jan. 22d, when the officers for the ensuing term were installed.

On invitation the S. R. Wells Society spent the evening with the Eureka and a very enjoyable time was had by all. The subject for the evening was, Spirituality, by S. C. Trawatha. Being a broad theme it was discussed also by Mr. Charles Sermin and Mr. James Devlin. Mr. Sermin spoke also on the Temperaments and Organic Quality. Mr. Markley spoke on the Social Organs, being the conclusion of an interesting talk on that group given by him at a previous meeting. Mr. Stoken, of the S. R. Wells Society, gave a valuable analysis of Continuity. The following officers were then installed: James Devlin, President; John Deeds, Vice-President; Lee B. Trawatha, Secretary; S. C. Trawatha, Corresponding Secretary and Treasurer.

We are pleased to note the growing interest in these meetings, and that visitors express themselves fully repaid when they spend an evening among us. This society would be glad to correspond with other phrenological societies. Any communication will receive a prompt reply by addressing the Corresponding Secretary, at No. 4547 Friendship avenue, Pittsburgh, Pa.

Jan. 27th, 1894. S. C. TRAWATHA.

THE HUMAN NATURE CLUB OF BROOKLYN has an open meeting on the fourth Friday evening of each month at W. C. T. U. Hall, 454 Bedford avenue, to which all are cordially invited. Thirteen of the members of the club have organized a class for the practical study of Phrenology and Physiognomy. They meet every Wednesday evening and are taught by Prof. Bausch, assisted by Dr. Brandenburg.

Last month Mr. Peter C. Leist, of the Class of '92, spoke on "Quality: Mentally, Temperamentally and Physiologically Considered." The lecture was followed by a lively discussion.

Later in the evening the club held its annual business meeting at which the election of officers took place with the following result: President, Rev. C. A. Brown; Vice-President, Mrs. Newins; Secretary, Miss Floyd; Treasurer, Mrs. Bausch; Critic, Albert Bausch.

The club is rapidly growing in numbers and enthusiasm, several joining at each meeting. For further information and tickets of admission to the lectures, address ALBERT BAUSCH, 100 South First street, or, Miss J. R. FLOYD, 214 Rodney street.

THE NEW YORK ASSOCIATION OF GRADUATES.—At the February meeting of this association, the topic was the Motive Temperament. Its indications were presented by Mary T. Hayward, who took the place of Mr. Charles E. Cady, who was ill, and Dr. Drayton, the editor of the JOURNAL, considered the "Relation of the Motive Temperament to Character." The subject was discussed very fully by the members, and the session closed with an examination, by Dr. Beall, of two very interesting boys from the audience, in whom the differences were striking.

In the meeting for March, to be held on the evening of the 5th, the Mental Temperament will be considered. Dr. C. S. Weeks, the author of "Human Nature," will take up the "Indications of the Mental Temperament" and what constitutes it, and Mrs. Cora M. Ballard, Class of '91, "The Relation of Mental Temperament to Character." To be followed by discussion.

27 ARCADE, CINCINNATI, O., }
JAN. 20, 1894. }

To the Editor of THE PHRENOLOGICAL JOURNAL: Glad to see you are giving some space to Field Notes every month. It is very encouraging to hear of success, especially that the interest is sufficient to form local societies in various places. Cincinnati comes last in the line, but we hope not to be last very long. We have been holding some preliminary meetings, but formed our permanent organization on the 10th of January, 1894, with Prof. J. F. Bienz as President, Dr. J. B. Kinney, Vice-President, Miss L. Barlow, Secretary, and Dr. M. J. Keller, Treasurer and Corresponding Secretary. We meet every Tuesday evening at 7.30. Just at present we are meeting at the homes of various members, but hope to hire a hall in the near future and hold some public meetings. The Literary Committee have laid out a course of lectures sufficient for the next six months.

One or more papers will be read each evening, to be followed by discussion and practical illustration. All friends of Phrenology living in or near this city as well as visitors, are invited to meet with us. Any inquiries will be cheerfully answered by J. F. Bienz, 484-486 Main street, or M. J. Keller, 27 Arcade, Cincinnati, O.

MARTHA J. KELLER.

VANCOUVER, B. C., Jan 30, 1894.

To the Editor of THE PHRENOLOGICAL JOURNAL: Prof. Geo. Cozens has just finished a course of lectures in this city. He

aroused a great interest in the Science of Human Nature. Four private lectures were given to an appreciative class of twenty, and on Jan. 15th he organized the Vancouver Phrenological Society with nearly twenty members.

The officers for the ensuing term are: T. G. Stark, President; R. A. Gillespie, Vice-President; Capt. Newcome, Treasurer, and Walter Vermilyea, Secretary. The well wishes of the society follow Prof. Cozens in his future labors.

WALTER VERMILYEA.

THE ST PAUL PHRENOLOGICAL SOCIETY report the election of the following officers at their meeting, held Jan. 19th: Pres., Mr. E. T. Berrisford; Vice-Pres., Mr. E. C. Miller; Sec., Mr. Carsten Hansen; Treas. and Librarian, Mr. Alfred J. Hill; Ex. Com., Mr. J. D. Spicer, Mr. Joseph Dellar and Mr. Herbert Simmons. Through the treasurer we have received an order for copies of "Heads and Faces" for each of the members who had not already procured the book, and each member is also to become a subscriber to the JOURNAL.

THE ELGIN PHRENOLOGICAL SOCIETY had the pleasure of having Prof. DeVore and wife meet with them. After the business of the evening, the members listened to an interesting talk from the Professor, in which he reviewed the work of the year done by the society, and encouraged them in their labor for the future by suggesting many excellent plans. It will be an evening long remembered by the members.

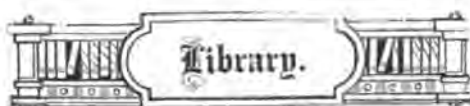
The officers for the year are as follows: John Sticklin, Pres.; F. W. Punchard, Vice-Pres.; Mrs. Ella M. Treadwell, Sec.; John Sticklin, Treas. and Librarian.

There is deep interest felt by the members which is shown in the way they prepare their parts.

ELLA M. TREADWELL, Secretary of Elgin Phrenological Society, 306 Addison street, Elgin, Ill.

W. G. ALEXANDER, of the Class of '84, writes from Wisconsin: "While the returns are not equal to last year, the interest manifested has been good." Mr. Alexander attracts attention, and his work is highly praised by the press. The Minneapolis Times says: "Prof. Alexander is a born lecturer, and would be interesting on any subject. He illustrates his remarks with witty examples of the points that he wishes to bring into prominence, and there is a liveliness to his entire address that prevents it from approaching anything like dryness."

R. L. MEANS, Class of '91, is in the Phrenological field in Texas, traveling, lecturing, making examinations, and selling books. While he reports that times are hard, large audiences listen to his lectures, and he has much to encourage him.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

NERVOUS EXHAUSTION.—ITS SYMPTOMS, NATURE, SEQUENCES, TREATMENT. By GEORGE M. BEARD, A. M., M. D.. Edited with Notes and Additions by A. D. ROCKWELL, A. M., M. D. Published by E. B. Treat, New York. Price, \$2.75 in cloth.

This is the third edition of a book that has a closer application to nervous maladies of our time than it had even when Dr. Beard gave the first edition to the world. In some respects it may be said that Dr. Beard was first to indicate the characteristics of neurasthenia. He was inclined to regard it as a malady peculiar to the American climate, but in later years Europe has become a field for its development, and what is said of symptoms and treatment has a use there as well as here. It is a book well adapted to lay reading although the trained physician will best understand it. Dr. Rockwell's additions show a full understanding of the present development of the malady and of the essentials in its proper treatment, so that the new volume is quite exhaustive.

ECCLE ORATOR! CHRIST THE ORATOR. By Rev. T. Alexander Hyde, author of "The Natural System of Elocution and Oratory," etc. 12mo. pp. 212. Cloth. Price, \$1.

This volume has the characteristics shown by the author in his admirable treatise on "Elocution and Oratory." It is marked by methods at once original and powerful, and should command attention in the reading world from all classes. Remarkably free from sectarian bias the book is, nevertheless, warm with feeling and devotion. Christ is his exemplar of the noblest character, and therefore, accord-

ing to the principles he advances, the speech of the Master naturally exhibits the highest types of oratory. The analyses of the parables and sayings of Christ are excellent pieces of critical writing both from the point of view of the logician and the theologian. Many suggestions for the minister who is solicitous with regard to his elocution occur in the course of the book. There is a freshness, life and earnestness in matter and style that is quite surprising when one thinks of the plethora of literature relating to the life of Christ. Mr. Hyde has indeed mined deeply and found many things in the words and mind of the wonderful Jesus that renew our interest in His relation to man.

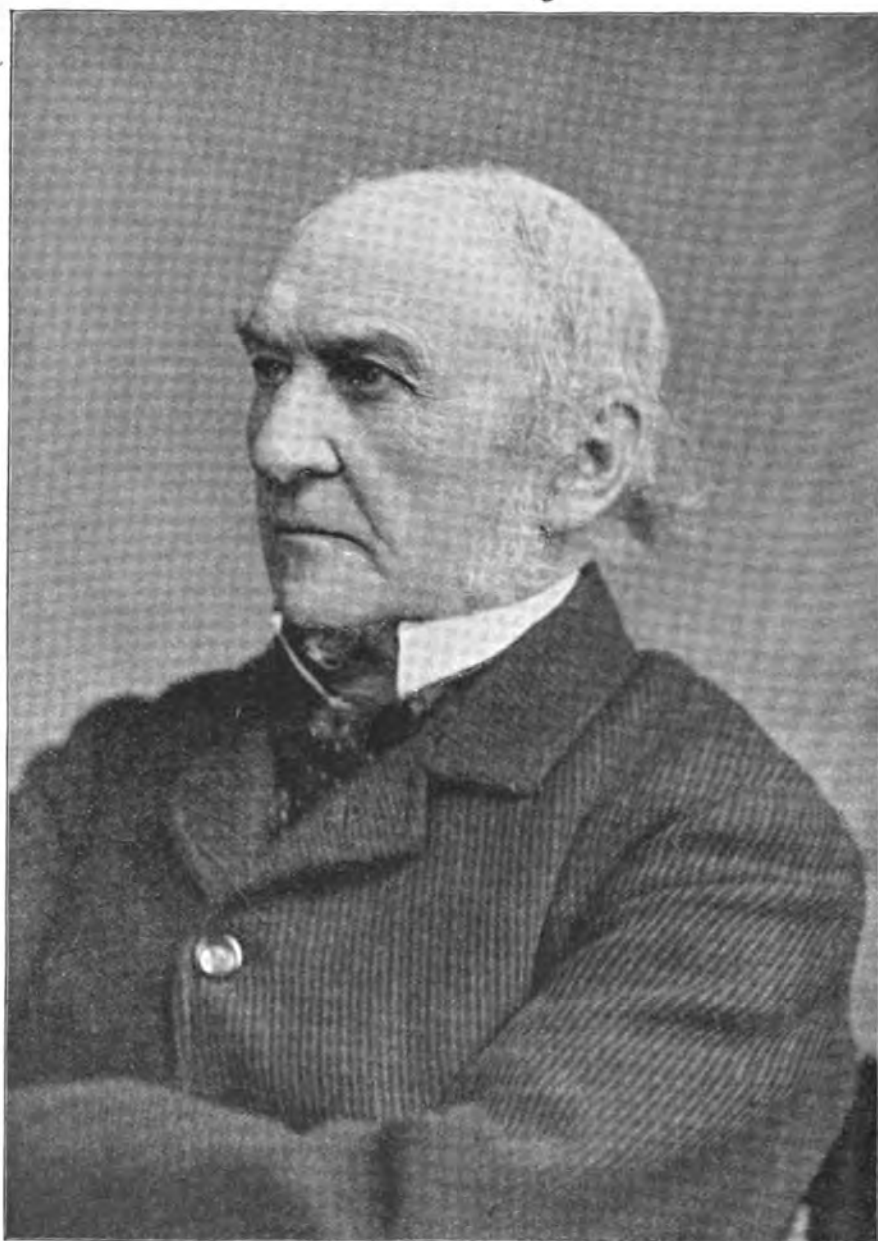
FOUR YEARS' WORK IN DISEASES OF THE RECTUM AT THE POST GRADUATE HOSPITAL CLINIC. By Charles B. Kelsey, M.D.—Reprint. An account of successful work by a specialist in what they term out West "orificial" surgery. The report covers many cases of hemorrhoids, fistula, colotomy, prolapse, etc. The electro-cautery is very happily applied by Dr. Kelsey in many of these operations.

PRELIMINARY REPORT OF THE INCOME ACCOUNT OF RAILWAYS IN THE UNITED STATES for the year ending June 30, 1893. From the Washington Government Printing Office.

ANNUAL REPORT OF THE SUPERINTENDENT AND PHYSICIAN OF WALNUT LODGE HOSPITAL, HARTFORD, CONN. An interesting review of the treatment of inebriety in which success has been exceptional, and that by scientific methods, while the much advertised and quack operations are properly denounced. Dr. T. D. Crothers is the Superintendent of the Institution.

JOURNAL OF THE SOCIETY OF SCIENCE, LETTERS AND ART OF LONDON. Jan. 16, 1894.

Contains a very full report of the recent work of this active educational organization. It has many friends in this country, and those who are not acquainted with its sphere of action can obtain full information by addressing the Secretary, at Addison House (160), Holland Road, Kensington W., London.



RT. HON. WILLIAM E. GLADSTONE

See page 188.

THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

VOL 97. No. 4]

APRIL, 1894.

[WHOLE No. 664.

GRAPHOLOGY; OR, CHARACTER IN HANDWRITING.

The handwriting bears an analogy to the character of the writer, as all voluntary actions are characteristic of the individual.—DISRAELI in "Curiosities of Literature."

INCLUDED among the categories of physiognomy is handwriting, which has a natural relation to the personal expression. In one sense the movements of the hand in tracing word outline partake of that class of gesture which accompanies mental activity, since temperament and emotional impulse impart peculiarities to such gesture. We learn through association to connect peculiarity of attitude and movement with certain individuals, and from gesture, therefore, to infer not only their type of nervous and mental constitution, but also special shadings or variations of mood that they may on occasion experience. The youth may acquire a certain style of chirography from his school teacher, and retain it through life; but in maturity his dominant phase of feeling and the thought habits that have become natural will be impressed upon the tracings of the pen and convey to the skillful observer a positive meaning. It is in writing as in everything connected with human activity: the action of a man exhibits his personality always. He may studiously endeavor to avoid a disclosure of motive or purpose by adopting arti-

ficial and counterfeit expedients, nevertheless his individuality will color the action. To drive a nail is a very simple affair of imitative mechanical movement. Yet no two men will strike the nail in precisely the same way; a sharp ear will detect a difference in the blow, and a sharp eye will perceive a difference in the handling of the hammer.

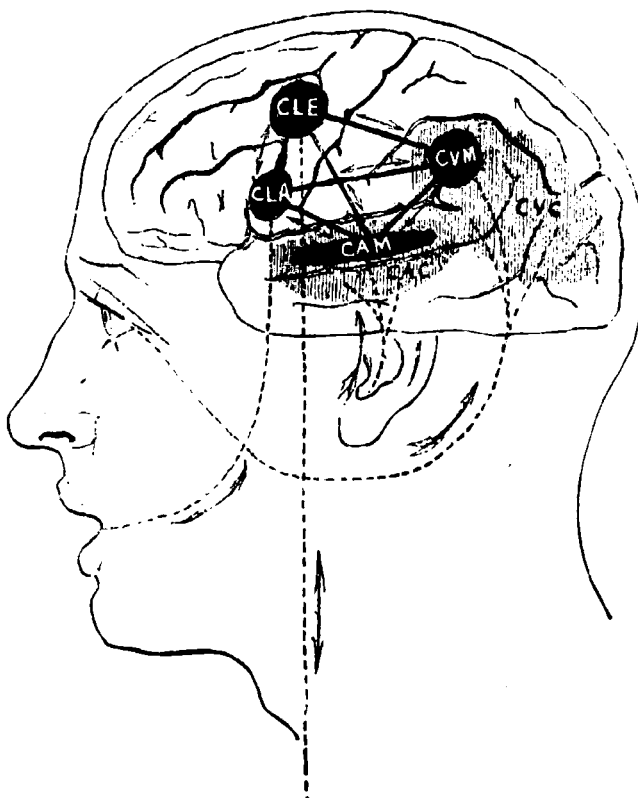
There is not a little to be learned of personality in the differences shown by people in holding a pen. On this line the experienced teacher can give us points, as he knows how difficult it is for some children to be taught to hold a pen at all properly; it appearing at the outset that the indwelling nature of this one and that insists upon establishing its control of the hand posture, and thus giving a special character to letter and word.

We remember noting the differences that were marked in the handwriting of our schoolmates. Given the same style of copy, the thirty or more young fellows that were in our department were wont on certain days to strive for the special consideration of the teacher. Each sought to imitate the copy as closely as he might, but there were no

two hands alike when comparison was made for the determination of superiority. Doubtless all those boys, the writer included, have, according to the nature of their pursuits, made more or less change in the style and manner of their chirography, but we are sure that with the passage of years their original individualities of trait and disposition, whether strengthened and accentuated, or modified for the better or the worse, are legibly stamped upon the forms.

words will be the same. The generous man will be generous still; the spendthrift a prodigal still; the stingy, stingy as ever. The t's will be crossed or not, as usual; the g's and l's looped or not; the writing cramped or not, no matter what the pen."

The relations of muscle movement to the brain have been demonstrated in later years; those finer activities of arm and hand that express thought exercise appear to be situated in the upper convolutions of the central re-



NO. 1. GRAPHIC CENTRE IN BRAIN SEHEMATIC (LUYS).

The pen, ink and paper used may make a difference that is marked in the appearance of the work, or, as an author in this line, Mr. Henry Frith, says: "The writing may be hurried, an unfamiliar pen may produce a thicker line than usual, or a thinner, but the general forms and shapes, the stops, the crossings, the flourishes will exist in one case as well as another, and relatively the letter and

gion of the brain contiguous to the organic centres that subserve the ideal, esthetic and mechanical appetencies. Language in man is a faculty having several relations in the cerebral economy, among which vision, hearing, and motor innervation are most important. Included in the last division is the power to express language by writing, and from recent experiments and investigations a graphic centre

has been almost positively determined. The development of this centre by itself would have its relative bearing upon the form and quality of one's handwriting, while the special characteristics of the mental constitution would be expected to exercise their influence



FIG. 2.

upon the action of the muscles that control the pen.

A recognition of such a centre in the brain as that of one innervating the muscular procedure of writing would be sufficient to enable us to construct a rational theory of mind expression through the pen. Knowing the differential effects of temperament upon faculty, be it of intellect or sentiment, we should be enabled to predicate the characteristic tracings of pen or pencil by this one or that. Certainly the observer of human nature whose experience scarcely exceeds that of the person whose education entitles him to fair social standing, would not expect the type of organization shown in Fig. 2, to write a hand like Fig. 3. The man of strong individuality whose conduct and speech render him conspicuous wherever he may be would be expected to indicate his nature when he had a pen in his fist, as well as when he had a cudgel. On the other hand the negative, undemonstrative, quiet man might write a neat and pretty style, but there would be

lacking the elements of force, emphasis and decision.

Habit will have much to do with the technical form, so to speak, of letters and words. For instance, certain clerical occupations require the writer to follow a prescribed routine and to make his style clear and legible. Copyists, bookkeepers, accountants, deputies in civil office, etc., belong to this category; but such persons usually have two styles, that of their pursuit, which is of a mechanical or artificial nature, and a second or *ex-officio* style, as it may be termed, in which their natural character appears. Yet something of individuality will be seen in the clerical forms, however guarded the hand by the limitations of vocation.

The man of even mental tone whose thought is systematic, and whose pursuit offers little change from year to year, writes in a clear, regular



FIG. 3.

manner. Fig. 4 is an example of a cool head, with an environment that gives occasion for little friction or disorder. The author is by no means hard pushed for time to carry out the purposes that may be entertained for himself or others, and there is little

or no experience of anxiety or concern regarding his welfare.

The contrast shown by specimen 5 is very marked. Irregularity and

Never occurred at all

FIG. 4.

excitement are impressed upon the broken and uneven strokes. The feelings of passion and irritability probably aggravated by unhappy sur-

8 and 14. When the crossings are light strokes, omitted often altogether, sometimes wavy and uncertain, it may be inferred that the writer is not pos-

essed of much firmness and resolution. The tracing of the words may also indicate a lack

of decided opinion. The example, No. 9, shows uncertainty. The writer begins his words with strokes directed toward the left, but they

My excellent friend

FIG. 5.

roundings show in the forms. The thought of the writer is wayward and fluctuating. The will may be strong, but acts in an impetuous manner; it is not steady in expression, but capricious and untrustworthy.

Will, power of endurance, and permanence are shown by strokes that approach the vertical and are clearly and strongly traced. The crossing of the *t*'s, the dotting of the *i*'s, are decided and unmistakable, the former being a thick, short bar, and the latter

appear to drift toward the right. We note here and there a letter written in a backhand adjoining another struck toward the right.

*fall and much
really care to*

FIG. 6.

Writing that is upright may indicate qualities of energy, decision and integrity, but it may also indicate a low, vulgar nature, love of ease and self-indulgence. A

thick, heavy line may show obstinacy and even brutality, when executed in a firm, rigid fashion, but if undulating, rather large and rounded, the upright style being

*which I
confess I don't*

FIG. 7.

a decided spot that one readily distinguishes from an accidental ink spatter or mark in the paper; see specimens

maintained, it will be found that the nature is easy, sensuous and of questionable morality. In the

ambitious the line ascends, while depressed, unhappy people write lines that tend to run below the level. The sensitive, easily affected, sympathetic

*Again, you state that
ervation you never
in lesion without*

FIG. 8.

person writes with an inclination toward the right. Examples given in 6 and 7 distinctly show this. The flourished *d* in 6 shows a high degree of approbateness. In 7 we have a specimen of the style much affected by ladies of culture and social aspiration. It is, however, not a little controlled by the spirit of the writer, and exhibits energy and ambition associated with delicacy and sensitiveness. Example 8 shows excellent mental

Yours faithfully

FIG. 10.

cultivation with an unusual appreciation of order. It is such a hand that we should expect from the careful, deliberate thinker; one who has much of the judicial type of mind or the analytical precision of the scientific observer. It contrasts sharply with No. 12, that is brimming with nervousness and irritability. Note the peculiar, snatchy character of the *I*'s

screwlike *m*, a wriggle in itself denotive of indecision or flightiness.

In 13 there is a nervous quality also, but of a different nature. The disposition is much pervaded with carefulness, prudence, and a systematic regard for the minute interests of life. The mental view is not broad and generous; there is sensitiveness, but it is largely veined with selfishness. Large secretiveness is revealed in the script, 14, and the writer is probably inclined to concentrate effort and attention. Note the monogram; also the manner in which the *t*'s are crossed, the *o* closed and the

early of interest

FIG. 9.

completeness of every word. Such a man is persevering, industrious; takes few risks and believes in the "sure bind" principle. Sensitiveness is shown in No. 11, a spirit that quickly takes offence, and feels a slight, yet note the height of the crossing of the *t*, a peculiarity very marked in No. 10 also, showing a liking for distinction and control in society, business, politics or wherever the person may be. There are no signs of wilful obstinacy, however, in either of these examples. Much more is shown in 12, rather a spirit of friend-

should write me

FIG. 11.

liness and concession that responds promptly to the "other side." In No. 16 we note a peculiar hand; it evi-

I'm the meanest &

FIG. 12.

and the hastiness of the terminals. There's a sort of flutter in the movement that is seen especially in the

dences originality and eccentricity associated with unusual power of observation and clearness of dis-

crimination. The separation of the words shows analytical sharpness. Such a person thinks clearly, compactly, and in a discussion keeps the

since; and feeling greatly

FIG. 13.

issue squarely in mind. There is no desire to waste words or time. Such a man would not do for a lawyer or a politician, for what is "capital"

sure the subject may be pursued indefinitely, and the higher and more delicate shadings that bear upon disposition be studied with a useful result. To those who thus pursue the examination of handwriting every inflection and line bears weight, each stroke or dot has its significance. But it must be remembered that, like the diagnosis of scientific medicine, a conclusion should not be jumped at and single indications not taken as final in the interpretation of so serious

to the power that be.




FIG. 14.

Francesco E. Willard

FIG. 15.

to them—adjournments, obstruction, compromises, etc., would be sources of irritation and disgust to him. If he has anything to do, he must go about it and consummate it in the shortest possible way.

I have not attempted to be elaborate in this paper, but to indicate a few of the more prominent elements in graphology—to show the natural and therefore scientific basis of the system; to point out those broad lines of observation that every one possessing a fair intelligence can follow and obtain trustworthy suggestions regarding the character of correspondents and others. To be

a matter as personal character. The surer and more rational method is to associate, as far as one can, the physiognomy of a person's organiza-

moral characteristics

history of the past

FIG. 16.

tion with the physiognomy of his penmanship, and so, by comparison, find what may be trusted to serve a practical end.

H. S. DRAYTON.

BRAIN AND MIND COMPOSITE.*

BY H. A. BUTTOLPH, M. D., LL. D.

FOR a considerable period of time the brain was regarded as a single and homogeneous organ, and the mind, in its various powers, as one and indivisible. While the recognition of the connection between matter and mind, in this life, was a long step in advance, yet, in the form in which it was held, as above stated, it was impossible to account for the phenomena that occurred, either in the physiology of the former or philosophy of the latter.

The universal observation and belief was, and is, however, that independent of any and every circumstance and surrounding of individuals, there has existed at all periods and among all peoples, a wide natural difference in the strength and activity of the mental faculties of the race of man. The inference, hence, arises, that as the mind is wholly dependent upon the brain for its manifestation in this life, it must, of necessity, receive from it all modifications.

To account for such diversities, various but ineffectual methods have been resorted to, the chief of these being, that it was to be accomplished by the radiation of the brain power, in the direction, and in aid of the most highly developed faculties—an explanation in the highest degree unphilosophical, not to say absurd—it being in direct opposition to the universal axiom of physiology, that “every organ in the animal economy performs a separate function, and *vice versa*, that every separate function is executed by a distinct organ.”

The truth of the e propositions, in regard to the brain and nervous system, was established many years ago, by an overwhelming amount of evidence in regard to the former, by Dr. Gall, and of the latter, by Mr. Charles Bell. After the discovery was made by

Gall, that the faculties of the different cerebral organs could be ascertained during life, by comparing the development of individual parts of the brain with the manifestation of individual mental powers, he proceeded to demonstrate by incontrovertible deductions, from facts, observations and analogies, that the brain, although apparently existing as a unit, every part of which was concerned in fulfilling a single function, consisted, in reality, of an aggregate of parts, each strongly resembling the others in structure and appearance, yet being essentially distinct, and endowed with a different function, and that the obstacle which had so long retarded the discovery of this fact, arose chiefly from preceding inquirers having grouped a variety of parts as one, and looked for functions common to them all, a research in which it was impossible to succeed.

In precise accordance with this philosophical procedure by Dr. Gall, Bell, in his first publication, wisely preparing the way for the unprejudiced reception of his discoveries, by establishing the same principle as his guide, and under its influence bringing forward facts, arguments and analogies to prove that the nerves of motion and sensation, although running blended together in a common sheath, and in appearance constituting a single nerve, all the fibers of which served for the same purpose, were also, in reality, distinct organs; one serving for sensation, and the other for motion, each capable of acting independently of the other, and each separately liable to disease; and showing, by parity of reasoning and with equal success, that most of the difficulties that had prevented the earlier discovery of their separate existence and uses, had arisen from blindness to the principle of a *single* organ being able to execute *only* a *sin-*

*From a paper on “Insanity or Mental Derangement,” read before the Am. Association of Superintendents for Insane Asylums.

g/*le* function, and the having constantly confounded together as single, what more accurate observation proved was double, alike in structure and in function.

The analogies between the discoveries of these eminent men go even farther than this, and afford additional presumptive evidence of the accuracy of both. Many circumstances, in health and disease, had seemed to render it more than probable that the apparently homogeneous bundle of nerves were of a compound nature, each elementary part having a separate use; and the suspicion had accordingly been entertained by reflecting men, before its truth had been placed beyond the reach of contradiction by Mr. Bell. In like manner, similar reasons had occurred to induce a general belief before Gall appeared to demonstrate the fact, that the central mass was an aggregation of many independent parts, each having its own separate use. In accordance with this law of distinct function, it is observed that every nerve possesses a constitution, adapted with an express relation to the object which it is destined to fulfill. The optic nerve representing one of the five special senses, and therefore, being intimately associated with the mental functions of the brain, is constituted to perceive *light*, and light alone; the acoustic, to take cognizance of atmospheric vibrations and these alone; the gustatory nerves, of tastes only; the sensitive nerves, of sensations, and the muscular nerves to direct voluntary motion; but no single nerve can serve for any other of these purposes than the one which has been assigned to it. The optic nerve, if placed in the ear, would remain insensible to sound; and the acoustic, ramified on the eye, would remain insensible to light; and the same in regard to all others having specific offices to fulfill, and special endowments to qualify them for the purpose.

A multitude of well-known facts

have thus forced the conviction upon most physiologists, that the brain is the organ of the intellectual and moral faculties, and of the various animal appetites; and that none of these can be acted upon, except through the medium of a corresponding change in these central organs, just as the eye must always be affected before sight can transmit its impressions to and from the mind.

But it is noticed that different passions and intellectual powers appear in *succession*, and therefore each must have a part of the brain or organ of the mind appropriated to its own operations; for, if one organ served for all, then the universal principle remaining the same, all ought to arrive at maturity equally early, which we know not to be the case.

Thus the perceptive powers are invariably in full activity long before the reflective begin to operate, and no rational man would seriously address an infant in the language of abstract reasoning, and accordingly, the art of the teacher consists in adapting his instruction to the expanding powers of the pupil's mind. The same remark applies to the successive appearances of the moral sentiments and the animal propensities, and particularly, to that very important faculty among the latter, relating to the propagation of the species, and which only becomes active at the age of puberty. Plurality of the organs will alone explain the difficulty, and hence, reason authorizes the belief. Pathology is equally abundant in demonstrative proof of the plurality of the cerebral organs, though neither it nor the microscope can be resorted to successfully for making *original* discoveries of the mental organs, but only for *confirming* results of *diseased* action. The phenomena of dreaming, a portion only of the organs and faculties being in an active state, partial idiocy, partial insanity, injuries of the brain which do not affect all of the mental faculties, insanity affecting one or a few faculties, cases of apoplexy followed

by loss of memory of names without apparent deficiency in other respects, are all at variance with the *unity*, and in harmony with the *plurality* of cerebral organs.

Some object to the brain being considered as an aggregate of parts performing distinct functions, that this is impossible, because there is no visible partition separating them from each other, but the same objection having been erroneously urged against nerves, now demonstrated to be compound, shows how little weight is to be attached to our notion of what ought to be in opposition to what is. There is, in point of fact, a greater similarity between the different mental functions, than between sensation and motion, and yet we find the nervous fibers performing the latter, inextricably intermixed in apparently a single bundle. Again, although long disputed, it was ascertained that the three nerves of the tongue subserve taste, motion and touch; and the difficulty is not greater in regard to the brain than it is to them or the spinal nerves, for it was inability to distinguish any boundary between their constituent parts that alone prevented their separate functions from being sooner demonstrated. It might be useful, or at least interesting, did space permit, to discuss, at some length, the modes of investigation employed previous to the time of Gall, and to explain the sources of their failure. But the fact that nothing was accomplished by their employment, and that after the labors of two thousand years the mental functions of the brain remained enveloped in mystery, except so far as revealed by Gall's method, is all that is required to demonstrate their insufficiency. Anatomists have failed in their attempts by dissection, because structure alone does not reveal function, and that if it did, the brain has been almost as little known as the uses it subserves. Metaphysicians have made the attempt in another way, but they have failed to trace the connection of the mind with the cerebral organs, because con-

sciousness, from which they drew their information, does not even inform us that we have a brain at all, much less what are the number and uses of its parts. Aside from this, it would not in any case reveal more than the operations of our own mind, and nothing, certainly in regard to others, which in the strength of different faculties, may differ greatly from our own. Hence, reflection on consciousness, as a method of studying the attributes of mind, is, in the highest degree, uncertain and unreliable.

Medical men have engaged unsuccessfully in the same inquiry through pathological investigations, because injury or disease of any part of the brain, however small, stirs up morbid sympathies and constitutional disturbance in proportion to the original irritability of the patient, and not merely in proportion to the local injury; and, besides, the ability to observe what mental faculties suffer from disease of particular cerebral parts, presupposes an acquaintance with the number and nature of these parts, or in other words, with the very things we are in quest of. Physiologists have heretofore failed, and I venture to predict, will always fail, and from precisely the same cause, in their efforts to discover the mental functions of the human brain, by the aid of experiments on the brains of the lower animals. On the other hand, it was claimed by Gall and his disciples that he succeeded, to a great extent, in locating the mental organs of the brain by observing what mental manifestations accompany great endowments of particular cerebral parts, or by studying the relation of *organs* to *function* in a state of *health*.

This is, in fact, the method by which physiologists have, in nearly all instances, ascertained the uses of other organs and parts of the body. This was specially true in regard to the discovery of the function of the heart or the circulation of the blood,

by Harvey, in 1619; and long after its anatomical structure was known. As an instance of the conservative tendencies of professional men, in the adoption of new and important truths in physiology, it may be stated, that this great discovery was for a long time contested from all sides, with the greatest acrimony, and it was remarked by Hume, as "evidence of obstinate adherence to preconceived opinion, that no physician in Europe, who had reached forty years of age, ever, to the end of his life, adopted it." It was also reported, as a

"great triumph for Harvey, when such an anatomist as John Rolan, of the faculty of Paris, who had been one of its most violent opponents, voluntarily succumbed, and became one of its warmest advocates, during the same century." In view of the acknowledged limitation of human powers aided only by scientific processes, in divining the true physiology of organized parts both in the animal and vegetable kingdoms, this would appear to be the natural, if not, indeed, the *only* possible method of arriving at the truth in regard to them.

MISS MAUD LANCASTER.

"THE THOUGHT READER."

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

By EDGAR C. BEALL, M.D.

THIS young lady was born in Leicestershire, England, where her father, the Rev. J. Edmeades Colyer, was a rector for twenty years. She was always a very active and venturesome child. Her early education was obtained chiefly from governesses; later she attended a boarding school, and it was at this time that she discovered her clairvoyant gift which has since made her famous. This power was largely developed by the efforts of her father, who was accustomed to direct his daughter to fetch him certain books by merely willing her to choose the particular volumes he wished. She used to go into the library blindfold and alone, and it is said never failed to find the right book, even if she had to climb on the step-ladder to reach it. When she returned, she used to tell him the title of the work, and would open the volume at the page of which he was thinking, and put her finger on the passage which was in his mind. She says that when she is going to do thought reading, she has her mind perfectly blank; if she indulges in any special thinking, she cannot exercise her clairvoyant per-

ceptions with any success. She says she feels as if filled with electricity, and as if moved by the wills which are concentrated on her. She feels as if being led by the finger tips, as if they were guided, so that they are in the right place by the time she reaches the object she seeks. If influenced by others in this way, she can tell the direction from which the influence is exerted.

The principal experiments given by Miss Lancaster in public are finding a pin which has been concealed; presenting flowers to ladies chosen by the audience during her absence; the finding and returning of property which has been mock-stolen; choosing a card and naming it while blindfold, and detecting a mock-murder. In the last named test, she enters the room blindfold, selects the victim, imitates the action of the murderer, and afterward selects from the company the person who has done the deed. Then, from a number of pocket knives lying upon a table, she selects the one which has been used in the mock murder. She has also been known to give the number of a bank note without

personal contact with any of the audience who knew it. She has given exhibitions in London and the English Provinces, Scotland, Ireland, Wales, and in a few of the Eastern

teach new truths which relate to occult forces of any kind, are likely to encounter a great deal of opposition, and are not infrequently subjected to the charge of duplicity.



MISS MAUD LANCASTER.

cities of the United States. She is now preparing to make an extended tour of this country under the well-known manager, Major J. B. Pond.

Those individuals who discover or

In such cases, the question of truthfulness and genuineness can usually be decided very easily by the aid of Phrenology. It is also a pleasure as well as a duty,

where possible, to vindicate the character of one, the honesty of whose motives has been doubted.

It has been intimated by some persons that Miss Lancaster works in collusion with a sister, who communicates the location of the hidden objects by simply looking in the direction of the place of concealment. This is, however, in the face of the facts, an explanation which is not only insufficient, but entirely untenable. Many reputable people have witnessed the performance of her most remarkable tests under circumstances which afforded no opportunity for deception. For example, in selecting one knife from half a dozen on a table on the stage of a theatre, where no one occupied the stage except herself and a committee of well-known gentlemen appointed by the audience, it was manifestly impossible even for the members of the committee to indicate to Miss Lancaster the particular knife she sought. They sat at a considerable distance from the table, and probably could not tell when she had the right knife in her hand until after she had made the selection, and called them forward to verify her choice.

Miss Lancaster is quite tall and striking in appearance; she is 5 feet 7 inches in height, and weighs 120 pounds. Her hair and eyes are quite dark. She is an excellent example of the Mental Motive Temperament, and manifests a great deal of both mental and physical strength. Her head measures $21\frac{1}{4}$ inches in circumference, but the texture of her brain is evidently fine, closely woven, and with her temperament, will insure a greater volume of mental power than would be possible to many persons of a much larger brain, but less favorable organization in other respects.

It is natural to seek for some explanation of her clairvoyant power in the development of her brain; and while there is no one center to which such abilities can be ascribed, we

may explain the problem in part at least, by a study of her temperament. The conditions are favorable to the highest order of activity, though not the excitability which is often an accompaniment of the former quality. Her fiber is unhandicapped by any great amount of either fluids or solids. She has neither the type of bodily development nor brain configuration which would promote the accumulation of any surplus material. Her brain is, therefore, adapted to act with the least imaginable resistance; and as her nerves are superabundant throughout her body, as evinced by her form and the texture of her skin, etc., she would naturally be extremely receptive to all influences capable of affecting those delicate filaments whose business it is to transmit messages between the citadel of thought and the external world.

Her brain is as far from roundly symmetrical as the other portions of her organism. There is no great development in the back head except at the love of young. With her temperament, we should expect her to be fond of dogs and horses. There is not a great deal of Friendship or domestic attachment, although she would be very loyal to a few. Marriage would not appear to her as a consummation especially to be desired. Her feelings are rather cold toward the opposite sex, except upon the plane of moral and intellectual sympathy. The head is of rather good width at Combativeness and Destructiveness. She has courage and energy coming thus from the brain and augmented by her temperamental condition.

Acquisitiveness is conspicuously deficient, as shown by the narrowness of the central side head, and the defection extends also to Secretiveness. She is naturally open, candid and frank. Her whole nature is one which seeks to accomplish its purposes by action, rather than diplomacy or intrigue. She would be will-

ing to work for anything she desired, and would instinctively employ her own energies directly, rather than seek to utilize the strength of others in any way.

Cautiousness is fairly developed, but it works upward and almost entirely with the moral group, hence she will scarcely know the meaning of fear upon the physical plane. Unlike the majority of her sex, she is not especially sensitive to the approval of others. It will disturb her, no doubt, even to a painful degree, to be misrepresented as to her moral integrity; but if she may be spared from malicious attacks, she will usually be contented, even though she should receive very few expressions of positive commendation.

Her Self-esteem is rather weak, wherein she also differs from the majority of her nationality of both sexes. But Firmness and Conscientiousness are both very finely indicated. Not only is her head high and broad in the region occupied by these two elements of character, but the squareness and angularity of her face and bodily contours, together with the firm, strongly knit tissues, betoken a type of organization which, as a whole, is most favorable to the manifestation of moral uprightness and love of truth. The eye, while keenly intelligent, is also surrounded by that configuration of the lids which suggests a habit of candor in thought and action.

The developments in the other regions of the top head are not so large. She will be religious largely as the result of training and example. She has not that mellow, emotional, reverential, religious sentiment which is characteristic of those to whom secret and silent prayer and the contemplation of pious themes afford a special pleasure. On the contrary, her religion would be chiefly a question of duty and a high ideal or standard of conduct in all the affairs of life.

Her forehead in the temporal region is especially developed at

Constructiveness and Ideality. She has intense love of the beautiful, but especially in fine architecture or landscapes. She would not be particularly interested in pretty ribbons or roses. Her mind inclines less to introspective or contemplative processes than might be inferred from her reputation as one possessed of occult powers. She takes cognizance of the thoughts of others, by plunging, as it were, into the aura of those with whom she wishes to communicate, rather than by retiring within herself to a quiet, subjective communion.

The Perceptives, Individuality, Weight, Color, Order, Calculation, Locality, Eventuality, Time and Tune are all of average or full development only. Perception of time and memory of names are especially feeble. She has excellent judgment of form and distance. She could correctly estimate perspective in drawing, or measure the distances to be overcome in such exercises as archery, bicycle riding, etc.

The fullness of the eye shows a good degree of Language. Sense of Human Nature is only fair, but her upper forehead is quite strong at Comparison and Causality, which confer general breadth of mind, comprehensiveness of thought, superior grasp in the study of abstract questions, and the power of analysis.

The temperament is too active, impatient, restless and energetic to allow her to become a profound student. Continuity is also rather weak, so that she is not likely to become distinguished for scholarship in any special line. She has the organization and the bearing of one who possesses moral and intellectual culture, due to heredity, personal effort and association. And whatever may be said as to the value of the peculiar talent with which she is endowed, there should be no question as to the actual existence of such a power.

CHEERFULNESS.

WE see so many people in the world who go about with a look of melancholy, as though they were badly abused by having been placed here. "It is all work," they say, "and I am tired of it." If one would but pause and consider that the Creator had a purpose in placing each one of us here, and that there is a special work for us to do, it would be far better for us. The most rational view one can take of life is to find out what he is especially adapted to do, and then enter into it with zest and alertness. "The willing and obedient shall eat the good of the land," we read.

As I have sat watching the incoming waves I have thought there was a lesson for us to learn from them. One wave comes in, breaking into spray, to be quickly succeeded by another, which reaches a trifle farther up the beach, and so they come and come with ceaseless continuance, thus making the water pure by their continual movement, and giving us the thought that we should strive to do a little better each time than we had previously until we reach the eternal shore.

Then, too, there seems to be an alacrity and zest in the happy flow and roll of the waves, which it would be well for us to copy. If the Creator has placed us here for some special purpose there must be some certain line of work that we can perform better than others, something which will prove consonant with our desires, and cause us to be happy. Our Creator is a rational being, and desires us not only to be happy hereafter, but also to be happy here. He also wishes us to accomplish a certain work, not only to glorify Him, but to help humanity as well as ourselves.

"But how are we to know the work we are all designed to do?" some one says.

We know of no better way to answer than this:

Make a thorough study of yourself. If you have not the time or liking for this have some competent person make a study of your organism scientifically for you, and undoubtedly you will forever afterward be glad and grateful.

You will be glad, because you will be doing something you are fitted to do, something congenial, and to which you can turn each morning with actual pleasure. Your countenance will be cheerful, because your former aimlessness will have been taken away, and a freshness and spirit will have come to you.

We are told within the good book to do all things "heartily." There is a great pleasure in doing anything heartily.

S. ROSALIE SILL.

HOW MUCH WILL BE LEFT?

How much will be left when all of self
Shall be washed from the soul away?
How much will be left when nature's dross
With the gold may no longer stay?

How much will be left of ripened grain
When the tares have no longer place?
Shall we gather sheaves of golden wheat
Or life's field be a barren waste?

When the Master comes expecting fruit,
From the vine he has pruned with care;
Shall we be able of perfect growth
To present an offering fair?

How much will remain and stand the test
When the true from the false shall part?
When the light of God shall clearly shine
And its rays illumine each heart?

What we have valued as priceless gems,
And have classed with our jewels rare;
When the Lord shall come to claim His own,
Will they count with the treasures there?

Ah! well may we ask in humble prayer,
That enough pure gold may remain,
When the furnace tries and melts the dross,
To inscribe the Father's name?

—A. E. W.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XVI.

BENEFACTORS OF MANKIND.

MRS. LYDIA FOLGER FOWLER, the wife of Prof. L. N. Fowler, of London, England, one of the founders of the house of Fowler & Wells, New York, was born on the island of Nantucket, Mass., in 1823. They were married April 2, 1844. Her Phrenology and Physiognomy furnish an interesting theme of study and contemplation. In figure she was above the medium height, and as she advanced in years she reached a weight of 160 pounds, which gave adequate support to her rather large development of brain. She had a full share of the Vital temperament, which is indicated by the fullness and the plumpness of the face, the breathing power being represented by the upper part of the cheek outward from the nose, and the vigor and strength of the digestive function by the middle section of the face, outward from the mouth. She had a full development of the chin and a steady, uniform circulation of the blood. Her head was broad and long on the top, also well rounded, showing a good degree of the Mental temperament. She was much inclined to study, and especially inclined to think and meditate and reach onward and upward for larger fields of thought and knowledge. It will be seen by the portrait that the head across the brows is well-developed. There was length of the head from the ears forward, though the head is not very broad in that region. The upper part of the forehead is larger, giving

her the power to criticise, to see differences and resemblances and to study the philosophy of things. Causality was large, which gave her the inclination to study principles and the philosophy of topics which inter-



FIG. 130. MRS. LYDIA F. FOWLER, M.D.

ested her. The top head was ample, the moral region was decidedly large and strongly developed and had a distinct influence in the way of controlling and modifying the action of the

other faculties. She had a strong sense of justice, a keen regard for truth, duty and moral obligation, and these had a prevailing influence in her mind. Her Hope lighted up the future and gave her courage and anticipation to go forward in the field of duty with a full hope of success. She had considerable imagination and was inclined to poetry and fiction. She was exceedingly sensitive in regard to character and to the opinion of those whom she respected. She was ambitious in a high degree and anxious to rise in the scale of life and broaden her field of knowledge and of usefulness. She was very affable; inclined to be polite and agreeable, easy in her manners, and strongly disposed to entertain friends and others.

She had a fair degree of dignity and of self respect, which aided her in impressing others with the importance of what she knew. She was anxious to teach. She had a great deal of perserverance and would manage somehow to accomplish whatever she deemed it necessary to undertake. She had a great command over her temper; and though she had Combativeness and Desructiveness fairly developed, they were mainly employed in imparting earnestness to her purposes, and thoroughness to her endeavors in the way of execution. She was able to employ her intellectual resources to good advantage. Her Language was large enough to give her latitude of statement and expression, so that as a writer and as a speaker she was fluent. Her Benevolence, Agreeableness and Approbateness were so strong that, combined with her affections and her social feelings, she had a persuasive and conciliatory manner. People seemed anxious to relate themselves to her in such a way as to become agreeable and co-operative in any plans or purposes which she was anxious to adopt and carry out. Hence she had the elements of popularity. She had the desire to do good, and to make her

efforts available and useful to others. The pathway of success seemed open before her, and the welcome from the public sentiment was the tribute paid to her talents, her morality and her sympathy. Some people are very acute, logical and incisive in what they do and say, but there is more of lemon juice than of sugar in their composition, and the public do not feel as much interested in helping sharp, positive people to secure success smoothly and pleasantly as they do one who is gentle, mellow, and pliable. Wherever Mrs. Fowler moved, socially and publicly, there seemed to be a sentiment favorable to her progress and success, and most people seemed inclined to throw light on her pathway.

Mrs. Fowler was the daughter of Gideon Folger, and directly related, on her father's side, to the mother of Benjamin Franklin, and he possessed many of the mental characteristics which appeared in that distinguished man, as inherited by him through his mother. Mrs. Fowler was a very ardent student, and having obtained a course of intellectual training somewhat in advance of that which was customary for young ladies in her day, she decided to pursue the study of medicine, and for that purpose attended a medical college, then existing in Rochester, New York, where she graduated. Mrs. Lozier, Mrs. Gleason and Mrs. Dolly, of Pennsylvania, each ranking high in the sphere of medicine, were students in Rochester at that time. Mrs. Fowler was appointed Professor of Obstetrics in the same school when she had completed her course of study, and subsequently she practiced her profession in New York and lectured for several years. Besides her professional duties she assisted her husband in his labors as a phrenological lecturer and author. She also prepared a small treatise on astronomy for the use of children. Mrs. Fowler's sympathies, as she grew older, influenced her pursuits, and gave her

mind more and more a direction to the concrete rather than to the abstract. In company with her husband and others related to the phrenological business, then established in New York, she travelled extensively in the United States and Canada, availing herself of opportunities to lecture on physiology and temperance, being always of the latter a most earnest supporter. At one time she travelled through the State of Indiana with a lady friend, lecturing every night on temperance.

About this time she published her first tale; it was entitled, "Nora, the Lost and Redeemed." This story was subsequently published in England. In 1860 Mrs. Fowler accompanied her husband and Mr. S. R. Wells on their professional visit to England, and soon after their arrival took a trip to Italy. On her way back she spent the Winter in Paris, attending lectures. Subsequently she spent some time as a hospital attendant in London, having for three months charge of the obstetrical department; then she travelled through England, Ireland and Scotland, lecturing on the laws of life, physical culture, moral duty and social reform. A number of her lectures were published in a volume under the title of "The Pet of the Household," and were designed as a guide for the use of parents in the physical and mental training of children. Another book which she published about the same time is, "Woman and her Destiny," a work addressed especially to woman.

Prof. Fowler, having decided to settle in London, took an office in Fleet street for some years, and afterwards in the Imperial Building, Ludgate Circus, where he has conducted his professional work, assisted as usual by his wife, until within a few weeks of her death. The routine of professional work was from time to time broken by trips to the Continent, and by a journey to the East, when Greece, Turkey, Egypt and Palestine were visited. Mrs. Fowler threw

herself with ardor into the labors to which she had devoted herself. She had always an abundance of literary and other work of her own on hand. Among her relations to what may be called popular life was her connection with the "Woman's British Temperance Society," as its honorary secretary. The variety of her engagements and the earnestness with which she pursued them, had much to do with her death; it may be said that she wore herself out, and she died on the 26th of January, 1879.

She was widely known and highly esteemed in England as well as in America for her professional abilities and moral worth.

Fig. 131. The recent death of Prof. Billroth, the eminent benefactor of mankind, in the ripened vigor of life and in the front rank of professional fame, has sent a wave of sadness and shadow over every civilized country in the world. The newness of his field and the boldness and success of his work had awakened a hope for his future in the interest of suffering humanity. He has suddenly left his work and a brilliant fame to those who have the skill and courage to follow his footsteps.

This is an interesting portrait, in which we see a combination of force of character developed through the middle section of the head, the strong perceptive power in the large and massive brow, the strong constructive talent in the temples, combined with Self-esteem and Firmness, which give a high crown of head, and a plenty of Destructiveness and Combativeness, or fullness above and about the ears, which tend to give that brave look or even hard and positive sternness of expression and attitude that would lead a stranger to his name and attainments to think him fit for a soldier, a surgeon, a leader of men, who could make tracks for the world's astonishment, and give a lead for the brave who dare to follow.

To this brave surgeon must the credit be awarded for first demon-

strating that living human stomachs may be operated upon successfully for the removal of cancer. He took out the section of a stomach of a patient five and one-half inches long, measuring eight inches in circumference; he closed the parts with sutures, and on the twenty-first day the patient, with a good appetite discussed a veal cutlet and the next day a beefsteak. The section of the stomach which was removed was affected by the cancer.

1867 he was called to a professorship at the University of Vienna, where this great surgical feat was performed. While he was great in surgery, he was an active writer and teacher in microscopic anatomy and general pathology, and has done much to improve the hospital system. He unfortunately died early in the year 1894 at Vienna, of heart failure, having been found dead in his bed. The world will miss his talent, his courage and his expert-



FIG. 131. PROF. THEODOR BILLROTH, THE BOLD SURGEON.

This great surgical feat occurred in 1881 at Vienna.

Prof. Billroth was born April 26, 1829, at Bergen, in the Island of Rugen. After having passed through a course of collegiate training, he studied medicine and surgery at different universities, and was appointed assistant to the celebrated Langenback at Berlin, establishing himself as demonstrator of surgery in 1856. Three years later he was professor of surgery and director of the surgical clinic at Zurich in Switzerland. In

ness in his bold field of work. Of course, he has left behind him others who may imitate his skill and courage in the future.

We have the opportunity of presenting an engraving (Fig. 132) of the stomach, showing its original size and shape, including the section which was removed, and also an engraving (Fig. 133) showing the job when it was completed. He made an incision, opening the abdomen of the person suffering from the morbid tumor, uncovered the stomach, removed the

diseased parts of the organ, which measured about five and a half inches in length and about eight inches in circumference. Fig. 132 represents the diseased stomach, the affected portion lying between P and S. The

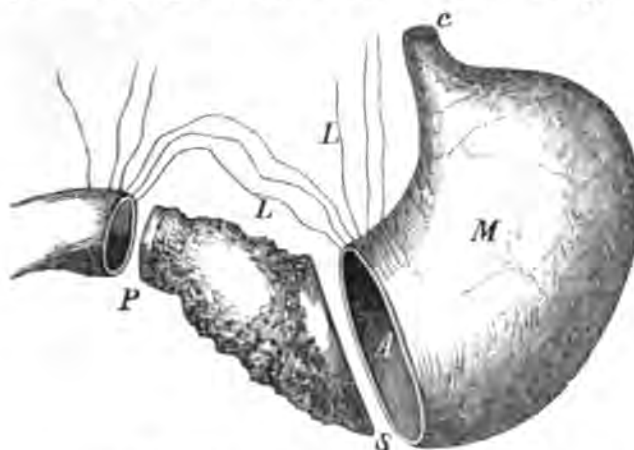


FIG. 132. DISEASED STOMACH.

A, main incision; P, separation of duodenum; P S, the diseased part with the Pylorus; M, the stomach; C, the cesophagal entrance; L L, the first thread inserted.

end of the duodenum (Fig. 133, marked D) was then attached by a suture to the opening of the stomach, which had been reduced in size by an incision, and the removal of a wedge-shaped piece as shown in Fig. 133, and closed by a suture of carbolized silk threads. The result was a new and well formed stomach. Before the operation the stomach had been thoroughly cleansed by the stomach pump, some fifteen quarts of water having been thrown into it and pumped out. On the first day following the operation nothing but bits of ice were given to the patient to reduce feverishness. On the second day she received sour milk, later sweet milk, still later cocoa, tea, wine, eggs, biscuit, and meat. In eight days the abdominal wound was quite healed over, and on the twenty-first day the patient discussed with good appetite a veal cutlet, and the next day beef steak, and on the twenty-third day she left the hospital. In the course of the following weeks the general state of her health was greatly

improved, and she moved about as formerly.

In the old style of surgery, before anæsthetics were discovered and brought into use to remove the sensibility, and before antiseptic surgery had seen the light, a successful performance of this sort would have been impossible. Now, openings into the abdomen are made every day for different diseases, and, being treated antiseptically, there is no inflammation and suppuration, and the edges of the parts heal at once. There are cases on record where a portion of the intestines has been successfully removed six feet in length, and the healthy parts brought together by suture, and the patient, soon recovering, went on his way rejoicing for a score of

years. In no science has there been greater or more important progress in the last half century than in surgery in its varied branches; and yet there are persons who speak

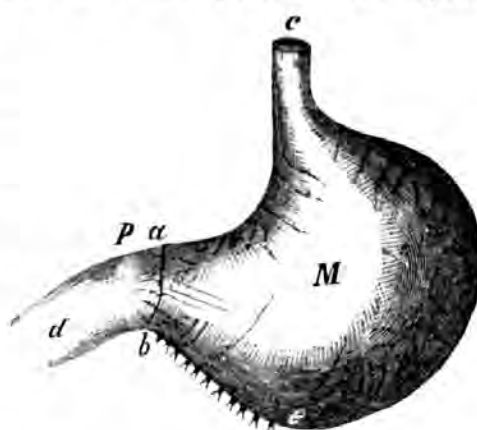


FIG. 133. STOMACH REPAIRED.

A B, the seam made between the duodenum, D, and the stomach M; B E, seam on the stomach; D, duodenum; P, new opening into the stomach.

favoringly of the profession of physicians, but shrug their shoulders and shiver when they think of surgery. And there are people who b'ame all

surgeons, but it is a beneficent branch of knowledge, and is the means of saving the lives of many thousands, and giving comfort to those who are suffering from afflictions that are grievous to be borne, and the marvels of modern surgery, could they be condensed into half a dozen pages, would be rich reading, and a basis for congratulation and thankfulness, that the skill and courage of surgeons have been cultivated and invoked for the benefit of suffering humanity.

Fig. 134. This portrait is a specimen of self-reliance and independence. The head is broad at the ears, giving courage. It is thrown upward and backward, indicating large Self-esteem, Approbateness and Firmness. The crown region of the head is high. The dignified attitude and the complacency of his face show a contented self-respect, and his career was a continuous task on self-reliance and skill. He has the organs of perception across the forehead immensely developed and large Constructiveness, and in these practical elements of ingenuity and skill lay the source of his success, of his prominence in surgery, especially in his line—the surgery that appertains to the nose and throat.

He had a fine quality of temperament. Was sharp, sensitive, clear-headed, discriminative, wakeful to all the truths that related to his life. In this country and elsewhere his fame has been impressed upon the public attention by the position he occupied in being invited from England to Germany to treat the throat disease of the Emperor Frederick, whose lamented death cast such a shadow over the civilized world. He had a cancerous affection of the throat, which disturbed his power of breathing, and was relieved by Sir Morell, and his life much prolonged.

Such an independent, critical, and susceptible type of development could hardly fail to rise to distinction in any pursuit. The temperament being strongly Mental, which gives clear-

ness and sharpness of intellect, with enough of the Motive to render him prompt, energetic, thorough and persistent, he was a ready student, a hard worker, ambitious, eager for success; was fond of approval, yet manifested the spirit of independence.

He was born in England in 1837, studied medicine in London and also in several Continental cities, taking up diseases of the throat as a specialty. He became familiar with the application of the laryngoscope. He was a member of the Royal College of Physicians in London. He practiced in London, where, in 1864, he was elected a member of the Royal College of Physicians. Previous to that he organized a hospital—the first in England of its kind—for the treatment of diseases of the throat and chest; was appointed lecturer on diseases of that sort in the London Medical College.

In 1870 he presented to the profession a work on "Growths in the Throat;" still later a work "On the Hygiene of the Vocal Organs;" another, after twelve years of study, "On Diseases of Throat and Nose." His reputation was largely enhanced by his connection with the remarkable illness of the German Crown Prince Frederick, whose life he prolonged until he became Emperor, which gave him special eminence the world over. And his wonderful success in that case conquered the prejudice of the German physicians, many of whom were formerly opposed to him and his methods. The sending to England for a specialist was an offence to the eminent German physicians; but he had special fitness for that peculiar line of diseases, and probably was the best in the world on that subject. At all events the Emperor's life was prolonged for months, greatly to the advantage of the German people and much to the advantage of his family, especially his wife, the Empress, who was the eldest daughter of Queen Victoria, who very properly knighted Mac-

kenzie, and later an important order of the German Royal House was presented to him by the German Emperor who owed so much to his brave, skillful and loyal surgeon.

So large a brain as his, related to so fine and intense a quality of temperament and organization, developed as his head was so amply in the region of perception and ingenuity, and also

everywhere and especially of those who are prominent in talent and in the sciences which relate to his peculiar profession.

Being called to attend so distinguished a patient in the very home of medicine and surgery exalted and intensified his renown and rendered his own death at the early age of fifty-five years at once an astonishment



FIG. 134. SIR MORELL MACKENZIE, M. D.

in the realm of criticism and sympathy, and then sustained by his admirable development of the organs of self reliance and stability in the crown of the head and in those in the base which give force of character, made him a brave, skillful, rapid and accurate operator, and won for him the respect and confidence of people

and a grief to the whole civilized world. He died Feb. 3d, 1892, of tuberculosis of the lungs.

With such a sensitive organization as his, the difficulties attending, and the great national interests involved in the case of his imperial patient overtaxed his constitution, aggravated his own ailment and hastened the end.

FIG. 135. JOHN JAMES AUDUBON,

Had a physical organization remarkable for its compactness, vitality, power and activity, as seen in his broad chest, athletic frame, prominent features and strongly marked outline of countenance. In conjunction with this temperament, he had great Firmness, self reliance, independence, energy, and force of character—hence, perseverance in whatever he undertook, independence of opinion, and executive ability were leading traits of his character. Cautiousness and Secretiveness do not appear to have been large, and hence frankness of expression and boldness of action should mark his whole life. But what most interests the phrenologist in his mental organization, is the immense development of all the perceptive organs, giving a sharpness and severity of expression—a restless energy to his countenance, which must have been almost painful to those on whom his searching eyes might fall. Although the eyes are prominent, showing large Language, yet the perceptive overhang them to a remarkable degree. See that bold projection at the root of the nose, between the eyebrows—the location of Individuality, then the general fullness across the brow to its exterior angle, and we get the great secret of his remarkable genius as a Naturalist; the close observation, the ready perception, the critical knowledge of forms, colors, and arrangement of all the minute and varied phenomena of Nature's works, as developed in his researches in ornithological science, and that great monument to his fame, "The Birds of America." Locality, Eventuality, Individuality, and Comparison are equally remarkable, hence the power to classify, analyze, distinguish differences and resemblances and power to retain facts, a knowledge of places and desire to travel the trackless forest. Constructiveness was also large—he would have made an excellent mechanic or engineer. Causality does not appear large,

and, unlike Humboldt, he was much more of an observer than a philosopher, he had less power and inclination to deal with principles than with facts and things. The moral organs were large, particularly Benevolence and Veneration, and the spirit of adoration and of kindness were among his strongest emotions. His Hope predominated over Cautiousness, while his practical talent, energy and perseverance made him one of the most industrious and successful of men in whatever he engaged. Such a frontal development marks him as a genius, which his life, as set forth in the following biography, will fully elucidate.

John James Audubon, the celebrated American naturalist, was born in Louisiana May 4, 1780; died in New York Jan. 27, 1851. His admirable work, "The Birds of America," now in the Astor Library, was published by subscription at \$1,000 a copy; was pronounced by Cuvier to be the most magnificent monument that art ever raised to ornithology. But one hundred and seventy-five copies of this great work were published; eighty of these were secured by his countrymen, and the price paid the expense of their publication. He sought and killed the birds in their wilderness homes, and, with matchless skill, with his own hands, drew them the size of life, from the humming bird to the imperial eagle and wild turkey, and colored them himself with marvelous accuracy and beauty.

In the work of gathering his material for the prosecution of his great errand in life, ornithology, he was obliged to make solitary wanderings in the dense forests. Then the Ohio River, and, in fact, nearly all those great Western streams, were as solitary as if they had just come from the hand of Nature. Down these streams he floated with his little family and two servants, till they at last had reached their habitation in the wilderness of Kentucky. Think of the task of hunting in the primeval forests for specimens for his future work, and

then his skill in studying their habits where the sound of the axe and the crack of the rifle had hardly been heard, and the patient effort necessary to procure so large a number of fine specimens! For years he sailed the silent lakes and rivers, traversed the trackless forests with horse and

culture of the old. He was a gentleman by instinct and culture, and full of poetic and artistic tastes. He had a fine and strong nature, at once of a hero, a poet and an artist. His description of birds in their various moods are not the dry, dull details of a naturalist, but the warm picture



FIG. 135. JOHN JAMES AUDUBON,
The Great Ornithologist.

dog where rarely even the hunter ever disturbed the silence. He had taken lessons in France at sixteen years of age and qualified himself under the best masters to do the work, which he succeeded in accomplishing, thus bringing to the wilderness of America, his native country, the finest artistic

paintings of a poet. To open any page of his volumes is to step at once into a region of agreeable facts and enrapturing sounds; he seems to sing when they sing, and to rise as on wings when they fly. But while his life was one of joy within, it was one of toil without; and when he had wan-

dered and toiled for years and gotten accurate representations of American birds, he found that two Norway rats had, in a night, destroyed two hundred of his original drawings containing the forms of more than a thousand inhabitants of the air; all were gone except a few bits of gnawed paper, upon which the marauding rascals had reared a family of their young. "The burning heat," says the noble sufferer, "which instantly ran through my brain, was too hard to be endured without affecting the whole of my nervous system; I slept not for several nights and days, passed like days of oblivion, until the animal powers, being recalled into action, with the strength of my constitution, I picked up my gun, my notebook and my pencils, and went forward to the woods as gayly as if nothing had happened." He went forth, and in less than three years his portfolio again was filled.

FIG. 136. HON. WILLIAM E. GLADSTONE,
Late Prime Minister of England.

(See Frontispiece.)

This gentleman has a most remarkable physical and mental organization, and one remarkable element about it is that he is hale and hearty at an age beyond eighty-four years. His mind is vivacious and executive, energetic and thorough, even at his great age. His temperament is strong and well balanced, and his head measures about 24 inches. He weighs more than 180 pounds, and stands about six feet high. The organization is not eccentric, but smooth and harmonious. His long life of active usefulness has kept his great body and brain active, healthy and wholesome. The brain being very large, strong and well sustained, we have in him an instance of power, endurance and susceptibility in excellent combination. Endowed, as he is by nature, with abilities to be the peer of the ablest statesmen, his culture and associations have been such as to ripen him for his work,

and the times have opened for him a pathway to renown such as rarely falls to the lot of any man in any country.

The world knows what eminent positions he has occupied for sixty years, and the commanding influence which he has exerted in the statesmanship of England, and the question naturally arises, "Wherein consists his powers of long life, endurance, intelligence, memory, dominant authority and the ability to win and hold friends?" His large body is harmoniously developed. The different elements of vitality are amply represented. His large chest corresponds to the fullness and breadth of his face in the center, the breadth of the cheek bone, prominence of it forward, and the length from the opening of the ear. His front head and front face show constitutional vigor. He has a large chin, which is the sign of a strong heart action; the heart works steadily, vigorously and thoroughly nourishes the system by a free circulation. He has adequate digestive power, and physiologically, he is to-day the equal of most men of half his age in the various functions of vitality.

Readers who are phrenological will understand what we mean by saying that he has a long "life line"; the opening of the ear is low down below the corner of the eye. If a line be drawn from the eyebrow to the occipital spine or bony point in the back of the head, it will pass above the opening of the ear about an inch and a half; and the distance between where that line passes above the ear opening, in a right angle to the opening of the ear, is called the "life line." Readers of the PHRENOLOGICAL JOURNAL may refer to the March number of the JOURNAL for 1893, page 123, where the "life line" is illustrated and explained. Another method of studying that, which is approximate, is to lay a card over the portrait, beginning at the corner of the eye and running it level back,

and the ear, though it is large as a whole, is entirely below that line and the opening of the ear very much below. Persons with that development have a strong hold on life. Children born with the opening of the ear low down are likely to live and go through with all the exigencies of life without succumbing to its detriments and diseases.

The forehead of this gentleman is very large; it is not only broad and high, but it is long from the opening of the ear to the center of the lower part of the forehead above the root of the nose. Some heads are short from the ear forward, and the intellect is cramped and deficient. This is unusually extended. The organs across the brows are admirably developed, showing very large perceptive organs, the power of gathering knowledge by observation, and appreciating the differences between objects and the qualities and conditions of things. He gathers knowledge in detail and can recall it at pleasure. He has an excellent memory of events; he must be a charming talker in the way of reminiscence. He will tell stories seventy-five years old, but new to the listener, with a vividness and accuracy that would be entertaining. The organs of the reasoning powers located in the upper part of the forehead, are massive; in the center of the upper part of the forehead is located Comparison, and this gives him the power of analysis, discrimination, criticism. The regions outward of the center of the forehead revealing that massive squareness, show the organs of Causality, which enable him to take a logical survey of a subject, and give the causes, the entities and equities of it. In the region of the temple, above a line drawn from the centers of the eyebrows backward, there is great fullness at the region of Constructiveness and Ideality, enabling him to understand the complications of affairs, and to employ his imagina-

tion in giving glowing descriptions of a subject or an object which has interested him. The eye is large, dark and full, indicating a magnetic expression of face. It was said of Webster that when he turned his great, earnest gaze upon an opponent in debate, his look was withering, masterful and majestic. Mr. Gladstone has the power of doing the same thing in the midst of his orations.

Another peculiarity of Mr. Gladstone is his large Cautiousness. If a vertical line be drawn from the back point of the ear, it will cross the organ of Cautiousness as it rises toward the top of the side head. It gives the head great breadth in the region above the ears, and it will be remembered that he has been non-committal, he has manifested wisdom and tact in talking with apparent plainness on a subject, and yet not quite revealing his full purposes.

He has large Secretiveness; and that gives width of the head on a line drawn vertically from the opening of the ear, about half way from the opening of the ear to the top head, or on a horizontal line corresponding to the tops of the eyebrows running back. This organ being large, enables him to reserve his purpose without explanation; he can talk around a topic that he does not wish to make entirely and fully understood, and make a speech in connection with matters of a public sort and reveal as much as he wishes, and retain the rest until the time has ripened for their expression; yet he has a wonderfully clear intellect and can express himself with warmth and vigor, dignity, breadth and incisiveness, and yet with a reserve that evades the points that may not conveniently be openly set forth.

His large Ideality gives elegance of diction; his strong Combateness and Destructiveness, which give width and fullness to the side head, give him force. His large Constructiveness enables him to understand

the entanglements and complications of a subject, and treat them with masterly success, and yet without committing himself in a careless or undesirable way.

He has large Firmness and Self-esteem, which give determination and strength of will, combined with masterful dignity, which enable him to hold people under his control, and command the respect of strong men in times that are turbulent and unsettled.

He has large Veneration, which gives him religious impulse and devotion; he has a good share of Benevolence, which renders him generous and sympathetical. He has large Mirthfulness, which gives him the power of wit, but he has so much of prudence and Secretiveness, and such an earnestness of purpose that he is not so playful as many a man of lighter type of mind.

The back head is also large and the social feelings amply developed, hence he has the power of personal magnetism in friendship that wins people to him, partly through his majestic power and presence, and partly through the magnetism of sociability; and also he has the towering intellectual capability which makes ordinary men feel small in his presence, and therefore they accept him as a teacher, a guide and ruler, from the massiveness of his intellectual power, and he thus cements by sociality the minds of men to each other and to him.

His face is a study. The massiveness of the head gives dignity to the face, but the face of itself, studied alone, is very strong. That nose, when he was younger, would have been called very handsome. The lines of the face are expressive; he has a good-sized mouth, a long, strong upper lip, a massive chin and length of jaw from the corner below the ear to where it makes an angle going forward to the chin, about where the whisker is and the collar passes it. That indicates strength of will and

purpose. The nose indicates intelligence and stability and thoroughness. His long and strong upper lip shows firmness and stability, and also indicates the spirit of friendliness and loyalty to companions and associates.

He has the sign of human nature, capacity to study mind and character and motive, and the ability also to impress people who come into his presence with his power, his intelligence, his prudence, his policy, his courage, and his ability for constructive management, in holding men together and leading them. That is a strong phase, and it is a good one. Few men of his age carry such dignified expressions of features; there are few men who stand as erect and speak with that clearness and force which belong to him. Most able men who are fifteen years younger than he, are as old in their manner, methods and appearance as he is. He has the faculty of recognizing the countenances and the names of people, and will hold men in his friendship by the fact that he remembers all the detail of their acquaintance, and many of the characteristics and experiences of the persons in question.

His Self-esteem is indicated by the fact that he has declined an earldom which was offered by her Majesty. He is greater than any title; he is a natural master among men, and does not need the letters M.A. or LL.D. attached to his name, nor the term Lord, Earl or Duke in front of it. He will be known as "Gladstone" down the coursing ages. If he had been born to the title he would have made a King or an Emperor in reality, for he is every inch a man, and no title could add anything to his renown. It is generally known that he has taken a great deal of exercise; it is even a matter of mirth that he is a wood-chopper; he likes to fell the sturdy tree and show that he has the power over the ax and the king of the forest; and he has been particular in reference to his diet, especially in regard to mastication, in respect to

which most people are either ignorant or utterly careless. Hence he has kept his health of stomach and brain and circulation and muscle. His general health is believed to have been splendid, and we do not remember that the gout, dyspepsia or rheumatism have ever been attributed to him.

The Right Honorable William Ewart Gladstone was born Dec. 29, 1809, at Liverpool, England. He was the fourth son of Sir John Gladstone, Bart., of Scotland. His father, originally of Leith, had won eminence and wealth as a West India merchant in Liverpool. Gladstone was sent to Eton, and afterwards to Christ Church, Oxford, where he closed a brilliant college career by taking a double first-class degree in 1831. He entered the House of Commons in 1832 for the borough of Newark. He held the post of Lord of the Treasury, and afterwards that of Under-Secretary of State for the colonies in the Peel government, for a few months in 1835. He has often held ministerial office under eminent Prime Ministers and has several times been Prime Minister. His resignation March 3, 1894 as Prime Minister, on account of age, doubtless closes his public career except perhaps as member of the House of Commons.

FIG. 137. LORD ROSEBERY,

The new Prime Minister of England.

The retirement of Mr. Gladstone as Prime Minister of England on the 3d day of March, 1894, completed and turned over one of the brightest and largest pages of English history, and the opening page, representing his successor, with a head and face full of promise and power, invites our present attention.

Massiveness, coolness and self-possession are embodied in this physical and mental endowment. The head is large as the basis of mental strength, the face is indicative of power, but reserved power.

There is an expression of calmness, but a consciousness of capability—abundant courage with energy under the control of judgment; steady determination and resolution, but no haste in manifesting his ultimatum. Then he has a wise conservatism joined with a reformatory and progressive spirit. He has a far-seeing, prophetic sense that looks for the good he desires, and that can partially wait and work till he wins.

His features are an interesting study. His long, massive upper lip indicates steadfastness and integrity. He has a social, friendly mouth, and a fraternal face. The nose shows dignity, self-reliance, persistency, keen prescience, and a well-settled confidence in himself and his cause.

This is also an honest face. He is willing to work by straight lines and accomplish results by the equities that are fair and honest.

He has a calm, steady eye that will not flinch in the presence of greatness.

He does not lose his self-respect, nor confidence in his own power. His progress and success in life would naturally come to him through steady pressure rather than through blows. He is not a man to make eager onsets. If he were a lawyer he would treat his opponents in a case with respectful and kindly consideration. He would cross-examine an opposing witness in a manner that would indicate forbearance and kindliness, and if his statements contradicted each other he would quietly ask him to explain it, and thus perhaps tangle him up. He can keep his temper when other men will boil over; he can speak calmly, respectfully and considerately when other men forget themselves and say that which they will in an hour regret, but cannot then take back.

His perceptive faculties are strong and he judges promptly and accurately in respect to science as applied to things physical. He judges well of form, magnitude and weight; he

should balance well as a horseman and walk with an easy poise.

That intellect is intuitive, clear, distinct. He is able to hold a large

comes to his aid when the facts are all analyzed and ready for the summing up.

He has an excellent judgment of



FIG. 137. LORD ROSEBERY, NEW ENGLISH PREMIER.

number of facts and interests in his mind. He has an excellent memory; he has an analytical intellect, and yet there is a reserve of logic that

strangers; he reads their character well, and is rarely at fault in his estimate of them. A man who talked kindly and pretended to be

friendly he would hold polite relations with for months or years, until the secret opponent was ready to show his aggressive purposes, and who would be astonished to learn all at once that he had been anticipated in his purposes, and that there was a masked battery ready for him.

He is a man of remarkable coolness and presence of mind. He has the power of comprehending complications. He is a good financier, and if he has a fault which may be inconvenient for him in regard to his present undertaking, it will be in the direction of forbearance and leniency. He has faith in manhood; he has faith in goodness; he loves the truth because it is true, and he is not hard, tricky, nor selfish. He will try to win on lines of integrity. If he were a business man, carrying great responsibilities, and some public financial pressure should confront him, so that it were necessary for him to ask for an extension or liquidation, it would be found that his affairs had been honorably conducted. Such a man as he would get an extension and liberal treatment.

We judge that his social feelings are strong, that he inherits as much of his mother's nature as of his father's and easily makes and retains friends. His power to resist aggression we think he gets from his father, and also his power of intellectual comprehension, but his tact, sympathy, faith and affection he gets from his mother's side, and therefore he never will be regarded as a hard, overbearing, unjust man; even his enemies will give him credit for sincerity and fairness.

His temperament is evidently Vital, Mental. He has a full development of the physique, and it is in the direction of nutrition, healthfulness and ardor.

The Mental temperament gives him a large head, and the Vital gives him harmony of body and brain. If he had a little more of the Motive temperament it might give him more

emphasis and positiveness, but it might not benefit his character.

The top head is well elevated and is long and broad, and he will respect virtue and duty and temper justice with mercy. He is endowed with a body, mind and character to deserve success.

Like Mr. Gladstone, Archibald Philip Primrose, Lord Rosebery, is descended from a Scottish family. His ancestors have been distinguished for centuries, and allied themselves by marriage with the greatest names in Scotland. The present Premier is forty-seven years old, having been born in 1827, and from the beginning of his life he was destined for politics. He was educated at Eton and at Christ Church, Oxford. As he was certain to inherit an Earldom if he outlived his grandfather, this taste for public life was sure to be gratified sooner or later in the House of Lords, but the young man preferred to win his first honors in the House of Commons. His father died when he was only four years old, and he was only twenty-one and had just been elected to the Commons when his grandfather died, and he took his seat in the House of Lords as the Earl of Rosebery.

HON. NEAL DOW.

Fig. 138. This man, with a world-wide reputation, celebrated his 90th birthday on the 20th of March, 1894. The portrait presented was made some years ago when he was in his ripened vigor, and he now has a bright and brave look, even at ninety.

His father died in 1861, at 95 years of age, and his mother died ten years earlier at 75. So he has in him the elements of endurance, power of thought, and harmony of physical and mental development, which permits, and with right living reaches old age. Every line of his face indicates power and positiveness, and though he has been called a great fighter, the term is hardly appropriate to him, because it would be better to

call it a struggle, a moral effort against immorality and the bane of human life.

His head from the opening of the ears forward is high, showing large Firmness, Self-esteem, Approbation, Conscientiousness, Hope and Veneration, and if ever a man was called to a long campaign of strife and persistent effort against the popular sentiment, and against fearful combinations and opposition, Neal Dow is just that man. He has an intelligent expression of countenance, and it is harmonious; there is no extravagance or exaggeration about his face. His chin supports his lower lip and that sustains the upper lip, and the nose is built on it as if it were a part of masonry, and had a good foundation to rest on. Then look at that broad, strong cheek bone, showing good breathing power, and the possession of that kind of heroic courage and thoroughness which requires power, resolution and vitality. What a calm, steady eye he has! It is bright without being bitter or acrimonious. It looks as if he was hunting for evil to be removed rather than himself to do evil works and wickedness.

His large perceptive development shows wonderful power of observation and ability to gather up facts and attend to detail. He has a rare and retentive memory of facts, places, and methods. He has a good memory of countenances. He judges color well, measures form, size and weight, could have been a mechanic or an artist, and would have been useful in these departments, and is adapted to gather and use information to excellent advantage.

He has large Comparison; the center of the upper part of the forehead is very full, consequently he is full of appropriate illustrations and figures of speech. There is such a right onwardness to his diction, and such thorough earnestness to his purposes that they are focalized, as the rays of light and heat are focal-

ized through a lens and converged to a point, to make it hot where they touch.

His Human Nature, just where the hair unites with the center of the top part of the forehead, shows criticism in reference to persons and dispositions, and gives facility to manipulate people, saying the right thing at the right time and in the right way, and acquiring great influence with people. His large Benevolence gives elevation to the front part of the top of the head, but that of course is somewhat obscured by the amount of hair, but it shows that it is amply elevated. Veneration lies behind Benevolence continuing the elevation of the top head, as the line extends backward. Then the region of the crown is well marked; Firmness is large, showing steadfastness, dignity, ambition and integrity, and he has a fair share of prudence, but he is not always consulting safety. He studies what should be done, and how it should be done, as an engineer lays a railway through a broken country;—not going around all the hills, plowing through them, or tunneling them and using the débris to fill up the valleys between. So he has tried to do what ought to be done in a straightforward, earnest, and honest way, without equivocating. He has been as persistent in his line of effort as William Lloyd Garrison was in his, who said, "I will not extenuate, I will not equivocate nor yield a single inch, and I will be heard."

His head is fairly well developed in width. He has the elements of courage and executiveness. He has a fair share of the feeling of economy, and desire for acquiring, and in ordinary lines of business, if legitimate, he would push them to successful results. The form of his body does not look bony and broad, but plump, smooth, and harmonious. He had a wonderfully young face for his age, when this picture was taken, and even to-day there is, for instance, enthusiasm, balance, and harmony

in every expression of his features and in the organization of his brain; no part seems to predominate beyond the influence and activity of the other parts. If he has courage, he has also prudence to guide it. If he has practical talent, he has also reasoning talent to absorb, balance, and rightly direct the facts. Then the moral sentiments work with

In his earlier life he was slim, and comparatively thin and wiry; in his later life he has rounded out more fully, indicating that his nutritive system was amply developed, as derived from his mother, and his health, as a consequence, was harmonious, and the whole mental and physical make-up substantial and available.



FIG. 138. HON. NEAL DOW, THE APOSTLE OF TEMPERANCE.

courage, dignity, and practical talent, and these have given him his influence and his power. But he has a gentle nature; there is much in him of his mother, which leads him to seek out and cultivate the gentler side in the common walks and affairs of life. He is a very companionable and cheery man, not rough or lordly.

Hon. Neal Dow was born on the 20th of March, 1804, in Portland, Maine. He came from English stock that settled in New Hampshire in 1637. His father settled in Portland, Maine, where Neal was born, and lived to the age of ninety-five years. Neal Dow's longevity is hereditary, two of his ancestors having

lived over a hundred years, and several over eighty. He was married in 1830, and has four children now living. He attended public and private schools in Portland and the Friends' Academy in New Bedford, Mass., his family on both sides being Friends, though he left the society before he was of age. As a young man, his vitality was manifested through athletic sports; he could ride, swim, sail a boat, box and fence with any of his companions, and the skill early acquired in some of these recreations has proved of service in not a few exigencies. In the village debating societies and in town meeting, he acquired facility in extemporaneous speaking; for many years he was chief of a large volunteer fire department, and became accustomed to the command of men. Active in politics of his day, he was an efficient and acceptable speaker in the conventions and public assemblages of his party. Confidence of business associates in his judgment and integrity placed him in the directories of banks, manufacturing, railroad and other corporations. He thus obtained experience and knowledge of men and affairs. With a sound body, well stored mind and self respect, he was early in life well equipped for the work to which so much of his after life was to be devoted. Later, when nearly sixty, an age when most men are unequal to the hardships of army life, he volunteered in the war for the Union, serving as Colonel of a Maine regiment and afterwards as Brigadier-General of Volunteers, was twice wounded in battle, and for many months a prisoner of war.

Mr. Dow's world-wide, enduring fame has come through his long and self-sacrificing service for temperance. The present generation has little conception of the task which he undertook more than sixty years ago. A man with less than iron nerve and without an unconquerable will, would have faltered before it. The liquor traffic constituted a large part of the

business of Portland. Authorized by law, it was a legitimate trade, supplying an almost universal demand. It was sustained by an overwhelming public sentiment there as elsewhere. In the midst of such conditions, to declare the liquor traffic hurtful in effect, a wrong in itself, was regarded as an insult to the intelligence and an impeachment of the integrity of most respectable citizens. Of course, he met with hostility, but, convinced that no progress could be made while the liquor trade was legally considered necessary and respectable, Mr. Dow aimed to strip it of its legal endorsement, and to this end, to convince the people that the trade was a prolific parent of poverty, misery and crime. Thus he became an object of studied and persistent hostility in various forms. Incendiaries fired his building, miscreants assailed his house with missiles, attacked him in the street by day and by night, though always to their own discomfort; his skill in sparring enabled him to clear the track through many a riotous crowd. Again and again he appeared before a legislative committee with enormous petitions urging the adoption of prohibition, only to be repulsed. He then appealed to the people to outlaw the liquor traffic through the Legislature.

In 1851, Mr. Dow was elected Mayor of Portland by a larger vote than before had been given a Mayoralty candidate. Clothed now with the influence of official position, he appeared before a legislative commission with a draft of a prohibitory law, pledging himself that if this was enacted, that within nine months the open traffic in liquor in Portland should be annihilated. This pledge he subsequently amply redeemed. The bill was passed and was approved by the Governor June 2, 1851, and has ever since been known as the Maine Law.

In the Spring of 1855, Mr. Dow was again elected Mayor as the first

candidate for that position of the then just organized Republican party, and again successfully enforced the law. He was elected unanimously to the Legislature, the withdrawal of all opposition to him being a tacit and courteous acknowledgment on the part of the political opponents that he had been unjustly assailed. He visited England, spent four years advocating prohibition, and served to establish the principle which is at present agitating the British Parliament on that subject.

Mr. Dow is still leading the movement which enlisted the strength of his youth. Two generations ago he

put his hand to the plough and hasn't looked back. Whoever else has faltered, he has not wearied in well-doing. Appreciating the magnitude of the task before him, no success has elated and no reverse has discouraged him. For this reform, at ninety years of age, he is laboring with a hope and enthusiasm worthy of youth, the determination of mature life and the earnest conviction and calm faith of a ripe old age. He hopes to die in the harness and be able to say with the Apostle Paul, "I have fought a good fight, I have finished my course, I have kept the faith."

SKETCHES OF PHRENOLOGICAL BIOGRAPHY. HORACE MANN, LL.D.

BY CHARLOTTE FOWLER WELLS

III.

SOON after George Combe's return to Great Britain in 1840, he published his journal or notes on his American tour. He submitted the proofs of his book to a few intimate friends, Horace Mann and Dr. Samuel G. Howe, of Boston, being among them. George Combe's biographer says :

Horace Mann's suggestion that he should write a philosophical survey of the American people took possession of Combe for a few weeks; but he abandoned the idea, or, as he remarked, he was now over fifty years of age, and he was eager to give all his time to the propagation of his philosophy of the brain. On one point, however, he was determined to set all personal considerations aside—that was to make the British public aware of the importance of Mr. Mann's labors in education. Friendship, as well as his interest in the subject, actuated him; and having read Mr. Mann's latest reports to the Massachusetts Board of Education, he declared that he would write an article upon them if he should "sit up all night to do it"—a very glaring infringement of the physiological "laws." He wrote the article just before his departure for Germany, and it was accepted by the *Edinburgh Review*.

This was a source of much gratification to Combe and to Mr. Mann, and it had the effect of drawing direct attention to the labors of the latter, which were unknown in this country (Scotland), and very poorly

appreciated in his own at that time; for he had many difficulties to contend with in carrying out his schemes, and much ignorant opposition on the score of expense to overcome.

Writing to Mr. Combe under date of Feb. 28, 1841, Mr. Mann gave the following opinion on the American work :

Your views on American civilization are sound and judicious, and written in a spirit of philosophic candor, which constitutes one of the great excellences of all your writings, and which will give you a greater power over antagonistic opinions than any previous philosopher has ever possessed. There is but one striking departure from this rule; and, indeed, it is the only important one, so far as I recollect, in all your works. . . . The address also will make a deep impression upon the public mind here. I have always thought it was a most able view of the subject, and it is conceived in a truly dignified and noble spirit, and expressed with great clearness and force. . . . There is much that is valuable in it, and that which we should all care most about—there is that which will do great good.

Perhaps I ought, in a formal and explicit manner, to thank you for the mention you have so frequently made of me in the progress of the work; but no selfish and personal regard which I can possibly have for you will ever bear any proportion to that general esteem and reverence which is founded on the imperishable basis of your

mind and works. Indeed, I have regretted to find myself the subject of such frequent commendation, because it will have the effect both to diminish my opportunities to speak of you as you deserve, and will impair the authority (if any) or the force of my encomiums when given, as people may say that I extol you because I have myself been praised. But this is past. You can yet help my mind, as you have hitherto done, and whenever it is in my power to render you a service, remember, I am ready. . . . It gives me pain to think that in a short time another sea will roll between us, but there is that in our hearts that neither seas nor continents can sever.

The following quotations are taken from Mr. Mann's letters written to George Combe at the close of 1841 and the beginning of 1842:

. . . . I perceive, with unbounded pleasure, that the "Constitution of Man" has had a sale wholly unprecedented in the history of scientific works. As demonstrating a spirit of inquiry on this class of subjects and the adoption of the best means to gratify it, this fact is most cheering to those who wait for the coming of the intellectual Messiah. . . . If once the doctrine of the natural laws can get possession of the minds of men, then Causality will become a mighty ally in the contest for their deliverance from sin as well as from error. . . . I am exceedingly obliged to Mrs. Combe and yourself for all your kind wishes in regard to my health, and that I would join you while on the continent. I should be most happy to do so could I take Massachusetts with me. But it is too large for my pocket though not for my heart. I have read your brother's book on "Infancy" with much delight. While perusing it I saw Death let go his grip from more than ten thousand children. . . .

FEB. 28, 1842.—Your kind letter of Nov. 15th I did not receive till about the 10th of January. I should have said beforehand that the intensity of my desire to hear from you would have been an attractive force sufficiently strong to draw it into my hands in a shorter time. But it seems to have been projected into space with great centrifugal velocity, and almost to have formed an orbit in which it might have revolved round me forever. New York was the point of its perihelion; but there the centripetal prevailed, and brought it to the centre at once. . . . I am carrying on the "Journal" for another year, although a labor which I am unable to perform. But, while I do all the work for nothing, it just pays its way, and is doing some good. I do not know but it would be going too far—and, if so, you will pay no attention to it—to ask you

to furnish me, during your residence in Germany, with a series of letters in relation to the German schools,—their course of studies, modes of instruction, discipline, order, qualifications of teachers, etc.; anything, in fact, which you could write without much labor, and which would be most interesting to our people, and most beneficial to our schools, whose condition and wants you well know. . . . Some of my friends have been trying to send me to England; but while you are away the whole island seems to me empty. When it is inhabited again, perhaps I may go to see it.

During the year which followed Mr. Mann was forced to encounter much opposition to his work and plans which seriously affected his health. To secure the necessary change and rest, and to visit European schools, Mr. Mann, accompanied by his second wife, to whom he was married on the 1st of May, 1843, sailed for Europe on a six months' leave of absence.

The excursion did not prove so much of a recreation as his friends hoped it would; his attention was so much absorbed in educational matters, that he had little strength or leisure to devote to mere amusement. It was his habit to spend the day, from seven till five o'clock, in visiting schools, prisons, and the men who were interested in these, and many of his evenings in reading documents which he gathered in his progress.

Mr. Mann visited many of the institutions and schools of Great Britain and then went to Germany. In Leipzig he met Mr. Combe, who had been sent to Germany by his physicians, on account of an attack of lung trouble, and condemned to silence. "but," says Mr. Mann's biographer, "the two friends disregarded every prohibition, and *pied à pied*, or on some pleasant excursion, they talked solidly from morning till night during the few weeks they remained together. In spite of the apprehensions of friends, Mr. Combe improved every day. Sometimes, taking one horse, one would literally 'walk on the horse,' as the French say, while the other walked on foot, still talking, till Mr. Combe had imparted all his observations on the country, with which he was familiar by frequent and long residences, and till they had talked far into the future as well as into the past. At last, time was no more for them; and they reluctantly parted, never to meet again on earth, except in the affections, and in such measure of intellectual companionship as correspondence by letter could give. Both were men capable of deep and abiding friendship, and the brilliancy of the one was a fine counterpoise to the gravity of the other, each being endowed with logical

power to satisfy the other's demands for that quality of intellect without which neither could enjoy interchange of thought with any one."

Mr. Mann's visit to Europe may have saved his life at the time, but it could hardly be called a rest. He hardly waited till the exhaustion caused by a very stormy and seasick passage home had passed away before he again plunged into excessive toil. In speaking of his condition to a friend, he said, "What can be done for a brain that has not slept for three weeks?" His correspondence with Mr. Combe was continued upon his return to America. Under date of April, 1844, he wrote:

Would to heaven that an ocean did not separate us, and that some mode of communication more quick and spiritual than that of correspondence by letter were left us! I long again for intercourse with your mind, in order to discover more and more those laws of the universe that determine the order of nature and regulate the affairs of men. It is only through a knowledge of these laws that the individual can be brought into harmony with the universe, and that the progress of the race can be placed upon a secure basis.

BOSTON, Feb. 13, 1846.

MY DEAR MR. AND MRS. COMBE:—Were I to stand upon ceremony, I should not write to you at the present time. But ceremony at the best is vanity, and between us it would be mischief. Having an opportunity to send my last report, I avail myself of it, and put in this note to say that we have another little son, born on the 27th of December. He is a fine, healthy little fellow, fat enough for an alderman, and has a head planned and executed on the principles of phrenology. His mother and I have been discussing the immensely important subject of his name. When I said to her that George is a pretty name, she said George Combe would be a glorious name; but we should not dare to call him so without your consent, indeed without your expressed desire, which I can hardly hope for.

Our oldest boy (born Feb. 25th, 1844), whom his mother calls after me, is well, and has a very active temperament and a very inquisitive mind.

Mr. Combe, who had no children, but whose love for them was very great, took much interest in his "name-son," as he called him; and was never weary of reading minute

accounts of the doings and sayings of both of the children of his friend.

April 27, 1846.

MY DEAR MR. COMBE:—I write you from Gardiner, Me., where I have come to spend a few days. I am partially resting from my labors; though Sisyphus never will be permitted to cease rolling his stone up hill. What are you doing now for the good of the race? I trust you will not cease to use your brain for the right formation of other brains, as long as it has the power of operating.

WEST NEWTON, Feb. 25th, 1847.

MY DEAR FRIENDS, MR. AND MRS. COMBE:—All I can say in defence of myself for being what you call a "naughty man" is that I have had a *conflict of duties*, and that I have postponed the performance of those which would have been most agreeable for the sake of those which seemed to me most indispensable to the welfare of the cause to which I am pledged. In the early part of the last season, I prepared another volume of our Annual School Abstracts, containing nearly four hundred pages. Even before this was completed, I had to go away on a tour of Teachers' Institutes, which occupied me for seven or eight weeks. On my return, in November, I was obliged to sit down and write my report, a hundred and seventy pages, and carry that and the report of the Board through the press. My correspondence equals all the labor I have enumerated. I have had the general care and superintendence of the erection of two Normal School buildings which have been built the last season, and are now occupied; and that, I know, will gladden your hearts. I have built a house for myself at this place, which we came into on Christmas eve. Now, I assure you, it would have been vastly more pleasant to have been writing to you and telling you about Mrs. Mann, and little Horace Mann (who is three years old to-day), and little-er George Combe Mann, who has a head that would satisfy the most fastidious and exacting phrenologist. I say it would have been vastly more pleasant to do this than to be fighting, like St. Paul, the wild beasts at Ephesus.

I received the PHRENOLOGICAL JOURNAL containing your article, which I read with great pleasure and profit. . . . I should like exceedingly well to be made acquainted from time to time with whatever promotes the progress of humanity, whether it comes in the form of improved education or in any other. . . . The JOURNAL is now somewhere in the circle of my friends, going about doing good. . . . You have been my benefactor in the largest and best sense. While my nature and yours remain unchanged, I cannot but

have the highest estimation of you, and I cannot cease to be grateful.

WASHINGTON, April 26, 1848.

MY DEAR MR. COMBE:— . . . I write you this from a seat in Congress—a place which, a few weeks ago, it would have seemed as impossible for me to fill as to be the successor of Louis Philippe.

Strange events have sent me here. I have time to-day to write but a single word more, to say that wherever I am I shall never cease to be your friend and admirer, and to acknowledge my indebtedness to you for the great principles of thought which have helped me on in the world.

WEST NEWTON, April 12, 1849.

MY DEAR MR. COMBE:—Silence is not forgetfulness. . . . On Feb. 23, 1848, Mr. John Quincy Adams died, struck down in his seat on the floor of Congress. Having recently moved into the Congressional district which he represented, I was nominated as his successor in the following March, and on the third day of April was elected.

WEST NEWTON, Nov. 15, 1850.

MY DEAR MR. COMBE:—I received your brief note from London, dated Sept. 15, and afterwards your letter from Edinburgh of Sept. 29. The letter gave me what I must call an unlawful pleasure, for it fully acquitted me of what my own conscience had long told me I was guilty of, namely, neglect of you. Mary has often said to me, "Now, my dear, you *must* write to Mr. Combe," and I had as often replied, "Yes, I must and will." But, like all other promises, these were made under the tacit and implied condition of possibility. But the possibility never came, and, before I get through, I must tell you why. I have received a copy of the annual report of your school, which Mary and I read together, as we always do everything that comes from your pen. Your life of Dr. Andrew Combe was sent here before I came home. . . . I find it very minute in its details; it never loses its interest. . . . I like to read his letters. I delight and profit, too, in reading a book which never departs from the phrenological dialect, and refers everything to phrenological principles. It is like a review of a delightful study.

WEST NEWTON, June 15, 1853.

MY DEAR MR. COMBE:—I should have written to you some time ago, only I hoped to have something to send you, and a friend to send it by. In both I have been, so far, disappointed, otherwise I should earlier have thanked you for your much-valued present of one hundred dollars, which I mean shall be better than a common monument of you, not a dumb and barren one, but a living, radiating one, diffusing instruction and delight. I mean

to expend it, mainly at least, for phrenological works, yours heading the list, and in such duplicates as will allow you to be speaking all the time to many persons.

ANTIOCH COLLEGE,
YELLOW SPRINGS, Ohio, }
Nov. 29, 1853.

MY DEAR MR. COMBE:— . . . I am wholly absorbed in my new work. I want to transfer the more improved methods of instruction and discipline, and the advanced ideas of education, from the East to the West. I am well aware that the seed which I hope to sow will hardly come up in my day, but my causality is so strong, that what *is to be at any time* has a semblance of being immediately present. Faith without causality must be a tough problem.

Oh, how I wish and yearn that you could be here, so that we might spend the remainder of our days together, and that, whoever of us should die first, the survivor might close his eyes! Farewell!

HORACE MANN.

YELLOW SPRINGS, May 18, 1858.

MY DEAR MR. COMBE:—I received your letter of March 18th, about a week ago, and it would have given me unmingled satisfaction but for the expression at the close. In this you intimate that we have become forgetful or unmindful of you, and say you are unconscious of having done anything to forfeit our esteem. My dear friend, I am exceedingly sorry that any such suspicion or suggestion should ever have come consciously into your mind. I assure you it represents no truth. My consciousness affirms this. There is no man of whom I think so often; there is no man of whom I write so often; there is no man who has done me so much good as you have. I see many of the most valuable truths as I never should have seen them but for you, and all truths better than I should otherwise have done. If I could do it, I would make a pilgrimage to see you; and if you would come to America I would take care of you till one or the other of us should die. . . .

My dear Mr. and Mrs. Combe, good-by!
HORACE MANN."

Soon after this letter was written the intelligence of Mr. Combe's death came. He died August 14, 1858. His lifelong friend, Horace Mann, did not long survive him, for he passed away August 2, 1859.

In preparing this sketch it has been thought best to allow Mr. Mann to speak for himself in all cases where it was possible, thereby proving how loyal he was to his friend Mr. Combe, and to the cause of Phrenology. In-

deed, he was loyal to whatever cause he espoused, and conscientiously thorough in every detail of his work, and without regard to ease or rest. Nor was any one under his direction allowed to swerve from the loyal rule adopted by himself without very plain, even severe reprimand, though ever so dear a friend, in ever so exalted a position. One fault of Mr. Mann's must not pass without criticism; he was less loyal to himself—his health—than to the cause he represented, and thereby shortened his life. He did not rust out, but literally wore out and dropped while in the harness and at the height of his usefulness.

In his last address before his death, delivered to the graduating class of Antioch College, in 1859, he closed with these words: "So, in the infinitely nobler battle in which you are engaged against error and wrong, if ever repulsed or stricken down, may you always be solaced and cheered by the exulting cry of triumph over some abuse in church or state, some vice or folly in society, some false opinion or cruelty or guilt which you have overcome! And I beseech you to treasure up in your hearts these, my parting words: *Be ashamed to die until you have won some victory for humanity.*"



A WORD IN BEHALF OF COLD WATER.

MATT. W. ALDERSON.

AN article in the December number of the PHRENOLOGICAL JOURNAL, entitled "The Wet Pack," contains conclusions that I cannot agree with, and prompts me to a defense of "the old cold water theory," not, however, as a believer in the wet sheet pack as a treatment applied to the whole body, except in the hands of a skilled operator. From experience I can say that the highest fever may nearly always be perfectly controlled without resorting to so heroic a measure. In my childhood days, if I burned my hand, I was told to hold it to the fire, that I might obtain relief by having the heat "drawn from the burn." To-day I know that heat is not subdued by heat, and were I to burn myself I would rub the burned place with ice, or immerse the part in cold water, and I would have relief from the pain almost instantly.

The regular practice of the medical profession is to apply hot moisture in

cases of enteritis, ovaritis, peritonitis, and other severe forms of internal inflammation, and a large percentage of the patients die. By the intelligent application of cold moisture, and especially in connection with massage or other movements, direct to the part affected, almost any inflammation may be controlled and subdued.

I have seen persons suffer intense agony with inflammation of the ovaries, have seen them labored over for hours and hours with applications as hot as could be borne, have seen them give up literally exhausted, or compelled to take an opiate to get a moment's respite from the pain, only to go through the same agony again and again. With the intelligent use of ice, or cloths wrung from ice-cold water, I have seen such persons relieved so they were conscious of no pain whatever, in less than an hour, and the pains never occurred again with the same degree of intensity.

Your writer says, and he emphasizes it: "*But mark that none of these benefits can or do arise till the cold sheet pack is turned into a hot sheet*"

pack." Thus far I will agree with him, but his conclusion is far from correct. He says: "Then why not apply hot moisture instead of cold moisture at once?" I answer, because *you cannot subdue heat by applying heat*. Common sense should tell a man that, especially after he has tried it a few times. I do not doubt that the person from whose article you quote obtained desirable results from an attempt to use a hot sheet pack. A sheet wrung from water as hot as could be borne by the hands would be cooled very much by exposure to the atmosphere before it could be applied, and the benefit resulting was the natural result of a moderate cooling of a large surface of the body. Cold water, intelligently applied to less surface, would accomplish like result without discomfort to the patient and with the advantage of reaching more directly the part affected.

Take a case of severe local inflammation, which develops into an abscess or felon (paronychia), the regular treatment is by the use of fomentations and emollients, with the idea to relax and soften the parts. Does such treatment ever afford relief? If so, it is but partial. On the contrary, suppose you rub the parts surrounding the sore with ice. How very comfortable it feels. Suppose the inflammation is on one's hand. Wring a towel as dry as can be from ice-cold water and wrap it around the hand. Place a chunk of ice over the abscess or felon, the wet cloth intervening. Put flannel around to absorb the moisture and retain the animal heat, and you may lie down to a pleasant natural sleep till the ice is melted and the cloths are warmed.

So far am I from agreeing with the writer from whom you quote that I make bold to assert that *when the cold sheet pack has become warm it has accomplished its usefulness*.

Cold water is not a cure-all, but it is the king of all remedies in cases of inflammation, undue heat, pain or fever; and as nearly all acute diseases

commence with an inflammation of one form or another, its application is very extensive. Of all remedial agents none other begins to compare with it. By what other power can you contract the blood vessels and give them relief from the strain and pain due to distension? It is a safer, better sedative than quinine, producing the same results with none of the bad after-effects. By its power to obtund sensibility, it becomes a safer anæsthetic agent for external local application than chloroform, and the medical profession partially recognizes its superiority in this respect to-day in the use of the recently evolved remedy—polarized ether.

COLD WATER APPLICATIONS IN PNEUMONIA.

IN a contribution to the *Therapeutic Gazette* Dr. Jackson speaks of a most successful experience in the treatment of pneumonia by cold water.

During the past winter ('92-'93) I treated twenty-five cases of pneumonia upon practically this one line of procedure. The results were excellent in every way. The recoveries were prompt and rapid in all the cases but two. Of these, one was very prolonged, being secondary to la grippe and complicated with fibrinous pleurisy, and the other died. The latter was a hospital case—a poor, miserable woman, who had led a wretched life. The beneficial effects of the treatment were so prompt and so apparent, *in the face of the greatest prejudice and opposition*, that they carried conviction to the most unbelieving. I have seen the application of ice-cold compresses terminate a case of double pneumonia of the base by crisis in sixty hours.

Another patient, a woman of 74 years, with consolidation of right base, recovered in four days. A baby, two years of age, with catarrh-

al pneumonia, most marked on the left side, was quite convalescent on third day. A laborer, 34 years of age, with consolidation of right base, delirious, and much oppressed for breath, required but two days' attendance. A bride, 22 years of age, awoke after a particularly fatiguing party in a feverish and lethargic state. After twenty-four hours there was the characteristic fine crepitation and stitchy feeling to the breathing; temperature, 105 1-5° F., pulse, 130. Ice-cold compresses aborted the lung lesion entirely, and produced a critical perspiration in thirty hours, at which time the norm was reached and persisted.

In all the cases in my case-book, from the time the cold was applied, rapid improvement ensued. The method was as follows: A large towel was rung out of ice water and the thorax enveloped in it. A comparatively dry towel was laid over it, and a binder of flannel or cotton held all snug. The ice water towel was changed as often as necessary, in order to ease the pain and reduce the temperature. When the pain or dyspnoea was severe, or the temperature high, the intervals would be short, say five or ten minutes. As the symptoms improved, the changes were made only as the towels assumed the heat of the body. The face and limbs were frequently sponged with the ice water, and, when required, a cold compress was put upon the brow. The medication was confined to promoting a critical perspiration. No alcohol was employed, except in the fatal case referred to. The diet was principally of milk, and liberal in quantity. Incidental symptoms were met as they arose. In none of the cases was there any expectoration to mention. Free perspiration was usually succeeded by copious diuresis. As a precautionary measure, a wet compress was worn for twenty-four hours after the crisis, and changed when it became dry. In order

to obtain the effects to be desired in this treatment, the cold must be freely applied, and with a firm hand, until the effect of a reduction of temperature and arrest of symptoms occurs. The treatment is grateful to the patient. It can be managed without incommoding the sufferer, by the exercise of a little ingenuity. It is prompt in its effects for good, and it is easily applied.

As the experience of twenty years' continued observation, I would most earnestly deprecate the use of opium, antimony, or blisters, and the more modern antipyretics. Under the usual routine treatment of poultices, expectorants and whiskey, I can quite understand Dr. Osler's view as to the non-efficiency of treatment. But with experience of the free use of cold, in the manner herein outlined, and in view of the etiological considerations advanced, I feel that a new and happier era is dawning in the treatment of pneumonia.

WHY BATHING SOON AFTER A MEAL IS DANGEROUS.

M. WERTHEIMER, in speaking before the Paris Academy of Science, developed some facts which it will be well to bear in mind, now that summer is approaching. He showed that a sensation of cold on the skin acts on the circulation of the lower part of the trunk; that is to say, the veins, and also on the brain, in the same way as a mechanical or electrical stimulus of the sensitive nerves of the skin. This observation affords an explanation of the fact that a sudden immersion of the body in cold water after a meal, and while the process of digestion is going on, may be attended with danger. At this time the abdominal system is the seat of an intense physiological congestion, and the accumulation of blood in it is suddenly thrown back towards the nervous centers. The consequence may be a shock resulting in death.



*Ex fronte, ex capite, ex vultu, etiam
in ipso oris silentio natura loquitur.*

PLATO.

NEW YORK,

April, 1894.

THE DUPLICATURE OF THE SENSES.

THE double constitution of the brain was not accepted by the scientific world until a comparatively recent date, notwithstanding the physiological analogies presented by the general organism. We remember listening to a lecture given by Dr. Brown Sequard, of Paris, something like fifteen years ago, on the duplicature of the nervous system, when the facts that he advanced in proof of the opinion appeared to be received by his audience as new, whereas they were substantially in the line of the demonstrations of Dr. Spurzheim, as published in his "Anatomy of the Brain" fifty years before. The later investigations that concern various physiological or sensory functions contribute mainly to the establishment of the phrenological doctrine. What has been shown by pathology in regard to the centers for sight, hearing, taste, language, etc., is of great interest, and can not be interpreted as militating in any respect against

the existence of mental centers. On the contrary, a beautiful harmony and reciprocity of relation appears in the arrangement of nature—an adjustment of parts and functions to the economies of human life. The study of the relations of language is especially interesting on account of the variety of its sensory and motor coordinates. Disease or impairment of a center on one side of the brain will modify the action in a peculiar manner, but later such modification may disappear and the normal status be reestablished, not because of a recovery on the part of the diseased center, but because the corresponding center of the other side of the brain has been brought into exercise.

So in the matter of sight. A lesion of the part that enervates that sense is usually indicated by *hemianopsia*, or half sight; but when the blindness is total, and the eye itself apparently normal, there is destruction of both the right and left organic centers. There are many features in the property of sight that give us important items of knowledge in regard to the working of the mental faculties, and go far to show the necessity of the mental subdivision of the brain functionally.

THE MINISTRY OF LABOR.

IT is trite enough to say that work has a very beneficial influence upon the physical and mental organism. Every child almost has learned from some source that action is necessary to healthful development, and that work which has in view a useful end is a means of true happiness. We are not so ready, however, to accept the proposition that work, earnest and sys-

tematic, persisted in from day to day despite infirmities of the flesh that are not only painful but appear of a grave nature, may be both a solace and a remedy. But such is the case in the great majority of instances—and he who has been an observer of human life will testify to the fact.

In sorrow that appears overwhelming, when all that it involves is considered by the grieved one, work employing thought and act comes like an angel of consolation, and enables him or her to bear up under the stroke; and with each succeeding day that is passed in doing the service and duty that come to hand the heart acquires fresh courage and hope, the clouds open to let in the sunshine of cheer. Time may bring healing to the stricken heart, but work of an earnest, useful nature soothes the spirit and enables us to consider our trials with a degree of patience and calmness that is scarcely to be found elsewhere.

The eminent physician of England, Sir Andrew Clark, left no legacy of greater value to the world than his example and counsel with regard to the ministry of labor. In a very interesting statement of an interview with him published not long after the death of Tennyson, in the *Westminster Gazette*, the reporter, a lady, cited an emphatic declaration by Sir Andrew in the following words:

"Shall I tell you why Tennyson's death was so peaceful? This is not to be put into the papers to-day. Probably it would not interest them to-day. But the secret is this: He lived a quiet, laborious, simple life. It is a secret which few men learn in time to profit by it. I was his friend before I was his physician. Metaphysics drew us together. Gladstone,

too, is deeply interested in that subject, and we all three agreed in our taste for a simple life, and a life of work.

"Half the disease of the generation is due to people's idleness. Idleness, the beginning of all evil. The mother of a pampered darling of a daughter sends to me. The girl ails, no one knows why. I am to come and prescribe. I know before I go what is the matter with the girl. 'Go to your local medical man,' I say; 'he can manage the case very well.' But, no, it must be Sir Andrew, the grumpy Scot, and Sir Andrew prescribes long walks and less rich food, and regular meals and early hours. And presently, when the young lady has regained her red cheeks and high spirits, they think I have performed a wonderful cure!

"Now let me tell you how I myself have managed to live at all. I am sixty-six. Over thirty years ago, when I was a young and obscure Scotch practitioner in London, I applied for a place on the medical staff of the London hospital. The authorities there said: 'Oh, let us give the poor chap a chance. He is consumptive; he won't last long. Let us, in pity, give him the post.' Well, I have outlived nearly every one of them. All my life I have been delicate; I have several times been at death's door, but by reason of a simple life and a life of work, I have managed to get very close to three-score years and ten."

In such experience the great English physician stands by no means alone. There are many who despite sickness and weakness keep steadily at work, and perhaps because of their physical infirmities do all the better service for the world. They are strengthened, nay, inspired, by their interest in what they are doing, and the organic functions, sympathizing with the mental spirit, gather new

power to resist the encroachments of disease and to supplement the activities of the mind.

What a lesson there is in all this for those who repine from any cause—especially to those who deem themselves the victims of fate, condemned to suffer and prematurely to die!

OPINIONS OF PHRENOLOGY.

CONTINUING our inquiries, we recently sought an expression as to the value of Phrenology from the Rev. W. J. Hunter, Ph.D., D.D., of Montreal, who is one of the most widely known ministers in Canada, having been thirty-eight years in public life, thirty of which have been spent in the principal cities of the young Dominion. He is at present the pastor of St. James' Methodist Church, Montreal, the largest and most elegant Methodist edifice in the world, and pastor elect to the Dominion Square Church, to which he will be appointed in June next, on the expiration of his term of service at St. James'. Dr. Hunter is a student of mental science, and a graduate of The American Institute of Phrenology of the class of 1887. We give below his thought and experience on the subject of Phrenology:

DEAR SIR—When I was much younger than I am now I preached a sermon against Phrenology, denouncing it as anti-Christian, materialistic, and infidel in teaching and tendency. I had never read a standard work on the subject, and had no knowledge of it save that gathered at the addresses of itinerant lecturers quite incompetent to deal with it. I jumped to the conclusion, as many in like circumstances do to-day, that if the doctrine of faculties is true, a man born with a certain organization could not

be responsible for the outcome of life in that organization. I was then, and am still, a great admirer of the late Henry Ward Beecher—his fertility of thought, copiousness of language and power of adaptation. About this time I purchased the two volumes composing his "Forty-eight Sermons," perhaps the earliest of his publications in the sermonic line. Judge of my astonishment when I read on page 303 of Vol. I. the following words:—

"All my life long I have been in the habit of using Phrenology as that which solves the practical phenomena of life. Not that I regard the system as a completed one, but that I regard it as far more useful and far more practical and sensible than any other system of mental philosophy which has yet been evolved. The learned professions may do what they please, the common people will try these questions and will carry the day, to say nothing of the fact that all the great metaphysical and scientific classes, though they do not concede the truth of Phrenology, are yet digesting it, and making it an integral part of the scientific systems of mental philosophy."

Then came Mr. Beecher's lectures on preaching, delivered to the students at Yale College, and published in *The Christian World Pulpit*, in 1872, in which I found the lecturer saying, "In my junior college year I became, during the visit of Spurzheim, enamoured of Phrenology. For twenty years, although I have not made it a special study, it has been the foundation on which I have worked. I have worked with it the same as botanists have worked with the Linnaean system of botany, the classification of which is very convenient, although an artificial one. There is no other natural system that seems to correspond to human nature so nearly as Phrenology does."

Now, while I admire Mr. Beecher, and derive inspiration from his writings, I do not accept every part of his system of theology, if, indeed, he

had any system of theology; but his utterances on this subject prompted within me a desire to read and study for myself. The result was the complete overthrow of my ignorant prejudice against Phrenology, a pleasure and profit in the perusal of its literature, and finally, in 1887, the pleasure and advantage of the full course of lectures and instruction at the American Institute of Phrenology. The benefit of that course I cannot fully estimate. It has greatly assisted me in the management of men on official boards and in committee meetings; for even in Methodism all officials are not entirely sanctified; it has opened up fields of thought hitherto unexplored; it has furnished arguments and illustrations for the enforcement and unfolding of truth hitherto unknown; and I do not hesitate in saying that it has added greatly to my usefulness as a public teacher, while it has contributed to personal and family health and happiness. It has not shaken, but strengthened my faith in the truths of the Gospel, which it is my privilege and joy to preach to the largest congregation in Canada, although I am now bordering on 60 years of age; and I cannot express a better wish for my young brethren in the ministry than that they may be privileged with a like course of reading and instruction. Yours truly,

W. J. HUNTER.

This letter is not only interesting as a testimonial from Dr. Hunter. The quotations from Henry Ward Beecher have a significance which can scarcely be appreciated without some reflection. It should be remembered that Mr. Beecher was phenomenally successful in his illustrations and analyses of character. When he says of Phrenology that "it has been the foundation on which I worked," he explains much of the power which people are accustomed to ascribe to his genius. Not that he could have

accomplished what he did if he had not possessed extraordinary mental capacity. But part of his genius was shown in his appreciation of Phrenology, and there can be no question that his fame and achievements would have been less if he had not drawn inspiration and knowledge from the fountain of phrenological lore.

PERSONAL.

J. G. CARLISLE, the Secretary of the Treasury, is a man of striking and pronounced personality. His head is characterized by decided contrasts of development and deficiency, although the volume of the brain is evidently very considerable. There seems to be a marked fullness and depth of the cerebellum, and those portions of the brain in the region of the ears which are concerned with the production of force and the conditions of longevity. He is



J. G. CARLISLE.

doubtless a great admirer of the opposite sex, and would be devoted as a parent, but he is not a slave to social ties or the conventionalities of the fashionable world. The accompanying portrait shows a reach of brain forward of the ears which seems twice as long as the line from the ear to the center of the back head. This signifies a great predominance of intellect over the social qualities. The absence of curves or convexity in the lips points also to the subordination of the affections to the judgment. The head seems to rise in the rear of the crown or vertex, at Firmness and Self-esteem. Independence, love of power, authority and stability must be among his leading traits. And yet he works for promi-

nence and distinction on account of the scope they give his intellect, rather than to feed his vanity or love of controlling others. He is probably conservative in religion and not much interested in philosophical innovations.

The intellect is remarkably developed in the first stratum or range, as indicated by the fullness of the lower forehead. The long line from the ear, or from the cheek bone, to the space between the eyebrows, shows great capacity for every sort of detail, facts, physical conditions, statistics, history, science, and all that pertains to the practical world. As a lawyer, he would excel in his knowledge of all the persons, names, dates, places, conversations, transfers of property, deeds, mortgages, and all other specific elements or events which might relate to a legal suit. As a statesman, he should be able to compile statistics with great success, and present them with clearness and force.

The upper forehead, however, is defective in philosophy, or the power to reason in the abstract. He will be a brilliant man within the realm of action, but not as a projector or originator of new principles.

SENATOR THOMAS C. PLATT is a remarkable type of intellectual energy. The width between the ears shows tremendous fire, vim, grit, and vehemence. He has not so much malleability or warmth of



THOMAS C. PLATT.

That would seem to them the easiest thing to do.

There is a finely balanced intellect, with a fullness of the eye which suggests great verbal fluency. He should be specific,

clear, graphic, vivid, realistic, and eloquent in his oratory and capable of viewing a question upon all its sides.

THOMAS F. GILROY, the Mayor of New York, is superbly organized as regards both body and brain. There is that harmony, balance, and relative proportion of the different parts of the brain which render the character eminently adapted to success. The back head is well developed at love of home and children, and



THOMAS F. GILROY.

Combateness is evidently pronounced both in the form of head and the elevated bridge of the nose. There is the expression of the eagle in this countenance, and it suggests an aspiring, proud, ambitious nature, which will be certain to soar above all ordinary conditions as regards place and power. This man will be capable of sympathy for his family and a few favorites outside, but he is hardly a philanthropist. He has the fullness in the central top head denoting veneration for established institutions and usages, but he has not the elements which would lead him to care much for the laws or philosophy behind them. This is a head which seeks to work by very direct, practical, and, in a certain sense, conventional methods. He would hardly attempt to rise in the world by studying out a great discovery, invention, or original scheme. He would not break the soil in a remote and uncultivated field, however fertile the ground might be. He would prefer to work in fields already well tilled, and the richness of which had been fully demonstrated by others.

His forehead is finely developed across the eyebrows in all those elements which make the observer, the experimenter, and the executant rather than the theorist or philosopher. The upper forehead recedes at

Causality. He does not venture into deep water, but he is a fast sailor. He does not explore unknown seas, but he makes rapid voyages over the regular lines. He is a man of affairs, action, readiness of speech, memory, detail, criticism, with aptitude for acquiring familiarity with the machinery of municipal government. This prominent lower forehead confers the talent to see, to know, and to remember all people, places, houses, streets, bridges, railways, and all else which goes to make up the objective life of a great city. He is not the man to sit in a library and pore over musty books. He cares nothing for the past. He is essentially a man of to-day. The power of analysis is a conspicuous quality. He loves authority, independence and distinction. Suspicion, jealousy, impatience, and a species of irritability are also indicated. He would have made a fine lawyer.

SENATOR G. F. HOAR combines masculine breadth and volume of mind with feminine



G. F. HOAR.

acuteness, sensibility, eloquence, affection, and emotionality extending into the field of literature and art. The indications are present of a genial, warm and magnetic love for family and friends; ambition, desire for place and position, but without a desire to rise at the expense of others, or by any methods involving dishonor or unfairness. He may not always be magnanimous, but he would rarely stoop to anything small or mean. He travels toward his goal on a river of sentiment rather than on a cold, steel-railed track of logic, but the waters of his sympathies keep within their banks. They do not wander off in side streams of caprice, sophistry, ill temper, doubt, distrust, suspicion, or discouragement. He is a man of

feeling, but it is healthy, and he is guided both by normality of instinct and a well ordered mind. The intellect is finely balanced. There is brilliancy with mental breadth, penetration and analysis, capacity for history and philosophy, design and execution, wisdom and words.

CHARLES A. SCHIEREN, the Mayor of Brooklyn, is a remarkable illustration of will-power. The height of the head on a

line with the ears reveals enormous firmness. The projecting chin, set lips, drawn nostrils, and compressed eyelids also bear the unmistakable stamp of determination, inflexibility and tenacity of purpose.



CHARLES A. SCHIEREN.

His affections are exclusive, and, if he were a parent, would center chiefly in his children. He is not easily captivated by the opposite sex. Secretiveness and Cautiousness are well marked. The forehead is compact, solid and strong. The fibers of the brain are extremely taut, like the strings of a violin tuned above "concert pitch," and the developments of the frontal lobes are such as to insure logic, hard, common sense, and practical judgment of a high order. The faculties which confer memory of places, colors, faces and dimensions are especially strong. He will not hesitate for a word which he has ever learned, but he does not use unnecessary, complex, or ornamental phraseology. His style as a speaker or writer should be clear, strong, steady, forcible and terse. He will waste but little time in speculations over theology, philosophy or art, though he may be fond of music. He could doubtless have become distinguished in surgery.

THE HON. RICHARD P. BLAND appears in this portrait to possess elements of wiry

strength, enthusiasm and ardor, with great nervous susceptibility. The fine straight hair



RICHARD P. BLAND. the keen eye, the sharp nostril, the drooping septum and a r c h e d bridge of the nose, all bespeak a clear analytical, cautious, logical, critical power of mind which would render him a conspicuous figure in any sphere requiring intellectual work of a high order. There is in the drawn appearance of the left eyelid the sign of shrewdness and a kind of sagacity which applies especially to the discernment of character. He should be a superior reader of men. His intellectual processes are intuitional in the extreme. That is, the inspection, classification and comparison of his data, are

made so rapidly that the action of the mind seems to consist of but a single step. He is probably conservative in religion and devoted to his family, though more to his children than wife or friends. There is more pure intelligence than force, although he may be subject to a certain irritability and impatience at times which pass for aggressiveness.

E. C. B.

IN MEMORIAM.—On the 17th of November last our excellent friend, Phineas Lyman Buell, entered into rest, aged 84 years. He was born Feb. 20, 1809, at East Granville, Mass. He became a teacher and in 1838 a public lecturer on Phrenology. In 1851 he became part owner of the *News Letter* in Westfield, Mass., and in 1861 sole owner and editor. In 1871 he sold the paper which became *The Times and News Letter*. He was chosen Librarian of the Westfield, Mass., Athenæum, and for a few years past he has enjoyed the serenity of restful old age. His character was above reproach and his talents were always employed for the benefit of mankind.

Our Mentor Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed directly to the Editor will receive his early attention.

THE ETRUSCANS.—S. O.—These people have been an interesting study for the an-

thropologists, and opinions differ as to their origin and relationship to modern races. One of our most distinguished observers, Dr. D. G. Brinton, has noted certain resemblances between them and the Libyans of North Africa and his view is supported by Professor Sergi, of Rome. Dr. Kleinschmidt has undertaken to show that two inscriptions in Etruscan character in the Isle of Lemnos can be interpreted by the Lithuanian language, a very ancient form of Aryan speech, which is peculiar to those people of Southwestern Europe. The Basques are thought to be a modern type of the Etruscan, but careful analysis does not bring out a close likeness. It is fair to say that those people intermingled with other races by way of colonization or through the relations of commerce, and in time a mixed stock appeared that has its representatives in Europe, Asia and Africa

and these representatives have retained some of the physical qualities and language elements of their ancestors.

TALENT AND GENIUS.—B. T.—Webster gives this definition: "*Talent* supposes general strength of intellect, with a peculiar aptitude for being moulded and directed to specific employments and valuable ends and purposes. *Genius* is connected more or less with the exercise of the imagination, and reaches its ends by a kind of intuitive power. Talent depends more on high mental training and a perfect command of all the faculties of memory, judgment, sagacity, etc. Hence we speak of a genius for poetry, painting, etc., and a talent for business or diplomacy. Lord Chatham was distinguished for his *genius*; William Pitt (his son), for his pre-eminent talents, unrivalled in debate."

Dictionaries and mental philosophies based on old metaphysics are often very clumsy. Webster, after treating genius and talent as synonymous in his separate definitions, then proceeds to make the pointed contrasts above quoted which seem to wipe out the synonymous relation between the words. The clumsy usage in speaking of talent so as to embrace genius and the reverse, is the result of a mental philosophy which fails to recognize properly the natural faculties of the mind. To a phrenologist talent instantly suggests the perceptive and reflective organs of intellect; genius suggests the organs of imagination and invention, viz.: Ideality, Constructiveness and Spirituality, and thus the problem is solved.

As the intellectual faculties often work with those of imagination and invention, even as the stomach, the heart and the lungs combine to supply healthy nutrition to the entire body, and its functions, embracing genius and talent, and yet the stomach, the lungs and the heart are separate factors of life and each may be excellent or in a measure deficient in the same person, so each individual may illustrate talent with or without genius, or genius with indifferent talent.

Imagination has the poetic or inventive sentiment; talent is required to give form to the poem, the statue, the picture, or the machine.

Byron and Poe had genius to conceive, and talent to elaborate. Longfellow and Whittier had talent, with enough of genius to serve as kindling wood to talent. The author of Shakespeare's plays had genius of the highest order, with talent enough to float it over every sea.

Talent is chiefly intellect. Genius embraces talent or intellect, set on fire by imagination and spiritual emotion. N. S.

GOITRE.—E. W.—The treatment of a case of goitre, or enlargement of the thyroid gland, must depend upon the condition and symptoms. It may be simply medical, or by external applications, or injections, or by surgery, the last being of course radical. A thorough examination would be necessary to determine what should be done. Of course the opinion of a physician who has experience in tumors should be preferred.

SINGING OUT OF TUNE.—*Question.*—During some recent observations, I have taken particular notice of several persons in whom the organ of Tune is quite well developed, ranging from full to large; they are fair musicians, and on account of their possessing large Tune, are what I consider "natural musicians." They can easily "pick up" and readily retain melodies by hearing them a few times; but when singing in concert with others, they quite frequently sing a half tone higher or lower than the pitch or key in which the others are singing. For instance, if the music were written in the key of A, and a choir were singing in that key, these persons would probably be singing the same tune in the key of B flat. They are, I think, beyond all doubt, unconscious of this defect, although it is quite perceptible to others. I have not been able to examine many of these individuals thoroughly, but with such examinations as I have been able to make, I am unable to come to any definite conclusion as to the cause of this peculiarity, that is on a phrenological basis. Can you give me any light upon the subject? Do you think Comparison has anything to do with it?

A. J. GETMAN.

Answer.—We do not think Comparison has any special relation to the question. In

the cases to which you refer, the defect is doubtless in the faculty of Tune. People may be fond of music as a result of a temperament which renders them susceptible to the emotions awakened by sounds in general, if agreeable in quality. But memory of tones in special combinations, or musical compositions and perception of pitch, are quite another matter, and dependent upon the development and culture of the faculty of Tune. The latter may appear to be large as a result of the expansion of the temporal region due to other organs; and the observer should carefully note all the indications of musical talent. Difficulties are often encountered in estimating this element.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

THE TEACHER'S NEED OF PHRENOLOGY.

The very word Phrenology suggests its value to the teacher—*phren*, mind, and *logos*, discourse—a discourse about the mind. It is admitted on all sides that the teacher needs every obtainable truth relating to the mind, the thing with which he is most directly concerned. This science for the past four years has been of incalculable benefit to me in every department of my school work. It teaches as no other science can that the elements of the man or woman are in the child, just as the elements of the tree are in the small plant. No other science can compare with it in showing that education is the growth, development or leading out and shaping of all the *inherent* powers of man in both mind and body.

The more exact a man's knowledge is of the material with which he has to work, the more successful his labor will be. The carpenter, the blacksmith, the shoemaker, the merchant, or the farmer, without a knowledge of the materials and forces he employs, will be certain, more or less seri-

ously, to fail. All acknowledge that the mind—the immaterial, undying entity of man—is more important than the material. As the creator is superior to the thing created, so is the mind vastly superior and more important than matter. How much more important then must it be for the teacher to understand the mind than for the physician to understand the body. If Phrenology gives the teacher better aid in this mind culture than any other science, certainly the teacher needs it.

Before the teacher learns Phrenology he censures some pupils because they are less capable than others, but when he understands that one kind of organization is quick and penetrating, and another slow and plodding, he no longer commits this error. When he learns and can tell from the head that one pupil will gather facts rapidly and go from these to principles, and that another perceives principles readily and goes from these to facts, he no longer tries to teach them in the same way—he ceases to try to cast them all in the same mold. He also learns that there is a better way to manage the broad flat-headed boy than to antagonize or beat him; in fact he learns that there is rarely if ever any excuse for corporal punishment. He learns that the mind is composed of forty or more faculties, and that each of these must be developed as a faculty in order that the mind may be strong as a whole. He learns that the exercise of any specific power of the mind determines the blood to a corresponding specific part of the brain. To manage the angry pupil he has only to start a different train of thought in the mind of the pupil; this carries the blood to a different part of the brain and he forgets his anger.

Pupils with great width of head at and above the ears manifest strong combativeness, force, energy, etc. Those with prominent lower foreheads manifest observing powers. Those with prominent development in the centre of the forehead excel in history, and those prominent in the upper part of the forehead manifest reasoning power superior to those less developed in these regions of brain.

I have made a great many observations in and out of school, and so far as I have

been able to verify or test the teachings of Phrenology, I have found them true. While traveling two years ago in the interest of my educational work, I lectured on Phrenology to a very interesting school. After the lecture the teacher and his pupils asked me a number of questions. While in conversation with an old lady who was a teacher in the school I described the boy that she would likely have trouble with,

and she exclaimed that she once had in charge one of that kind, and everybody said that he was the worst boy in the county. One of the young ladies manifested large Language, and I said, "There is a talker." Everybody laughed and her teacher said, "Yes, her tongue is the last thing I hear at night." The teacher cannot afford to be without Phrenology and do his work well.

W. A. SIMMONS.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

THE NEW YORK ASSOCIATION OF GRADUATES.—The last meeting, March 5, 1894, was attended as usual by an audience which tested the capacity of the hall to its utmost. The topic was "The Mental Temperament." Dr. C. S. Weeks discussed its indications and constitution, and Mrs. Cora M. Ballard spoke upon its relation to character. Both speakers acquitted themselves finely and received a good deal of applause. In addition to the discussion of the subject of the evening, there were a number of very interesting responses to questions propounded by Mr. Charles Weake, M. B. P. A., London, England, who appeared incognito, and in that way elicited many expressions, notably from Mr. Turner and Dr. Beall, which otherwise would not have been brought out.

THE COOPER, TEXAS, PHRENOLOGICAL SOCIETY.—Prof. Hayles, of the Eastern Texas Normal College, says: "I write again as to our progress. The little number of seven or eight has grown to more than three times eight, and the prospects are very bright. There is more interest and warm discussion in this society than in any to which I have ever before belonged. We have topics pertaining to phrenological investigation, essays upon 'Men,' 'Women,' 'Life,' etc., articles on Gall, Spurzheim, Combe, etc., and many other questions that will serve to attract attention. Many are becoming interested in our work, and are beginning to ask about it. The JOURNAL is eagerly read by the members, and we loan it to others with books from our society. We are going to subscribe for the JOURNAL next month, and put it in the library, where it will be read by or where 500 pupils of the E. T. N. College can have access to it."

HUMAN NATURE CLUB.—At the last open meeting of the Human Nature Club, Mr. A.

F. Dennett, of New Hampshire, spoke on Practical Phrenology. The lecturer showed how a knowledge of Phrenology was of incalculable value in the training of children, when young, in the proper choice of a pursuit when older, in enabling business men to perform partnerships that would prove of interest and profit to all concerned, and finally, how with the aid of Phrenology in the selection of husbands and wives, divorces would be relegated to the past and one would never again hear the question, "Is marriage a failure?"

After the lecture Mr. Dennett examined a number of people, describing the wives and husbands with whom they could live happily.

On April 27th, Mr. C. E. Cady, of the New York Association of Graduates, will speak on "Phrenology and Childhood." Parents and teachers will find this lecture especially profitable and all interested in the subject are invited to attend.

Mr. Bausch has been in Rhode Island on a lecture tour, so that the class for practical study has not met for two weeks. The lessons have been resumed, however, and new members have joined the class.

The Club meets on the fourth Friday of each month at W. C. T. U. Hall, 454 Bedford avenue, Brooklyn. They are arousing a great interest in the subject of Phrenology in Brooklyn. Last month eight new members were admitted to the Club. For further information, or for tickets of admission to the lecture, apply to Albert Bausch, 100 S. First street, or Miss J. R. Floyd, Secretary, 214 Rodney street, Brooklyn, N. Y.

F. M. COOPER, M. D., class of '93, has been presenting the subject of Phrenology to a scientific club of Emporia, Kas., where he is located. A newspaper clipping from an Emporia journal gives a full account of

his address and the discussion which followed, and also announces that the subject is to be taken up in future meetings of the society.

WARDEN'S OFFICE,
STATE PENITENTIARY,
WALLA WALLA, WASH. }

To those whom it may concern:

Upon an invitation from me, Prof. R. H. Dennis, of Dayton, Wash., visited this institution and spent considerable time in delineating the character of those who came under his notice. Notwithstanding the vast dissimilarity in temperament, ranging from one extreme of the human scale to the other, his studies were in every instance correct, and in many cases remarkable for the accuracy with which he described the subject as he was known.

The task is not an easy one, to take indiscriminately from a large number of men any one of them, and with no knowledge of the individual except that gained through Phrenology, to designate the particular failing which led to his downfall. This the Professor has done.

I take pleasure in recommending him as one of great ability in the life work which he has undertaken, and believe that I am justified in saying that his judgment of human nature is nothing short of extraordinary.

JNO. MCCLUS, Warden.

W. S. BELL, class of '93, is editing *Up to Date*, a bright weekly magazine devoted to discussion of questions of the day, issued by the Wilson Publishing Co., 312 State street, Chicago.

MRS. C. M. HENRY, a sister of Prof. Geo. Morris, Duluth, Minn., gave a lecture on "Love, Courtship, Marriage and Jealousy," in connection with Prof. Alexander's lectures at Appleton. It is spoken of very highly by the *Appleton (Wis.) Post*, which says: "Mrs. Henry is a very easy speaker, of charming manners and a graceful attitude, presenting her subject in a clear voice with easy articulation."

GEO. MORRIS, class of '78, is attracting attention to the subject of his lectures in Minnesota. The Austin papers speak of his large audiences and his success in interesting the people. In the Austin Opera House, seating a thousand people, there was standing room only at his lecture on "Love, Courtship and Marriage." From Austin, where he instructed a class, he went to Le Roy, Minn.

THE REV. HENRY LUTZ, of Hiram, Ohio, writes that he has organized a class in Phrenology containing more than thirty members, and that a great deal of interest is being manifested in the subject.

A. B. KEITH, class of '77, after having spent a number of years in the newspaper business, has now become private secretary to the Governor of Montana, and his leisure hours are spent as managing editor of the *Montana Mining Era*. He has not lost his interest in Phrenology. Mr. Keith was born in Maine in 1855, and we believe there is a brilliant career before him.

H. T. GRIFFITH, who is prosecuting phrenological work in the vicinity of Portland, Ore., is successful in awakening an interest, and sends orders for books and the JOURNAL.

WM. WELSH, Class of '93, is taking up the subject, and interesting the people in his part of Canada. He reports "fair audiences and good attention."

E. W. PORTER, Class of '92, is in the field in his own State, Maine, and reports: "I am having excellent success, an interesting experience, and enjoy the practice of Phrenology."

GEO. COZENS, Class of '91, is still lecturing and teaching classes in British Columbia. He has had a very successful course at Vancouver. The *Daily World* published a letter from Mr. O. P. Sweet, very strongly commending Mr. Cozens and the subject. A society has been organized, with Mr. T. G. Stark as president; Mr. Gillespie, vice-president; Mr. Vermilyea, secretary; Capt. Newcombe, treasurer. We have no doubt that we shall receive good reports of work done by this society.

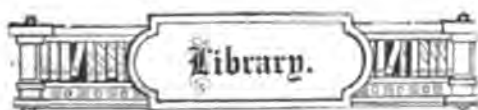
J. M. KIMMONS, Class of '84, writes that he is still interested in the subject, and is preparing a new course of lectures. He sends an order for a supply of Heads and Faces and the Human Nature Library, and expects soon to be in the field again.

MRS. IDA V. DAVIS, Class of '88, is spending the season in Nebraska, where she is making warm friends for Phrenology, and doing good work. Mrs. Davis is thoroughly in earnest, and her intense love for the work has contributed very much to her success. Large audiences attend her lectures, and she has as much as she can do in professional work.

IRA L. GUILFORD, Class of '76, will for the next two or three months be in the counties of Northumberland, Westmoreland, Lancaster, and Middlesex, Virginia. His permanent address is Ridgely, Md. Any of our readers wishing to correspond with Mr. Guilford can do so at the above address. He is also ready to respond to invitations to lecture in that part of the country.

MR. AND MRS. J. B. MCILVAINE, class of '93, have been somewhat quietly at work in Pennsylvania, meeting with encouragement, and adding to their cabinet of crania a number of animal skulls, which is a good plan to follow, as these skulls are always of interest.

LECTURES WANTED.—Mr. Chas. Caldwell, of Dallas City, Ill., writes as follows: "If you would kindly give the address of some graduate of the American Institute of Phrenology, whom we could get to deliver a series of lectures at this place, I would thank you heartily. We publish this with the suggestion that those in the field, who can take in this point, would do well to communicate with Mr. Caldwell.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher alike fairly and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

NONE SUCH? THERE WILL YET BE THOUSANDS. By EMORY J. HAYNES. 12mo, pp. 351. Boston: The North Publishing Company.

A novel coming from the hand of a minister would be expected to involve certain moral issues of importance to society, and from the point of view of one whose aim is the improvement of his fellows. We confess that we incline more to favor such novels than the indefinite or purposeless fiction of the "realistic" school. But we scarcely should have said "purposeless" since there is a commercial object that the author has very distinctly in view. The reverend author deals with questions that concern the plutocrat, or money king, and his chief character is a representative of that class, which is well delineated and very interesting. A love story, of quite a practical sort, yet pretty, is woven into the plot and brightens up the movement. The wealthy man is advised in this book to distribute his gifts among the worthy and industrious, and not

to endow institutions already rich in ways that accomplish little real good. The people at large should be helped, not the few; the worthy and mature, rather than the young and frivolous, for the general elevation of moral sentiment in the community. Yet the book encourages youthful hope and honors education that is associated with useful, generous purpose. We consider its teaching to be in the main sound and practical, and from it rich and poor may learn an excellent lesson for daily living.

The sixteenth annual report of the Commissioners of Prisons on the Reformatory Prison for Women for the year ending Sept. 30, 1893, has been received.

The good work accomplished in this institution is well known. From the report of the superintendent, Mrs. Ellen C. Johnson, we learn that "the whole spirit and outcome of the work for the year shows more convincingly than ever before the value of the system upon which the prison is conducted; a system which has been worked out step by step during the past ten years. Its prominent features are the grading of prisoners according to conduct, with the stimulus of privilege and promotion; and the plan by which, under the indenture law, the women of the higher grades are allowed to go out to domestic service before the expiration of sentence. . . . In no way is the wisdom of this law more clearly shown than by the fact that the demand for prison help is always beyond the supply."

The industries of the prison are the laundry, the dairy, the shirt and sewing rooms, the care of poultry and the planting and gathering of vegetables, and the income from these sources is very satisfactory.

In a word, the practical working of the system proves its fitness. It has long ago passed the stage of experiment, and has developed the characteristics of a public charity of the broadest kind.

PAULA FERRIS. By MARY FARLEY SANBORN, is one of the better class of society novels—and has in its course certain moral effects that may be impressive to those who take a little time to read between the lines,

No. 28 of the Good Company Series. Price 50 cents. Lee & Shepard, publishers, Boston.

JOSEPH ZALMONAH. A Novel. By EDWARD KING, author of "The Gentle Savage," etc. Published by Lee & Shepard, Boston.

This book is a late issue of the "Good Company" series and is in the line of what has been taken up by some writers of late depiction of the Jewish character in Western civilization. The author has a very suggestive subject for working up, viz., the "sweaters" of New York. The leading characters are Jews of Russian and Polish derivation, who are fairly well delineated, and supply among them two or three admirable types of masculine and feminine nobility. Certain elements of passion are illustrated that impart a warm coloring to the plot.

HUMAN NATURE. Considered in the light of Physical Science, including Phrenology, with a new discovery. By CALEB S. WEEKS. 12mo, pp. 240. New York: Fowler & Wells Co., 27 East 21st St. Price, in paper, 50 cents.

The author of this book is a philosopher and a poet who very justly endeavors to build upon a foundation of fact. He theorizes and speculates, but he is careful to walk in the path of knowledge. While his eyes are turned upward in the search for higher light, his feet are planted firmly upon the rock of science. In these days of partisanship in matters of physics and metaphysics, it is refreshing to find a judicial writer who is capable of seeing at least two sides: one who appreciates heaven without forgetting the earth; one who comprehends the broad principles of psychology, and yet understands the significance of Phrenology.

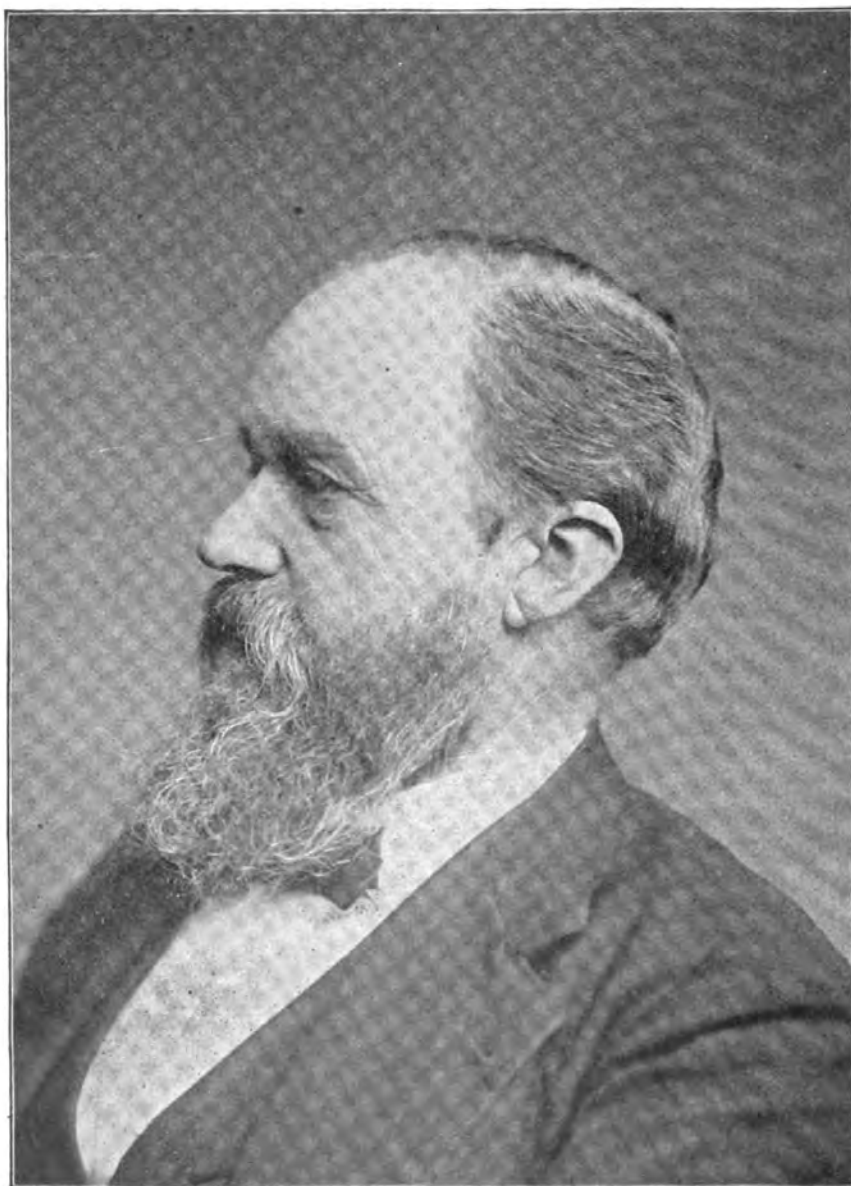
Dr. Weeks treats the subject of mind and its relations to the brain in a somewhat original manner. He states old facts in a new way, and aims to point out difficulties as well as questions easy of solution. In his deductions, inferences, and analyses, there are perhaps some statements that need revision, or which at least should be carefully weighed. But if

any of his views lack precision or practicality, they are all very suggestive, and particularly on this account we can heartily recommend the book. In a subject so important as this, we need all the aid we can obtain, and especially is this true as to the philosophical bearings and applications of Phrenology to the affairs of life.

THE REMEDIAL USE OF HYPNOTISM. An Essay read by Dr. F. H. Gerrish, Professor of Anatomy in Bowdoin College, etc., before the Maine Medical Association in June, 1892, intimates that some interest is shown by physicians of reputation in a field of human nature that deserves special consideration. The treatment of diseases, especially those of a nervous character, by magnetic or hypnotic suggestion, has here and there an advocate, but very few of the medical profession have anything like an approximate estimation of the therapeutical value of this agency. In relieving pain, disturbances of the brain, gastric disorder, nervous excitability, insomnia, etc., no other method known to medicine is so potent and so generally benign in its effect. Dr. Gerrish speaks in the enthusiastic vein of a man who knows what he is writing, and we, from a similar point of view, practical experience, cordially approve his statements that to help patients physically by producing an impression on their minds is both "legitimate and desirable." The pamphlet merits a wide circulation.

THIRD HAND HIGH, a novel, by W. N. MURDOCK, is a story of a somewhat mixed plot. It is written in an off-hand style and well adapted to please most readers because of its naturalness and the humor thrown into the conduct of its principal character, Sam. Price 50 cents. Boston: Lee & Shepard.

TWENTY-FOURTH ANNUAL REPORT of the Manhattan Eye and Ear Hospital, with Throat and Nervous Departments, New York. From the details of work given, this well-known hospital is one of the most efficient charities in New York City and deserving of the consideration of the general public.



ROBERT BONNER.

Rockwood, Photo.

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AND
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[WHOLE NO. 665.]

ROBERT BONNER.

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

By EDGAR C. BEALL, M.D.

ONE of the common errors in judging human nature is to suppose that the majority of wealthy business men are impelled to accumulate from the mere sense of possession, or love of money for its own sake. The truth is that very many of those who amass large fortunes, especially in the United States, are successful because of a liberal policy which a parsimonious, miserly individual would fear to practice. Of this enterprising, generous class an excellent illustration is afforded by the personality and history of Robert Bonner.

It only requires a slight familiarity with the art of reading character to discern at a glance that this is a man of superior mental and physical endowments. He is five feet, seven inches in height, and weighs 180 pounds. His hair is naturally dark, which indicates a current of positiveness and strength, while the sandy beard suggests an impulsive, enthusiastic, facile and brilliant vein. These elements in combination insure unusual versatility. The hazel eyes also bespeak a shrewdness, intelligence, and sense of humor which are

characteristic of the Scotch-Irish, to which nationality Mr. Bonner belongs.

The form of the nose is more feminine than masculine, the bridge being somewhat concave, and the point rather sharp. The distinguishing quality to be associated with this nose is penetrating intelligence. It may be possessed by men of small enterprise, provided they lack the sentiment of ambition, or the desire for power and position, in which case there will be a tendency to very conservative and cautious methods, and to be satisfied with small results. But with a large brain and an eager desire to succeed, the methods, though still cautious, will involve speculation and heavy investments. The motto of the latter class is *festina lente*, or as the Germans put it, *Eile mit Weile*; that is, they "hasten slowly," by which is meant that they are impatient in the pursuit of what they aim to do, but in their boldest manœuvres they never relax their vigilance. They are careful, sharp-sighted and diplomatic, rather than forcefully aggressive in making deals, but still the deals must be large. Thus it is with our present subject.

Mr. Bonner's hand is of the type known as the square, or useful, and he has a rather large thumb, which is in keeping with the general strength of his individuality and power of will. Few men are more generously supplied with the organs which supply nutrition. The trunk is long and well



ROBERT BONNER. ROCKWOOD, PHOTO.

developed in both the regions of respiration and digestion. The temperament should be called a well balanced Mental-Vital. At present the health is excellent.

The size of the head is extraordinary. It measures 24 inches in circumference, 15 inches from ear to ear over the top, and $13\frac{1}{4}$ from ear to ear around the forehead.

Another very striking and interesting peculiarity is the extension of the forehead beyond the line of the cheek bone. This distance is an inch and a half, which is fully a third longer than it is usually found, and is an evidence of the special power and activity of the frontal lobes. The

long diameter of the head, as shown by the calipers, is eight inches and a quarter, while the greatest measurement from side to side is five and three-quarters.

The whole occiput, as indicated in the frontispiece by the expansion backward from the ear, is very large. There is strong love of the opposite sex, union for life, friendship, and domestic attachment, while the love of children is perhaps the largest of the group. It is in this last named development especially that we find an explanation of the fondness for horses which has done almost as much to make Mr. Bonner famous as his proprietorship and management of the *New York Ledger*. An almost clannish friendship and a patriotic love for ancestral traditions are also qualities for which Mr. Bonner is well known, and which such an organization should be expected to produce.

Of the mental powers that contribute to executive energy the largest is Firmness. There is a fair degree of Combative-ness, which will be manifested in the defence of family, friends, country, and personal reputation rather than money, and his weapons will be lingual and literary rather than manual and military. The head is rather narrow between the ears at Destructiveness, and much of the intensity which he displays has its source in the great volume of blood and vitality generated by his nutritive system, or vital temperament. The head is also of only ordinary width at Secretiveness. He is not disposed to rely upon stratagem or concealment. His intellect will devise means to accomplish his wishes under circumstances where guardedness is needed, without the stimulus of the propensity to hide. And as his Cautiousness is rather large he does not neglect to consider all elements of actual danger.

The diameter of the head at Acquisitiveness, as shown by the calipers, is only five and three-quarter inches, which, in a brain of such volume, is very moderate. Mr. Bonner has incidentally become a millionaire in his efforts to make his business a success. His career has been marked by numerous illustrations of his indifference to money when it stood in the way of his dominant desire to excel. He once paid Henry Ward Beecher thirty thousand dollars for a story, which was the highest price ever given by any publisher in the United States for a novel. He also gave Edward Everett ten thousand dollars for writing one article a week for the *Ledger* during one year. He paid Lord Tennyson five thousand dollars for one poem, and the same amount for the only story Dickens ever wrote for an American publication. The fabulous sums he has expended for horses also illustrate the idea in question. It was not the thought of money so much as the desire to stand at the head in whatever he undertook. It was not that he considered Beecher's novel of such great intrinsic value, but it was the ambition to capture Mr. Beecher himself. He was proud of his ability to induce the great Plymouth pastor to engage in a literary labor which probably no one else could have persuaded or bribed him to undertake. And it is needless to add that the difference of a few seconds in the time made by "Dexter" or "Maud S." over other horses which could be bought for one-twentieth of the money the great racers cost Mr. Bonner, appealed to his pride rather than to his purse.

The word pride, as used in the preceding paragraph, is applicable to Mr. Bonner only in the popular sense. According to our phrenological analysis, the gentleman has but a moderate degree of the element which produces genuine pride, namely, Self-esteem. He is not haughty, arrogant,

distant, or even dignified. On the contrary, in his manners he is exceedingly affable, and easy to approach. Approbativeness, however, as might be expected, is exceedingly large. It does not show in the profile so much as in a rear view of the head, owing to the deficiency of Self-esteem and Continuity, which, with the moderate Acquisitiveness and Secretiveness, allows the brain to droop in the region of the crown, and expand from side to side.

Conscientiousness is large, and, together with Firmness, produces a high degree of moral stability. As to religion, Mr. Bonner is a Presbyterian by inheritance and association, though he is by no means dogmatic in his interpretation of the old creed. He has the Scotch reverence, and perseverance or persistence in a position once taken, but his temperament gives him more sympathy with the ethical than the theological form of faith. He has the idea of religion rather than the sentiment, and he is more interested in the administration of justice than the giving of alms. His charities will be the expression of his conscience rather than his sympathy.

He has not much inclination to believe without strong evidence, and, in most matters, he is inclined to be governed by the principles of every day logic. He is not what the occultists would call a "psychic," and not responsive or hospitable to messengers who do not knock at the regular gates of the senses.

The head is narrow at the temples, denoting little skill or taste for mechanism, and still less for music. The calipers show a diameter at the seat of the musical faculty of only four and a half inches. This is an inch and a quarter less than the same region in the head of Paderewsky, and when it is remembered that the circumference of the great pianist's head is an inch and a half less than that of Mr. Bonner, the deficiency in the latter as

regards the tone art will be seen to be very remarkable. If it were a question of a superficial knob or peak upon the cranium, as so many people erroneously imagine, a little variation in the thickness of the temporal muscle or the plates of the skull would certainly render an estimate of the development difficult, if not impossible, as has been so frequently urged by the Quixotic opponents of Phrenology. But when a relative difference amounting to an inch and a quarter is found at a special point in two heads which differ in absolute measurement an inch and a half, the advantage in the special area being in the brain of lesser volume, the scientific basis of the phrenological method becomes apparent at once. In corroboration of his deficiency as regards music, Mr. Bonner declares that although he has been a regular attendant at church for over fifty years, he has never been able to distinguish "Old Hundred" from any other hymn.

The intellectual developments, on the whole, are extraordinary. The Perceptives, Individuality, Size, Weight, Color, Order and Calculation are all very marked, while Form, which separates the eyeballs, and Locality and Eventuality, which are located in the center of the lower forehead, are phenomenally large. The last named pair of faculties are conspicuously active in Mr. Bonner's conversation whenever he has an appreciative listener. He is master of a fund of reminiscence, history and anecdote, the equal of which it would be difficult to find. Language is also rather large, as shown by the extension of the eye forward from the line of the cheek. He rarely hesitates for a word. The upper forehead is also finely expanded in those areas which relate to philosophy, criticism, sense of motives, mirthfulness and politeness.

That Mr. Bonner should have founded a family paper, the principal feature of which was narrative, is not

surprising to a phrenologist, in view of the very great development of the back head, which is the seat of the domestic feelings, and the fullness of the central forehead, which relates to everything that can be expressed by the verb, and is therefore characteristic of the historian, the journalist, or the typical writer of stories.

Robert Bonner was born at Londonderry, Ireland, and is now seventy years old. He came to this country in 1839, and after working for a while as a printer, settled in New York in 1844. He bought a commercial paper called the *Merchant's Ledger*, which he continued to publish as such for two or three years, when he changed it to the well-known periodical with which his name has been associated until a few years ago, when he resigned the management to his sons.

At present, Mr. Bonner spends most of his time on his stock farm, which is three miles east of Tarrytown. He is said to be the best informed man in the country with regard to scientific methods of developing speed in race horses. He has given special study to the anatomy of the horse's foot, and has been known to save many a valuable animal by being able to adjust a shoe in a peculiar manner.

Readers of the JOURNAL will no doubt be interested to compare two analyses of the same character written forty-eight years apart, by two men, neither of whom saw the work of the other until his own was finished. We therefore take pleasure in presenting the following description of Mr. Bonner, which was made in the early days of Phrenology as a practical profession by Prof. L. N. Fowler, to whom Mr. Bonner came as a stranger, when he was about twenty-one years of age.

This delineation was taken down by a phonographer in the usual manner, and has been carefully preserved by its owner. It is herewith published for the first time;

PHRENOLOGICAL DESCRIPTION OF ROBERT BONNER AS GIVEN BY L. N. FOWLER.

CLINTON HALL, Nov. 19, 1845. }
131 Nassau Street, New York. }

Your head is very large, and if it were sustained by a body proportionately large, and as strong as large, you would be capable of becoming a noted man of uncommon power and intellectual capacity; but you have a drawback, a barrier to success or notoriety; and that is, a lack of strength of muscle and density of the whole physiological system. You need to work hard with your hands in the free, strong open air in order to inflate and brace up the lungs and arterialize the blood, and give it a circulation propelled throughout the body by the extension and contraction of the muscular apparatus.

Your head is now too large for the power which sustains the action of the brain; hence you need to remember that wherever disproportion exists, it is the result of an enlargement of one part at the expense of another, and it would be beneficial to you if you could diminish the size of your brain and make it more on a par with the rest of your physical structure. This you can do by the right kind of management, but not otherwise.

You are friendly in your nature, and very fond of your home, the place—as a spot—where you were born and brought up, your country, and you dislike to leave it, notwithstanding you have a rather strong desire to see places and objects. Still you would never be so happy without a home as with one, the thoughts of which would make you happy and give a charm to many an hour that would otherwise be wearisome.

You love variety, and are not disposed to dwell long at a time upon any one thing, but pass rapidly from one subject, or train of thought, to another. You prefer a business which

gives change and does not require continued application upon any one subject or object.

You are rather spirited as an opponent, but it requires a great deal of motive to call you out efficiently, and if I were making my utmost endeavors to benefit you, I would try to call your powers into action by opposing you strenuously. I would place you in some circumstances where you would be obliged to exert yourself energetically in order to extricate yourself from the corner to which the events had driven you.

Your Combativeness is large enough already, but Destructiveness—that gives tone and energy, force, severity, and sternness—is not large enough to put into action all the power which you possess.

Combativeness exhibits itself mentally more than in physical combat, yet if out of health you would feel worried and like fretting, but seldom get angry or feel disposed to revenge your wrong by hurting the aggressor corporally. You feel sometimes as though you wished to punish, and perhaps you threaten to do so, but when it comes to the case in hand, you would rather yield and suffer an injury from another than be yourself the inflictor, for your sympathy is very strong, and would be apt to stay the hand that was raised to give the blow, rather than to cause suffering.

Guard your appetite. Let your food be light and select, for you will find that it affects the action of your mind, and if you eat too much, or food that is gross and too strong, you will find that you cannot think clearly or intently.

You do not hold on to money quite enough, but spend it rather freely for the gratification of your desires, and to relieve the distress of the suffering.

You are not a free or copious talker, but what you think you speak, and act as you feel; sometimes express yourself too freely, and without sufficient forethought, and are thereby in

danger of injuring the feelings of a friend unintentionally, or when you would not on any account have done so. Cultivate cautiousness and prudence. You are liable to act with too little forethought, and the result is that you lose the object of your effort just at the time when hope anticipated that success was to crown your endeavors. You are pleased with the approval of your friends if they choose to bestow their approbation, but you think just about as much of your own pleasure, and will never stoop for applause or turn aside because they censure, and would feel as though they were as apt to be wrong in their judgment of your acts as you would be to do wrong.

You realize about all that you expect—are neither very sanguine nor very anxious for the result, nor apt to be much cast down, neither do you often condemn yourself, but you wish and endeavor to do just about right, and would be sorry if you were to do wrong, yet would not have that keen, lively sense of it that would grow out of a different organization.

You generally take things about as they come, and make the best of them. To be sure, you might be tantalized by difficulties, but would go around them as easily as possible. You appreciate a joke when it is not at your expense; but you have more mirthfulness, or love of fun, than of wit or sarcasm.

You have a good intellect, and some of the educational organs are unusually large, while others are too small, and should be brought out and cultivated.

Your memory of forms, countenances, shapes, the looks of a pattern

and the like, is very good, so also is your judgment of size and distance; and you judge of the weight of an article more from its bulk than from its specific gravity *per se*.

Your principal trouble in remembering what you have seen or heard, is because you do not pay sufficient attention to the subject, and hence fail to impress it upon your mind. You should look more and think less, or rather, take into consideration more of the minutiae of an object when presented for consideration, and not pass off too soon to something else. Cultivate memory of incidents by reviewing the occurrences of each day at its close, each in its detail, remembering both the words and the actions and circumstances.

You are very kind-hearted—in fact you are too good for your own benefit; and when your sympathies are once called into action, you do not know how to say no, even though convinced that if you should consent to the wishes of others you would injure yourself in many ways; hence you need to learn to say no, when intellect dictates, unless you expect to be duped with your eyes wide open.

Cultivate Language, and learn to express your ideas as you would like, for they are good and plentiful, but before you give them utterance, they are gone. You must begin to talk, and improve every opportunity; therefore, talk, whether you have words or not, for with use they will flow with great ease. Give free vent to your ideas, and share them with others; cultivate an exchange and interchange of views, and thus increase sociability and the happiness of both yourself and your friends.



SYSTEMATIC MORAL EDUCATION.

A SCHEME FOR THE SCHOOLROOM.

By H. S. DRAYTON, LL.B., M.D.

HAVING reviewed the inter-related activity of the faculties chiefly concerned in giving to conduct its moral aspects, it remains for us to indicate the course to be pursued by a teacher who would make his moral instruction practicable. The limits of our discussion prevent more than a general plan, which the earnest teacher, who has given more than a superficial glance at the subject, may find of a flexible character and susceptible of the elaboration that experience may require.

The school teacher, we are ready to remember, has no easy task in attempting to train the great majority of his young pupils in ways of uprightness, since before they begin to attend school their moral nature has already been given a strong formative impression, for which of course their parents are responsible. We are also ready to remember that the tutoring in habits of truth, duty, obedience and mutual helpfulness that the teachers may give them may be largely counteracted by the laxity and carelessness of their home life. Nevertheless there remain the duty of the state and society to the growing youth and reasons of the plainest economy for making moral instruction a part of the regular curriculum in the schools of the masses.

Assuming this to be an accomplished fact, every public school in the community would have its course in practical ethics, according to a received text book, just as any intellectual study is now pursued, what might not be the outcome in a few years of enlightened sentiment and a clearer view regarding personal responsibility in general relations of society? Even as muscular power is developed by the exercise of the

muscles and intellectual power results from intellectual action, so moral power is incident to moral action. Evils, abuses, will continue for ages to come, but moral culture will develop power to resist them and correct their pernicious effects. Mr. Dunton, whom we have already quoted, says*:—"If all parents realized the force of this law (of development through action) and had a clear conception of the true end of moral education, how much less would they *govern* the children, and how much more would they strive to induce the children to govern themselves!"

A proper course of moral training would include:

First—Direction and guidance in the common physical habits—the child's behavior indoors and out, at the table, at the desk, at play, receiving attention.

Second—Insistence upon accuracy of statement to the extent of the study or observation of natural things; also obedience to the requests of the teacher, and to the regulations, the judgment of the child being enlisted on the side of order by simple explanations of its expediency adapted to his tender understanding.

Third—The thorough learning of the fundamental rules and principles appertaining to proper moral conduct. To this end a code of morals should be arranged for use in primary schools, as part of the reading lessons; this code including

(a) Definitions in simple language of the higher sentiments—kindness, respect for others, sense of duty, truthfulness, honesty, courage, regard for parents, loyalty to country, constancy, etc.

* Education. Boston: 1891.

(b) Illustration of these sentiments by incidents drawn from the everyday life of both children and adults, the playground and home furnishing the examples. Sharply drawn rules and admonitions are by no means so effective as examples set by the teacher in word and conduct as he or she moves before the young charges, and illustrations more or less extended in well told stories and sketches

The imagination of a child, or the representative power, is active very early, and unless perverted, as it were, in the cradle, the early gleams of sympathy that lighten up that imagination are on the side of the true and noble. Children invest every character of prominence that occurs in their reading with elements of heroism, and when later their admiration is disturbed by learning the truth which disenchant, their feelings sustain a shock that is positively injurious to their general judgment. The stories given them to read should be carefully written and recite the truth clearly while they portray the better sides of human conduct.

Fourth—The text book should furnish suggestions and schemes for reading and discussion in which teacher and pupils are to take part. Here is a most important field for the well-read and judicious teacher. He can create and deepen impressions by inspiring questions, and talk that awakens thought in regard to moral issues. The little contests that arise among the children can be laid before him and serve as trial cases of a most interesting sort.

History, biography, scientific discovery, may be made to subserve a useful end in this ethical course, their study furnishing an affluent source of illustration. While the young students are learning something of the progress of the world and of the men and women who have contributed to it, they who were really noble and great in thought and deed, and whose lives were actuated

by an earnest unselfishness in behalf of their fellow men, who sought not their own profit but the welfare of society and community, their own souls can be stirred to aspire for like action and honor.

Only the best examples should be presented to a child's thought, and the manner in which they manifested practically the principles that substantiate moral sentiment. The very young should be taught positively, not negatively. Trained to speak the truth, to be sincere, kind and obedient, it becomes a law of their nature to do these things as a matter of course. When in later life they learn of the evil in the world, the vices, trickery and crime too common in all stations of life, they can best understand how wickedness is a departure from the right and true, a transgression of the harmony of moral action, and why it is attended with so much wretchedness and disgrace.

Fifth.—The life of the teacher in the school room and out of it should be made as far as possible to conform to the teaching in moral lines. "Teachest thou others, teach also thyself" is a proverb that has no better application than in the relations of the classroom. The spirit of moral culture is most ennobling. To the instructor it imparts grace, dignity and authority that exercise a very marked influence upon his or her pupils. The great and increasing numbers of teachers in our nation render them a most powerful element, politically and socially; but their influence will never reach its zenith until it has become illumined by that earnestness and beauty that radiates from a life whose principles are those of Christian morality.

Are rules and admonitions needed by the teacher, a class book to which he may refer for hints and encouragement and from which may be drawn noble, practical thoughts, to be impressed in the fallow soil of the child mind, can a better system be found than that furnished by the

Book of Proverbs, the Sermon on the Mount and other teachings of the Bible? We agree with Professor Blackie* regarding the great value of these teachings to the growth of the mind and its establishment in righteousness. The example of a great

and noble man constantly set before the eyes of youth is powerful in moulding character, but the Divine voice speaking in terms of vivid force to the heart and soul of a learner creates impressions never to be effaced.

THE VOICE AS AN INDEX TO THE SOUL.

BY JAMES R. COCKE, M. D.

I HAVE always lived in a world of sound and touch. A physician's mistake cost me my sight in early infancy, so that all the memories which I have are of sound. All the loves of my early life were for the voices of those whom I knew. All my childish aversions were caused by harsh, unpleasant tones; and the earliest recollections I have of nature came to me through her myriad voices. When I first, by the sense of touch, acquired a knowledge of the forms of these things, it was exceedingly difficult to associate them with the sounds they made. I began early to analyze my reasons for liking and disliking people, and found it was not what they said or did, but a quality inherent in their voices which affected me.

I early discovered the difference between the voices of the educated and the illiterate. I recall the voice of an old minister, a bass-baritone, mellowed by age, but replete with tenderness, warmth, and the deepest love; there was in it, also, an element of sternness, which put me a little in awe of him.

Again, I remember the voice of a lawyer; this, too, was a baritone, brimful of merriment, fun, and good humor. With pain do I remember that as I grew older, and read his voice better, I heard in it something earthly, sensual, not to say devilish; and yet, speaking to me so plainly, it seemed, many times, to reveal more good than was borne out by my sub-

sequent experiences. This man's voice illustrates a type. I have learned that voices similar to, if not just like that of this lawyer, are possessed by men who embody in a marked degree both the emotional and the sensual. They are always kindly and full of color—if I may be permitted the figure of speech; they are seductive voices. Their possessors have usually dark complexions, with features handsome but somewhat heavy, particularly the lips and nose. This voice is capable of the most subtle modulations; and in certain moods it may become perfectly dull, monotonous, and passionless. This question of mood affects voices very materially; and yet persons with pronounced moral traits will invariably show them in their voices, no matter what the state of mind may be. I can recall from my memory's sound-gallery some fifty voices similar to that of the lawyer. Professionally or otherwise I have known the lives of these men pretty well, and while the characters of a few of them were out of keeping with their voices, the great majority were emotional, false in a measure, kindly in impulse, passionate in the extreme, and intellectually above the average.

Of course, training, age, health, or disease of the vocal organs alter voices. In general those of children show less of their real character than do the voices of adults. The voices of women, are, as a rule, more difficult to read, because they are naturally sweeter than those of men. Those of

*Self Culture, Edinburgh, 1888.

the Northern races have less warmth and passion and are sterner than those of Southern races.

There are national as well as sectional voice-characteristics. The Scottish voice is whining, sad, and, at the same time, stern. The predominating qualities in the Irish tones are warmth, great emotional intensity, and, among the lower classes especially, one is painfully aware of a certain tone of fawning treachery, while among the better classes, the voices show great strength of purpose, coupled with a warm kindness, and a musical tone of refinement which I have never observed in any other nationality.

The voices of the people of England vary much in different sections. Not taking into account the pronunciation of the cockney, his voice is usually flat and expressionless; while the peculiar, harsh, brazen note of the Lancashire man has in it absolutely no expression of anything but vulgarity. There are three prominent types of voice among cultivated Englishmen. The exceedingly courteous, but cold, quiet one, of which Mr. Joseph Chamberlain is typical; the kindly but egotistical voice, usually found among the better class of merchants and business men; and the cold, affected, self-assertive tone of which Oscar Wilde is a representative.

The voices of the French people impress one first with their strength and loudness. This is particularly true of the women, whose tones seem to lack in softness, beauty, and womanly tenderness, more than any of the nations around them. The voice of a cultivated French gentleman, speaking his own language, while it is impetuous and passionate, is courteous, warm and kindly beyond description.

The voices of the Spanish men belie the character of the people. Unless they are in action, they are mostly cold and passionless, but when in angry discussion, ill-bred and harsh, and lack at all times the courteous tone of the French. The speaking-

voice of Spanish maidens is exquisitely beautiful; that of the older women has in it the predominating element of pride. The national voice of Italy is at once musical, pleading, pathetic, and childlike; of course, like that of all Southern nations, it is passionate.

The voices of the German people, although harsh, are usually kindly, and show a less complex emotional life than is found among their brethren of adjoining nations. With the German aristocrat, toward his inferiors, the voice is arrogant in the extreme; toward his equals or superiors, courteous, deferential, refined. The voices of German maidens are generally simple, kindly, and rather musical. One finds among the better class of the Viennese, the most musical, and, above all, the most cultivated voices of any of the nations of middle or northern Europe.

The Turks, and Orientals generally, have high-pitched voices, so far as the musical key is concerned. They show also an intense emotional life, while approaching in courtesy the tones of the French. The voices of the Chinese, as a people, vary in musical pitch less than those of any nation I have studied; one can get no idea of their real emotional lives from their voices. They, however, use more inflections and intonations than any other people on the globe. The men's voices are usually a low tenor, while the women speak in a mezzo-soprano key. The Japanese voice is exceedingly courteous, not very musical; that of the women is full of coquetry, and rather kindly.

Is there a typical American voice as well as accent?

I do not refer simply to peculiarities of pronunciation, but to the quality of the voice and to the characteristics of the people as revealed by it. Starting in Maine, as a rule, the voices are somewhat harsh and nasal, energetic and full of bright, intellectual life, but rather devoid of tenderness and kindly feeling. This is not

as true of the women as of the men; I have heard many sweet voices among the girls and women from "down East." Of course, culture and refinement make the same difference here as elsewhere.

One can scarcely say that the people of Boston have a typical method of speaking; the voices, however, are generally sharp and rather cold, and their habit of clipping their words intensifies this quality. The voice of the average Boston lady is mezzo-soprano, clear, with a certain element of kindness; a little too self-assertive, but cultivated and full of strength of purpose. Of course, every large city, with a cosmopolitan population, is not only cosmopolitan in art, literature and music, but in the voices of its people as well.

Has the New Yorker a distinctly characteristic voice? Emphatically yes. A very interesting type is that of the New York commercial traveller, especially if he be of Hebrew ancestry. His enunciation is rapid, his tones, when among his companions, are kindly, but the whole manner of the man, as expressed in speech, has a sort of snap to it, like a cold Winter's day. The New York business man of American parentage has a voice full of life; it is courteous, but every tone speaks plainer than the words he utters: "I am here for business; what can I do for you?" But if anything displeases him, you know from the tone of his voice that he means to resist. In Chicago is a greater conglomeration of races and types of people, but standing out prominently we hear the clear, sweet tones of the Western girl, at once healthy, kindly, and, though not quite tender enough, as true as her own loyal heart. Then we have the unmusical but frank, kindly voice of the farmer. The voices of the people of Illinois are rather more pleasant than those of Michigan. The people of Indiana speak, as a rule, more like Eastern people.

Let us now go to the sunny Pacific

slope, and voices seem to speak to us as though they had caught the spirit of the golden sunshine. What pleasurable memories are brought back of the voice of one from California who read to me in early life!

We find the sons and daughters of Texas with a distinctly characteristic and unique type of voice. The men's voices impress one as a little brusque and harsh at first, but that soon wears off and gives place to a feeling of hospitality. Still there is ever present a want of perfect culture and refinement; one can hear in the tone something that suggests the horse pistol and the knife. The voices of the Texan women are kindly, not particularly sweet or musical.

Passing on to New Orleans the voices of the men are languid, somewhat musical, yet one can feel that a hidden fire of passion is concealed under this languid tone. There is a want of noble, high purpose; these are not the voices of men of whom saints and martyrs are made. The voices of the younger women are beautiful, kittenish, tender, as soft and sweet. Those of the older Southern women seem to break earlier than their age would warrant.

The accent and quality of voice vary much in different sections of the South. The voices of Georgians seem to me to express the most hospitality, manliness, and straightforward purpose of any of the Southern types. In the northern belt of the South, including East Tennessee, western North Carolina, West Virginia, and a portion of Kentucky and Alabama, they vary more, according to the degree of cultivation, than in any other section of our country. The tones of the mountaineers of this district express, in a marked degree, their well-known characteristics. They are at once ignorant, passionate, strong of purpose, and, in some unaccountable way, impress one as exceedingly conservative. This may be due partly to the association of ideas. The voices of the F. F. V.'s

are somewhat too haughty, but hospitable and kindly to their equals. Those of the women, particularly, are refined and full of high moral principle.

Having considered the national and sectional characteristics, we will now listen to voices in disease. The voices of those suffering with dementia seem to exemplify Darwin's law of natural reversion. Their aimless, meaningless chatter resembles much the noises made by the apes. In acute mania, they are feverish and wild in tone, showing at once that the baser part of the man is dominant.

Among the more habitual and hardened criminals you will find that the voice portrays, in its ever-varying mood, ever-changing tone, the want of moral stability in the man. There is a type of voice characteristic of the kleptomaniac. It is low, not wholly unmusical, if its possessor be a man; if a woman, it has a peculiar, whining ring, impossible to describe. I have studied the voices of a number of professional burglars. They are usually cunning, cowardly in quality, sometimes boastful. I never heard one remorseful. Occasionally they have a canting, whining, hypocritical tone, and the good that one hears is of an impulsive character. They are frequently emotional.

Among the finest voices that America has ever produced stands that of James G. Blaine. I heard it in 1876, when he was in full vigor—clear as a silver bell, rich in color as a golden Summer sunset, ever and anon proud and imperious, and again, tender as a mother's while caressing her child; above all, it was full of hearty kindness. This could not be said in his

later years, as disease told sadly upon his voice. The voice of Edwin Booth, in his prime, was perfect of its kind—broadly intellectual, deeply emotional, and showing a constant struggle within his own soul; as strange, weird, and withal fascinating, when he read "Hamlet," as are the strains of Chopin's music.

The voice of Sarah Bernhardt was to me, silvery, passionate, but not quite tender and sympathetic enough. The sweetest-voiced actress on the American stage at the present time is, in my judgment, Agnes Booth. Her voice suggests the incomparable Adelaide Neilson; it is so natural, so merry, so womanly, so true.

Among the voices of clergymen, stands out that of Phillips Brooks. His exceedingly rapid enunciation prevented his full, rich voice from showing at its best; but one who studied its tones could read in it the deep religious fervor of the Heaven-sent messenger. The voice of the Rev. Minot J. Savage is earnest, clear, convincing, strong.

The voice of Robert G. Ingersoll partakes of the Western freedom; it is musical, full of the deepest pathos, and at the same time strongly combative. It is honest, too.

A typical illustration of the voice of genial old age, is found in Dr. Gatling, the inventor of the "Gatling gun." His is rich, clear, and has that wonderful mellow softness, which a ripe old age, with a healthy body, alone can impart.

The voice of Mrs. Mary A. Livermore, when speaking in public, is strong and full of purpose; it shows broad culture, and with all its strength and earnestness, is full of womanly tenderness.—*The Arena*.



HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XVII.

LITERARY AND BUSINESS SUCCESS.

CYBUS H. K. CURTIS.

Founder of the Ladies' Home Journal.

The following analysis of Mr. Curtis was made from a personal examination of his head, he having been introduced by a friend of his without giving his name or occupation, and it was literally the "study of a stranger." We give it verbatim as reported:

Your head, measuring $22\frac{1}{2}$ inches in circumference, and from ear to ear over the top of the head 15 inches, is large enough for a man who turns the scales at 160 pounds instead of 132.

You are a compactly built man; are positive, executive, intense, quick, and enduring, and you are not as likely to break down by over-work as the majority of men, because there is a kind of tenacious, wiry endurance connected with the fiber.

Your dark hair, dark eyes and firm fiber indicate the Motive temperament. The second temperament with you is the Mental, including the brain and the nerves, and with your nervous susceptibility and excitability you are likely to impel your locomotive system, or mechanical system to do a great deal more work than is common with persons of your weight. Any work that comes within the scope of your strength, you can turn off effectively and rapidly. If you were put into heavy work, like the lumber business, for instance, you would over-work and get broken down. If you were building something that was within the

scope of your strength, you would be rapid and accurate in the work, and there would be few men who could do as much as you would.

The third temperament is the Vital, and that in you shows good lung power, pretty fair digestion, and good circulation, and if you will avoid coffee, tobacco, spices, and other articles which are apt to disturb the nerves that operate the heart, you will be likely to live to a good old age; whereas if the action of these nerves were disturbed, it would tend to produce heart failure, even if there were no disease of the heart.

With your large brain and sensitive temperament, which inspires you to thought and effort, you are sharp, earnest and emphatic. Wherever you act, something is achieved. When you strike, the bell sounds; wherever you use force the diamond point cuts the glass. Your head is broad from side to side, and you are energetic and positive.

You have the financial elements, which, if devoted to business and to finance, would make you wise, efficient and successful. You always see the profit and loss, the financial or commercial side of all subjects which involve the expenditure and accumulation of means, and if you were trained to a business of manufacturing you would be able to financier definitely so that there should be no leaking of cost unnecessarily. You would organize in a business departmental methods or responsibility and criticism; for instance, in a bookstore you would have accounts kept with each book. If a

book did not pay you would drop it out and would put extra push into that which did pay, because it had merit of its own. So in those lines of economic procedure you would analyze, criticise, and organize, and make things successful, or else drop them.

You have the faculty of judging character which helps you to work through other people. You would be able if you had business wants to be served, to find men who were adapted for the work in temperament, culture and habit. One likes accounts, another likes to collect, and another likes to handle the material, to work with his hands and his thought. One man will sit at his desk and rule a thousand agents, peppered all over the land; he will pull these wires, or act through them and so produce desired results; and yet he might not be worth much to take one of those departments himself.

Intensity is one of your special qualities. This gives you the tendency to feel in a hurry and you may over-do in that way. I would put people under your influence who would have a quieting, sedative effect upon you—people who would receive your rebukes, your instructions and your hurrying, and seem gratified and thankful that you had favored them with information, and who would go about what you would tell them to do without objection. But if people were like sand-paper to matches, when friction came, they would hardly know whether the fire came from the match or from the sand-paper. People around you ought to be quick to think, but they should not be very emphatic in their actions. They should move with an easy sweep of effort—they should shut doors easily—they should not walk with heavy shoes, they should not talk very loudly, and they should not answer back until you wanted them to. You have the faculty of holding people in hand, as a skillful driver can hold four pair of reins. You are capable of organizing because you

have large mechanical faculties, that is to say, you have the power to plan what needs to be done, how it should be done, and thus organize the efforts of others so that they would work profitably and harmoniously. For instance, if you understood printing, you would make a good foreman in a printing-office. You would divide an article into as many "takes" as the time would demand, and you would put force into all your efforts and all your thoughts. The base of the brain gives urgency, and you act, walk and talk as if you had no time to waste. People would learn to work faster by working for you. If a person were to come to you for instructions, you would lean forward in your chair, open your eyes wide, look him squarely in the face and give your instructions as fast as you could; you would not lean back, put your thumbs in your vest, revolve in your chair, and say, "Well, we must consider that."

You would have made a first-rate surgeon; because you would have worked rapidly, and you would have worked boldly.

You would have a sharp memory of ideas. Impressions that you derive from seeing, hearing, experience and from thinking—these experiences are fadeless—you remember the thought and the idea you get from them, you may forget the facts from which an impression is derived, but the impression lasts—it is indellible. In dealing with human nature, and in working through it you would select the right factors for doing certain things; and you might select men who could do the work better than you could do it yourself, but you would do the directing. You would assign different duties to different men according to their peculiarities. If you were a captain of police, you would know all your men and what men would be requisite for a particular job, and you would assign the men to duties according to their peculiarities. You might not be able to go into the field yourself and do the work, but you would

understand it so well that you would assign the right man to the right place. The same would be true in carrying on general business. If you wanted a man visited on some delicate or intricate business, you would consider his temper, and his circumstances,

gives you an aggressive spirit, the tendency to push whatever you are interested in. You would get more miles out of a given team on a certain road, than most men who drive teams, because your voice would be an inspiration to effort. You would



FIG. 139. CYRUS H. K. CURTIS.

and then you would choose a man to go whose temper would not rasp the other man,—you would send a man who would be mild, mellow and conciliating, but who had Firmness enough to stand quietly, but still persistently. Then if you wanted a man visited who needed a dominant spirit to manage him, you would select a man of the requisite type.

Combateness is rather large, which

not need a whip, you would only draw the reins and speak in such a way as to inspire the horses to effort, and then they would go. In going uphill you would let them go slowly, and when they got on a level stretch again, where you could push them, and where they had nothing to do but keep out of the way of the wagon, then you would manage to get distance out of them; so it would

be easy for the horses, because you would plan for them,—you would make them go according to your idea of what was easiest and best, and so you would bring your horses home all right; as a livery-stable man would say, you would bring them in “dry in good wind,” and you would drive quickly too. You would drive business in a similar way.

You are fond of argument,—you like to ~~take~~ the opposite side; where you seem to be opposed you are apt to respond in kind, but if people present a subject, and do not seem to oppose you, then you will say, “Well, yes, that subject is worthy of consideration.” The moment you find you are not being opposed you are open to conviction; and if a man has any suggestions that are better than your own, they would be accepted by you with more courage and promptness than by most men. You want the best, and if somebody knows better than you do on some point you want to find it out as quickly as you can, and then you say, “Why, yes, John, that is a good idea; incorporate that into your plan, it will work well.” You would take up the new plan heartily, you would not act as if you had been defeated or surpassed in your judgment. In fact, your mind works so rapidly that very few men get ahead of you.

If you had the chance to be the director and controller of affairs, you would work up prosperity right along, but perhaps there would be more friction in you than in the business. Whatever is interesting to you gets attention, and you are on hand in season and out of season, and you plan and accomplish desired results. You do not let grass grow under your feet, as the saying is. You do not let things go by default.

Destructiveness gives you efficiency, and Combativeness gives you aggressiveness, industry, push and activity, and the desire to exert influence. Destructiveness gives you

solidity and executiveness and makes you good in a pinch.

Your Secretiveness qualifies you to conceal that which you do not wish to communicate. It is very little trouble for you to hide thought and knowledge on topics that do not concern other people. You do not confess your weakness, at any rate, not until the crisis is past. I have known men after they had become rich to tell how near they came to failing, seven years before, but they do not tell that until after they stand on a good, firm foundation. Then there are some people who show their condition in their faces. You have Secretiveness that leads you to conceal your thoughts and to use your knowledge to good advantage, and not to use it where it is not best.

You have large Friendship, therefore you are influential in that field. The friendship of other people influences you and you want to cement alliances between yourself and them. The social tie is strong between you and those you can affiliate with.

The love of home, the love of children, and the love of woman is strong; and woman exerts, and always did, a beneficent influence with you.

Your father might scold at you, he might beat you, but your mother's word was an inspiration, and her wish would influence you better and perhaps more deeply and more continuously than the father's stronger method.

You have the domestic spirit. If you were a physician you would be popular in the families. Woman likes you, childhood likes you. You can win the interest and the sympathy of childhood and of womanhood, and, therefore, you would have made a good teacher of a female seminary. The girls would have looked upon you as an elder brother, and they would not have conspired against you so as to get the best of the teacher. If you were a preacher there would be a larger number of women who

would like your discourses and your pastoral influence than would be common in other congregations with other men.

The truth is, you inherit a great deal from your mother—your temperament, your spirit, your refinement, your affections, your faith, and your intuition come from her.

The fineness of your quality indicates your intensity and susceptibility, and does a great deal to explain your tastes and tendencies.

You like the fine, the nice, the perfect, the best and best sense.

You are executive, brave, plucky, enterprising, strongly affectionate and loving.

You have tact, ambition, thoroughness and moral judgment. You will contend more earnestly for that which you think is right than for that which you think is merely profitable; and when things are wrong, no matter whether there is any morality in them or not, you want them corrected.

You would make a good proof-reader for that reason. You would see all the errors and you would want to revise the proof to see that all your marks had been noticed and made.

You enjoy music, appreciate art and beauty. You have enthusiasm, and that enthusiasm is backed up by courage and ambition, therefore we judge that you are a factor of influential force wherever you move, and you are an inspiration to other people's capabilities. In photography there are chemicals applied which serve to make the body of the picture, and then there are certain sensitive influences that are brought to bear which bring the picture out quickly with a flash light. It used to take two and a half minutes to make a picture, but they have been working towards shortness of time, and now they have the instantaneous picture. You serve among men, in business and in affairs like that special sensitive chemical influence in

photography which brings a picture out quickly and clearly.

The criticism that we would make for your benefit is that you are liable to take on too much duty,—to be too hearty and too earnest in the fulfilment of duty, and thus wear yourself out and break yourself down before your time.

You are fortunate in two things; in the first place you work easily, considering your speed, and secondly you have tenacity and rapidity.

BIOGRAPHICAL.

Cyrus H. K. Curtis, who founded the *Ladies' Home Journal*, is its present owner and publisher. Mr. Curtis is a typical, energetic "Down-Easter," having been born in Portland, Maine, on the 18th of June, 1850. He was twelve years of age when he turned his attention to the world of periodical literature. He was a schoolboy, but outside of those hours when not laboring with problems of geography and arithmetic, he sold newspapers. He soon built up for himself a lucrative "news route," and success in this led him to try his hand at publishing a paper of his own. The result was a unique production; its title was the *The Young America*, and it styled itself "the best and cheapest monthly in America." Its price was two cents per month, and the name of Cyrus H. K. Curtis was blazoned forth as "editor and publisher." He set all the type himself, printed his own paper on a boy's press. Moderate success crowned his efforts, and, with youthful enthusiasm, he gloried in his journalistic achievement.

At this time, Phrenology, as represented by Prof. O. S. Fowler, was the rage in Portland. Along with hundreds of others, Mr. Curtis tried the skill of the phrenologist. The result of Prof. Fowler's examination of young Curtis's head was that he was destined for large success in a business in which he would deal with

women—a prophecy which has certainly been verified.

In 1868 he removed to Boston and entered the advertising business, and subsequently became engaged in the publication of several periodicals.

A desire to bring himself closer into contact with New York business men and houses led him to remove to Philadelphia in 1876. He chose ~~that~~ ^{the} ~~light~~ ^{shrewd} observation light on a great metropolis ~~at a~~ short distance than by actual residence within its borders.

His first Philadelphia venture was the establishment of a weekly periodical called *The Tribune and Farmer*, which he brought to a bona fide circulation of 46,000 copies. This periodical he conducted until the idea of *The Ladies' Home Journal* occurred to him, and, on Dec. 1, 1883, the first number was issued of the periodical which in seven years was destined to astonish the literary world.

Mr. Curtis is a firm believer in generous advertising, and no magazine of to-day is advertised on such a large and extensive basis. He makes the advertisements attractive, gives them plenty of space, and he may be said to be one of the best advertisement writers of the present time. "Does it pay to advertise so largely? Yes, in every respect. A man can never advertise too much, so long as he is judicious, has something which the public wants, and exercises careful judgment in the selection of his mediums."

His business principles commend themselves to every believer of honesty in commercial transactions. For any form of deception he has the most sincere hatred, and believes that not only is honesty the best policy in business, but that it is the only one which a man can follow with any hope of permanent success.

Personally, Mr. Curtis is popular in the best sense of that word. His open principles attract all who come in contact with him, and there is with them

ever present a feeling of security in all their transactions with him. He is a man of fertile brain, to whom fresh ideas come quickly and naturally, and no proposition which has merit in it is too large for him to grasp and undertake.

EDWARD W. BOK.

Editor of the *Ladies' Home Journal*.

~~The description of character was dictated~~
~~no~~ ~~when the examiner had~~

You have a pretty good frame, and a fairly developed muscular system; but your head measuring $22\frac{7}{8}$ inches in circumference, and $15\frac{1}{2}$ inches from the opening of one ear to that of the other over the top shows too large a head for your present weight, 146 pounds. You ought to weigh 170 pounds. If you were large enough to turn the scales at 170 pounds at your ordinary working condition, you would be able to do more work with your brain and not feel depressed. You would not need vacation as much as you do now. A word or two as to how to carry your large brain may be useful to you. In the first place you ought to sleep an hour more than is ordinarily supposed to be necessary. Eight hours of sleep is supposed to be the average need of the human race at your age. If you could make it nine hours every night it would give you 20 per cent. more of power to work and to think.

You can improve your diet with a view to vigor and to length of life, by dropping out a good deal of the carbonaceous portion of it, to wit, sugar, fatty matter and starch. If you could eat the entire wheat instead of the mere starch, which is only the heating part of the wheat, and the entire milk instead of the butter which produces only heat, and if you would leave sugar pretty much out of the question it would be better for you. Your complexion, and the tendency to pimples show that you eat too much sugar, or other carbonaceous material. If

you will, take lean beef, mutton, fish and eggs, fruit without sugar, oatmeal, wheat without sifting, vegetables and the entire milk, you may eat to your temperate satisfaction, and then there will be no feverishness, no excitability and no tendency to nervousness, no liver, kidney or dyspepsia trouble,

you achieve the what, and are instantly hungry to know the why, so you are all the time holding communication between facts and philosophy; things and their uses; phenomena and logic.

You have large Language; you talk as easily as water flows towards the



FIG. 140. EDWARD WILLIAM BOK.

Editor of the Ladies' Home Journal.

as would be likely to occur with the common mode of living.

You ought to avoid coffee, alcohol and tobacco, as well as spices.

In regard to the brain, your head is amply developed in front, indicating clear-cut earnestness and breadth of thought. You gather the facts,

ocean, when you understand a subject as well as those are supposed to understand it who are listening to you, or who read what you write, you have the faculty of liquefying your logic. There are those who know enough, but their knowledge is like cold beeswax in a jug, it is rich, but solid as a

rock, and needs a great deal of warming before it will pour; what you know is like kerosene in a pitcher; when you want it to flow it is ready. You have large Eventuality, which enables you to hold historical knowledge in solution. That is, you can consider it in its severalties, in its identities and in its peculiarities; then your Language is large enough to convey it. You would make a good extemporaneous speaker. For example, if you were a physician, you could stand before a class of students who knew something about muscles and bones, and you would seem by your descriptions to put new life into these and thus you would make an extemporaneous speaker.

Being a natural teacher, if you understood the art and the science of public speaking you would preach well, or would lecture well, and people would feel while you were discoursing that you were talking to them, and that you were not delivering a stilted oration; although once in a while you would run up to an oratorical height in making a rounded culmination of statement.

You have large Benevolence which renders you sympathetic. You are sorry for people, and you can talk on the tender side of a subject, and if you were a clergyman you could go to a funeral and so talk to the people, that they would be glad to go and hear you elsewhere. The listeners would think you were "good at a funeral" because you can be intelligent, tender and logical. You can talk about difficult topics in a way to make them tolerable. You can say hard things smoothly. You can give advice without seeming presumptuous, and reproof without seeming cruel. When you are called to take people to task about something, they thank you when you get through.

Your head is high, and the moral group is large, and you take hold of the theoretical side of subjects. You are just, merciful, reverent, and hopeful. You could take a person's hand

if you were a minister, a physician or a friend, if that person were ill, and it were questionable whether recovery would result from treatment and time, and could talk in such a way as to benefit and please the patient, and perhaps lift him out of darkness into healthy recovery. You would say, "You are worth a dozen dead men; hope in God and in a good constitution, sleep all you can, and do not worry." That is the spirit in which you would treat trouble and difficulty, and you would thus help to buoy the patient.

You read character well. You appreciate strangers, and know how to address yourself to different strangers of varied peculiarities so as to achieve desired results. You could ask for a subscription from a stingy person, or from a person who did not have the money to spare just then, and could do it in such a way as not to make the person feel ashamed or annoyed. You would say to a person, "I am representing such a cause; if you wish to contribute to it I am authorized to receive your name and your donation;" and if the man said, "I am very sorry, but I do not think I can afford it just at present," then you would say, "Well, I am sure you would be glad to do it, if convenient; I will not press you, but sometime perhaps you may feel able to do it." And you would get out without having the man feel that he was hunted or annoyed. And if a man did give something, you would talk in such a way as to make him feel that you appreciated that he had been generous, even if it were only half as much as you had expected. You would say, "I am very much obliged." But you would not add "for half as much as I expected to get." Yet there are some men who are just as good and as true as they need to be, but they lack smoothness, mellowness, sociability and pliability; they hurt everybody they touch; they cannot collect a gas bill without making a man feel crabbed. Yet, you have sterling de-

termination, and if people are in the wrong, or if they undertake to wrong you or the truth, you have steadfastness and dignity that would enable you to make them feel sorry and ashamed—if it were necessary. If you were a teacher, and the young men were delinquent in decorum, or in attainment, you would be able to reprove without alienating; you can punish without awakening hatred. If you were obliged to give a person a demerit you would say, "John, it is harder work for me to do this than for you to take it, but I cannot help it, my duty requires it, I owe it to your parents and to the school, but I hope I shall not have to do it again, and if you will do your best I certainly shall be spared doing it." And the delinquents would dread delinquency because it would hurt the teacher. There are teachers, so called, who seem to delight in finding fault, in detecting error and delinquency; they hunt for it, as a setter dog does for the track. If it existed you would find it, but you would not make people think you were hunting for it, you could show that by expressing regret and surprise: "Is it possible that you have been delinquent? I am very sorry." And that would save a fellow where hard words would not reclaim him.

I think you had a good mother, and you have borrowed much of her life. She got hers probably from her father, and it has been filtrated through maternal life, and you have taken it in that way, modified. You have your mother's spirit, talent and sentiment.

You have large Causality, which seeks to know the why. You have the instincts which enable you to find out facts and truth, so that you have a kind of free access to knowledge in detail and also in its philosophic form. You hardly know in which phase of acquiring or holding knowledge you are strongest.

You have ingenuity and planning talent, ability to devise ways and means to accomplish things smooth-

ly and easily. If you had been put into a manufacturing institution, you could have drawn plans and patterns, and devised ways and means to accomplish desired results successfully. When you see new inventions you are attracted, and are induced to study them until you understand them, and wonder why they had not been done before; but you are essentially literary, moral, philosophical and ethical.

You have a devout, a kindly and a just spirit. You are watchful rather than timid, you are cautious, guarded and prudent rather than worrying, anxious, despondent and fretty about the future. If you live rightly, you can have sunshine all the year round. All you need is to keep your body in such a condition that your nervous system will not be exacerbated.

You are a good friend; and naturally patriotic. You love home and you would enjoy the ownership of lands—"grounds," as they are called. To a young lady of Freehold, New Jersey, I once said this, and she looked up with pleasure and pride, and said, "Our family live on a farm which was purchased of the Indians by our ancestors; it has never been out of our hands, and a piece of buckskin represents the deed." And we shook hands on it.

You are ambitious to be respected, are also proud enough to desire to deserve respect, and therefore you stand erect even when people do not recognize your worth, your good intentions and your talent;—you may feel despondent, but it does not crush you,—you simply say "They do not know me." We mean that what you are, and what you have attained you understand pretty well, and you stand in the plenitude of your attainments manfully and with dignity, and you believe in yourself. You may not be arrogant, but you are not cringing or weak, and are sorry for people who are so.

I would give you more Combative-ness, would make you a little more se-

vere and would give you more policy and concealment and ability to manipulate smoothly for the world's good, but not deceitfully. I would give you more reticence, more power to hold what you know and feel, hope and fear without showing a sign of trepidation or of solicitude. All your life long, if you have been unfairly and unjustly reproached, ridiculed, misunderstood or maligned, it has hurt you worse than you were willing to have people know. Your Self-esteem and your Firmness have kept you up; you feel, "Though he slay me, yet will I not wince."

I would give you a little more base of brain, more of the selfish qualities, the capacity to be harder where hardness is useful.

With your large brain you ought to be an intellectual man, in the minutiae as well as in the philosophical. You are artistical in your taste, mechanical in your judgments, but not quite financial enough; you need to appreciate profit, property and gain more than you do. You can achieve that which ought to be paid for, better and easier than you can make people agree to pay you and get it. If you were in business you would want somebody to do the collecting and do all that kind of pushing drudgery that belongs to collection. You could plan that which would be profitable and desirable, but to follow it up and collect it, invest it and keep it, would be a more difficult task. You ought always to have a collector and one not extra sensitive; but you would try to teach him good manners. You should marry a woman with a broader base of brain and more selfishness and force. It would be better for you and for the children.

People can put you off and make you wait. If they need to delay you will be the man they will operate on. Those broad-headed men they would pay promptly all they owed, but would pay you half and ask you to wait until next Saturday for the balance, and then perhaps divide it again.

You have better power for making literature or other useful products than you have for getting pay for it.

As a talker and as a writer you are at home, and if you would learn to dictate to a stenographer you would find it a very easy task to do literary work, because when rested you would have a chance to revise it, add to, or diminish it. Any field of literature you could cultivate in a reputable and successful manner and command an enviable position.

BIOGRAPHICAL.

EDWARD WILLIAM BOK was born in the seaport town of Den Helder, near Amsterdam, in Holland, Oct. 9, 1863, and he is, therefore, in his thirty-first year. He was reared amid wealth and luxury. His father occupied diplomatic positions at the Royal Court of the Netherlands, and was considered one of the richest men in Holland. But reverses came, and Edward was brought to America at the age of six, unable to speak a word of the English language which he has learned to write so fluently.

Young Bok was first heard of at the age of fifteen, making a wonderful collection of autograph letters and documents of famous personages which soon attracted the attention of the newspapers of America and Europe. The fame of the young collector quickly spread, and he became known as "The Prince of Autograph Collectors." This collection now numbers over 20,000 pieces, and is, without doubt, the finest and best selected autographic compilation owned by any private person in America.

At nineteen, he started *The Brooklyn Magazine* with not enough money to pay the printer for one printed page. He struggled against all obstacles, however, and made the magazine a success in little more than a year, selling it at a good price to a Brooklyn millionaire. Mr. Bok's editorial management of the *Brooklyn Magazine* was so fresh and original that

his work brought the magazine into public notice from the start. Even at this age, before he had attained his majority, he thus showed his tact as an editor.

Henry Ward Beecher soon after this became attracted to the young man, and the great preacher put much of his literary work into his hands. The closest confidence existed between Mr. Beecher and his alert protégé. At Mr. Beecher's death, Mr. Bok compiled and edited a "Beecher Memorial" for the family, to which Mr. Gladstone, the Duke of Argyll, Dr. Oliver Wendell Holmes, John G. Whittier, "Grace Greenwood," Julia Ward Howe, Edwin Booth, Dr. T. DeWitt Talmage, General Sherman, Bartholdi, Salvini, Ristori, and over one hundred and fifty other famous persons contributed. Its publication attracted the widest attention and won considerable literary standing for Mr. Bok.

He was the founder of a literary syndicate, which is known as "The Bok Syndicate Press," and is one of the most powerful literary influences in New York, employing over eighty of the most famous authors of America and Europe. More than 135 newspapers are its customers, and from this its enormous influence may be measured.

He became connected with the firm of Charles Scribners' Sons, and in four years he graduated through several positions until he was made chief of the advertising department of the house. In this capacity, his strong and picturesque advertisements, of the houses' books became quickly noticeable and directed renewed attention to this active and rising young man.

After receiving and declining several lucrative offers, he accepted the position of editor-in-chief of the *Ladies Home Journal*. He has proved one of the most enterprising and successful men now occupying an editorial chair, and his remarkable feat of quickly lifting the *Journal* into the public eye and placing it

among the first literary papers of the day, has perhaps not an equal in literary annals.

The secret of Mr. Bok's editorial success unquestionably lies in his singularly accurate knowledge of what the public wants and will read, and with one eye on his readers he keeps another on the press, the result being that *The Ladies' Home Journal* is one of the most widely quoted and best gratuitously-advertised periodicals of the day. He is also as good a business man as he is an editor.

Perhaps no literary man has the friendship and confidence of so many celebrities and the most famous authors. He has the name of every author of note at the ends of his fingers, knows them all personally, and can secure their best work where others will fail. *The Ladies' Home Journal* has a subscription list of three-quarters of a million.

It is interesting to a student of Phrenology and Physiology to study the organizations of these men, and then follow in their biographical sketches the work which they have performed, and then the fact that they have become settled and established, perhaps for life, with each other in carrying out a laudable and popular work, and have made perhaps the best exponent of woman's life and opportunity, which has ever been evolved, in the establishment and successful conduct of the *Ladies' Home Journal*.

Each in his way was a hustler. Each started a paper as owner and editor, and made it a success. Their capital consisted of their brains and their prophetic enthusiasm. The whole world was before them where to choose their habitation and their pursuit. Fertile in resources, patient and industrious, with will-power equal to any emergency, with tact and ingenuity sharpened by necessity, their efforts and their success may be regarded as phenomenal. Now they are happily united in a great, popular and profitable literary enterprise

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

SAMUEL GEORGE MORTON, M.D.

SAMUEL GEORGE MORTON, an American physician and ethnologist, was born in Philadelphia, Jan. 26th, 1799. He studied medi-



DR. S. G. MORTON.

cine at his native city and at the University of Edinburgh, receiving the degree of M. D. in both places. In 1824 he settled at Philadelphia, where he not only practiced his profession, but distinguished himself as an ardent student of many other branches of science.

He contributed many papers upon a wide range of subjects to the "Transactions of the Academy," the "Medical and Physiological Journal," Silliman's "Journal," and the "Transactions of the American Philosophical Society." These papers evinced a gradual tendency toward physiological studies, particularly in the department of craniology. In 1834 he made a voyage to the West Indies, where he studied the diversity of races and the results of their interrelations.

In September, 1839, he was elected Professor of Anatomy in the Pennsylvania Medical College, which position

he resigned in 1843. Ethnology finally became his chief study, and as a basis for the investigation of racial differences in cranial structure, he formed an immense collection of skulls, both human and brute, at heavy cost, and without aid from the government or from any of the scientific societies.

As far back as 1840 this was by far the largest museum of comparative craniology in existence, embracing 867 carefully measured and classified human skulls, from widely separated regions of the earth, 253 crania of mammals, 267 of birds, and 81 of reptiles and fishes, or a total of 1,468 specimens.

There were in the collection a great variety of Indian skulls and a large number of Mexicans and ancient Peruvians. There were about one hundred skulls of the ancient Egyptians, obtained from the catacombs of Thebes and Memphis, and supposed to be more than four thousand years old; some of these possessed great interest from a phrenological point of view. There were also about the same number of skulls of native African negroes, which, in their cranial developments, presented quite a contrast to the preceding class, and evidently showed that their possessors must have belonged to an entirely different race, or at least that had very different characteristics. "The principal object," said Dr. Morton, "in making this collection, has been to compare the characters of the lower animals and especially with reference to the internal capacity of the cranium, as indicative of the size of the brain."

The result of Dr. Morton's investigations as bearing especially on the

American aborigines, or Indians, was embodied in his grand work published in 1839, entitled "*Crania Americana; or, a Comparative View of the Skulls of Various Aboriginal Nations of North and South America*, to which is prefixed an essay on the varieties of the Human Species; illustrated by 78 plates and a colored map." Prof. Silliman, of Yale College, at the time of its publication pronounced it "the most important, extensive and valuable contribution to the natural history of man which has yet appeared on the American Continent."

This work was followed by another, less voluminous, but scarcely less important, entitled "*Crania Egyptiaca; or, Observations on Egyptian Ethnology*, derived from history and the monuments, with numerous plates and illustrations," 1844. It was based principally on a collection of 98 heads obtained for him by his friend and disciple, Consul George R. Gliddon, from the tombs and catacombs of Egypt. Following close on these more elaborate publications were others less extensive and formal which embraced conclusions on some of the most interesting questions of physiology and ethnology. In 1849 he published "*An Illustrated System of Human Anatomy, Special, General, and Microscopic*." Just before the publication of this work, in December, 1848, he was attacked by pleuro-pneumonia, from which he recovered with his physical powers much impaired. His strength gradually declined and he died May 15th, 1851.

Dr. Morton's work, "*Crania Americana*," upon which his scientific reputation mainly rests, was an exceedingly valuable contribution to this department of literature. The subject was one of great interest, and Dr. Morton treated it in a manner at once scientific and pleasing, while the beauty and accuracy of his lithographic plates have not been surpassed in any of the modern text books of science.

Dr. Hirschfeld, a distinguished

physician of Bremen, Germany, and the author of several valuable works, said: "From a phrenological as well as a historical point of view, Dr. Morton's publication promises to be of very great interest to scientific men of all nations."

It opened a fruitful field of inquiry, both novel and interesting, and in a great measure hitherto unexplored. In those days little was known respecting the early history and character of the Indians previous to the discovery of this continent. Many efforts had been made by travelers and historians to collect and embody every species of information which might serve to portray and transmit their real character. Not only had their habits and customs in active life under every variety of circumstances been critically observed and recorded, but even their implements of war and hunting, as well as the various specimens of their skill and ingenuity, designed either for amusement or utility, were sought with the greatest eagerness. Great value was generally attached to these collections, however trifling or comparatively useless in themselves as mere illustrations of Indian character. However, very little attention had been given to the collection of crania, which would exhibit at once the primary and original elements of their character, and solve many phenomena respecting them. The "*Crania Americana*" contained an "Introductory Essay, embracing a brief view of the varieties of the human species, accompanied by a colored map of the world showing at a glance the geographical distribution of all the races of men." The lithographic illustrations constituted an important feature of the work, consisting of 75 plates of the natural size, also of about 200 outline engravings on wood. These drawings were executed with remarkable accuracy and precision.

George Combe, in his tour in the United States, said under date of Jan. 1, 1839: "I again met Dr. Mor-

ton and Mr. Phillips and discussed the method of measuring the skull. I greatly admired Dr. Morton's method of drawing the skull on a reduced scale. His lithographic drawings of the skulls are excellent, and of the full size of nature. He has engaged the services of a talented artist whom he keeps constantly employed on his plates, which are drawn under his own eye, and each carefully compared with the original before it is committed to stone. I narrowly scrutinized a number of them, holding the original skulls in my hand, and trying them and the plates by means of calipers, and found them faultless."

The crania of more than 40 Indian nations were represented in these plates, including the Peruvian, Brazilian and Mexican, together with a particularly extended series from North America, from the Pacific Ocean to the Atlantic, and from Florida to the country of the Esquimaux. These illustrations enable the reader to distinguish at one view the differences in the skulls of different nations, and trace out the coincidences or dissimilarities between the size and developments of the skull, and the varied exhibitions of character. He gave satisfactory explanations of the extraordinary distortions of the skull caused by mechanical contrivances among various tribes, Charibs, Peruvians, Chinooks, etc., and reconciled many facts and phenomena which had before appeared inconsistent and contradictory.

The intrinsic value and practical utility of the work were greatly enhanced by the numerous and accurate measurements which were given of the crania. The author bestowed a vast amount of labor on this tedious and all-important part of the work.

The capacity and various dimensions of each skull were accurately ascertained. The interior capacity, as a whole, and the distinct regional portions of every skull were given with the greatest accuracy. Dr. Mor-

ton said, "An ingenious mode of taking the measurement of the internal capacity was devised by Mr. Phillips. In order to measure the capacity of a cranium, the *foramina* were first stopped with cotton and the cavity was then filled with white pepper seed* poured into the *foramen magnum* until it reached the surface, and pressed down with the finger until the skull would receive no more. The contents were then transferred to a tin cylinder, which was well shaken in order to pack the seed. A mahogany rod (previously graduated to denote the cubic inches and parts contained in the cylinder) being then dropped down, with its foot resting on the seed, the capacity of the cranium was at once read off on it."

The facial angle was taken by a new and complete instrument. Besides a series of anatomical measurements embracing the various diameters of the cranium, about forty phrenological measurements of every individual skull were given. These data rendered the work invaluable to the student of natural history and anatomy in connection with mental science. In the dedication of the "*Crania Americana*" (to John S. Phillips, who had rendered the author important service in preparing the measurements), the following statement appeared: "It may, perhaps, be thought by some readers that these details are unnecessarily minute, especially in the phrenological table; and, again, others would have preferred a work conducted throughout on phrenological principles. In this study I am yet a learner, and it appeared to me the wiser plan to present the facts unbiased by the theory and let the reader draw his own conclusions. You and I have long admitted the fundamental principles of Phrenology, viz., that the brain is the organ of the mind and that its different parts perform different functions, but we have been slow to acknowl-

* "White pepper seed was selected on account of its spherical form, its hardness and the equal size of its grains. It was also sifted, to render the equality still greater."

edge the details of cranioscopy, as taught by Dr. Gall, and supported and extended by subsequent observers. We have not, however, neglected this branch of inquiry, but have endeavored to examine it in connection with numerous facts which can only be fully appreciated when they come to be compared with similar measurements derived from the other races of men. Yet I am free to acknowledge that there is a singular harmony between the mental character of the Indian and his cranial developments as explained by Phre-

George Combe ~~combed~~ work a phrenological essay, together with valuable corrections and suggestions as to the measurements. It was one of those rare productions that will go down to posterity as the most valuable representation that could be transmitted of numerous tribes of the human family that have already become extinct, and of others that

will disappear before the lapse of many years.

So great was the esteem for Dr. Morton in his native city, that on the day of his funeral the houses were draped in mourning and the stores were closed. The writer of these sketches well remembers the day, it being the largest private, yet public, funeral she had ever witnessed. He was venerated by the people, not on account of his age, but for his wisdom and knowledge.

The likeness accompanying this sketch is a correct representation of Dr. Morton in 1840, while he was strong, and his great work. It is a development of the temporal and superciliary regions are in perfect accord with his fact-gathering talents and ability to weave his knowledge into a form at once artistic, perspicuous and eminently adapted to practical use.

SATISFIED.

BY BYRON WILLIAMS.

While I wait
With a hope that shall cope
With all hate,
Here's my hand as I stand
By my fate,
With a smile for the trial,
And a tear for who care
When I die.

When I'm through
If they shall me recall,
Tell those, who
For my sake no pain take,
That they do
As they would that I should
For the one who has done
Them no wrong.

Tell them, too,
They can send to my friend—
One or two—
Who shall say that my play
Was as true
As the thought that has caught
On the tinge of the fringe
In the sky.

When I'm low,
As they walk let them talk
Mild and slow;
For he sung lays unwrung
By his woe,
And he died with a pride
That his heart had a part
In your song.

—*Saxby's Magazine.*

A STUDY IN PERCEPTION.

BY JOHN W. SHULL.

OUR notions of the intellectual phenomena of perception and their relation to other intellectual processes are not always clear or correct.

founded. He stated his view of the question about like this:

"The books assert that Individuality perceives things as things, as units,



INDIVIDUALITY LARGE.

This fact was exemplified some time ago by a young gentleman who had studied mind chiefly from the physiological side. In a little side-talk on mental science he professed a belief in Phrenology and highly commended its fundamental principles, but objected to the faculty of Individuality, or at least to the usual analysis of it. On inquiry I found that the objection was his own and not an adopted one. It had, therefore, the merit of being an original problem to him, and not a metaphysical cloud that had been vaporized and dissipated ten thousand times already for as many second-hand dissenters.

This made me all the more anxious to meet the objection on the ground of truth in the light of recent investigation, if it were really well

as individual objects separate and distinct from other objects. They also teach that it is the first faculty to become active in childhood, and leads to the acquisition of knowledge; also that it is first to act in our common observations. We perceive a tree, a house, a horse, as a thing, a separate existence, first, and then we perceive the qualities, the form, size, color, motion, position, etc. Now I call all this a complete reverse of the truth. The notion of 'thing' or 'individual' is an abstraction and is only reached by perception of the properties of a thing. Like 'force' or 'cause' it is above direct perception. To know individuals as separate and distinct from other individuals, we must perceive their want of identity, and this implies a perception of their various

qualities, and a recognition of properties in one which are not found in the other, thereby giving a sure basis for our disbelief in their identity. I hold that we reach the notion of individuality through abstraction from a previous perception of the qualities of some thing, and that we cannot possibly perceive a thing, as a thing, but only its properties."

This was indeed a new statement, but I felt at once that he was taking too sensorial a view of perception, and thereby drew too broad a distinction between a "percept" and a "concept." We discussed the problem then in the light of physiology and

objects, by direct taction or through the atmospheric medium, by waves of light or sound. This effect is termed an impression. This, when conveyed to the sensory tract of the cerebrum, becomes a sensation or a sense perception. This, in turn, by still higher centers, is transformed into knowledge, and becomes true intellectual perception. The sense-perception must not be confounded with true perception. It is simply the basis, the first *sine qua non*, of all objective perception in its true psychological sense. Perception is as remote from the senses as conception. Conception and perception are but one process



INDIVIDUALITY SMALL.

metaphysics, and later on another occasion. The result of those conferences, touching perception in general and Individuality in particular, are here embodied.

There are but five avenues through which the mind receives knowledge of the objective world—sight, hearing, feeling, smell, taste, in the order of their importance. These have for their instruments the sensory nerves leading from their special organs, the eye, ear, finger-tips, etc., to sensory tracts in the cerebrum. The periphery of these nerves is affected by external

considered under two sets of conditions.

To illustrate: We look at a landscape. The scene is reported at the visual tract so long as the eye is focused on it. This is the ultimate reach of sense perceptions, but now a higher range of centers—the perceptive faculties—begin to transform the vision into knowledge. They recognize a river, a mass of trees, a farmhouse, some grain fields and pastures. In rapid succession the scene becomes completely transformed to a group of ideas. They note the grouping of

objects and their qualities. They note the white tree-trunks and the varying shades of green, and the fleeting sun and shadow. They note the ripples and turns of the river, the cattle standing mid-leg deep in its shallows, and a group of children tossing stones into the deeps to startle the waters into undulating circles. They note the ripening grain waving in the wind and the harvesters beginning their labors. So the process goes on. All the percepts are at work together, each contributing its part with completeness and vividness in proportion to its strength. If Color were weak, the hue of leaf and harvest would remain latent in the sense perception, to pass into oblivion as soon as the eye is closed or turned away. If Size were weak, the magnitudes and distances of objects would remain latent. If Locality were small, the grouping would not be distinctly transformed to knowledge. If Eventuality were small, the swaying of trees, the dancing of sunflecks on the river, the gathering of harvests and the tossing of stones, and the ripple of waters would pass away with the turning of the eyes. So it is with all the percepts. Neither is dependent upon another, but all work together harmoniously, each transforming into knowledge its own proper element of the sense-perception, with effectiveness proportioned to its power.

This process of transforming a sense-perception into knowledge is termed "perception," and each idea so secured is a "percept." When the eye is closed or turned away, or when we attempt to recall the scene afterward, the process is memory, and the scene, or each elemental idea of it, as we succeed in reproducing it, is a "conception." The only distinction to be made between a "concept" and a "percept" is that the latter is transformed from an existing sense-perception, while the former is reproduced from a perception, in the absence of sense-perception.

Since there is in reality no depend-

ence of one perceptive faculty upon another, is there any order or precedence in their activity?

In viewing the landscape, the first idea seems to be that it is a unit, a single view. Then it is analyzed into several broad units, a river, a wood, a field, a farm-house. The sense of grouping and relation of distance next proceeds. Then each of these units is analyzed, the river into curves and ripples and deeps, and the closely related objects of children and cattle, the wood into a mass of tree trunks and innumerable branches and masses of foliage, of divers colors and motions; the fields into harvests of waving gold, and harvesters and pastured meadows, and the farm-house into roofs and gables, and windows and porticos covered with vines. The analysis goes on, and at last becomes a complete and harmonious interplay of all the percepts. However, the conception of the unit seems to lead, and the analysis is by division of units into still smaller units, each unit during the process having its qualities noted by the appropriate faculty, whether Form, Size, Color, Order, Locality, Number, or Weight, before its still further analysis is made.

From this we are led to think that Individuality is the *first* to act in securing knowledge. It transforms an element of every sense-perception into the "percept" of "individual" or "unit" which becomes the "concept" of the "individual" in the concrete, and leads to the formation of the abstract concept of "individuality," "divisibility," as properties of matter, motion, time, thought, force, cause, and, in practice, confers the power of analysis into distinct units.

This conception of the "individual" is not in the least dependent on the other perceptive, but upon the sense-perception. In other words, we do not arrive at the notion of "thing" by perception of such properties as form, magnitude, color, position, motion. We need but a single sense-perception, coming by

any one of the five avenues of sense, and instantly the "percept" of "thing" is transformed from it into knowledge, and held in readiness for memory and conception. That this is true admits of the simplest demonstration. Let a person, blindfolded, touch with the tip of his finger some object perfectly unknown to him. Ask him what it is: "I do not know; it is *something*." The tactile sense could not reveal form, size, color, or any property but resistance, yet the percept of "thing" is produced. Let some one touch him, and ask "who?" The answer comes: "I cannot tell; it is somebody." The simple sense of contact has been sufficient to awaken the percept of the "individual." Take a small object sufficiently heavy to be sensible and suspend it by a thread from his hands, and ask what it is. The same answer inevitably comes, "Something." Only the muscular sense, or Weight, is needed to arouse this "percept" of "thing," though it gives no hint of any of those properties which the other percepts recognize. Multiply these experiments *ad infinitum*, and it will be found true that the concept of the individual is not dependent on the other percepts, but naturally is the *first* to form, and arises from the simplest kind of sensation or sense perception. The other percepts, though shown to be entirely independent upon Individuality in the process of perception, are naturally secondary or supplementary, since the properties which they recognize are conceived and accepted as properties belonging to the individual or inherent in it. They also complete our perception of objects, and confer that completeness of knowledge which leads us to distinguish them from others and classify them according to likeness and difference.

That Individuality is most active in childhood is implied by every child's wide and ready memory of objects, but his almost invariably distorted perception of their prop-

erties and relations. School children see things as readily as their teacher, but, without having them specially pointed out, they will not observe half the properties that the adult mind will grasp at a casual view.

In art, science, business, this faculty, when large, delighting in individualizing and analyzing and taking in vast fields of facts at a single mental grasp and analyzing them to units, confers a facile mastery of details. With the other percepts large also there will be great exactness in dealing with all the innumerable minutiae, but with those faculties weak there will be much uncertainty and inexactness in dealing with particulars.

But all this concerns only the objective world. The subjective world reports itself in consciousness. This is to the subjective world what *sense-perception* is to the objective. Consciousness is the state of sensation, or subjective vision, the elements of which the percepts transform into knowledge. Not all the percepts, however, are privileged to enter this world. Thoughts have no form, no magnitude, no location, no weight, no color; but they are things, or, rather, capable of personification into things. They are events. They have order and succession and number. The most active of the faculties in this subjective perception are evidently Eventuality, which records the thoughts, the emotions and passions, and even the intellections, as the events or motions of the mind, and Individuality, which calls each sensation and perception, each memory and generalization, each beautiful reverie, each motion, purpose, volition and deed, a *thing*. This individualizing of formless, insubstantial mental processes is evidently a function of Individuality. Personification of the passions and emotions, of Time, of Song, of Love, of Faith, Hope and Charity, of the Graces, of Devotion, Humility, Mercy, so often found in

poetry, is evidently due primarily to Individuality, stimulated by Ideality, and perhaps Imitation.

The conception of thoughts or emotions or deeds as things is shown by that curious process of ascribing qualities to them as good or bad, wholesome or unwholesome, expedient or inexpedient, successful or unsuccessful, complete or incomplete, beautiful or deformed, according as they affect for good or ill our fellows, the outside world or our other faculties, or fulfill or fail in their purpose. These qual-

ities being qualities of related action are recorded by Eventuality, but suggested in many cases by the moral faculties, the perfective faculties and the higher reason.

The conception of the "Ego," or "self"—the individual distinguished from the universe, or "non ego"—is a concept of this faculty. The conception of Deity as formless entity, all pervading spirit, is due principally to Individuality for the mere intellectual side. More gross conceptions of personality are also due to it.



EUGENE SANDOW.

THIS famous athlete, who performs feats of strength equal to the mighty deeds credited to the Homeric age, is doing more, perhaps, than any other one man just at the present time to call attention, awaken enthusiasm and direct study, with regard to the possibilities of developing physical strength.

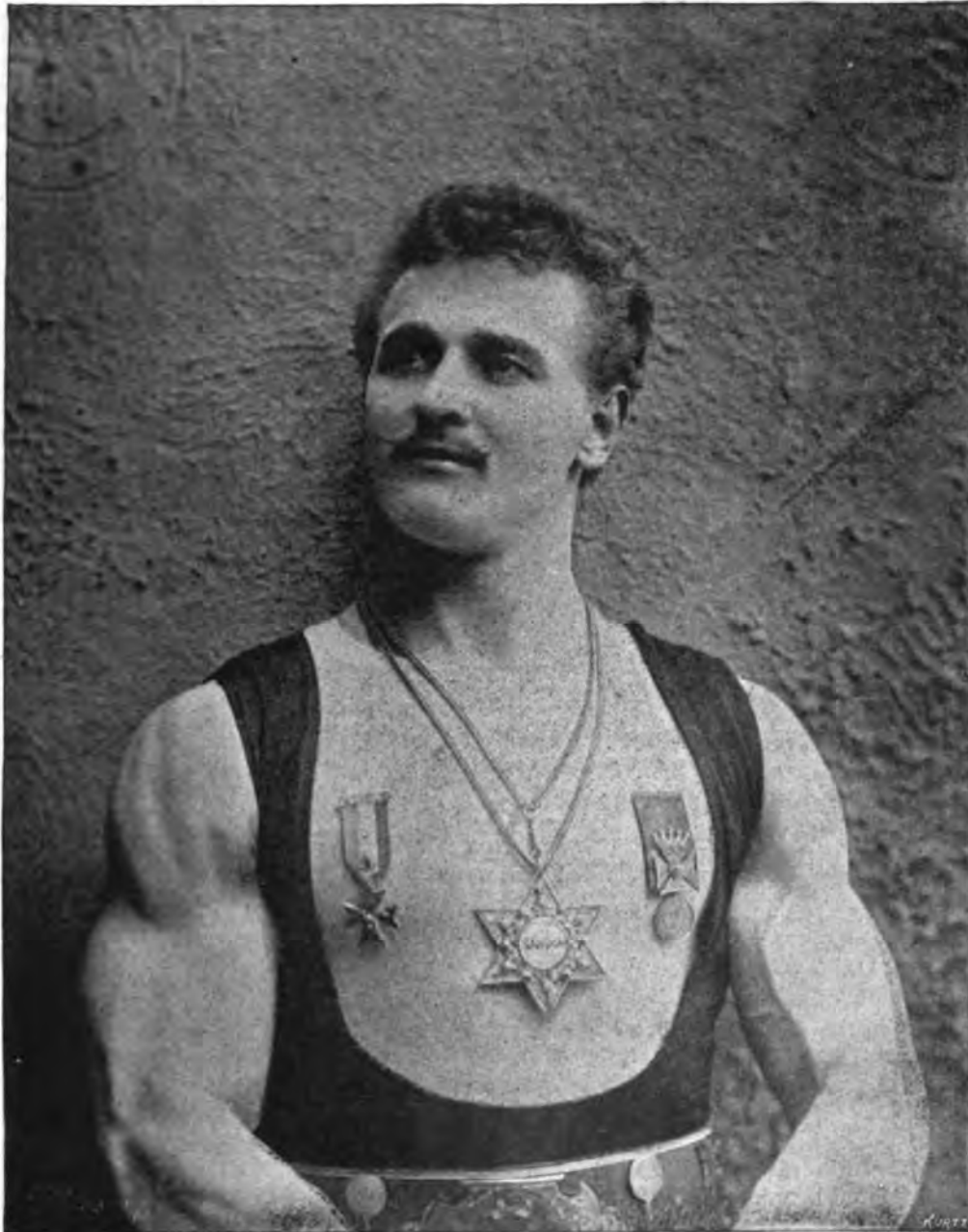
Interest in this subject has been kindled from time to time in different parts of the world, but has rarely been long continued in a manner to accomplish much good. This has been due in great measure to the lack of intelligence concerning the conditions and actual advantages of muscular strength. During many latter periods of civilization there has been a tendency to cultivate the moral and intellectual nature of man at the expense of the physical, or, if not at the expense of the body, at least under circumstances which were not adapted to promote physical perfection in any appreciable degree. Among the few exceptions, we may mention the crusaders of the Middle Ages, and the

athletic clubs in our modern colleges.

At the present time, however, there is a revival of interest in physical culture which is likely to prove of more permanent value than any similar wave which has arisen in the past, from the fact that this age is pre-eminently practical, and disposed to make utility the primary consideration. There is now also an amount of information diffused among the masses regarding hygiene, the like of which never existed before in any age with which we are acquainted. These facts give promise of a future method in education which will combine the building of the brain and the body in a harmonious manner. That the influence of Mr. Sandow in this matter will be very great, there can be no doubt. Not only the hundreds of thousands of people who witness his exhibitions, but also the numerous accounts of him in the press, as well as the remarkable book he has recently published in this city, will all contribute to the enlightenment of the public in this respect.

Nature has been generous to Mr. Sandow as regards brain as well as brawn. His head measures $22\frac{3}{4}$ inch-

face and head are characteristic of his nationality, and it is interesting to remember that the German nation is



SANDOW IN STAGE ATTIRE.

es in circumference, and $14\frac{1}{4}$ from ear to ear over the top. His eyes are blue-grey, and his hair, which is short and curly, is a decided blonde. His

said to have lived nearer to the bosom of nature than any other modern people. During the periods when the Latin races were engaged in military

conquests, private intrigues, and voluptuous amusements, the Germans were gazing at the stars, drinking from fountains of pure water, and breathing the free air of their native

of personal and private affairs as if he had not a secret in the world. He is likely to be extravagant in the use of his money, for he has as little sense of economy as could well be found.



SANDOW IN POSE OF "THE WOUNDED PARTHIAN."

forests. It is said that no other nation so closely obeyed the natural laws in regard to marriage, so that not a little of the hardihood of the Germans may be explained on that score.

Sandow has a rather large cerebellum, which is true of all men of great physical strength, but there are no especial developments in the occipital lobes. The back head is rather straight, and typical of the male sex in general. He is sociable toward people collectively, but not greatly attached to individuals. Combative-ness is moderate, but Destructiveness is rather large. He is naturally a lover of peace and averse to contention, but if thoroughly angered would be capable of almost uncontrollable rage. Acquisitiveness and Secretiveness are but feebly developed. He is as candid and open as the day. In his conversation he talks as freely

Approbateness is rather strong, but dignity, or the feeling of self-hood, is weak, in which he resembles the majority of his countrymen. Conscientiousness is well marked, but there is not much faith in the mysterious or unknown. Benevolence is excessive. He is sympathetic to a fault

The forehead is very fully and harmoniously developed, with the exception of specific observation, order and memory of events. He takes no interest in details, and is not very coherent in narrative. But in the judgment of shape, dimensions, weight and color he would excel. He has superior talents for mathematics, music and mechanism. He has patented a number of inventions, and manifests his constructive ability also in writing poetry and in the acquisition of languages. He is quite a good abstract reasoner; is eager to

know all principles and laws. He has also rather large Ideality, Sublimity, Imitation and Mirthfulness. These confer a decided taste for art. He could doubtless have become a sculptor. There is much in the expression of his face which resembles the classic models of ancient times, and also suggests a composite of many distinguished countenances of modern Germany. There is only needed a brightness in the eye and an increased length of the face to complete the classic ideal.

Perhaps the most remarkable thing about Mr. Sandow is the uniform development of all the muscles in his body, and the evident multiplicity of fibers. Thus his strength seems to be largely due to a peculiarity of construction and arrangement of the tissues, which is analogous to the extra depth and number of the cere-

somersaults with his feet tied together and a fifty-six pound dumbbell in each hand. He also supports with his arms and legs a platform on which there are three horses, the entire weight of which is 2,600 pounds.

Mr. Sandow's neck measures 18 inches; forearm, 16½ inches; biceps, 19½ inches; chest, relaxed, 40 inches; normal, 47 inches; expanded, 61 inches; waist, 28 inches; thigh, 27 inches; calf, 18 inches; height, 5 feet 8½ inches; weight, 196 pounds.

Eugene Sandow was born at Koenigsberg, Prussia, on the 2nd of April, 1867. As a child he was by no means a prodigy, either physically or mentally, and though neither ill-formed nor unhealthy, he was rather delicate and slight of build. Indeed he continued thus until about his fifteenth year. He was an earnest



SANDOW IN POSE OF "THE DYING GLADIATOR."

bral convolutions to be found in men of great intellectual power.

An idea of his strength may be conveyed by the statement that he raises to his head dumbbells weighing 300 pounds, and turns backward

student, and considered especially gifted in mathematics.

For the accompanying illustrations we are indebted to the courtesy of his publishers, J. Selwin Tait & Sons, of this city. E. C. B.

SCARLET FEVER AND ITS TREATMENT.

WHILE this disease may occur at any time in the twelve-month, it is more prevalent in early Springtime than at any other part of the year. The changes incident to the close of Winter favor its development. The primary cause is a contagion, and whatever contributes to the spread of that contagion renders its effects the more serious. Children under five years of age are its special prey. Hence the dread of it entertained by parents, a dread in a good degree warranted by its grave consequences.

Usually scarlatina makes its appearance suddenly; the child may have appeared very well up to the attack, which is announced by nausea, vomiting, perhaps convulsions, coldness of the skin and a rapid pulse. Then follows the fever, of greater or less severity, the throat being swollen and unusually sore, the tongue coated in correspondence with the state of the stomach and bowels, loss of appetite, general languor and pains in the back and limbs. With the fever the skin becomes hot and dry and harsh in feeling.

Six days is the average time for the appearance of the characteristic eruption, after exposure to the disease, and it may appear within twelve hours subsequent to the onset, as just described. This has the form at first of a rose-colored rash, the whole surface being reddened, here and there being deep red points, forming patches or *macule* of irregular shape that are level with the skin. These disappear upon pressure, and if the finger be drawn firmly over the surface, a white line is left, which will appear within a few seconds.

The eruption first appearing on the face and neck, quickly spreads to the other parts of the body, and is most marked on the third or fourth day. It is usually more abundant on the back and abdomen and usually of a deeper color, the darker the color the more

severe the attack. The whole surface is not often covered at one time, while the skin generally is smooth to touch, unless, as sometimes happens, small vesicles or postules form.

On the fifth or sixth day the eruption begins to decline, usually, and finally disappears about the eighth day. The symptoms which have preceded the eruption usually continue with greater severity until the eruption begins to disappear. The pulse is very rapid; in severe cases so rapid that it may be impossible to count it. The voice is usually natural, or, if it becomes hoarse, we know that the inflammation has extended into the larynx, a condition which should cause some anxiety. After two or three days the thick coating which first appeared upon the tongue goes off, and the surface of that organ presents a lively red appearance, the papillæ being of a still brighter color, gives the peculiar appearance known as "strawberry tongue." The throat presents a similar red appearance, and the tonsils are always swollen. Sometimes they are dotted with small white spots, due to exudation from the follicles, or have a membranous covering. The throat symptoms are not severe in mild cases, but in the worse forms of the disease may take on a condition of inflammation that threatens life.

There is always headache, restlessness and nervousness, occasionally delirium in the mild cases, which becomes very marked in severe cases.

As the disease declines the throat symptoms gradually disappear, swallowing becomes easy, the eruption gradually fades, and as it disappears the skin takes on a scaly condition. On the chest and the abdomen this scaling appears in good sized flakes, while on the face and back of the hands it occurs in minute scales. On the palms of the hands, as well as the feet, very large thick pieces may be

thrown off. Cases have been reported in which a complete cast of the hands has been shed, but this is rare. This casting off of the epidermal layer of the skin is accompanied by a good deal of itching and discomfort.

The treatment of scarlet fever consists mainly of hygienic measures in which good nursing, a proper diet and bathing are the leading factors.

On account of the contagious nature of the disease the child should be isolated at once, especially when there are other young children in the family. Often, though, at the onset of the attack, other members of the family have been exposed, yet as a single exposure very often fails to produce the disease, prompt isolation may save others from an attack. The sick room should be large, well ventilated and should not be kept too warm. When the fever is high and the surface burning, the temperature should be kept below 66 degrees. Later, when the fever begins to disappear, it is well to raise the temperature to about 72 degrees, especially if the patient is weak, and complains of chilliness.

Cold drinks should be allowed frequently because of the thirst accompanying fever, and if the child is too young to call for drink, it should be supplied by the physician or nurse. Mild lemonade or raspberry water can be allowed if desired, or cold water, according to preference. In all cases, however mild, where there is any rise of temperature, as well as when there is fever from any other cause, the child should be kept in bed as long as the fever lasts, and for two days afterward. Cases so treated are always shorter in their duration, and are not so apt to be attended by unpleasant effects, as swelling of the glands of the neck, kidney or ear trouble, etc. If the bowels are constipated they should be relieved at once by an enema; a free douching of the rectum and colon is excellent treatment at the beginning. Tepid or warm baths, or sponging with tepid or warm water, are very grateful and control the high

temperature to a good degree. A cold cloth may be applied to the forehead in case of pain and much heat in the head. If there is much swelling of the throat, a gargle containing a little witch hazel and a pinch of alum may be used to advantage. If the child is too young to gargle, a little alum may be mixed with sugar, in the proportion of one part to five, and a pinch of this placed on the tongue every hour or two. The Seiler mixture is good, also, for sore throat. Hot cloths applied to the throat externally, alternated by cold compresses, afford much relief.

Oiling the skin frequently conduces greatly to the comfort of the little patient, a good mixture for the purpose being a teaspoonful of glycerine to two tablespoonfuls of fresh cream. Vaseline or cocoa-oil may be used for this purpose, but is not so cooling as the above. This should be repeated at least three or four times in the twenty-four hours, and sometimes when there is great irritation of the skin it should be repeated every two or three hours, a little being applied at a time to a portion of the body and gently rubbed in until the entire body is gone over.

The diet should consist for the most part of liquids, milk and thin gruels of wheat, barley, oatmeal or rice. Overfeeding should be guarded against, especially if the child is rather full bodied.

For the safety of the patient no point in treatment is more essential than the care of the child while recovering from the disease. At this time the kidneys are likely to become affected, and in mild cases as when the disease has been severe. It is a result from the chilling of the surface of the body after the eruption has scaled off. Hence every child that has suffered from the effect of scarlet fever should be guarded in the most careful manner, and kept continually in a ventilated but warm room for at least four weeks after the onset of the attack. D.

POOR TEETH AND THE CAUSE.

THE author of that excellent book, "The Avoidable Causes of Disease" which has been so long in the list of the Fowler & Wells Co. that Dr. John Ellis scarcely needs an introduction to the reader, has a letter in the *Tribune* on the subject of the title. He very properly attributes the poor teeth that most people have to their improper dietetic habits, and speaking from the observations of a long life says in his emphatic manner:

"If parents care for the present health and development and for the comfort of their children in after life they should never let any superfine flour or bread or cakes made from such flour enter the house where their children dwell. It is difficult to imagine the immense harm to the present and rising generation which is being done by the use of superfine white flour—and the whiter the poorer it is. It should be banished from use, and it is being banished steadily by intelligent and liberal-minded people who are not slaves to habit and fashion. I have known a man when traveling to walk a mile to get a loaf of graham bread rather than to eat white bread. To those who have been accustomed to eat graham bread, cakes, etc., white bread is tasteless and without substance, and altogether unsatisfactory.

"Whenever people live on unbolted wheat or rye flour or meal, they have good teeth, bones and muscles. I well remember, when in Egypt in 1884, at Thebes, the little Arab girl who, with a vessel of water upon her head, ran over the sand, stones, rocks and hills as we rode upon our donkeys to visit the tombs of the Kings, for she had splendid teeth, sparkling eyes and a beautiful and well developed waist, symmetrical in form and graceful in every movement. On a visit to the house of our Arab dragoman, or guide, to look at some curiosities which had been obtained from the tombs of the ancient Egyptians, we saw two women grinding at a mill,

and making the kind of flour which that young girl ate. There were two mill stones, perhaps eighteen or twenty inches in diameter, standing in a tray, with an opening through the centre of the upper one for pouring in the grain, and at opposite sides erect handles.

"The women took hold of these handles and turned the upper stone around and around, and back and forth, and the flour or meal came out between the outer edges of the stones. I said to our guide: 'We have not had a bit of good bread in Egypt, for at the hotels at which we have been stopping they think that they must furnish superfine flour bread for foreigners to eat. Now, I want you to make us a loaf of bread from that flour and bring it to our hotel to-morrow and I will pay you for your trouble.' He did so, and it was the best bread we had in Egypt.

"It is wonderful to see the improvement in health, development and vitality which frequently ensues when delicate, sickly children—and even old dyspeptics—who have been living largely upon superfine flour and its products are fed upon unbolted wheat or rye flour bread or pudding. But, if the stomach and bowels are weak from the want of proper nourishment, or if they are irritable or inflamed, then for a limited time or until they gain strength and health from the use of this more nourishing food, it is necessary either to sift out with a coarse sieve the coarsest of the bran from the graham flour, or to obtain flour which has been ground from wheat which has been hulled before grinding, which can be had in some of our cities. If this caution is not heeded by those beginning the use of graham or unbolted flour it will not infrequently, in the cases named above, prove too irritating at first, and its use abandoned and condemned, but for strong, healthy children and adults this flour, bran and all, is just right, as the Lord intended it."

NOTES IN ANTHROPOLOGY.

The Botany of the Old Egyptian Tombs.—Most valuable information has been derived from examination of the flora of the old Egyptian tombs. These flora consists of funeral wreaths, the fruits and seeds of funeral repasts, and of offerings to the dead; and being in a perfect state of preservation, they permit of the closest examination and comparison with their living representatives. Many of the most delicate flowers, indeed, have been preserved without sustaining the slightest damage. The roses, for instance, had evidently been picked in an unopened condition, so as to prevent the petals from falling. In drying in the coffin, the petals had shrunk and shriveled up into a ball, and when moistened in warm water and opened, the andræcium appears in a wonderful state of preservation. Not a stamen, not an anther is wanting. When taken from the dust of the cemetery, the vegetable remains were dry and brittle, but, upon being soaked in water of a suitable temperature, they recovered their flexibility. Many of the forms of vegetable life represented in these collections still grow in the fields and gardens of Egypt. Other species of the ancient flora have disappeared, notably the papyrus, which furnished the earliest writing material.

The botany of the tombs has something to say concerning Egypt's commercial relations. The cork-soles suggest commercial intercourse with Spain; the cedar panels of the celebrated portraits of Hawara were made of wood which may have been imported from the Lebanon; the pine for coffins had also been imported; but the more generally used sycamore is a native wood. Plants had been introduced from Western Europe, Greece, Asia Minor, Mesopotamia, Persia, Ceylon, and Central Africa.

These investigations throw a welcome light on the question of the evolution of species. The conclusion based on the most careful microscopic investigation is that the flora of ancient Egypt, like that of the Lake-dwellings, announce that the plants

which come in contact with man become changed up to a certain point, while the wild plants of two or three thousand years ago have not undergone the slightest change. The hypothesis of evolution finds little support in any department of Egyptian archæology.

The study of the funeral garlands of the tombs is full of interest. The language of the affections was the same in Egypt four thousand years ago as in our own country to-day. Among the most highly prized plants may be enumerated the rose, the myrtle, the sweet marjoram, the bay-laurel, the jasmine, the heliotrope, the iris, the ivy, the narcissus, the mignonette, the Egyptian white water-lily, the field poppy, the lime, the immortelle, the convolvulus, and the chrysanthemum.

Primeval Pottery and Its Character.—"In the dim past, when primeval man occupied this continent, no one knows for how long a period, they raised mounds, dwelt in caves, or built towns that are now below the surface of the earth. In all this long era they used flint or stone implements for all edged tools, hammers, axes, spears, etc. At the same time, having no mettle pots or kettles, a rough earthenware was used for cooking, and for all other uses, for which we now use iron, tin and wooden vessels. There is somewhat of a resemblance in many of the stone implements all over the world. It is only recently that it has been discovered that there is a similar resemblance in much of the pottery of this early age, especially in the coil pottery. This pottery was made by rolling clay into long strings like cord, and, while soft, beginning with one end, to coil it round and round, increasing the size of the bottom until it assumed the desired dimensions, then shaping it up the sides (just as straw hats are made) till the required form and size was attained. The most extraordinary part of the investigation is that this ware, made in the same manner, is found in the mounds of Florida and Ohio, in the cliff-

dwellings of New Mexico and Arizona, in the buried cities of the canons of these territories, also in the Connecticut Valley, and under the ancient shell heaps of Cape Cod, Mass. What a long period of time it must have taken to have this art disseminated over so vast a territory at this early age. According to the uses these pots were intended for, so were they made large or small, thick or thin, and of various shapes. It was a common practice to use some sharp instrument to dint or work out some fanciful design without obliterating the lines of the coil; in some cases they are beautifully marked, looking like carved black oak; others made of light-colored clay in very fine coils, prettily indented, forming neat designs. Some of the best ware is handsomely smoothed and rubbed to almost a polished surface before baking. All are smoothed inside before they were dry; probably some of those intended to withstand heat have plumbago mixed in the inner surface of the vessels. There are many fanciful designs of this ware, some very large jars, pots of all shapes, bowls, cups, pitchers, etc."—*Science*.

Was America Peopled from Polynesia?—In a pamphlet by Horatio Hale, the author takes the negative side, basing his opinion upon a study of language. In the first part of the pamphlet he dwells upon the similarity of the Iroquois' and Cherokees' pronouns, and then turns to a comparison of the pronouns of all the languages of the west coast of America, and says there is no resemblance between any one of them and those of the Polynesian Islands, though he acknowledges that there is an element of reduplication in several of the languages, the Nahuatl, Pima, and Sahaptian. This reduplication, however, is seen in the Japanese and the bushmen of South Africa. He says that America was undoubtedly peopled long before Polynesia. The clear traditions of the islanders and the evidence of their language show that they reached their present abode from Southeastern Asia in modern times, and that the easternmost groups have been peopled within the Christian era; the Sandwich Islands were settled about two centuries earlier than Iceland.

He bases his opinion upon M. Quatrefages' "Hommes Fossiles et Hommes Languages." This opinion needs revising, for there are discoveries in all the islands which carry the dates farther back and indicate a succession of races, the language of the later races being very different from that of the early races and the monuments differing from one another. No one can properly say that we have reached the end of discovery. It may be that the connecting links will be found which will show the identity of the dolmen-builders of Japan, of Peru, and the pyramid-builders of Central America with those of Eastern Asia.

Old New England Almanacs.—

The oldest almanac in New England is still published annually by David A. Daboll, a rural astronomer and farmer of the rocky country town of Groton, in New London County, Conn., and is entitled "Daboll's Almanac and Farmer's Friend." This exceedingly quaint calendar was begun in 1783 and has been published each year since. A recent investigation shows that it was established in that year by Lemuel Warren and printed by John Trumbull "at the printing office near the court house, Norwich." For several years thereafter it appeared as "Bickerstaff's New England Almanack," though in 1793 its title was changed to that of "New England Almanac and Ladies' Diary." The name of "John Weatherwise" appeared on its title page as being the author and compiler of it, and in 1803, besides its astronomical and weather news, it had "an affecting account of the death of Miss Polly and Hannah Watts," and other reading "curious, useful and entertaining." The work did not come into the hands of the Daboll family until 1808, when Nathan Daboll, author of "Daboll's Arithmetic," which was the standard mathematical text book in New England for half a century, bought it and continued to publish it until the time of his death. After his death his sons continued to issue it. The publication still retains in a large degree its antique and curious character. It still has its odd "wise saws" and Yankee predictions about the weather, as, for instance, "Expect a cold storm of snow or rain about this time." Then there are such remarks as "Dog days

begin," "Dog days end," "Moon runs high" and "Moon runs low." William Harvey, of Plainfield, has probably the only complete file of the almanac from 1783 to 1825.

Another old almanac that is still running is the "Old Farmer's Almanac," which was established by Robert B. Thomas, at Worcester, Mass., in 1793, and is still published at that town.—*New York Tribune*.

The Most Primitive Race of Our Hemisphere.—That this title undoubtedly belongs to the Ainu, of Japan, is the opinion of Mr. A. H. Savage Landor, who has recently described his experiences among them ("Alone with the Hairy Ainu," London, 1893). The author, who is a grandson of the poet Landor, lived five months with this people in the interior of Yezo, and had greater opportunities for observing their peculiarities than previous travelers, many of whom drew false conclusions from observing Japanese half-breeds instead of pure-bred Ainu. The Ainu, all told, number about 15,000 to 17,000. They are undersized, averaging about five feet two and one-half inches for men and four feet eleven inches for women. The body is covered with hair, the forehead narrow and sharply sloped backward, the cheek bones prominent, the nose hooked and broad. They appear to use the feet and toes freely to aid their hands and fingers, and employ their teeth so readily that when an unusually heavy haul is necessary they prefer to use them rather than their hands. Many of their movements are ape-like, and their habits in some respects are decidedly more like animals than human beings. Their sense of touch is singularly deficient, but that of smell is very acute, though they seem oblivious of their own marked odor—an intensified form of the peculiar smell of a monkey's cage. Mr. Landor believes that this primitive race came originally

from Northern Asia, and may be akin to the North Europeans.

The editor remembers meeting an Ainu who had been taken by a European, educated and trained for exhibition, and who exhibited a degree of intelligence, despite his hairy aspect, that would have been creditable to any young American.

Alcohol and Mortality.—According to Dr. Newsholme, Medical Officer of Health for Brighton, England (*British Medical Journal*, Feb. 3.) the death-rate among publicans between twenty and forty-five years of age, is about four times as high as among clergymen of the same age—a fact that can be explained only by the effects of chronic alcohol-poisoning. The reported increase of the death-rate from intemperance from 40 per million in 1858-60 to 56 per million in 1886-90 is believed by Dr. Newsholme, however, to be not real, but due to more accurate certification of deaths—a conclusion confirmed by the corresponding decrease in reported deaths from liver disease and ascites. As an illustration of an improper use of statistics Dr. Newsholme instances a recent item stating that according to an inquiry made by a committee of the British Medical Association, the mean age of teetotallers at death was only 51.2 years as compared with 59.7 years among drinkers. These figures are correct, but it need hardly be said that they were not intended to be used in this way, and show nothing except that teetotallers, as a class, are younger than drinkers—a fact that is quite evident, as they number nearly all the children in the world in their ranks. To be of value, such an enumeration should include only such persons as die after reaching a given age, otherwise it would be quite easy to prove, for instance, that bishops are longer lived than curates, or masters than apprentices.





Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M. D., EDITOR.

NEW YORK, MAY, 1894.

PHRENOLOGY AND CRANIOMETRY.

AN apparently ambitious and sanguine writer contributed a few statements to the *Boston Herald* of recent date, which illustrate in an interesting manner how easy it is in our complex civilization to fall into error. This individual says that he "spent an afternoon" unavailingly in an endeavor to find some still surviving expert in the once fashionable "science of bumps." He expended still further efforts during two subsequent days, and discovered, as he says, "the following explanation of the fall of Phrenology:"

"The Professor of Phrenology used not only to be one of the most interesting figures of his time, but he took a certain stand as a scientist, for he represented a branch of inquiry which then seemed to be big with the promise of valuable results for the study of psychology, or the knowledge of man. The idea that intellectual qualities can be associated with particular parts of the brain had taken the world by storm. It had drawn immense force from the first investigations of men like Gall, Spurzheim and Lavater. To the half educated imagination it seemed one of those beautiful laws which human

progress is continually laying bare, and the world was ready to accept as a science what had not yet been perfected even as a theory.

"The movement was premature; the facts upon which the conclusions of its promoters had been based were too few in number and too limited in scope to warrant the use which had been made of them, and Phrenology, prematurely dubbed a science, had to abate its predictions or retire from the field. It had, in reality, put itself out of Court. . . . To scientific men, the rejection of the claims of Phrenology was a comparatively easy task.

"The high importance of the results yielded by craniometry has led to the construction and perfection of the most costly appliances for measuring the angles of the human skull. In the earlier days of anthropological studies, it was fondly hoped by some enthusiasts that types of skull would be found to have a fixed association with types of men—that, in fact, it would only be necessary to tell the angles of a man's head to reveal all that it was necessary to know regarding his race. This was an illusion of exactly the same kind as that which later led the phrenologists to suppose

that they had only to describe a man's bumps to reveal his character."

With reference to the expressions we have quoted, we beg to state, first, that a writer who has spent two or three days in investigating Phrenology, and who has learned so little as to lead him to employ the term "bumps" in referring to brain development, must be characterized as very unfortunate in his methods of study. There is but little room in our philosophy for blame, and hence we have no harsh criticism to make upon the errors of this presumably impulsive individual, but it is our duty, nevertheless, to correct his assertion that the facts were too few and too limited to warrant the use made of them by the phrenologists, or that the intelligent representatives of our profession ever supposed "that they had only to describe a man's bumps to reveal his character." This writer should consult the works of Spurzheim and Combe, and acquaint himself with the history of the long continued experiments made by the founders of the science. He would then discover that so far from being few in number, the facts collected by Gall, Spurzheim, Vimont, Combe and other coadjutors and followers, can only be estimated by millions; and as to the limitations of their scope, he would find that they related to observations of both sexes, in health and disease, sanity and insanity, of nearly all races and conditions of the human species, and included nearly all genera of importance among the lower animals. The atlas of a hundred plates published in connection with the great work of Gall and Spurzheim in Paris in 1819, contains besides human

brains and skulls, many pages illustrating crania of horses, dogs, cats, birds, and various other animals. The opportunities of Gall and Spurzheim for studying the different classes and ranks of men and women were exceptionally favorable. Dr. Gall was for many years physician to a hospital for the insane in Vienna, and as a result of his high position he possessed a large circle of acquaintances among the most influential and gifted people in that great city. It should also be remembered that his investigations were continued patiently for more than a score of years before he began his famous lectures in the Austrian capital. In this respect he pursued the same method that Darwin observed in preparing for the announcement of his discoveries. In short, the extent of the induction preceding the publication of the Gallican doctrine was simply enormous.

With regard to the idea that phrenologists have professed to rely upon supposed cranial knobs or projections for their opinions of individual character, we beg to say that in the treatise upon Phrenology published sixty years ago, by Spurzheim, who was the first author upon the new doctrine who presented it in systematic form, on page 118 occurs the following statement: "Let it be understood that the size of the organs is not to be confounded with the notion of protuberances." Again on page 129: "Such elevations occur but rarely, and the habit of looking for isolated organs thus acquired by beginners has undoubtedly retarded the progress of Phrenology. Adversaries also support their objections by supposed exceptions, for they imagine that an

organ is large only when it present as protuberance. This, however, is not the case; and it is better to consider the size of the head in general, to divide it into various regions, and to observe which and what parts of each are most developed. The *medulla oblongata*, the occipital hole, or the external opening of the ear, will serve as a central point from which various radii may be drawn toward the surface in all directions."

Combe explains the same principle of measuring from the *medulla oblongata*, or external opening of the ear, on page 88 of his "System of Phrenology," published in 1836.

It will thus be seen that Phrenology, while primarily a philosophy of the radical mental faculties, includes also a system of craniometry which is really more complete and valuable in its results, if not more minute in mathematical statement than any of the methods of the modern anti-phrenological anthropologists. The situation is almost explainable by the fact that when Phrenology was first taught it was opposed by learned men who were bound by the conventionalities of their schools, and as their objections have been transmitted from generation to generation until the present time, the modern college professors and others who have a reputation for a knowledge of physiology and psychology are also unwilling to accept a new doctrine which exposes the errors of their masters, and throws into discredit the only title deeds to scholarship which they themselves possess.

It is, perhaps, a good deal to expect of any man in a high position that he should publicly acknowledge

a serious mistake from the mere love of justice, but there should be no difficulty in defining the duty of all those who see the truth.

THE MOST DESERVING FIRST.

IN a recent number of a New York paper, one of the staff writers made a criticism of Mrs. E. B. Grannis, the editor of *The Church Union*, which certainly had the very fault of which he complained; that is to say, "it seemed unnecessarily slipshoddy." He objected to a statement by Mrs. Grannis at the annual meeting of the Christian League for Social Purity, held in this city March 26, in which she spoke of helping the "better classes."

The critic said, "she ought to know that the 'better' class is not necessarily the richer or the better clad people of the day. The term 'better' is applicable solely to moral, not financial, conditions."

Now if this writer had listened more carefully to Mrs. Grannis, he might have heard her say that the Industrial Home which she is working to establish is intended for that *better class* of young women who have never "fallen," and who have no vicious inclinations; but who, from poverty, ill health, or other forms of misfortune, are rendered homeless and without employment. Mrs. Grannis's idea is to give 'he good girls some needed help. She believes, and certainly with justice, that virtuous, refined, noble young women deserve shelter, sympathy and protection when thrown upon the world, quite as much as those who are coarse, ignorant, and vicious. There are homes to-day for depraved and shameless

creatures, but none for the gentle, pure-minded souls who are thrust into the street by a cruel fate. Far be it from us to discourage charity toward the "fallen." But the majority of this class are naturally of a low grade of intelligence and moral sentiment, and if saved from a life of degradation they would still be comparatively worthless factors in the world's great army of legitimate workers. For this reason it would be manifestly unfair and unwise to discriminate in favor of the vicious class.

Mrs. Grannis unquestionably had this idea, and did refer to the *moral* young women, and not the merely rich, when she used the phrase "better classes." To deny that moral and refined women are "better" than the criminal class is certainly as inaccurate as the idea that mere wealth is a guarantee of goodness. It is a legitimate work to raise the standard not only of the "better" classes, but also of the best. The highest classes need more intelligence and knowledge, admitting that their moral sentiment is sufficiently developed. There is need of reform even among reformers.

We can understand why a man in a burning house will throw mirrors out of the window and carry an armload of pillows down to the street. We know that he is excited and has but little time to reflect. But those who are more willing to assist the criminal and debased poor than the noble and cultured poor, can scarcely plead such an excuse. What could Wagner have done if he had not received financial aid? He had the good sense to demand from his

wealthy friends the necessary funds, and his friends had the superb generosity and good sense to relieve him from all anxiety on that score. But if he had been an American, and compelled to support a family by giving music lessons in a five-room Harlem flat, the air would never have been glorified by his marvellous art. The same might be said of Humboldt, Schopenhauer, Gœthe, Browning, Darwin, and many others. It is a mistake to assume that genius always grows best in a soil of sorrow. Too severe a frost will kill the budding fruit. The sunshine of happiness warms the virtues into life—that is, the happiness of congenial and successful labor. Anarchy and social vice are born of ill-adjustment to environment.

Let us raise the fallen wherever we can, but without forgetting to protect those who are adapted to support others in return. Let us help the helpers first. They are of the greatest value in the economy of the social world. Let us foster genius, especially the genius for doing good.

To this end there should be more applications of Phrenology in determining the character of those to whom we are asked to extend our sympathy and substantial aid. Unfortunately the conventional ranks of society rely so much upon the mere show of virtue in estimating the springs of human conduct, that they are seldom sure their confidence is not misplaced.

It is in the very nature of the finest souls to shrink from a battle with fate, and they are averse to any recognition of their worth which must be purchased upon their own recom-

mendation. The world pays homage to successful soldiers. Those who turn the other cheek are never honored until after they are dead. Let us find the true heroes and crown them before their brows are cold.

INFLUENCE OF WEATHER UPON MIND.

THAT states of weather have their differential effects upon mental manifestation no intelligent person entertains a doubt, but how far we may go in assigning degrees of influence to one state or another, as exhibited locally or climatically, remains to be determined. A writer in the January number of the *American Journal of Psychology*, for this year, discusses the subject from the view of common experience, and presents some facts that are interesting as well as leading in their directness. He says: "The head of a factory employing 3,000 workmen said: 'We reckon that a disagreeable day yields about ten per cent. less work than a delightful day, and we thus have to count this as a factor in our profit and loss account.' Accidents are more numerous in factories on bad days. A railroad man never proposes changes to his superior if the weather is not propitious. Fair days make men accessible and generous, and open to consider new problems favorably. Some say that opinions reached in best weather states are safest to invest on."

Other facts are mentioned in the psychical and physiological relation, as, "Weather often affects logic, and many men's most syllogistic conclusions are varied by heat and cold." . . . "The knee jerk seems proven to have another factor. It is

not strange if the eye, *e.g.*, which wants the normal stimulus in long, dark weather, causes other changes."

Temperament is a fundamental factor in sensitiveness to atmospheric changes, that type of it called the mental being the more intensely affected, while the bilious type may exhibit by comparison the more capricious or morbid impressions. The mental manifestations, as a rule, however, depend upon the organism primarily. If the culture is good, *i. e.*, the faculties have been trained to co-ordinate, harmonious action, and the elements that contribute to serenity and self-control have been well developed, weather conditions will but operate like other parts of the environment, the self-training will show adaptation and self-repression. The "nervous," excitable, irascible person is he who has not learned to control feeling and expression, and it is he who finds fault with his surroundings and imputes uncanny conduct to them. That there are functional states of the body that predispose one to mental depression or exhilaration, we are ready to admit. A torpid liver, a chronic catarrh, a rheumatic joint, and even an old corn may render one susceptible to weather changes, the physical ailment producing a nerve reaction that is keenly felt at the spinal centres, and may test the spirit.

Mind, however, is superior to matter, or rather constituted for superiority. Fairly organized, carefully developed and trained it will exhibit that superiority by its poise and calmness in circumstances that are disagreeable or painful to the physical senses. D.

LEARNING GORILLISH.

SOME TIME last year we were told that a gentleman of inquiring disposition contemplated a visit to the African wilds for the purpose of studying the sounds or cries of the gorilla. This gentleman, Mr. Garner, has now returned and given to the world, according to report, a preliminary account of his observations. He watched and listened to the great apes while occupying a steel cage of convenient size, placed conveniently for their approach in the forest. According to the note on his experiences that we have seen, he believes that the gorilla and chimpanzee can talk, but he has not been able as yet to transfer the sounds they make to forms intelligible in human speech. We may suppose that the gorillas have tribal relations and that each tribe has a dialect of its own, and hence to comprehend the gibber of a stray ape it would be necessary to have some knowledge of the generic or root tongue of the ape family as a fundamental step. Mr. Garner should visit that central tribe of gorillas that speak *gorillish* in its classical purity, and having learned the original tongue from them, he would be prepared to note the peculiar idiom and variation of those occasional examples of the great quadrumana with whom he might come in contact.

It must be admitted that Mr. Gar-

ner has proposed for himself a very difficult task, and one that in any event will be beset with uncertainties. However, there have been those who have given serious attention to the study of the manner of animals or birds or insects in communicating with each other, and their findings have been interesting indeed. An American, Mr. Cheney, collected the material for a valuable work on bird songs, and eminent scientific authority is at command in attestation of the ability of ants to exchange views upon matters of importance to them. They are said to do so by certain movements of their antennae; but is it not reasonable to think that these little creatures with big heads really talk to each other, and if a megaphone of proper adaptation were employed we might hear their microscopic tones? There is no question regarding their great intelligence, term it instinct or mind as you may, and if there be associated with that intelligence ability to communicate wish and purpose, it is not unreasonable to think that such communication is put into some form of language.

The gorilla, too, probably talks in his way, but we think that Mr. Garner will need to repeat his visits to the jungle and remain there indefinite periods before he will be able to produce a grammar and dictionary of *gorillish*.
D.



Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Medical Editor will receive his early attention.

GRAY EYES AND MENTALITY.—J. S.—The gray eye is commonly associated with intellectual capability, power to acquire ideas and to reason. There seems to be a better poise in the affectional nature of the gray eyed, with coolness and deliberation that are not so commonly associated with blue or dark eyes. With the brown eye we generally couple warmth, tenderness and susceptibility. The pure gray eye is rare, much more so than the blue eye. Commonly it is combined with a degree of brown which imparts a softness to the expression that is often very striking. It is the mixed gray eye we hear about. It seems to have a close relation to the poetic faculty. But, after all, this disposition to associate color of eye with a special tendency of mind must find its solution in race or national characteristics, and in that line the best analysis can be made.

HONEY AS PART OF DIET.—W. H.—Used in moderation honey is valuable as a saccharine in food. In ancient time it was much more eaten as a food principle than now. "A land flowing with milk and honey" offered to the Eastern mind the best of natural advantages. Two sorts of sugar

exist in honey—the crystallizable, glucose, and the other uncrystallizable—besides gum, coloring matters and pollen. Of course the carbon elements are in high proportion, and on this account its effect when taken in considerable quantity are similar to those of molasses. The common honey of commerce is usually adulterated more or less.

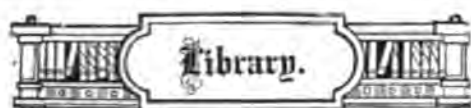
RED HAIR.—T. L.—The color of hair is due to pigmentary deposit in the tubular structure. The iron that enters into the constitution of the blood corpuscles may be said to be superabundant in the sanguin motive temperament of the red-haired and high-complexioned person. This it is that imparts the vigor, the elasticity, the exuberant vitality that characterizes the ruddy-haired; and this strong, sentient animal life is what renders them more intense in all their emotions than their fellow creatures of the merely mental or vital types.

SELF CONTROL.—TO THE EDITOR OF THE PHRENOLOGICAL JOURNAL:—I am instructed by the members of the Vancouver Phrenological Society to request you to answer the following question through the columns of the JOURNAL. Yours sincerely,

THOMAS MATHEWS, Secretary.

Question.—What combination of faculties, mental or temperamental, tend to give self control?

Answer.—The list of faculties and conditions required may be named as follows: Hope, Secretiveness, Firmness, Self-Esteem, Continuity, Eventuality, Imitation, and a full degree of the motive temperament. Your society doubtless would prefer to discuss this question without any further suggestions from us, but if we can be of further service to you in the matter write us again. We should be glad to know the result of your discussion.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

SANDOW—HIS SYSTEM OF PHYSICAL TRAINING FOR MEN, WOMEN AND CHILDREN. Compiled under the Athlete's directions by Capt. G. MERCER ADAM. Cloth, 4to, silvered, pp. 244. Price, \$3.50. J. Selwin Tait & Sons. New York.

In issuing this volume the publishers state that it was not Herr Sandow's phenomenal strength which first attracted their attention, but the fact that by a carefully sustained and intelligent method of his own, he had built himself up from a delicate child to be one of the most powerful men in the world.

Sandow's likeness as a boy of ten on the fourth page, shows him to have been a slender, narrow-chested child. The amazing change wrought in the seventeen years between the date of the photograph on the first page and that on the last, must be regarded as entirely due to his physical training the value of which is not confined to himself, inasmuch as the results have been satisfactory also in the case of pupils who have come under his instructions.

Unlike the followers of athletes trained by the usual violent methods, Herr Sandow has enormously strengthened his lungs, heart, stomach and all other important internal organs. This is a fact which vitally concerns parent and offspring, school and college instructors, and in fact, every man, woman and child in the land, since neither age nor sex is debarred from the benefits of the methods described in the book.

Herr Sandow's system involves no form of privation which would tend to make its exercise irksome to any one adopting it. The book is embellished with upwards of

eighty half-tone illustrations from photographs by Sarony and other eminent photographers, and by one hundred and fifty marginal illustrations by a pupil of Meissonnier. The publishers are therefore justified in their announcement that this is the most sumptuous work ever issued on the subject of athletics.

COUNSEL TO PARENTS ON MORAL EDUCATION OF THEIR CHILDREN. By Dr. ELIZABETH BLACKWELL. Fifth Edition. New York: Fowler & Wells Co.

The name of the author on the title page of this book is a sufficient voucher for its value to society. Written from the point of view of a thoughtful, earnest observer, the truth is told regarding actual conditions in society. We need not say that in many respects such truth is far from being an agreeable picture. Yet it is necessary to be seen and known to be realized how much society needs the advice and example of those who understand the reason for the situation and can give practical counsel for its correction. Dr. Blackwell points to the errors and vices that prevail in domestic life, and occupies a large space in the book with their consideration, showing how fundamental sexual impropriety is to the existence of vice and wrongdoing. If we would raise the level of moral sentiment and make men and women better, more worthy of the humanity which they claim the spring of social life must be cleansed. The beginnings of existence must be ordered with regard to higher aims than those seemingly kept in view by most people. Moral culture must be undertaken in earnest and not be a mere play upon terms. The author of "Counsel to Parents" goes to the root of things and reads its lessons of truth and duty in clear, unmistakable language. She writes not for the sake of writing but because she feels it her duty to strive for the salvation of her fellows and to vindicate the noble side of humanity. All who have to do with the young—parents, teachers, guardians—should carefully read this book and be moved by a common impulse to put its precepts into use. The tendency of the day, especially in our cities, makes the book most timely.

NEW YORK.—A REVIEW OF ITS RECENT DEVELOPMENTS. (Illustrated.)

Moses King is an enterprising man. He showed a broad, progressive spirit, when he published a magazine some years ago in Boston, and since that time his every effort in the literary line has indicated the same spirit. Now he deals with a large subject, and gives it to us in a charming style. Of course every New Yorker will feel complimented by the descriptions and encomiums bestowed upon the American metropolis.

A PRACTICAL TREATISE OF THE DISEASES OF THE HAIR AND SCALP. By GEORGE THOMAS JACKSON, M. D., Professor of Dermatology, Woman's Medical College, New York Infirmary, etc. 12mo, pp. 414. Cloth. Price, \$2.75. E. B. Treat, Publisher, Cooper Union, New York.

A revised edition of a treatise, which is appropriate to the use of the medical practitioner because of its compactness, and the method adopted in discussing the affections of the hair and scalp. The writer is dominated throughout by the spirit of practicality, so that his eminent experience in this special line is made especially valuable. The chapter on the "Hygiene of the Hair" has a fitness for popular reading that should give it a general circulation in some way as an offset to the drivel that finds its way into general literature from unauthorized and specious sources.

The volume is divided into four parts, viz.: I., General Considerations; II., Essential Diseases of the Hair; III., Parasitic Diseases of the Hair; IV., Diseases of the Hair Secondary to Diseases of the Skin. A voluminous bibliography of authorities and a full index are added.

As a work treating of the hair in particular, we commend it to the medical profession; and being uniform in binding and style with the series of practical works that have been published by the well-known house of E. B. Treat, it will be deemed quite indispensable to the library of physicians who possess other volumes of that valuable series.

THE SPIRITUAL LIFE; STUDIES OF DEVOTION AND WORSHIP. 12mo. pp. 198. Published by GEO. H. ELLIS, Boston.

A volume made up of essays, by half a

dozen writers of ability, on topics closely touching the general life, viz.:

I. The Spiritual Life of the Early Church, by Howard N. Brown.

II. The Spirit of German Mysticism, by Lewis G. Wilson.

III. Spanish Mysticism and St. Theresa of Avila, by Francis Tiffany.

IV. The Spiritual Life of the Modern Church, by Charles F. Doyle.

V. The Devotional Literature of England, by Francis B. Hornbrooke.

VI. The Spiritual Life in Some of its American Phases, by George W. Cooke.

Each of these essays is the product of much careful thought and reading, presenting men and movements in human life in an interesting manner, and pointing the moral of the things affected impressively. Of course the book is for thinking, earnest minds chiefly, but all who feel and hope for better things in this life and a future will find it of help. Many lands and ages are made to contribute to its purpose, and in its biographical passages and simple stories of great religious ideas the glimpses it affords of eager lives lived in battle with things that hold back, yet victorious in inward power, are vital in their capacity to encourage and make strong. It treats of deep things, yet the treatment is not too elaborate or profound for any reader who would live up to the standard of his being, and partake of those fruits of the spirit that are within the reach of his humanity.

WITCHCRAFT; IS IT A REALITY OR A DELUSION? By H. L. HASTINGS, Editor of *The Christian*, Boston. Published at the Scriptural Tract Repository, Boston.

From our observations in some forms of hypnotism, we should be inclined to think that witchcraft or something like it still existed. The author assumes that spiritual manifestations partake of witchcraft and discusses them from that point of view, making a rather strong case. We remember that a certain old book admonishes us "to try the spirits" to determine their character, whether bad or good.

INTERNATIONAL MEDICAL ANNUAL FOR 1894. Published by E. B. TREAT, 5 Cooper Union, New York.

Promptly in hand for the busy doctor's

use this well arranged and compact annual deserves a liberal credit. Compared with the numbers of previous years, this exceeds them in size by a hundred pages and in the variety of its matter. Modern medicine is making rapid advances, because of the considerable number of talented men who now pursue specialties and contribute the results of their observation and treatment to the literature of their profession. Mr. Treat skillfully avails himself of the services of such specialists, so that whatever there has been evolved recently in any department of medical or surgical practice shall be included in his valuable series. We note in this number for '94 a decided increase in the number and quality of the illustrations, there being eight colored lithographs and twenty-one half-tone photo plates, besides other diagrams, etc., of the average sort. The later outcomes of treatment for consumption, nerve and skin diseases, appendicitis, intestinal lesions, etc., are well covered, and the advances in hygienic processes or natural remedies, especially massage work and electricity, are noted at such length as their importance demands. Price, in cloth, uniform, \$2.75 net.

METROPOLITAN MUSEUM OF ART. Twenty-fourth Annual Report of the Trustees of the Association. 1894.

Notes growth of museum in general importance. During the year 1893 over 650,000 persons visited it. New features have been added and building enlarged. It is realizing the purpose of its founders and becoming a monument of which Americans should be proud. President, Mr. Henry G. Marquand; Secretary, L. P. D. Cesnola, New York.

SHORT STORIES OF UNUSUAL CASES. By W. F. CHAPPELL, M. D., of New York.

From Annals of Ophthalmology and Otology. Describes peculiar cases met with in throat and nose surgery.

THE MAGAZINE OF POETRY. Monthly. Illustrated.

March number has a considerable list of sketches with a few portraits. Among the number are a few writers of reputation like Willis, S. M. Watson and William Winter. Published by Charles W. Moulton, Buffalo.

TWO CASES OF CONGENITAL HYPERTROPHY OF THE TONGUE.

A case of tuberculosis of the myroid gland. By W. F. Chappell, M. D. Reprint. New York.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

THE NEW YORK ASSOCIATION OF GRADUATES.—It has been our custom in referring to the meetings of this society hitherto to mention the fact that the hall was crowded to its utmost capacity. At the last meeting, however, which was the occasion of Prof. Nelson Sizer's lecture on "Activity," held the evening of April 2d, not only the lecture room was crowded, but quite a number of persons stood in the doorway, outside in the hall and on the stairs throughout the entire evening. This is an agreeable evidence that Phrenology is not on the wane in New York.

Prof. Sizer was in his usual good spirits, and treated the subject of his lecture in his customary vein of happy illustration, reminiscence, analysis and anecdote. One of his replies to a critic present was espe-

cially felicitous. A gentleman asked a question in regard to the possibility of estimating a mental quality in a case of extreme abnormality. The Professor explained that in applying any science, the rules were only expected to be reliable under normal conditions. "No man," said he, "would expect to learn pedal anatomy from a club foot, or astronomy while the sky was black with clouds;" and, referring to the abnormal case in question, he concluded with the remark, "God may be able to tell, but I can't."

There is every reason to believe that these meetings will continue to grow in interest and usefulness. On the first Monday in May Prof. Charles Weake, M. B., P. A., of London, England, will address the society on Size of Brain.

HIRAM COLLEGE, HIRAM, OHIO.—Phrenology at the centre of education is professionally represented by Mr. Henry F. Lutz, a student of the theological department. He had in February a class of thirty, all enthusiastic in their acceptance of Phrenology as the science of the mind. There were so many more who desired to join that a second course of class lectures was contemplated. Mr. Lutz is an earnest and industrious student of Phrenology, displaying a skill in the application of its principles and a knowledge of its literature that are by no means common. He has established an office for private examinations. Thinking to give the cause an additional stimulus, he invited Mr. Stanley M. Hunter, who graduated from the Institute in '89, and who is studying for the Unitarian ministry at the Meadville (Pa.) Theological School, to come and give a popular lecture before the students. This was February 29th. Mr. Hunter accepted. The President, the Rev. Dr. Zollers, several of the faculty and about three hundred students and townspeople were present. Mr. Lutz, after a brief, practical talk on "The Value of Phrenology," then introduced Mr. Hunter, who took for his subject "People We Meet and How to Know Them." At the close he made a number of public examinations, one being blindfold. He also examined several skulls furnished by the audience. These efforts were greeted with frequent applause. The occasion was a decided success and scored a triumph for Phrenology.

It is to be hoped that neither Mr. Lutz nor Mr. Hunter will give up active work in Phrenology when they enter the ministry, since clergymen have exceptional opportunities for the spread of the beneficent teachings of the true science of the mind.

CHICAGO.—The Chicago Phrenological Society meets twice a month, the second and fourth Tuesday of every month, at 118 Oak street. The meetings during the past Winter have been well attended and the society has gained two new members. The active members have been very prompt in presenting essays and lectures on various themes of Phrenology. These lectures and essays are always open to criticism, and enliven the interest. Visitors are always welcome, and to all who may take an interest in Phrenology the Chicago Phrenological Society extends a cordial invitation to visit the meetings.

DORA CARPENSTEIN, Sec'y.

JOHN W. SHULL, class of '91, is expecting soon to take a professor's chair in a prominent Western college. Mr. Shull is a patient, thorough and accurate investigator, and is certain to become eminent in the scientific world.

CINCINNATI.—We continue to hear encouraging news from Cincinnati. Dr. Keller and many others are active in the new society, and there seems to be no question as to its success.

Prof. T. J. Wyscarver, formerly one of the most capable and energetic representatives of our profession in the United States, is at present a rich and influential publisher in the "Queen City." He is the editor and proprietor of the *Harness World*, a periodical whose pages are often enlivened by bright rays of philosophy and scientific lore. He has a beautiful home and a beautiful and amiable wife, and he attributes much of his success to his years of study and practice in the phrenological field. He still lectures occasionally, and it is hoped that the new society will secure his sympathetic aid.

Dr. O. N. Heise, one of the most scholarly and successful young physicians in Cincinnati, and an earnest advocate of Phrenology, sailed on the 19th of April for a six months' visit to Europe. As he expects to meet a number of distinguished medical men and other scientists, he has promised, if possible, to write a letter to the JOURNAL in regard to the outlook for Phrenology in the old country, with such other information of interest as he may collect.

MRS. IDA V. DAVIS, class of '88, is at present in Nebraska and writes encouragingly as to the future outlook.

MRS. MARY VAUGHT is lecturing in Chicago and finds a growing interest in the subject in that wide-awake city. We hope she will continue her efforts there. Chicago is now one of the most important communities in the world, and as the Western people are peculiarly hospitable to new truths, much may be accomplished by gaining a foothold in that city on the lake.

MRS. DR. T. S. ANDREWS is successfully engaged in DeWitt County, Illinois.

W. G. ALEXANDER, class of '84, is still in Canada, where he is reaping a rich harvest of hard cash as well as reputation and honor.

H. D. CAMPBELL, class of '89, is also in Canada.

W. S. BELL, class of '93, is editing *Up to Date*, a bright magazine issue by the Wilson Publishing Company, 312 State St., Chicago.

J. B. HARRIS, class of '88, is now in Kansas.

GEO. MORRIS, class of '78, is at present in St. Paul, Minn., where he is working with his usual vigor and enthusiasm.

G. G. BROWN, class of '92, sends good reports from Canada.



SUSAN B. ANTHONY.

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SUSAN B. ANTHONY.

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

BY EDGAR C. BEALL, M.D.

WHATEVER may be the outcome of the labors of American women for the enfranchisement of their sex, it is certain that in the history of progress the name of this brave worker will always occupy a conspicuous and honored place.

Under every flag in the field of reform, there are personalities which, upon a phrenological analysis, will be found to differ as widely from one another as they do from the enemies of their cause. Some persons object to the existing order simply because it objects to them, and imposes upon them too many restraints. They find it easy to rebel against tyranny and error for the reason that they hate to submit even to the sovereignty of goodness and truth. Others complain of the world because its standards and enforcements are too low and lax; and while they also rank as rebels and destroyers of the social fabric, at heart they are thinking only of rebuilding a more splendid structure and upon a higher site. As one who strives to alter the existing conditions, Miss Anthony well illustrates the latter class.

She is the personification of earnestness and integrity, and her organic peculiarities are in perfect accord with her character and the record of her work. The dominant principle in her physical construction is that of squareness and angularity. It has often been observed that conspirators and "heavy villains," whether on the mimic stage or in the tragedies of real life, are characterized by poverty of adipose stock. Shakspeare has made this idea familiar, and Cæsar's opinion of Cassius would be endorsed as readily now as in the palmy days of Rome. But it should be understood that neither bone nor muscular tissue is the source of evil passions. Intense action of the mind consumes the juices of the body; and as there may be intensity of thought and feeling upon either the immoral plane or the moral, it follows that what is true of the great sinners on the score of leanness and angularity is equally true of the great saints.

In the fibro-osseous temperament, a predominant sincipital or coronal development of brain, as in the present instance, precludes all desire for

frivolous amusements or those pursuits which only favor self-aggrandizement. Such persons naturally choose a life of sacrifice and resistant action. They refuse the insignia of honor which traditional authority awards to servile acquiescence, and scorn to

tion. But if the enthusiasm of such reformers did not sometimes carry them too far, it would never carry them far enough. If they did not demand more than they need, they would not obtain as much as they deserve.



SUSAN B. ANTHONY.

reach the goal of happiness through paths worn smooth and noiseless by the conventions of the past. It is true that they are incapable of enjoying many of the pleasures they so willingly renounce, and it is true that they often possess more zeal than discre-

Susan B. Anthony has not only a striking and impressive physique; she is both strong and fine. Her temperament would have been called by the old writers the bilious-nervous, now usually termed the motive-mental. Her hair is dark, but soft and fine;

her eyes are blue, and her skin is almost as firm and smooth as ivory. The convolutions of the brain must be remarkable for multiplicity and depth. There is that peculiar tension of the scalp, and that subtle, magnetic emanation, by which the experienced examiner recognizes a high order of cerebral power and activity. The size of the head, however, if taken alone, would convey a very imperfect notion of its value. The glabella-occipital circumference is only $21\frac{1}{4}$ inches, so that the coronal developments and relative proportions of the whole head must be especially studied.

This is a brain in which there is no waste—no superfluous expenditure. This is a woman with a purpose from which she never swerves. Music, "with its voluptuous swell," cannot allure her from her toil. And the arrows of Cupid, which pierce the armor of earth's mightiest warriors, fall harmlessly at her feet.

The signs of connubial sentiment are wanting in the lower back head, in the eye, and in the center of the upper lip. Her mouth is set and firm. Its lines are as free of warp and flexion as the strong, courageous words she has uttered so many years.

She is profoundly patriotic, but her attachment to particular geographical spots within the limits of her native land is not so marked. Her social feelings and affections in general are latent, rather than active, or exercised more in the abstract than in the concrete. This is true even of the maternal instinct, which exhibits a very considerable development under the "Grecian knot" at the back of her head. She will feel a mother's love and solicitude for the whole race, but will not directly share the joys and sorrows of little children. She will wish them all happiness, and will throw both fruits and flowers in their way, but without waiting to see them eat the one or wear the other. This is due in part to her temperament, which produces a degree of serious-

ness and dignity somewhat incompatible with the plasticity and playfulness of the infantile character. This phase of negativity or inactivity of maternal love is also indicated by the absence of that graceful little curve or scallop near the outer corner of the upper lip, which is characteristic of the typical feminine mouth.

Of the elements that confer talent for self preservation, she has a strong love of life, but only a moderate sense of danger. She thinks of wealth only as a passport to the land of Beulah, not as a haven of joy in itself. And as to the twin faculty of secrecy, she knows its meaning as given in the dictionary, no doubt, but has no consciousness of its promptings in her mental experience. She is combative in defense of her principles, and has destructive energy enough for her necessities, but she does not contend for the sake of contention. The base of her brain is not the source of her power. It is rather the force of her convictions, her independence, and iron determination which support her in her labors.

Is she a womanly woman? In the sense of typical femininity, certainly not. But in possessing qualities which adapt her to a highly creditable performance of special duties inherent in the conditions of our complex civilization, she is at least not unwomanly. That is, she is qualified to do a work that needs to be done, and she can do it by methods which are consistent with the standards of conduct created by the consensus of the world's best people. She can reach out into the sphere of masculine work without being unwomanly, just as a man may transcend the sphere of typical masculinity by becoming a poet, yet without meriting the epithet of effeminacy. In the latter case, the man needs only to be strong as a poet, and the woman who would be a politician must simply retain her refinement and moral tone. The manly poet must mingle philosophy with the music of his verse, and the womanly

reformer must do battle with weapons of intelligence and love. The former must tell of something more than "the flowers that bloom in the spring," and when the latter is in the thickest of the fight, she must be careful not to swear. Judged by this criterion, Miss Anthony is surely entitled to our respect.

Dignity, or sense of personal value, independence, and self-reliance, the spirit which asks to hold the reins, is strong, and its antithesis, the love of commendation is of only ordinary influence. The principal life of the brain seems to concentrate in the rear of the crown. Firmness is one of the dominant qualities, and is shown by the length of the line from the ear to the top of the head, also by the extent of the chin downward and forward. Still other signs are in the vertical upper lip, the wide cheek bones, and the general expression of solidity. Adjoining this faculty of steadfastness in the brain, the sense of justice is equally conspicuous. Conscientiousness is the law of her life, perseverance the coadjutor and logic the executor. *Fiat justitia, ruat cælum* would be her motto. The breadth of the chin, general squareness of all the bones, the direct gaze, the distinct color in the hair, eyes and skin, all corroborate the pronounced development in the brain.

As to religion and morals, she is of a liberal Quaker family, and while deeply imbued with the spirit of devotion to all that she conceives to be grand and good, she is more inclined to an objective expression than subjective development of spiritual force. Those conditions of moral supremacy which some persons seek to attain by introspection and seclusion she would endeavor to reach by practical efforts to improve the world, relying chiefly upon the influence of a wholesome environment without

and the stimulus of a lofty purpose within. Or, to repeat the idea in the terms of physical hygiene, her method would be one of exercise rather than medicine. She would rejuvenate and strengthen the body politic by a species of moral massage, not deplete it by potations of sedative sophistry. She would strive to enlarge the scope of human action in the direction of the highest possible ideal. She could say with George Eliot:

"I, too, rest in faith
That man's perfection is the crowning
flower,
Toward which the urgent sap in life's great
tree is pressing.
Seen in puny blossoms now,
But in the world's great morrow to expand
With broadest petal and with deepest
glow."

Benevolence is large, and unites its influence with the sense of justice and the maternal impulse to protect and nurture the helpless and oppressed. In these elements we find the key to her character as an advocate of political liberty for women.

Her intellectual organization is unusually fine. Excepting the sense of configuration, the percepts are all large. The reflectives, especially the power to classify and criticise, verbal fluency and sense of motives, are also strong, and so remarkably balanced as to insure exceptional accuracy, coherency and consistency in reasoning. The musical and æsthetic qualities are subordinate to the mathematical. She is a logician, not an artist. She has the refinement of a chastened soul, the beauty of character which comes from the elimination of selfishness. She cares little for external ornament. If the walls of her abode were of pure, solid marble, however plain, she would be happier than if within a palace of common clay made gorgeous only on the surface by the painter's art.



THE FACULTY OF LANGUAGE.

By JOHN W. SHULL.

IT (*idea*) being that term which I think serves best to stand for whatsoever is the object of the understanding when a man thinks. I have used it to express whatever is meant by phantasm, notion, species, or whatsoever it is which the mind can be employed about in thinking. . . . The use of words is to be the sensible marks of ideas, and the ideas they stand for are their proper and immediate signification.—*Locke*.

All our sensations, whether of sight, hearing, touch, taste, smell, and all our feelings that we have in the exercise of our moving energies, become transformed into ideas. . . . To speak is a necessity of man's rational and emotional nature. He speaks because he thinks and feels. When the mind receives an impression or intuition by an instinctive impulse of the nature of reflex action, some outward expression—a gesture or vocal sound—breaks forth, which, by association, becomes a sign or symbol of the impression or idea which gave it birth.—*Chambers*.

Feelings and conceptions must in every instance precede words, and the invention of a term for which no idea exists, instead of being a step toward the advancement of knowledge, would be a simple absurdity.—*Combe*.

These, though early authorities, state very well the basic philosophy of language. Thought is indeed very intimately related to language, but we must not identify reason and speech as the learned Max Müller seems to do in his recent works, unless reason is understood to be another term for the organized expression of thought. Language is but the instrumentality by which mind expresses its ideas. Idea must here be understood in its broad sense—to stand for every sensation, conception, imagination, emotion, purpose, indeed, everything the mind "may be employed about" in thinking, feeling or willing.

The common definitions of language are based on this view. "Language is the expression of thought by means of words." "A thought is a proposition comprising an assemblage of ideas in logical relations." "A sentence is the expression of a

proposition, and comprises an assemblage of words in grammatical relations." "Each word in the sentence is the sign of an idea in the proposition."

In language the *idea* is first, then the *term*. Each faculty originates, remembers, and on occasion suggests its own proper ideas. This is phrenological doctrine. There is no more vicariousness in mind than in body. One faculty does not perform the function of another. Even in those cases where there seems to be a vicarious action it is merely apparent. A blind man's touch takes the place of sight, not by seeing, but by increasing its sensitiveness in its own sphere, the result being possible only because sight and touch are, in a large measure, conversant with the same class of ideas. The law that each faculty originates its own proper ideas may be taken as absolute and without exception.

Then our ideas of thing, substance, object, individual, and this element in our innumerable complex ideas of objects, acts, thoughts in the concrete, which we designate by nouns, originate in Individuality. The ideas of dimension and distance, such as those expressed by long, broad, deep, far, large, their degrees and their opposites, originate in size. The ideas of figure expressed by round, triangular, square, oval, ovoid, cubic, pyramidal, cylindrical, spherical, prolate, oblate and numerous others named, and still more numerous unnamed, belong to Form. Weight originates all ideas of motion or rest in equilibrium, such as we express by moving, resting, poised, balanced, projected. Color has its field in those innumerable ideas, only the more distinct and striking of which have found names in red, blue, yellow, purple, orange, green, gray, brown, mauve, maroon, olive, russet,

etc. Order originates all ideas of system, arrangement, series in time, place or thought. Number gives us the idea of unit and all its definite multiples up to millions of millions as far as mind can express exact relations; also the indefinite ideas of few, many, several, numerous, innumerable. Eventuality relates to action.

by desire, appetite, pleasure, pain, emotion, passion, beauty, dignity, vanity, pride, justice, perseverance, hope, faith, charity, worship, love, hate, anger and their kindred ideas. I have imagined that intellect alone produces ideas, but that these particular ideas would no more exist without the feelings to suggest them



LANGUAGE LARGE.

Locality is concerned with ideas of place, direction; Time, with the ideas of duration; Tune, with the ideas of tonic relations; Comparison, with the ideas of like, unlike, identity, difference, class, order, species; Causality, with the ideas of power, force; causation, effect, means, purpose.

But Idea in its Cartesian sense will apply with equal aptness to the thoughts which are traceable to the feelings. I have imagined sometimes that the feelings do not of themselves and unaided produce ideas, but that they produce simply emotions or passions of a nature proper to each faculty; that those become ideas only by the aid of intellect; that Eventuality gives rise to all those ideas of suffering, willing, loving, hating, desiring, hoping, because suggested by these several existing emotions or passions; that Individuality recognizes the ideas expressed

than would the idea of color if no light existed. The doctrine of non-vicarity holds here. The ideas of the social feelings are traceable to the social faculties; those of the selfish desires to their appropriate faculties. It would be tedious, however, to enumerate the distinct ideas traceable to each of the thirty affective faculties; and, the principle being very fully illustrated already, the reader conversant with the phrenological system will be able to complete the analysis for himself.

When I use the term originate I mean that the faculty is the genetic power which forms the idea, not that it does this independently of any stimulus whatever. Ideas have two modes of origin, by stimuli and by spontaneity—by stimuli, when an appeal is made to the mind through the senses; by spontaneity, when the brain centers develop mental force which involuntarily strives to expend

itself in emotions, intellections and actions. Both modes blend in most of the thoughts and acts of mature life.

Having shown the source of all ideas to be the whole of the mental faculties, it is evident that the organ of Language cannot be an organ of any ideas other than its own proper ideas of terms. Its function must necessarily be restricted to a perception, memory, suggestion and production of terms to express the ideas originated by the other faculties. This, its ultimate analysis, is the first

A relatively strong faculty of Language will remember relatively more terms; many synonyms will be learned; the verbal stock will include words rarely used, or used but once years before; odd expressions, even meaningless locutions. New words are a delight, and there is a tendency to avoid repetition. Words are rarely strained to new uses, or made to express many shades of meaning. Synonyms have their shades of difference noted, and there is volubility in discourse, if not often repetitions of



LANGUAGE SMALL.

fact to be remembered in the discussion of this faculty as an element of character and talent.

The next principle bearing on the subject is that size is the measure of power. This means, first, that a relatively weak faculty of Language will remember relatively few terms, and those only the most necessary and most constantly repeated. New words will be learned only with great difficulty, and the vocabulary will be insufficient to express all the shades of meaning one may wish to convey if the mind be otherwise well constituted. The style in conversation or writing will be dry and monotonous, and words will be forced to do duty in several significations, the shades of meaning to be gathered only from the context

ideas under a new garb for the mere pleasure of verbal expression.

So much might be correctly inferred if Language originated the idea as well as remembered the terms, but, since ideas originate from the whole mind, and not at all from Language, this result may be modified in important ways.

The whole brain being small, and the mind consequently weak, there will be few original ideas, and none strong. Such a mind is receptive chiefly and gets its ideas and thoughts mostly from others, or from the surface suggestions of its environment. Spontaneity, though not absolutely wanting, is rarely strong enough to reach an original experience. In this case, if Language partakes of the smallness, no remarkable deficiency

or hesitation will be noted, for hesitation is due to the presence of ideas demanding expression when language is too weak to recall instantaneously the proper term. The character will be quiet and commonplace, and the language sufficient to play that role with apparent ease. If to such a weak mind a relatively strong faculty of Language is added, there will be a marvelous amount of talk for a few ideas, a pyramid of words to contain a thought-mummy; much chatter about anything and everything that happens to have a temporary interest, but no steady, dignified, rational conversation on any subject. The talk will be remarkable for nothing but voluminous emptiness—disconnected, like a talkative child's prattle, which, on the tongue of a mature person, is an intolerable bore, both to those who have ideas and to those similarly constituted, the latter being thereby hindered from a similar indulgence. Negro characteristics approach this, as shown by their favorite songs.

The whole brain being large, and the mind consequently strong, there will be original, pressing ideas. Feeling will be passionate, purposes vehement, conceptions clear, reasonings strong. Ideas will be drawn from others, from books, from investigation. They will be enlarged, blended, compounded, classified, and rendered clear. If Language is small in such a head, there will be hesitation and a feeling of distress, because so many pressing thoughts must wait for a lagging faculty to furnish the proper terms. Such persons express themselves well in writing, this process giving the faculty longer time to marshal its words into sentences. This is probably the reason why lawyer Speed wrote every sentence before speaking it. The ideas were formed in his mind, but Language being weak, the words were not suggested rapidly enough to produce extemporaneous oratory. If Language be equally large, all the mental conditions of eminent oratorical genius are present

—strong perception, clear reason, vivid imagination, passionate feeling, irresistible mental energy, finding voluble and eloquent expression in terms fitted to convey their full meaning and power to the auditors. These deductions concern only well rounded characters, which are not the rule, but the exception among men.

Language is modified in its expression by the idiosyncrasies of individuals. Brains are generally of uneven development, some organs being large, others small. This results in the expression of minds with correspondingly strong and weak faculties. From this we have types of character called in common parlance, criminal, moral, social, intellectual, selfish, unselfish, ingenuous, aristocratic, active, contemplative, etc., according to the predominant traits manifested by each.

Remembering this fact concerning the mental organization, let us turn to the laws of perception and memory which play an important role in intellectual work. A general law of perception is that the impression is vivid in proportion to its intensity. A general law of memory is that an idea is recalled with vividness and power in proportion to the intensity with which the mind received it.

There are two means of securing vivid remembrance: (1) Perceiving with strong faculties whose ordinary processes are intense; and (2) making repeated and purposeful efforts with weaker faculties. Outside of special efforts toward culture, the first is the commonest means. Accordingly, we find that strong faculties originate and remember their ideas to a greater extent and more positively and intensely than weak faculties.

In view of these laws of memory, we infer that Language will be stocked with sufficient terms to express the ideas with which the dominant faculties are conversant, but will be wanting in many of the terms for ideas naturally pertaining to the faculties that are weak.

[To be continued.]

PRIMARY MAN.

WHEN, WHERE AND WHAT WAS HE?

ONE of our most profound investigators in Anthropology, Dr. Daniel G. Brinton, has reviewed the evidences *in re* the above queries and concludes as follows :

"Everything is special. The whole species is made up of special individuals; and their evolution is multiform. Scientific men are agreed that the human race did in some way arise from some inferior animal form—not necessarily monkeys. The transition may not have been gradual, but abrupt—evolution *per saltum*. We do not find the "missing link;" it is still missing; it may be forever missing. There are different opinions as to how many early men there were. There may have been several distinct centers, but science as well as orthodoxy points toward the conclusion that all men originated from one primal pair living in one definite place. When did these early men appear? A perplexing question. We used to be told that it was 6,000 years ago; but we now know that there were at that time thousands of men living in Europe, Asia, Africa and America. It may be that we have misunderstood the Biblical record, or that it may have concerned a single branch of the race. It is certain, however, that man appeared late in the geological history of the globe. Human remains have been found in half a dozen places in the world under circumstances that seem to show that man lived in the Tertiary Age, but the proof really seems meagre. Did man appear during the great Ice Age? The testimony from ancient caverns whose mouths had been sealed by drift, and whose contents lay hidden under stalagmitic floors, as well as that gathered from stratified gravels and other sources, proves that man probably did inhabit the globe

during or even before the Ice Age. The date of that age is not exactly fixed, but was probably about 50,000 years ago, although some men of science have assigned a less and others a greater period than this."

"Where did the earliest men make their homes? Manifestly there were certain conditions requisite. Man requires food and generally some kind of clothing. We may reason by exclusion. The first men did not inhabit an island, for they could never have got off. They did not live where it was very cold, because they would have perished. The greater portion of the northern hemisphere was under water at the time of their advent, hence that is ruled out. They could not have lived in Australia nor in Southern Africa on account of climatic conditions and for other reasons. In short, we find them limited by conditions to the area between the Himalayan Mountains and Spain. Practically the oldest remains yet found have been discovered in the most densely inhabited regions of Europe. The sacred record treats of a particular line of human beings. The fable of the lost Atlantis and the theory of Haeckel as to the submerged Lemuria are not tenable. Eurasia was certainly man's original birthplace.

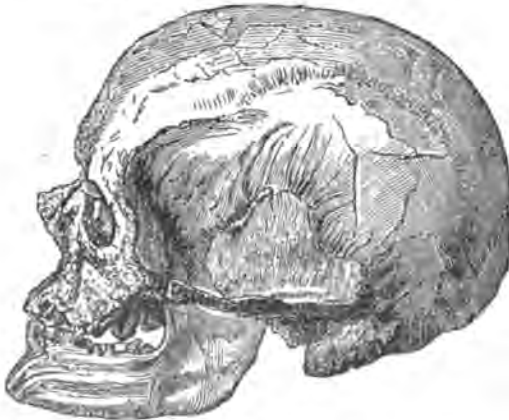
"What did the early men look like? Were they altogether rude? Did they creep on all fours or walk erect? The most expert anatomists have decided, after examining the ancient bones that have been exhumed, that there is no more difference between ourselves and those early men than there is between ourselves now. They were doubtless sturdier. They did not trouble themselves as much about dress as we do. They had reddish

hair and probably a ruddy complexion, with blue or gray eyes. Their skulls were about as good as ours, ex-



NEANDERTHAL SKULL-CAP, FOUND IN 1857
AMONG REMAINS OF EXTINCT MAMMALS.
CAPACITY 74.42 CUBIC INCHES, 8 INCHES
LONG, 5.75 INCHES WIDE.

cept the famous one of Neanderthal, for which we have less respect than we used to have. In a word, they were men. They knew how to make a fire. Even the very oldest of all men knew that wonderful art. They also knew how to make tools from stone, wood and horn. They were conversant with a variety of instruments and tools. They had weapons with which they killed huge animals. They knew about boats. They had dwellings. They were socially inclined and lived in communities.



SKULL OF OLD MAN OF CRO-MAGNON, FOUND
IN THE VALLEY OF THE VEZIERE. WELL
PROPORTIONED, LONG HEADED SKULL. CA-
PACITY 97 CUBIC INCHES.

They were brave and had wars. They endured hardships. They had

good hearts and loved one another. We have positive proof that they took care of the aged and nursed the invalids among them. They had some kind of language and knew something of music. We can not positively say that the very earliest men worshiped, but if they did so, their worship was spiritual. They had no idols. They had some sense of beauty. They decorated shells. They carved the horns of reindeer and tusks of mammoths. Those first men could travel rapidly. They encountered no very dangerous enemies. We can easily see how there came to be varieties among them, for more changes are now going on than ever before. All shades, from black to blonde, are easily explained. We may safely conclude that the early men were essentially human and very



THE ENGHIS SKULL, OF GOOD BRAIN CAPACITY.
ONE OF THE MOST ANCIENT TYPES OF MAN.

much like ourselves, with hearts and brains, hopes and fears, woes and aspirations like our own."

[In discussing the cranial remains of prehistoric men there is much room for uncertainty regarding their priority. We are not sure that the Neanderthal skull-cap is older than the interesting relic of Cro-Magnon or of Englis. Then, too, we are not sure that the skull-cap represents a healthy specimen of the human head. Other suggestions occur also affecting its validity as the type of a race that once lived upon the earth. Yet taking

it as found we may compare it with the crania of races now existing, and find that so far as brain capacity is concerned it loses nothing. Among the African Bush-



ESQUIMAUX SKULL.

men, the South Australians and the Caribs we will find smaller heads—and even in the domain of civilization we may discover examples of head

development that for projection of the supra-orbital ridges rival the Neanderthal. It is merely claimed as reasonable that this fossil is to be regarded as representative of a low and brutal type of human being, a precursor in the evolutionary order of existing man; then there are races that make that type real by somehow



SOUTH AUSTRALIAN.

perpetuating it to the present time. (See illustrations.) H. S. D.]

THE ETHICS OF JEALOUSY.

A FAIR philosopher has lately been reasoning in one of the magazines on the passion of jealousy. She seems to regard it as almost peculiar to her sex, and as rather a romantic, though decadent, emotion than otherwise. Against the former position it may be argued that one sex is just as apt to be jealous as the other. That primæval man was jealous Mr. Darwin argued with much show of probability. All male animals are jealous, even male salmon, which fight ferociously for the fair, and very funny is the spectacle, as they drive at each other with their winter beaks.

Meanwhile the lady salmon shows no jealousy at all, no more than do the gray hens when the black cocks hold their crowing tournaments in spring. Hinds are not jealous, stags are jealous, and so on throughout the animal creation. The male fights his rivals, the female only shows courage when her young are threatened, and then a hen thrush will

attack a cat. Thus, when primæval man was frankly polygamous, he probably had most of the jealousy to himself, though when he was polyandrous we do not know much about his domestic emotions. It should follow, if we are to be Darwinian, that males will inherit most jealousy.

This was apparently the opinion of Shakespeare and of Molière. That the latter was jealous we have good reason to believe, and his jealous characters, as Don Garcie de Navarre and Sganarelle, are men, as a rule. In Shakespeare, from Othello and Leontes down to Master Ford, we have jealous men in abundance; but of jealous women it is difficult to remember any one besides Cleopatra and Adriana in the "Comedy of Errors."

Shakespeare is, perhaps, not unlikely to have caused Anne Hathaway some anxiety; but he does not in that case make many studies from his own experience. Either he thought men the more jealous sex, or he avert-

ed his eyes from the foible, undignified rather than tragic, of the green-eyed passion in women.

There seems to be thus no reason for thinking that women have jealousy all to themselves. The opinion is not warranted by history, or by poetry or by experience. On the other hand, woman, as the weaker vessel, is perhaps the more apt to let her jealousy spill openly and in the sight of the sun. She is, also, the more ready to be jealous without rhyme or reason: just because she has more time to bestow on every sort of unconsidered trifle. She places man on a pedestal, yet keeps a wary look-out for defects in the idol.

This is extremely hard on man; he did not ask, poor fellow! to be placed on a pedestal. He is not fond of being a domestic St. Simon Stylites. He knows that pedestals are slippery places; and that an idol seldom falls or is pushed off, as more often occurs, without being broken. He himself has always been aware that the idol is an uncommonly rare bird, and is the less disposed to idol-breaking when he discovers a slight flaw. Woman, being more ideal, is more subject to disappointment, indignation and iconoclasm on hasty suspicion.

If she cannot content herself by reflecting that her spiritual nature is the true source of her discontent, it is well; but she seldom derives much comfort from this source. Her lord has an unfeigned pleasure in the society of Miss A. or Mrs. B, and down comes the idol in a shower of dust. Yet her lord may be a very innocent and faithful soul; nothing is to blame but the lady's own intensely spiritual temper. Unluckily it is a spiritualism shared by little dogs and cats. If you caress Pepper the dandy, then Skerry the skye is up in arms. But instead of biting you, as he ought in all conscience and reason to do, he bites Pepper, who is entirely blameless in the matter.—*Saturday Review*.

A Vision of Life.

SHAFTS of the bitter North !

Edged with sharp hail and feathered with
the flake,

Already hurtling forth,

Where the tarn shivers and dead rushes
shake

Upon the biting wind.

Echoes of all the years,

Summers and autumns dead, that lie be-
hind,

Laughters dissolved in tears,

Griefs that have set their hands upon my
head,

Ye chant into my ears.

Heralds of tempest-time !

Winding your sleety music in the hills,

Answering sublime

The gathering thunder of a thousand rills,

Spray-jewelled with the young Novem-
ber rime.

Happy who, listening,

Through your tumultuous revelry can hear

Sworn promise of the spring.

To me, who tread the perilous darkness
near,

Ye speak this bitter thing.

Alas for him who yields !

Alas for him whose hopes be all confined

Within the barren fields

That march with death! 'Tis not to reap
or bind.

'Tis not to garner with the blest who deem

The fruit of life is richer than a dream.

Speaker,

S. W. DE LYS.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XVIII.

SHAPES OF HEADS AND OF HATS.

There is existing a very mistaken idea in the minds of thousands of intelligent people in regard to the shape of the human head at the point where the hat touches it, and that has arisen solely from the distorted outline which

the hatters' Conformatteur indicates at the top of the machine where the little outline is produced by a row of pin-holes indicating a shape, called by the hatters a Conform.

Reporters of papers have inter-

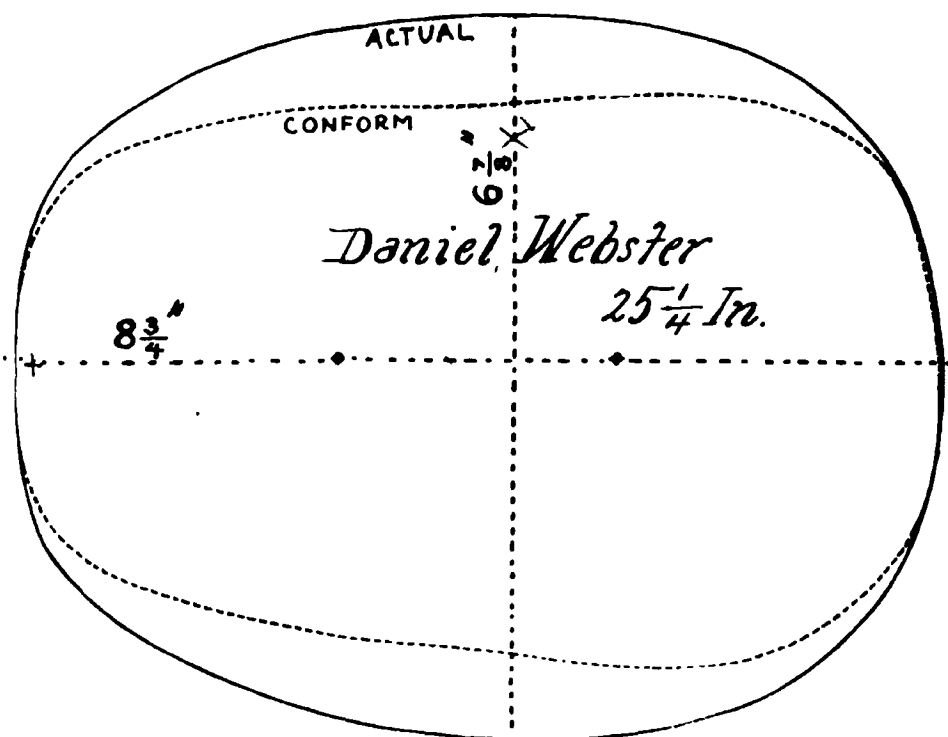


Fig. 141. Daniel Webster, represents a cross section of the head reduced one-half by the photographer. This was taken by means of the hat Conformatteur and the external line shows the shape and proportionate length and width of the great diameters of the head. It was taken from the only life cast for which he ever sat, and this external outline represents the exact form of the cast referred to. The circumference of the cast is $25\frac{1}{4}$ inches; the length from front to rear $8\frac{3}{4}$ and the width $6\frac{1}{8}$ inches. The left hand end of the outline, as we look at it, marked thus +, is the forehead, and this rule will apply to all the figures which are to follow. The inner dotted line of the head is called the Conform, which is the result of the action of the hatter's machine called the Conformatteur. A casual glance at that figure will show that it is much too narrow for its

length to compare with the outline of the real head. Outside of this interior dotted line is a reduced form of the larger outline, showing how much wider proportionately the head really was than the Conform represents it to be. And this reduction is accurate, because it is photographic. This gives the text of this whole topic, namely, that while the hatter's machine aids them in getting the exact size and shape of the head, its representative, the dotted outline, is misleading, while the form which immediately surrounds the dotted outline is the true shape of the head accurately reduced.

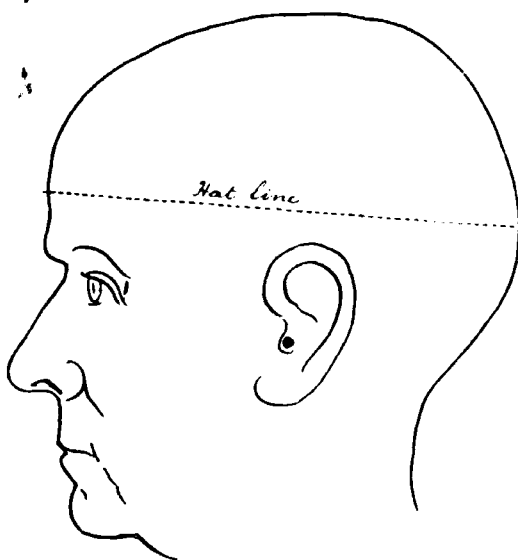


Fig. 142. This is a side view outline of the head and face of Webster from his bust. If the reader will turn to Fig. 1 of this series, January, '93, he will find this outline and other outlines of heads projected on the same scale, and also a back view of each, which will give a clear indication of the method of studying the forms and magnitudes of heads, and the significance of these facts. The dotted outline crossing from the center of the forehead to the center of the back head indicates the hat line, the place where the hat, properly put on the head, is worn. There is a dandy fashion of lifting the hat up from behind, but it is apt to blow off. The dotted hat line on this head shows where the Conformatteur is placed to determine the size and shape of the hat required.

viewed us with large numbers of these hatters' shapes or Conforms that had been printed by the dozen in different newspapers. They would bring them to us with the names cut out or concealed, and ask us what such a shape of head indicated, and wish us to write out for publication the character of some noted men based only on that form of the head which the hatters' Conformatteur produces.

Some twenty years ago there appeared an article in the *Scientific*

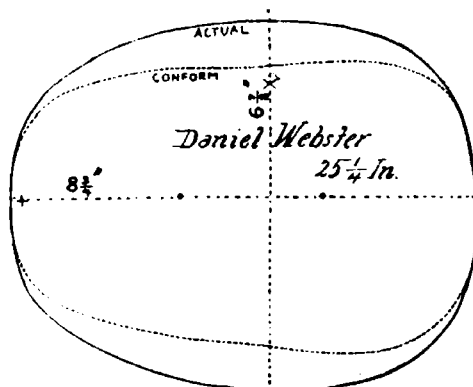


Fig. 143. Shows the central figure of Webster, 141, represented by the dotted outline, which is a reproduction of the Conform of Fig. 141, and around that is a reduced real form of Webster's head, and the contrast of the two shows the difference between the real shape of the head and the Conform which the instrument produces.

American, elaborately illustrated with a large engraving of the hatters' Conformatteur, with a specific description of the machine, and a large number of "Conforms" were published, with the names of the persons from whose heads they were taken, and these were represented as the true form of the heads. We were astonished that a scientific mechanical journal should accept the statement as a fact that those Conforms represented the real form of the heads in question. I kept a copy of the *Scientific American*, thinking sometime I would disabuse its readers in the matter, and it is not more than a year since, when, in overhauling some papers I met with it. It may have been a "communication," and the engravings furnished by an interested party, but the misleading impression which the text and the illustrations afforded should never have passed a clear-headed man worthy to edit such a paper. The Conformatteur does not and cannot make a small Conform of the same shape as the head that

serves as a model if the head is in any degree longer than it is wide. Only with a model perfectly round will the Conform be shaped like the model. Yet honest and intelligent hatters who have had twenty years experience will earnestly assert the contrary, but three minutes explanation will show them how easy it is for intelligent honesty to be mistaken.

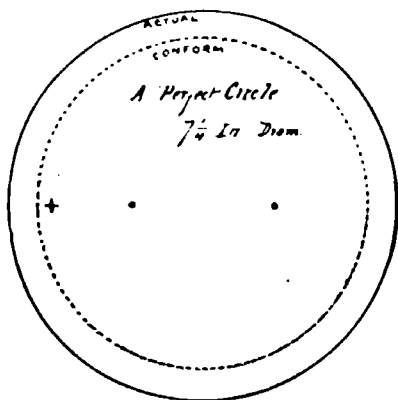


Fig. 144. A perfect circle represents a perfectly round head, if such a head could be found, and some approximate it. We had a figure made from a piece of board exactly circular, and put it into the Conformatteur, and, as we expected, it developed a Conform which was a repetition of the perfect circle, and this proves that the elliptical instrument applied to an elliptical head exaggerates the difference between the length and the width of the representation, reducing the sides just as much as the front and rear are reduced, proving that the Conform, so called, does not represent the real shape of the head, unless that head were perfectly round or perfectly square, and then it would represent it.

To aid me in directing public sentiment to the real facts in this matter, I have been most kindly aided by those well known popular and prosperous hatters, the Messrs. Dunlap & Co., of 180 Fifth avenue, New York, who have furnished every facility by applying their Conformatteurs to casts of heads from our phrenological collection, especially that of Daniel Webster, the only life cast ever taken of him, showing the absolute size and form of his wonderful head. Those gentlemen have also permitted us to have the use of

the Conforms of not a few of their noted customers, by means of which we secured outlines of the head the size of life, that enabled us to make the record of the size as well as of the forms of the heads.

In the case of the head of Daniel Webster, we show the relative length and width and the exact form of the head where the hat fits it. The Conform, so called, in the center is the production of the hat Conformatteur in taking the shape and size of the head, and the dotted outline shows that Conform, but in photographing the real shape of the head and reducing it to the length of the Conform as a means of comparison, it will be perceived that it shows an outline much broader than the form which is represented by the dotted outline. This is a perfect reduction by photograph from the large outline, and represents the true form of the head, and the dotted outline of the same length is an exhibition of the shape of the head distorted as the hat Conformatteur produces it.

These Conforms, technically so called, are not really the form of the head. If one would look at a Conform, which is about half as long as the head and one-third as wide, and compare it with the open hat of the original before him, he would see instantly that it is much narrower in proportion to the length than is true of the hat of the person which is shaped to the head.

The reason why these Conforms, so called, are so much too long for their width is that the machine is an ellipse and the head which is placed in it is also elliptical, and the way the machine is made to act necessarily reduces the sides as much absolutely, not proportionately, as it does the length. If the head were perfectly round the hatters' machine would make the Conform perfectly round, because it would reduce the figure equally on every part of it.

The machine, as some readers may not know, is made something like a

hat, the walls of which are composed of a great number of narrow pieces of wood, the height of a hat, surrounded by an elastic spiral spring, and then the wall is constructed so as to move in an out to fit any head. This adjustment on the head gives the perfect size and form of the head or inside of a proper hat.

The vertical pieces constituting the walls of this machine are turned at right angles above the head in the top of the machine, and approach the center and each other by radical, convergent lines, and at their ends surround an oval space over the center of the top head. At the inner end of these tapering arms, each having a standing needle point, look like a picket fence around a small fountain.

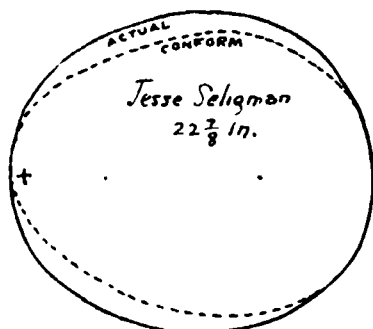


Fig. 145. Jesse Seligman, the distinguished banker, recently deceased, had a $22\frac{7}{8}$ -inch head, and in form it approximated the round. He was of German stock, and they have broader and shorter heads than some other nationalities. And this shows that the Conform with the dotted line approaches the true form of the head more than was the case with Webster's or the others that we shall represent. This fullness of the side head gave him the push, policy and financial capacity which enabled him to begin peddling in a strange country with a basket, then a pack and to become a banker and a millionaire. He had also the intellect and the moral top head which made him a philanthropist and in middle life a peer and accepted associate of the great and good of the land.

When the Conformatteur is being fixed upon the head, those converging arms are drawn away from the center according as the head presses out the wall pieces, and the little

space at their ends is contracted and expanded by the sliding in or out of those arms from the center, thus giving shape to the open space fenced in by standing needle points.

While the Conformatteur is thus fixed a piece of stiff paper or thin cardboard is laid over this row of needle points, and a padded cover fixed by a hinge is pressed down upon the paper and the needle points perforate the paper, making a shape which the hatters call a Conform. This paper being removed and trimmed according as the perforations, show its form. It is then placed in another machine called a Formillion. This apparatus (the head not being in the way) can lie flat on the table and is made up of pieces of wood made tapering and converging toward the

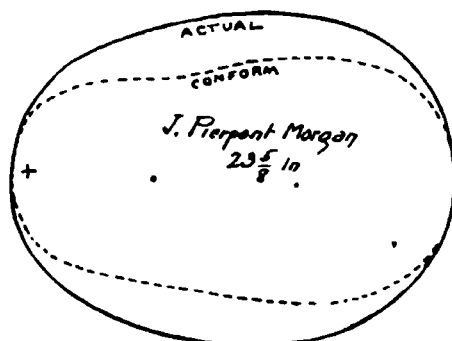


Fig. 146. J. Pierpont Morgan, the banker and business man, has a head measuring $23\frac{5}{8}$ inches in circumference—it is a broad head and yet long. It is a longer head in proportion to the width than was the case with Seligman, and the Conform represented by the dotted outline shows a greater contrast with the solid line around it. Intellectual sagacity, scope of mind, prudence, policy, sociability, courage and thoroughness are his leading characteristics. But how the Conform is stretched out, and how it varies from the true form, as seen when it is reduced in length to that of the Conform!

center in which the Conform is placed on two centering points to hold it firmly.

When these converging arms are gently placed against the edge of the Conform, set screws are turned which hold them firmly, and this Formillion then exactly represents

the form and size of the head when surrounded by the Conformer and the hat block is made to conform to it.

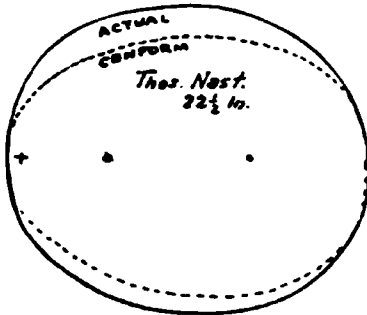


Fig. 147. Thomas Nast, the caricature artist, whose head measures $22\frac{1}{2}$ inches in circumference, has a head bordering on the round, broad and short type, and the Conformer in his case approaches the true outline form of head which surrounds it more nearly than is the case with J. Pierrepont Morgan.

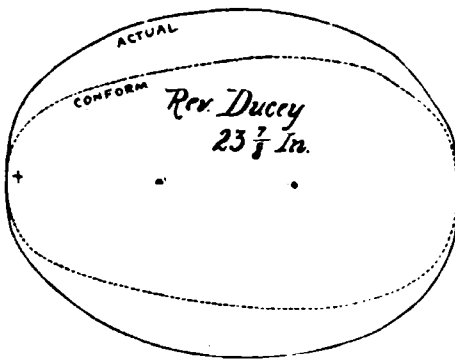


Fig. 148. Rev. Mr. Ducey has a long head, running towards the intellect from the opening of the ears and from the ears backward in the social side of character, but in the side head he is not as strong in the selfish elements as those who have a broader head in proportion to the length.

This development indicates intellectual penetration, the power to gather and hold knowledge, and bring it into use as may be required. His head measures $23\frac{7}{8}$ inches, and belongs to the class of very large heads, and yet that size is liberally made up in length of head rather than of breadth; still the head is amply developed in the sides, and he has therefore great administrative ability.

The Conformer appears to be very long and comparatively narrow, but the true form of the head in the continuous line around the dotted line shows the difference between the real shape of the head and the Conformer.

The side-view portrait of Daniel Webster was taken by photography from the bust of Webster himself and is accurate; the dotted line that runs across from the front to the rear is the "hat line," and the Conformer is put on the head to fit on the line where the hat fits, and thus we get the shapes of all the heads we have presented, and the figures, $25\frac{1}{2}$ inches for Webster, $22\frac{7}{8}$ inches for Seligman, and $23\frac{7}{8}$ inches for Vanderbilt represent the exact circumferential measurements of these heads.

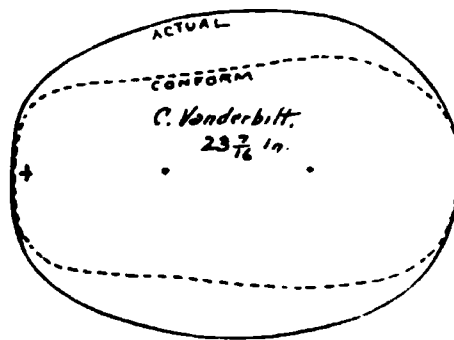


Fig. 149. Cornelius Vanderbilt, the great railroad man, whose head is $23\frac{7}{8}$ inches, shows a decidedly large brain, indicating great length fore and aft. The intellectual region in the front, and the social region in the back head being large give length to the development. His head is wide enough in the center to give him secular wisdom and energy of character. It is a very well balanced head, but the Conformer, shown by the dotted line, is very much lengthened by the process of taking that figure by the hatter's machine. The real form of the head being reduced so as to contrast more easily with the Conformer, shows how much wider the head really is than the Conformer represents.

The outlines we present are taken by photograph, and each occupies the same distance from the instrument, so that they are relatively the correct size; Webster's being the largest and the others varying according to the measurement of the head.

Mr. Seligman's head approximates the round, and the dotted line of the Conformer is more nearly round than any others present.

C. Vanderbilt, J. Pierrepont Morgan and the Rev. T. J. Ducey have longer heads than Seligman in pro-

portion to the width, and the dotted line Conforms are elongated and narrow. The most extraordinary one is that of Thomas Shandley, which was made on a cast of his head and which we know to be correct; yet people have brought us such outlines as Shandley's and wanted to know what such a head indicated.

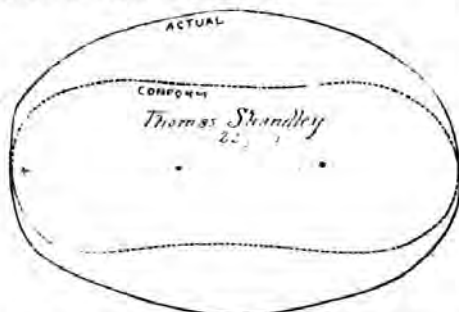


Fig. 150. Thomas Shandley has a peculiar development of head. It is long for the width of it, and the Conform, bounded by the dotted line, looks more like the sole of a shoe than like the inside of a hat, or shape of a head.

The proper form of the head being reduced by photography to the exact length of the figure of the Conform, shows by contrast the difference between the Conform and the head itself.

For the hatter, the Conformatteur is a valuable institution, but as showing the real form of the head by the dotted line Conform it does not represent it. If a head were perfectly round then it would represent it, but as nearly all heads are elongated, some more and some less, the variation is marked and relatively misleading.

An oblong or oval body subjected to the treatment of the Conformatteur in its process of reduction to the size which is called the Conform, lessens the width of the small figure as much as it lessens the length. For instance, in treating a head which is eight inches long and six inches wide, if an inch be taken from the front and rear the figure loses one-quarter of its length, and an inch taken from each side of the head lessens its width one-third. Take two and a half inches from front and rear and there are three inches left. Do the same by

the sides and there is left but one inch. It is three times longer than it is wide. At first there was the same real difference, but the proportionate difference in the outlines as shown is astonishing. We have many more specimens for future use in this line of work.

Fig. 151 and Fig. 152.—These two portraits may often be seen on the streets. The first is a broad head, and did not have the head measured by the Conformatteur, the hat not shaped to his head, and a finished hat cannot be put into shape readily. It will be seen that the hat at the band is bulged out and the brim is buckled and twisted because the sides are pressed out and the rim has to buckle because the hat is bulged midway.



FIG. 151. BROAD. FIG. 152. NARROW.

Fig. 152 is a narrow head, easily compared with the other, and the hat seemed to be well fitted to the head and is not bulged out at the sides, and the hat looks as if it had been fitted by the modern Conformatteur, while the other one looks as if the hat did not belong to him and as if he had laboriously pulled it down, thus buckling the brim into awkward shapes.

The organs of the selfish propensities, above and about the ears, give breadth to the head, and their deficiency gives flatness to the head. Figs. 145 and 147 are like 151, while Figs. 158 and 159 are more like 152. The broad headed men are those who are efficient, severe, thorough, and self-protecting. The narrow and long heads are more frank, social, and usually more developed in the intellectual region.

CHARACTER STUDIES. No. 8.

BY NELSON SIZER.

¶ [This young lady was presented as a total stranger and described and the work completed as here given, without a dream or thought of her history, her effort or her hopes.—N. S.]

FLORENCE ROCKWELL.

You ought to have connected with that large brain of yours—22½ by 14½ inches—a constitution that would ultimately turn the scales at 160 pounds, and you have time enough before maturity to reach the requisite weight. If you were to go on the stage and could have the ripeness of life which 160 pounds ought to bring, you would play Lady Macbeth better than you would if you weighed, as now, only 112. The body is the boiler, or officiates as such. The brain is the engine, and yet the brain is the master of the body. Every tremulous thread of the bodily constitution, every fibre, is under the immediate dominion of the brain and cannot act without it; and yet the body feeds the brain and acts out and obeys the mandates of the will in all the efforts that bring victory, however put forth. So the brain and body is a composite establishment, interplaying and working, and it is called automatic.

You have a well balanced head; that is saying a great deal for any head; but it is a large head and a healthy head, and a mental make-up that is calculated to win victories somewhere. It does not make much difference where you try it, whether in scholarship, in mechanism, or in art as portraiture, or art histrionic, or art musical, or art terpsichorean, or equestrian art.

Your large Perceptive organs give you an open sesame to all the outward world; you see it and know it and appreciate it. You draw pictures; you would be picturesque if you wanted to—that is, you could

play pantomime; you could suit the action to the word in elocution.

You have large Order, and consequently you incline to systemize. You have large Calculation, and hence you are inclined to be mathematical; you think by square corners and in a way that is demonstrable, and when you come to a conclusion you feel solid on it; you do not guess at things so much as some do.

You have strong musical talent, and you ought to play everything from a penny whistle to the great church organ. I think you ought to sing; I mean that you have elements of body that would make you a good singer. Some people have the soul for it, but they lack voice; they cannot make the fiddle respond.

Language qualifies you to express yourself easily. Causality is large enough to make you take in the why and wherefore. Comparison enables you to analyze and discriminate and see the differences and the analogies, and think pictorially on that account. You see the scene and then describe it. If you were a lecturer and public talker you would see the figure; you would have the vista of it that would spread out like a panorama; sometimes it would be a moving panorama.

You have large Mirthfulness; you see the funny side of life and use it. Your Constructiveness and Ideality enable you to do anything in the way of ingenuity. Your hands follow your thought and are expert, you have what the French call facility. You look out for the dollar; believe in a good exchequer and also in a good cuisine, and you would learn to cook, and it would taste good in anticipation if

you were preparing food. Hence you well sustained vitality.

You have large Destructiveness, and that enables you to be strong in your compositions; there is a bravery about it; there is a certain kind of executive severity. If you were on the stage, for instance, and you had to execrate something, it would feel execrated. If you reprimand persons they feel as if they were reprimanded.

There is hardly anything that a woman can do, or a human being, for that matter, that you cannot work at to pretty good advantage.

You have large Firmness, and that gives you persistency. You have Self-esteem enough to make you self-poised and self-possessed, but not enough to make you seem to be dogmatic. When you know all about it you sometimes say it suggestively. Another one will say, "It is so and so." You do not do it.

I think if you had a trifle more Self-esteem it would not hurt you at all.

Continuity is not quite large enough for a perfect character; but sometimes it is a benefit not to have too much, because you can make transitions from what you are doing and thinking to something else that may be interjected. For instance, if you were reciting a dialogue, and you were in earnest talking your point as if you had your mind made up about it and something else were interjected, you could turn right around as the play would be written, and talk it as if you had not thought of anything else for a week. When you come to daily life you can do it. If you were a teacher and a pupil brought a problem, you would be all arithmetic for a minute till you got the thing straightened, and another would be waiting for grammatical assistance; then you would become grammatical; you would bury the arithmetic and the mathematics as if you had never known them; then the geographical question and the question in history or mental philosophy, and you would go from one to another and would

seem to sparkle; and the children would think you were very smart; but if you had large Continuity, it would take you a good while to get into arithmetic; and when you got into it and another person asked you about grammar, it would take you a long while to get yourself established in that, and the pupils would think and tell their mothers, "I don't think our teacher is smart, for I got the problem out before she did." It is only large Continuity that makes one do that. It takes some time to transfer a locomotive from a platform car to a ship.

You have the social elements well developed. You are a good friend; you are a good citizen; you believe in home; you would be a good mother; you believe in children and know how to deal with them; dogs believe in you; all pets would talk to you; canaries know whom to talk to and they recognize them.

You have strong Conjugal love, that is to say, it is a feeling of satisfied and centralized affection. "This one and nobody else." And as soon as you were engaged you would like to have it understood in the circle where you moved that you were engaged, and then the conduct would not be thought too diffident or too forward or too something else. Besides, you would not want to have an extra distance established between yourself and your chosen companion; because if people knew that you were engaged, they would think you were pretty cool, distant and formal. You would want the fact known, and then if you wanted to be joyous and jolly for a moment, it would not seem out of place. And if you wanted to have it appear that everything was settled, that would be all right.

I think you are not much of a hypocrite; there is a good deal of wholesome and homelike integrity in your make-up. You have a lot of common sense. You have always had enough of that; when you were a little girl as tall as a chair, you were old-fashioned, as grandmothers used to call it; you

would talk sense and give answers that would seem too old for the tree they grew on.

You are not too large in Caution; that is to say, the elements of force

because it would be fed and nourished, and, like a great organ, with enough of wind to make it sonorous. Where a person's body is not large enough for the brain, there is a little weak-



FIG. 8. FLORENCE ROCKWELL.

Rockwood Photo, N. Y.

are strong enough to balance the elements of prudence, so that you do not feel timid nor act timid.

You have an uncommonly large brain, and you look to be pretty healthy. If you had more body, there would be more snap in your eye, and there would be more glow in your cheek, or, if you had a $21\frac{3}{4}$ inch head with your weight it would scintillate,

ness in the manifestations, as there would seem to be in the playing of a great organ if it were not kept up strongly—a lack of accomplishment.

If you wanted to be a scholar in history or art or mechanism or commerce, or in domesticity you would be at home all around. We seldom find a head as large as that with a person no larger than you are, and we sel-

dom find a head as large and as well rounded out and full as yours, and there are fewer phases in it which fail to respond as fully. A billiard ball is supposed to be perfectly developed every way for its size. It does not care which side it rests on; one side is as good as another, and it will roll within an eighth of an inch of going into a pocket; it does not know that there is any danger there, don't know that there is any game in it, but it stops when the force stops. That is what balance does.

You take common sense views of life; I mean by that reasonable views of life; you are not angular and eccentric or queer or partially insane, as most people are. There are some sharp sides to most people, and some flat sides; and so with genius and imbecility muddled in together, they are eccentric and fill the world with astonishment.

Now, you may do what you want to do in the way of thought and study and work and achievement, and not fear failure. And I see no reason why you would not excel in almost anything you might desire to do. You may be a musician; you may be an actress; you may be a mechanic; you could paint well, as you have Color and Form large.

BIOGRAPHICAL.

Florence Rockwell, who was born in St. Louis, Mo., is not yet sixteen years of age, and has already in her short career attained a position and accomplished that for which many actresses have labored for years. As leading lady for Thomas W. Keene she has played Juliet, Ophelia, Desdemona and various other rôles of a Shakespearean and classic repertoire, to the delight of critical audiences. Her success was so marked that she will soon appear as a star.

She showed her dramatic talent at an early age and was perfectly at home before an audience. Her first appearance in public was at the age of four years, when she entertained

the members of the St. Louis Merchants' Exchange with recitations from "St. Nicholas" and "Babyland." She was in demand for amateur theatricals, and when twelve years old her talent had developed to such a degree that it was decided to have her study for the stage. She came to New York, and the metropolitan critics confirmed the verdict of her friends. She was placed under the tuition of Rose Eytinge, who was enthusiastic in her predictions for the future. Two years were spent in study, and the little girl had grown to be quite a big girl when a vacancy occurred in Mr. Keene's company and she was offered the engagement. She made her debut in Pittsburgh as Julie de Mortemar in *Richelieu*. Her success was instantaneous. Miss Rockwell takes great pleasure in athletics and has made a record in gymnastics. She is remarkable for her symmetrical physical proportions. She is an earnest student, and with her youth, grace and dramatic power is "pronounced a girl of positive genius, around whom prophecy will delight to gather."

EXTRACTS FROM PRESS NOTICES.

Pittsburgh Leader, Sept. 5th, '93.

"Miss Florence Rockwell is pretty and has a gracious stage presence. Her expressions in the most trying lines are natural, and the lady gives evidence of latent genius. She has a sweet voice that endears her to her audience before she has spoken a dozen words."

Kansas City Journal, Oct. 8th, '93.

"This girl of fifteen is certainly an important consideration in the legitimate field, although she never appeared professionally until about four weeks ago, when she at once assumed the position of leading lady with Mr. Keene. Her Juliet is a wonderfully impassioned and illusory creation. Her reading of the beautiful lines is informed with a philoso-

phy, a passion and a general intelligence nothing less than astonishing."

Chicago Despatch, March 6th, '93.

"If Miss Florence Rockwell does not have her pretty head turned at the adulation her youth and genius will bring, her coming years will be crowned with the laurel wreath of brightest success."

St. Louis Republic, Nov. 23d, '93.

"In Ophelia the unadorned picture that the girl presents by itself wins applause. It is not necessary for her to speak to know that she is lovelorn, or later no word is needed to add to the proof that her mind is gone. No insane laugh of recent Ophelias has surpassed that of the creation of Miss Rockwell."

Baltimore Sun, Dec. 29th, '93.

"Mr. Keene's marked success was shared by Miss Florence Rockwell, whose Ophelia was the very embodiment of girlish feeling and pathetic delicacy, particularly in the mad scene."

Boston Traveler, Dec. 9th, '93.

"Unquestionably the youngest

leading lady in the world in tragedy is Miss Florence Rockwell, who has won the praise of many of the best critics in this country in such rôles as Juliet, Ophelia and Desdemona. Miss Rockwell is but fifteen years of age, and this is her first season upon the stage. Many persons who are in a position to judge say that the young lady is the coming successor of Mary Anderson."

Cincinnati Post, Nov. 28th, '93.

"Miss Rockwell as Julie won the appreciation of the most critical. She is really but a child, and only when Julie exclaims that she is no longer a girl but a woman, does the impulse of genius carry her over the line of maturity."

Washington Capitol, Dec. 23d, '93.

"Miss Rockwell takes the part of Juliet for the first time at Juliet's age. A child-like, pure lily face she has as any little girl making her Easter communion, and yet some of the great critics have said that her work is strong and real and full of the true ring of dramatic power."



CHARACTER STUDIES. No. 9.

[A photograph of this man was handed to me for analysis and description. It was dictated to a stenographer, with no information as to the name or work of the original, and is here presented verbatim as then given, the veritable study of a stranger.]

B. J. RADFORD.

This head and face constitute an interesting study. The height being six feet and the weight but 165 pounds, show that there is not a pound of flesh to spare. Hence, his body is muscular but not plump, active and strong and substantial without being weighted with adipose material.

He is a natural worker. Wherever he may put forth endeavor it counts. If he were a mechanic he ought to be a builder of large structures, and do something that requires breadth and height and strength. He would hardly be willing to make bird

cages or watches, but rather locomotives, bridges or churches; and while he has a wonderful development of the Perceptive organs, showing marvelous fullness over the eyes, giving the keenest kind of practical criticism, he does not deal in light, trifling matters. If he were accustomed to the use of tools he would want something, the handle of which would fill his hand like a carpenter's hammer. And he would hit where he looked, just as his Language goes to the spot without any divergence, and makes a solid and influential impression. Imagine him a soldier with those great cheekbones, that large nose, that high head, and that spirit of courage

and thoroughness which animate every feature, which show distinct and earnest attention and intention. Imagine him a worker in the fields of heavy industry, the master of a ship, at the head of a hundred workers anywhere, and it would be easy to suppose that he would be the leader, the master, the teacher, the director. Notice the great fullness along the middle of the forehead; he has not only the large perceptive development across the brows, but through the middle of the forehead the organs which give retentiveness, ability to gather knowledge and hold it ready to be used whenever it comes to be required. Hence he would, as a business man, have fertile resources; he would, as a public speaker, be full of sound and searching truth, and rarely at a loss for a clear and vigorous method of expressing his thoughts. His memory furnishes the material that his large perceptive organs have acquired; the memory holds it and pays his drafts at sight, and, therefore, he seems to know everything in the field of his endeavor where he would choose to act. There would be few men in such a field who would be more ready and vigorous and clear-headed than he, or more decisive in his utterances.

The upper part of the forehead is also large. He is a wonderful critic, sees the flaws and excellencies, the success and the mistakes which are interwoven with the conduct and works of people around him. He would be a good reviewer of books; or, if he were a mechanic, he would write clear and satisfactory descriptions of machinery and other structures.

He has the psychological spirit, the tendency to read men and understand mind and motive, and know how to relate himself to people in order to become their leader, their teacher and their master.

He appears to have large Language, although the eye is not protruding. If he were to gain thirty or forty

pounds of flesh, there would be a fullness under the eye which would indicate that Language was large and active.

His Causality makes him philosophical, but he is also historical, scientific, descriptive, analytical and biographical. He would enjoy writing biographical work; and if he were related to such a department of literature, he would be invited to write biographies, which would be read with avidity and pleasure. As a preacher he would talk up some noted worthy of olden time, and give such a running commentary on his daily life and walk and spirit that people would feel that he had been there and known him by sight and by touch. He would make a splendid lawyer; he has the power of debating, and, unlike some lawyers, he would not take a circuitous route for the accomplishment of a purpose. He inclines to work in straight lines, as railroad men would say, he is an express train, and has a right to the track, and other traffic is side-tracked till it goes by.

The reader will notice that in the upper angle of the temple, the head seems to broaden out, and that shows a large development of Ideality, and, with all the rugged strength of his features and expression, he has a sense of the beautiful which sometimes invites his thought and his language, and he will make some beautiful passages, but they are always strong.

He has large Sublimity, and consequently enjoys the vast as well as the beautiful; and if he were to write poetically, there would be strength as well as beauty, majesty and power, as well as delicacy and tenderness.

His Cautiousness is influential, but not too strong; for his own purposes, Cautiousness has only the tendency to keep him awake to all his surroundings. He does not walk or act or feel timid or alarmed, but he does not cross the street without looking to see if something is likely to injure

him. He looks at his steps, but he makes them rapidly and firmly.

He has large Self-esteem, is conscious of his own worth, and when well assured of the data on which he

they do not appear to reach their conclusions by a suggestive diffidence. But every utterance is a blow squarely laid on and so, when he feels assured as to his premises, his conclusions are



FIG. 9. REV. BENJAMIN J. RADFORD.

is acting, he moves as if he were entire master of the situation.

Firmness is large enough to make him seem overbearing, dogmatical, but people who know how much he has had opportunity of knowing will not regard it as dogmatical. It is simply a recitation of well known facts. Men do not apologize when they recite the multiplication table;

as inevitable as gravity and sometimes as heavy.

Conscientiousness is a chronic attendant; every movent of his thought and purpose must be squared by the element of righteousness; and, knowing himself to be right, he utters his thought or executes his efforts with a pushing certainty that discourages opposition.

His Veneration is large; hence he has a high respect for greatness and whatever is noble or divine.

His benevolence is large; it is not common to find a man with such massive severity of features and expression who is so gentle and sympathetic as he is. He has enough of his mother and other divine facts in his make-up that he is sorry for suffering and lenient towards ignorance and even vice; and he would deal with culprits with less rigor than most men who are as rigorous about their own conduct as he is. He is broad enough to feel that many men are wicked largely because they are weak; and others go astray and do wrong and are culpable from lack of opportunity for culture and improvement. Hence he would deal with those who have one talent gently. People are afraid to do wrong in his presence, and feel guilty when they see him if they are conscious of having lived below their proper privilege and duty, because that honest eye and that firm expression, and that tall top-head will always be a reproof to wrong doing. When boys, having been in mischief, see a policeman, they run; and there are men who walk the world who are not policemen, in whose presence sinners feel ashamed and afraid.

The side head seems rather narrow, as if his love of gain was not remarkably strong, and as if his Secretiveness were not large enough to give any shade of double dealing or duplicity. We judge, therefore, that his word is uncommonly direct but sincere and generally accepted.

He has the element of wit, but he would not use it in sarcasm, but rather as a plaything; he will laugh with those he loves, and pity those who are ignorant or too wicked to do their best.

His social feelings are fairly indicated; his friendship and love of home give him a companionable spirit and a loyal devotion to country and home.

His dark complexion and his large

bony structure indicate great endurance, and we judge from the constitutional indications that he belongs to a long-lived stock and is likely to live to old age and do good work clear up to the end.

That is a historical head. He is a fact gatherer and a fact retainer and a fact user; and he gathers material from every quarter of the world; and no fact that has been earnestly elaborated is uninteresting to him.

He enjoys traveling; he would be a fine geographer and a clear-headed scholar in almost any branch of useful knowledge. His memory, his Ideality, Language and Comparison give him a decidedly literary turn, and he would use it as a means of outlet for the expression of his power.

BIOGRAPHICAL.

Benjamin Johnson Radford was born near Eureka, Illinois, December 23, 1838. Working on the farm in summer, and attending school in winter, were the occupations of several years until he was about 17. His first teacher was an expert penman, and the youthful Radford was ambitious to equal his teacher in this art. Those now familiar with his beautiful chirography will appreciate the success of this early ambition. And, indeed, throughout his student life, whenever he has met a teacher who was remarkable in any department of study, it has been his purpose to excel in that branch.

The result of these characteristics, has been his elevation to a high position among his compeers in literary, scientific and Christian work. The young man continued to work on the farm, teach school, and attend Eureka College, until the commencement of the civil war in 1861, when, at the age of 23, he had reached the senior class in his studies. He enlisted in the company of Prof. O. A. Burgess, being mustered into the U. S. service May 25, 1861, and continued in the army until the close of the war in 1865. He re-entered Eureka

College in September '65, and graduated in June, 1866.

Until the war broke out it had been young Radford's purpose to prepare himself for the legal profession; but his experiences in the army, together with the influence of his matrimonial alliance with Miss Rhoda J. Magarity, to whom he was married in November, 1864, changed his purpose, so that he decided to turn his attention to the Gospel ministry, which was a surprise to the companions of his youth, for he seems to have been regarded by them as greatly lacking in the natural meekness and sobriety compatible with such a work. And it is likewise to be noted, that, even after he had undertaken the work, with all his studious preparation, a venerable elder in the church advised him to turn his attention to some other calling, as his prospect in the ministry seemed to foreshadow failure. This now seems amusing, in view of the success that has attended his labors, as well in the pulpit, on the platform, through the press and the school room, in every department of moral and religious work in which he has been engaged. It is in point here to say that some of the ablest papers that have appeared in religious quarterlies of his denomination have been from his pen.

Prof. Radford has occupied, with more or less success pastorates in Niantic, Ill., Des Moines, Iowa, and Eureka, Ill., his home church, where he was located for ten years, teaching also in the college, two years of

which period he was president. During his two years' residence in Des Moines, he was also president of Drake University.

In September, 1885, being then engaged as pastor and professor in Eureka, Mr. Radford was unexpectedly invited to Cincinnati, Ohio by the late lamented Dr. Isaac Errett, the founder of the *Christian Standard*, a weekly religious journal which now has the largest circulation of all journals of its class west of the Allegheny mountains. Prof. Radford became associate editor of this paper, and so continues to the present. His peculiar work entitled "Around the World" embraces a review of the exchanges, which necessarily calls in exercise his varied learning. While conducting this department during the past nine years he has also been engaged in pastoral labor most of the time. A small portion of this was at Denver, Colorado, but mostly at his Eureka home where he is also engaged in the college as professor.

As a poet Prof. Radford holds no mean place in the literature of our day. His book of poems, "The Court of Destiny" deserves and receives high commendation.

As a farmer, soldier, teacher, preacher, editor, lecturer or poet, the subject of this sketch has had a varied experience; and the successes of the past, as he is but little past the meridian of life, promise more abundant results in the future.

M. C. TIERS.

THE UNANSWERED QUESTION.

PHILADELPHIA, May 5, 1894.

"Why do the American Indians, after a long intercourse with civilization, resume—on returning to their tribes—the modes of life in which they were born?"

It seems to me Phrenology solves this supposedly unsolvable problem. Indians having a social nature demand social contact. This they find unattainable among whites as well as among blacks.

Finding an Indian girl in a household with white girls—domestics—it is noticeable that the Indian girl, so soon as the work is over, is absolutely alone, and there is also very little companionship even between Indians and Negroes. True, while being educated here, at institutions like that at Carlisle, Pa., they have social intercourse among themselves while together there as pupils, but on being separated and distributed in different sections of the

country they soon find themselves without a soul to talk with. R. D. WELLS.

Our friend has hit the nail on the head, and this country is full of illustrations in the conduct of other people besides the Indians. We Americans sometimes wonder why the Irish, Scotch, Germans and other foreign-born fellow citizens are clannish. They enjoy themselves better with each other. They have memories and associations in common with those of their own nationalities.

It will be noticed that Americans have in foreign cities a church, a hotel, a place to meet people, settled or transient, of their native land.

In New York there is a Southern Club and a hotel which is especially patronized by Southerners, and this social tie shows itself everywhere. Think of it. If you were in New Orleans, among strangers to you and your city of Philadelphia, how pleasant it would be to meet a person who knows a dozen people of your own city! From earliest history mankind

have consorted in tribes. Everywhere boys make up into parties, gangs, groups! Even in school districts the "east side" and "west side" boys are grouped in playful or hostile parties. In some families after the sons and daughters have married they remain cordially united in sympathy and interest; but this is not the rule. Each becomes interested in personal achievements and acquisitions, and desires to have "line fences" as strictly established as strangers maintain them. "Blood is thicker than water!" Home and family associations are precious! Animals collect in herds and flocks, even fishes in the fenceless flood live in schools. Great is sociability. It is a part of the very constitution of animated nature. Though pigs sometimes, nay, often, quarrel with each other, let a man, a dog, or a wolf catch a pig, its outcry will bring every bristly brother of the herd to his rescue, and woe to the invading enemy. The despised pig has one virtue! N. SIZER.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

JOHN NEAL AND DR. B. A. PARNELL.

JOHN NEAL, an American author and poet, was one of the many distinguished men who were warm friends of Phrenology, and who, by study of the science and strong personal influence in its favor, upheld it in its early days.

He was born in Portland, Maine, August 25, 1793. His parents were members of the Society of Friends, with whom he also remained connected until the age of 25, when, for a variety of reasons, the principal one being his inability to "live peaceably with all men," he received his formal dismissal.

When only a month old he lost his father, but by the exertions of his mother, who conducted a school, he succeeded in getting a tolerable elementary education. About the age of twelve he commenced business as a

shop boy; a few years later he taught drawing and penmanship in the principal towns of Maine; in 1815 he became a partner of John Pierpont, but the concern failed. Pierpont then began his ministerial career, and Neal devoted himself first to law, then to literature.

His writings were of a varied and prolific nature, embracing novels, poems, histories, magazine sketches, reviews and essays. He spent three years, 1824-1827, in England, during which time he contributed to *Blackwood's Magazine*, the *London Magazine*, the *European*, the *New Monthly Magazine*, the *Westminster Review*, the *European Quarterly* and others, numerous articles on the social and political condition of the United States, besides tales and miscellanies.

During his visit to England he lived

for some time in the house of Jeremy Bentham, and published a memoir of this remarkable man after his death. George Combe, in his "Tour in the United States," said: "I told Mr. Neal that the cast of Mr. Bentham's head, taken after death, showed an excessive development of the organ of Love of Approbation. Mr. Neal remarked that Mr. Bentham 'would not bear contradiction from any one except Mr. Doane, the barrister, one of his secretaries, and myself. Everybody also flattered him to his face—if not by downright eulogy, by submissiveness or unquestioning acquiescence.' There is proof of this in every page of the memoir above referred to. When he understood that Mr. Neal was keeping notes of his conversations, he desired him to write them out every night and made him read them to him in the morning!"

While George Combe was visiting Portland in 1839, he became acquainted with Mr. Neal, and gives an interesting circumstance which occurred while Mr. Neal was practicing law. As it bears directly upon our subject it is briefly mentioned, and in Mr. Combe's words: "Among other gentlemen in Portland who take an interest in Phrenology we became acquainted with Mr. John Neal, a lawyer and a distinguished author in the United States. He gave me 'The *New England Galaxy* for January and February, 1835' to read, on account of the report which it contained of a trial of a boy in whose defence he had pleaded and led evidence, avowedly on phrenological principles. To Mr. Neal is due the merit of being the first barrister, so far as my information extends, who has had the courage to bring Phrenology directly into a court of law and to plead upon its principles." When Mr. Neal returned to America in 1827, he settled in Portland, where he employed himself in practicing law, writing and lecturing. He was also a very earnest advocate of physical exercises, and excelled as a gymnast and fencer. He

contributed many articles to the PHRENOLOGICAL JOURNAL, for which he entertained a warm regard. He had strong personal magnetism, and was agreeable, sympathetic, friendly and pliable. These qualities, together with his polished manners, won for him many friends. He died June 20, 1876.

DR. B. A. PARNELL.

Dr. Parnell was considered one of the best of the early phrenologists, and deserves recognition in these sketches, although but few facts connected with his life and labors can now be obtained. He began his phrenological career in the infancy of the science in America and left converts wherever he went. He visited principally the South and West, doing more for the science in these regions than perhaps any other single worker.

In 1840 O. S. and L. N. Fowler visited him professionally without his knowing who they were, and the descriptions he gave were characteristic and to the life. The writer also received an examination from Dr. Parnell, and was pleased both with the man and his professional methods. The following brief particulars are taken from a letter written to the PHRENOLOGICAL JOURNAL by Mr. C. Townsend, soon after the death of Dr. Parnell:

"He was a man very widely known throughout the Western and South-western States, as a popular lecturer and indefatigable laborer in the field of phrenological science. Few men have done as much in that particular department, and fewer still have been as successful in convincing their fellow men of the truth of the great leading features of the interesting science to which his life was chiefly devoted. His health had been feeble for the last nine or ten months immediately preceding his death; but still, with an energy and zeal which knew no obstacles too formidable to be vanquished, he continued to labor. His time, attention and talents have

been devoted to the investigation and dissemination of the principles of the science of Phrenology. For the last sixteen or eighteen years he has lectured almost incessantly; and it is to be regretted that he lectured so much and wrote so little. But oral instruction seemed to be his forte. He was a ready, captivating and persuasive speaker. Few men, indeed, possessed his powers of enlisting and riveting the attention of a promiscuous audience. His manner was easy and deliberate, yet positive and emphatic. He rarely said anything except in a manner peculiar to himself. He was a bold and fearless speaker, and nature seems to have designed him for the exercise of no ordinary dominion and influence over the minds of his fellow men.

"The leading element of his character was moral courage. He asked not the world what he might think, or what he might speak; he consulted no living mortal, nor the recorded opinions of any deceased author, as to the views he might entertain; in fact, he seemed totally indifferent to the estimation of men concerning him, although no man seemed more anxious than himself that truth should be taught to and embraced by the entire family of mankind. He was a man of unaffected modesty and rustic simplicity in all his intercourse with society; not of that haughty, assuming and overbearing manner which would ever lead him to obtrude his peculiar views upon the attention of others. Therefore his personal enemies were few, while his good qualities were so numerous and prominent as to secure him troops of friends wherever his lot might be cast. He would enjoy his liberty of thought and of speech for himself, and was always cheerful to concede the same prerogative to others. * * *

"That Dr. Parnell had faults or defects even his best friends and sincerest admirers would hardly pretend to deny.

"But these faults were of such a character as more intimately concerned himself than anyone else. Phrenologically, Dr. Parnell had several peculiarities. His Acquisitiveness was very weak; the acquisition of money or property of any kind seemed to have no influence whatever over his conduct. He rarely knew whether he had five or twenty-five dollars in his pocket, and was aware of the limits of his resources only when he found he had not cash enough to pay his bill.

"Vitativeness was another deficient organ in his brain. He often remarked that he would just as soon die as to take a journey to a neighboring village; and when he came to look into the dark valley, and was told that he could live but a few hours at the longest, he manifested not the slightest anxiety or agitation, but, on the contrary, serenity and tranquillity. For two or three weeks previous to his death he seemed perfectly conscious that he should live but a short time. About two weeks before his last and fatal attack, being confident that his days were few, he made the singular request, and often repeated and insisted upon it, that he should be buried north and south, with his feet directed to the south, and that the writer should take his head from his body and secure its perpetual safe preservation. His first wish has been complied with, he is buried in our village graveyard with his feet to the south; and I have his head in my possession, and have adopted such measures as cannot fail to secure it.

"He often said that the contemplation of the human head had been a matter of great and absorbing interest to him for many years. No one doubted his sincerity, and he repeatedly made known his eccentric request in the presence of witnesses whose veracity would not be questioned. He enjoyed his senses down to the latest moment of life, and still insisted upon the execution of his will in this regard. He several times

remarked that he had a very extensive acquaintance throughout the Union, that his character was known, that he had devoted many years of his life to Phrenology, and that he would like finally to present his head, as a contribution to the science, when he should no longer have use for it.*

"Dr. Parnell's was no ordinary head. It was of the larger size, measuring around the base of the brain full twenty-three inches, but this was not a fair indication of the

quantity of brain contained in the cranium; for the entire coronal region was elevated to an unusual height. Benevolence, Veneration, Firmness, Hope, Conscientiousness, and some of the organs contiguous to these were very largely developed. Hence his strong moral feelings, uniform kindness of disposition and fearlessness as to the future. He was known in boyhood and youth for his generous and amiable qualities, and as a lad of no common promise."

Dr. Parnell died at Manchester, Mich., on the 22d day of April, 1847.

* I have, through the JOURNAL, sought for information with reference to Dr. Parnell's skull, but have received no reply.
C. F. W.



WHAT'S IN A NAME?

A ROSE by any other name," said the great poet, Shakespeare, long ago, "would smell as sweet." Everybody must admit the truth of this. If the lovely pink or creamy blossom that we have crowned queen of flowers were called *soot*, and the refuse from the chimneys were known as *rose*, the latter word, pretty as long use has made it seem to us, would always call up memories of blackness and pungent smell, while the former would unfailingly suggest a picture of beauty and fragrance.

So far, a name matters little. It is what we *are*, not what we may be *called* that is of chief importance. It is when the name truthfully describes a person or a thing that it becomes of real moment. No one likes to be called a *sneak*, a *liar*, or a *thief*. It is hard enough to bear it unmerited; but if justly earned it is a thousand times worse, because the sting of conscience within is then added to the sense of shame without. To know that we *deserve* the bad name which is attached to us, must be intolerable.

Some folks, however, old and young alike, do not seem to mind deserving the name so long as they don't get it.

Little Johnnie, who is not yet four years old, will often come to his mother and say: "Mamma, Susie has been and hurt me!" or, "Mamma, they've been and done"—this or that. And then he will add, "I'm not a little tell-tale, am I?" Another time after eating up his own cake or orange very fast, in the hope of getting a piece more of somebody else's share, he will anxiously ask: "That isn't g'edy, is it? You don't call that g'edy, do you?" And if his mother is obliged to answer: "Well, yes, I'm afraid it is," Johnnie will be very much distressed. "Oh, don't say that!" he will beg. "Don't call me uggy names," And perhaps he will cry.

You see he doesn't mind *being* a tell-tale, or greedy, so long as he has not the disgrace of it. He likes "the game," but not "the name." We hope none of our readers are as babyish in their way of thinking and acting as Johnnie.

Sometimes good people have to bear being called bad names. One of the best men who ever lived—most of you will guess his name—was called by his enemies “a pestilent fellow and a mover of sedition throughout the world.” That sounded dreadful, but he did not mind it so very much because he knew it was not true, and he knew that God knew it, too, which was better. Sometimes children who are trying to do right are called “proud,” or “unsociable,” or “ill-tempered” by those who do not care to be good, because they will not join in games which involve disobedience, or mischief, or cruelty to some living creature.

But as a rule, a name gives a more or less just idea of the person or thing to whom it has been attached. Brisk people are never dubbed “snails” nor generous people “prigs.” Our characters, or what we *are*, and our reputation, or what we are *said to be*, fairly agree; and in the long run, despite occasional misunderstandings by the way, justice is sure to be done. Let us only take care to *be* all that we would wish to be called, and we are scarcely likely to suffer from an ill name.

JENNIE CHAPPELL.

THREE VISITS.

IN the natural world every section of country has an atmosphere and climate of its own, so I find that every community and each separate home has a social climate and certain air peculiar to itself.

One late Autumn it was my fortune to visit, for a short period, in three different families.

At my first stopping place I was given the elegant parlor bedroom to sleep in. Everything looked neat and prim as in a band-box; the windows and doors had been closed and darkened all Summer to keep out the flies; the bed looked smooth and clean, but as I lay between the cool, white sheets, a chilly dampness crept

over me, and my nose in the soft pillows seemed to be dipping down into a mess of mold.

I slept and dreamed that I was in my coffin far underground, and felt that it was a very uncomfortable thing to be buried.

But next morning I was awake and alive with only a dull, heavy feeling in my head unfitting me to think clearly on any subject.

I arose early, but a house full of children were astir before me. The mother was getting breakfast and scolding with all her might; I always knew she was an energetic woman.

From my room I heard her yell, in awful tones, “Get out of my way there,” and I expected to hear a kicked dog give out a yelp, but only a boy’s voice answered, “I ain’t deaf that yer need ter holler so.”

One child spilled something on the floor, and again that savage voice sounded its reprimand, “You good-for-nothing, you need a sound whipping; and it’s what you’ll get before long.”

Along in the day the poor woman entertained me with a delineation of her troubles and trials; her poor health and hard work, troublesome children, and contrary, unfeeling husband. She told me that she had the worst children in the world, and I agreed with her.

The older ones, she told me, were no help to her, and they were lazy and ill-tempered, like their father.

I refrained from asking if not even one of them had inherited any of her gentleness and goodness, but sympathy and fear closed my lips.

I determined to make a speedy exit from that place; the atmosphere was too depressing; the woman was a complete “wet blanket.” I knew I could not long stand the strain of somebody else’s troubles being heaped upon me in that manner. It is hard enough to bear one’s own afflictions, but to be constantly weighed down with the woes of another is more than ordinary human nature can bear

The thermometer of my heart sank very low, and it beat only half its usual pulsations.

In the evening I bade the woman good-bye, hoping she would feel much relieved by all the distresses she had poured out upon me. Married life she had made me believe to be a very sad condition, and I faithfully promised to heed her admonition to never, never marry as long as I lived.

At my next place of visit I felt that I had leaped into the torrid zone; everything here was at high-steam pressure. There were children, and they thronged around me like rats in a corn-bin. The very indulgent mother made a continuous effort to show off her progeny. I was told, in confidence, how smart and talented they were; the youngest, especially, was believed to be a born genius of some sort; and they all declaimed their pieces and sang their childish songs and came about me, wiping their sticky, dirty hands down my dress-skirt, all to my edification and dissatisfaction.

They climbed over me and questioned and criticized in a wonderfully frank and ingenuous way. I was urged to read and tell them stories until my brain was thoroughly ransacked and had given up all its stock of childish entertainment.

At night I slept, and again I dreamed: the air seemed filled with a crowd of buzzing, shouting elves, who were tantalizing me in a fearful manner. The next morning the mother asked me if I thought I had ever seen children equal to her's, and I replied, "Never, they are very extraordinary indeed." I went away from that house thanking my stars and comets that I was still alive and had my senses, and I set my heel down with a firm determination that I would never, no never, be entangled in the toils of matrimony.

Visit the third was dreaded, but I had given my promise to go, and I went. It was night when I arrived, and quiet reigned. "Children all

abed and fast asleep, thank fortune," I thought, and so it was.

"Only a little past bed-time," said my smiling hostess as I entered, "husband and I sat up for you. We are so pleased to have you come; but you are tired traveling, and after a good night's rest we can have a delightful visit together."

As I thought of the morrow anxiety crept over my spirits, and at mention of "night's rest" a vision of the ghostly spare bed-room loomed up before me. But here I was pleasantly surprised, being ushered into a well ventilated and comfortably heated room, furnished with every needed convenience.

"A very gem of paradise," I said.

"Our house, as you see," said my hostess, "is ventilated and heated by the latest method. This room will be your's while you remain with us, and there is an easy couch that you can wheel about wherever you like, and you can come in here and rest whenever you wish to be alone."

"And is there a key to lock the door?" I asked, thinking of the children, but met the unsuspecting reply: "Oh, you need have no fear of burglars, the outside doors are well secured."

At any rate, I thought, the children will not annoy me in the night, and, judging from the mother's appearance, they seem to have been no worry to her, for she is just as calm, sweet, cheery and bright-looking as in her girlhood days. Not a bit careworn, and, really, there is a happier look in her eyes than I ever saw there before.

Her countenance is as smooth and unruffled as a placid lake; and yet she has a husband, six boys and a baby girl. Trusting myself to the care of Providence and the comfortable bed, I soon fell into a sound and dreamless sleep from which I did not awaken until the morning light broke in at the window. Such a comfortable sleep in the airy room made my brain feel clear and keen and I was up with

the sun feeling happy as a song-bird.

I went down stairs and found the six boys were all up earlier than I, but there had been no loud noises; and so courteous, considerate and gentle was the demeanor of these children that I wondered at it.

At the breakfast table the conversation was upon some outside topic of interest with no flavor of personal comment or apparent consciousness of self. I noticed the respectful way in which the parents addressed each other and saw that the children unconsciously imitated them in their manners.

A genial sunny warmth pervaded the home atmosphere. I was charmed. "Where is the baby?" I inquired, as we rose from the breakfast table.

"Fast asleep," said the mother, "she usually sleeps late in the morning, and I like to have her lie quiet as much as possible even during the day, for I know she will be the better for it. I think little ones are frequently harmed and their brains kept unduly excited by being handled and noticed too much, with often an insane chattering of baby talk that only tends to wrack the delicate nervous system. I never allow any one to treat my little ones as if they were mere playthings or trained monkeys. What babies most need is a great deal of 'let alone,' with abundance of good air, warmth and rest, with opportunity to lie still or kick about as they feel inclined, with enough attention to keep them clean and properly nourished."

Upon more intimate acquaintance with the older boys I found each one to be engaged in some work or study of special interest to himself; yet they were continually helpful to their parents and to one another in so many little ways I thought genuine kindness prevails here, and how different it is from weak indulgence; the one is wise and truly good, while the other is selfish and of lasting harm.

I asked this sensible woman if she never had to scold any. "Oh, dear,

no," she said, "that could do no good, and I long ago learned that scolding was the surest recipe in the world to kill love, and that a disagreeable temper was a great source of unhappiness. Big people are only 'children grown tall' after all, and like to be commended and consulted, and addressed kindly and respectfully. I like to dwell in an atmosphere of pure, deep love. Heaven is a place filled with love, and God, you know, is love."

"You wise woman," I said, "other women without doubt love their husbands and children, but their words and actions speak the contrary, and all their hearts tend to grow hard and bitter. I agree with Professor Drummond and the Bible that love is the greatest thing in the universe."

My friend smiled, but I thought I detected a glint of tears in her eyes. "I am a truly happy woman," she said, "but it takes watchfulness and care to do the right. And there is so much greater power in example than in precept that I could never train my children in self-control and right actions if I did not first learn to control myself and do the right things.

"Children are such imitators, they naturally copy the manner and even tone of voice of those with whom they associate. Our children are made to feel that their parents truly love them. Their plays, studies and reading are superintended in such a way as to try to make the best possible improvement of the passing time, so when they grow old they will be rich in health, knowledge and well-formed habits; they are taught prompt obedience from the first, and they all have such kindly hearts it is a pleasure to ask them to do things."

"Kind hearts are more than coronets," I quoted then smilingly said, "Your children, I think, have imitated their parents in being 'kindly affected one toward another.'"

"Oh, yes," was the reply. "My husband is so thoughtful, and I want

my boys to grow up to be manly, considerate and respectful like their father.

"You dearest woman," I exclaimed, "you have the happiest home I ever was in, and I have been puzzled to know why your little domestic world is so superior to that of many others, and I believe it to be mostly owing to your own natural intelligence of mind and teachable disposition, always willing to accept and learn the best ways, and then you are possessed of that wonderful 'know how' faculty of doing things. I have now fully made up my mind, and so strong is the force of example that I intend to get married myself just as soon as ever I can, and have a home of my own like yours."

"Do," she said. "And will you invite me and all my boys to the wedding?" she asked, with a gleeful laugh.

"Of course," I said. "All the family must come; such children as yours are no terror to me."

"Oh, but they do romp and play and make a great deal of noise sometimes," she said.

"Naturally they do," I replied, "but in right places and at proper times; your children know how to behave, and I am not afraid of them. It would be a pleasure to have them visit me, so let them come soon without waiting for the wedding. Yet that must come e'er long, for what sensible person would fail in the possible attainment of 'the only Paradise that has survived the fall.'"

LISSA B.

MORAL GROWTH IN CHARACTER.

A WRITER, commenting on Mr. Flower's article in the *Arena* on Moral Culture, quotes the remark to the effect that moral characters should be developed "during the plastic hours of early childhood," and says: "We usually hear of the 'plastic years of childhood,' but this writer strikes a deeper note. It is hour by hour that

character is built, and the greater its immaturity, the greater the power of what may be put, for good or evil into 'one little hour.' Not that every hour may be an hour of intense moral growth. There is such a thing as moral rest as well as moral exercise. During the periods of rest, the moral nature is preparing itself for further growth when the time for thinking on some ethical theme or doing some good act shall return. Every hour and its needs should be the subject of special study. The hour of theoretical ethics when moral questions are studied and moral sentiments aroused by thinking; the hour of practical ethics, when the opportunity for doing arrives; and the hour of rest, when morals are not thought of, but the mind is turned to other subjects.

MISTAKE.

How your sweet face revives again,
The dear old time, my Pearl,
If I may use the pretty name
I called you when a girl.

You are so young; while Time of me
Has made a cruel prey,
It has forgotten you, nor swept
One grace of youth away.

The same sweet face, the same sweet smile,
The same lithe figure, too!
What did you say? "It was perchance
Your mother that I knew?"

Ah, yes, of course, it must have been,
And yet the same you seem,
And for a moment, all these years
Fled from me like a dream.

Then what your mother would not give,
Permit me, dear, to take,
The old man's privilege—a kiss—
Just for your mother's sake.

A fellow who lived in our village
Was bent upon stealing and pillage,
So he stole a sweet kiss
From a dear little Miss,
Then went back to his farm and his tillage.

—W. W. STORY.

SCIENCE OF HEALTH

SIR ANDREW CLARK'S ADVICE.

THE late Sir Andrew Clark was very much of a hygienist in his practice of medicine, apparently depending little upon the chemists for help, even when the case under consideration was serious. A "reminiscence" published by Miss Frances E. Willard is instructive regarding the manner of the great doctor and his methods. Miss Willard had been feeling quite out of health, and when in London went to consult Sir Andrew, and says, in the course of her account of the interview:

His manner was most reassuring and had in it a tender considerateness hardly to be expressed. When he asked to take the pulse or see the tongue he prefaced the request with the words, "My dear patient." It was apparent that not only great skill and high character, but a most fortunate manner were the essentials of his success. He prescribed no medicine whatever, saying that he thought very little of it, and that old Mother Nature was the only true physician, and gave me some simple rules which seem to me so good that I have had them copied for the benefit of any who may care to profit by the wisdom of a man both great and good and a physician of unrivaled fame.

At my request he wrote down three aphorisms that he had used during our interview: "Labor is the life of life;" "Ease is the way of disease;" "The highest life of an organ lies in the fullest discharge of its functions." Here follow what he called his "temporary general instructions":

"On first waking in the morning, sip about half a pint of water cold or hot; on rising take a tepid sponge

bath, followed by a brisk general toweling. Clothe warmly and loosely. Avoid chills, damp and passive exposure to cold. Take three simple, nourishing meals daily and nothing between them. Breakfast at eight to nine, plain or whole-meal bread, or toast and butter, with eggs or fresh fish or cold chicken or game or tongue, fresh, not preserved, and towards the close of meal about half a pint of tea not infused over five minutes, or of cocoatina or of coffee and milk.

"Dinner from one to two o'clock—fresh, well-dressed meat, bread, potato, some well-boiled green vegetable, if it agrees, and either some simple farinaceous pudding or some simply cooked fruit. Towards the close of the meal, drink water.

"High tea, five to six hours after dinner, whole-meal bread or toast and butter, with broiled fish or cutlets, or a chop or cold meat or cold chicken, and, towards the close of the meal, about half a pint of black China tea, not infused over five minutes; cocoatina or cocoanibs may be substituted for tea, if it is preferred and if it agrees.

"Nothing after this meal, except that on going to bed you may sip a tumblerful of water, hot or cold.

"Avoid soups, sauces, pickles, spices, curries, salted, smoked, tinned or otherwise preserved foods, pies, pastry, cheese, creams, ices, jams, dried fruits, nuts, raw vegetables, compotes, confectionery, malt liquors, cider, lemonade, ginger-beer, much liquid of any sort, and all sweet, sour and effervescent drinks.

"Walk at least half an hour twice daily.

"Retire as soon as possible after ten. See that your room is airy. Avoid self-notice and self-distrust. Shun ease and lead a full and regular and active and an occupied life.

"Whenever you have to speak at night, be sure to lie down for an hour before tea.

"Take nothing between meals.

"Never take a sleeping draught.

"Take as little medicine as possible; accept your sufferings; strength is perfected in weakness; in labor you will find life."

If Sir Andrew had stopped for a time at some well-conducted hygienic institution—it is probable that he had at least studied the methods of such a place—we should expect that so broad-minded a man would have imbibed just such principles as appear in the advice given to Miss Willard. He is a splendid example to the medical profession of the world in this respect.

long practiced the custom of bandaging the feet in infancy so that they shall not partake of the general development of the body. The result is that the appearance of such feet in adult life is far from elegant. While the ankles are fairly grown, the carpal and metatarsal regions are stunted and thickened and the toes childish in size.

We have heard that the Chinese ladies were much embarrassed in their movements by the inadequate growth of their feet, but a recent writer, Mme. Cocheris, in her book, "*Les Parures Primitives*," assures us that they are quick and graceful in walking, and even possess some skill in



THE CHINESE LADIES' FEET.

THE study of the feet is one of the interesting topics of civilization, because it involves many things of a physiological and social nature. We are as much concerned about making a good appearance with our feet as with our hands. So far as the woman of the better classes is concerned, this is certainly true. A slovenly dressed foot is accepted as an index of a rather unrefined and negligent disposition, and one who is at much pains to be neat at the extremities, commends himself or herself to our attention at first sight. The Chinese women of the upper class pay more attention to feet than the women of other nations, for while a European lady is concerned about the smallness of her waist, the Celestial lady deems it indispensable to have a foot of infantile smallness, and to that end, as most of us know, have

the art of "kicking." A game of "feather ball" which they play, requires some agility of the kind, as the ball is knocked about by their feet. The illustration gives us an idea as to how it is done.

The accounts differ as to the origin of this peculiar custom of foot bandaging. Some say that Chinese ladies submitted the feet of their female children to the "everlasting" bandages, in order that the reproach of the club-feet of a popular Empress might be removed. Another version is that this custom was imposed by husbands to keep their wives from gadding about.

As a custom it is not as dangerous as our "civilized" practice of compressing the chest by tight lacing, while it may be somewhat inconvenient to those whose powers of equilibrium are not up to average. D.

THE EFFECTS OF QUININE.

WITH reference to my remarks on Quinia in the articles on "Medicine or Nature," a correspondent takes me to task because of the very extensive employment of that salt by physicians in all parts of the country. I have but to say that such extensive employment in itself is a fact prejudicial to quinine as a remedy, for a drug that possesses virtue of genuine character has certain adaptations, and to go beyond them in treating ailments is not only reprehensible on logical grounds but also because injurious effects are likely to result, and do result.

A physician writing to the *American Surgical Bulletin* of April condemns in very severe terms the common use of quinine. Its virtue, so far as it has any, is exhibited as an antiseptic or antiperiodic, *i. e.*, it may render inoperative certain forms of low organic life that, having gained entrance into the system, produce fevers of the intermittent type. Tests show that quinia "enters the system unchanged and eliminated as such almost entirely by way of the kidneys," thus acting as a foreign body, and when taken repeatedly it must set up disturbances of the organism—especially of the nerves.

I need not look very far for testimony to the effect that deafness, vertigo, dimness of vision, stomach disturbance, and other troubles arise from its promiscuous use—even to that degree of poisoning indicated by paralysis.

Dr. A. A. Young, the physician to which reference is made above, speaks with more minuteness of the drug's untoward effects: "It is true that quinine is destructive to microzymes, but with their destruction seems to end its specific action. Small doses only paralyze them, while the large doses are destructive to them, but the continued large dose has its effect upon the secretory system; hunger is blunted, the gastric juice is diminished in quantity due to the irritating action

of the drug upon the mucous membrane of the stomach and abdominal organs. While the urine remains practically unchanged in quantity, there is a marked diminution in amount of uric acid and urea, which fact means imperfect tissue change. The retention of urea or uric acid in the system means dullness of comprehension; it may mean coma or coma with convulsions as is sometimes found in the condition known as uremia. In several cases I have seen convulsions produced by the administration of quinine."

I may add to this serious indictment a further item from the same honest observer that should cause the pill taker to reflect upon his unwise practice, to the effect that "quinine is at least a contributing cause for cerebral hemorrhage, and other allied disorders, which are now so common and seem to be on the increase steadily. This inference is corroborated by the vital statistics of my own town, a study of which showed that those who have died from cerebral hemorrhage, were free users of quinine.

If my critic entertains any doubts regarding the points set forth I would only ask him to look about and study the effects of the drug among those who use it, and judge for himself.

H. S. D.

BAD FOR THE EYES.

(Some good points on this line appear in a recent number of the *Analyst*. Attention of the younger readers is called to them, for in youth the foundation of enduring eyesight must be laid.—*Editor S. of H*)

Among the sources of the greatest trouble to the eyesight are the chewing of tobacco (this above almost all others), the excessive use of wine, spirits or beer, the indiscriminate administration of quinine, the use of cosmetics for heightening the lustre of the eye, and mixtures for dyeing

the hair and eyebrows, and there is a case on record where a diminution of vision has been traced to the wearing of an artificial wreath of flowers. Another source of failing vision may be traced to impeded circulation. The wearing of tight neckwear, such as collars which are too small, or shirt bands or neckties tightly drawn, should be avoided, as they prevent the downward column of blood returning to the heart, and dilatation and development of disease is likely to follow. The same rule holds good of constriction of other parts of the body. Another most serious source of eye strain is constant reading in railroad carriages, which is the practice of nearly all business men in going to and from their offices and

stores, and the injury to the eye from this cause is incalculable. Nothing gives tired eyes greater relief than a green disk or square of sufficient size suspended on a direct line of vision at or against a wall on which the eyes can rest; but best of all to look upon is a green grass plot or green trees. (The green cloth of the poker table is not good for the eyes at all.) It is suggested that it would be a public boon if our monthly magazines were printed on paper of neutral tint, and the drop curtains in theatres should have scenes painted on them showing great perspective. It is a rest to the eyes, after the concentrated effort made in trying to watch the facial expression or eyes of an actor, to look upon such a picture.

NOTES IN ANTHROPOLOGY.

Pre-Columbian Voyages to America.—It has been frequently asserted by Scandinavian scholars and others that the legends and traditions of the Icelandic Sagas bearing upon the Pre-Columbian discovery of America would be established as facts, if the private records of the Vatican could be called upon as witnesses; but until Leo XIII. occupied the Vatican, no amount of argument or influence was able to unlock the mysterious manuscripts which for 1,800 years have been accumulating on the shelves of the Holy See. In the Summer of 1892 Congress passed a resolution requesting the Governments of Spain, France, Great Britain, the Pope of Rome, the Duke of Veragua, and others to loan for exhibition in the convent of La Rabida, at the World's Columbian Exposition, certain manuscripts, maps, and printed volumes relating to the voyages of Columbus, and the discovery and early settlement of America. His Eminence, Mgr. Rampolli, who represented the Pope in the negotiations, was extremely cordial and interested, and furnished a fac-

simile of every important and interesting document that could be found bearing upon the early history of America. The claims of the Scandinavian scholars were not sustained, and no evidence was disclosed to show that the discoveries and adventures of the Norsemen in America were ever known to the Church, or that Columbus obtained any information or assistance whatever from this source, but there were brought to light several historical documents of the greatest value relating to the settlement of Greenland. According to Adam of Bremen (died about 1076), and the Sagas, Norwegians first reached American coast at the end of the Ninth or beginning of the Tenth Century; but as in Norway itself, so in Greenland, the complete establishment of the Christian religion is attributed to king Olaf II. (died 1030). It is said that Archbishop Adalbert of Bremen (1055) sent Albert as the first bishop to Greenland. This bishopric certainly existed in 1124. It was the first bishopric erected in America.—*National Geographical Magazine.*

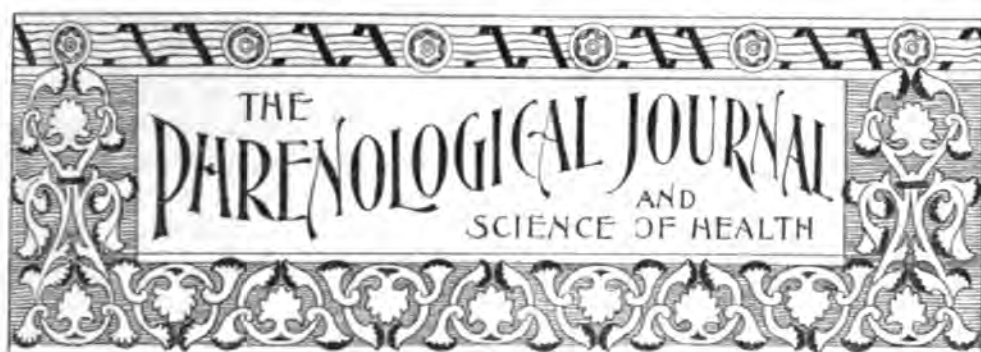
Antiquity of Jerusalem.—Jerusalem was originally a Phœnician town and summer resort from the heat of the lowlands. Good masonry with large blocks is found in the town wall which the founders built. When Solomon built his temple he hired skilled workmen of Hiram, King of Tyre, a Phœnician city, to erect the masonry. Part of the temple was built on rocks leveled off, and where the hill sloped off piers were carried up and arches sprung across them to get sufficient area for the temple. These piers contain blocks thirty inches square, thirty-two feet long, and are as good to-day as when built. Solomon used much wood in the temple, and when it was destroyed by fire the arches, being of limestone, were calcined and ruined. When the Jews built the second temple they rebuilt the arches on the old piers. The second temple was smaller than the first, and when that was burned the arches were again destroyed, though only partly. Subsequently the Romans rebuilt the arches and temple, which accounts for the three different styles of masonry, concerning which there has been so much speculation. Just by the Jews' wailing place, on the outside of the temple, are the large skewbacks of an arch connecting the temple with Mount Moriah, Solomon's home. From the size of these skewbacks the arch must have been a masterpiece of Phœnician work. Josephus speaks of this arch.

The Phœnicians also founded Damascus, and the Phœnician gate, with its massive stones and grooves in which the door slid up and down, still exists. In what is said to be a triumphal arch, built like the façade of a Greek temple, occurs an arch sprung across on the two middle columns. The Greek square is carried over the arch. The arch is ancient, and no date can be assigned to it.

Insanity in Egypt.—Dr. Peterson, in an interesting article on the insane in Egypt, gives the result of his personal ob-

servation. He calls attention to the fact that New York city and Brooklyn together, with two million inhabitants, have asylums that accommodate over seven thousand three hundred insane; whereas Egypt, which has six million inhabitants, has but one asylum, and this contains two hundred and fifty patients. While making due allowance for the Mohammedan dislike to institutions, and their treating insane as holy persons, he still concludes that the percentage of insane in Egypt is vastly lower than anywhere else in the world. The first asylum in Egypt was founded in 1280 A. D., and the patients were treated with kindness. Music, dancing and light comedy were features of the treatment. In 1800, Napoleon found patients there in chains and made some improvements. Dr. F. M. Sandwith, who visited the lunatic asylum in 1883, found the most shocking condition of things. The patients were in chains and everything else in the institution was in keeping. Dr. Sandwith took charge of the institution, introduced a system of kindness, furnished competent clerks, and, in fact, completely transformed the institution architecturally and in its general management. At the present time restraint is rarely employed. The patients' apartments are neat and clean, and the attendants are kind and attentive. The doctor found that in quite a proportion of the insane, the insanity was due to *cannabis indica*. They used the drug by smoking. The earlier mental symptom is a marked and increasing timidity, and often it results in chronic insanity, dementia or death. General paralysis is very rare, and it has yet to be proved that it even exists among the Egyptians. It is a curious fact that just across the sea from Egypt, in Greece, general paralysis is very common. The doctor thinks the Cairo asylum would be a good school for the study of craniometry and racial characteristics. Among the patients he saw there were Egyptians, Copts, Nubians, Soudanese, Abyssinians, Turks, Greeks, Syrians, Circassians, Jews, and Bedouins.—*The Medical Record*.





Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M. D., EDITOR.

NEW YORK, JUNE, 1894.

IS THE HANDWRITING ON THE WALL?

Let us examine some remarkable statistics disclosed in our last census, and inquire into their bearing upon our future as a nation.

It has been ascertained that we have in the United States three millions of born drunkards; three hundred thousand idiots; two hundred and fifty thousand deaf, dumb and blind; two hundred and fifty thousand insane people; and four hundred and fifty thousand persons who are crippled and deformed. Add to this the appalling fact that in the year 1892, six thousand, two hundred and seventy murders were committed in the United States, which is three times the number *per capita* that were perpetrated in any country in Europe. Yet this is not all. With our charitable institutions, hospitals and prisons all crowded to repletion, we still have many millions of individuals who are so feebly endowed intellectually and physically that they must be supported chiefly by the labors of others.

Do these facts show that all is well with us, and that there is no hand-

writing on the wall? Are there not dark clouds gathering over a future by no means distant, and seriously threatening the prosperity of our national life? If all these evils are rapidly on the increase, as reliable official testimony shows, do they not clearly prove that our leaders are unable to cope with the enemy on the old lines of battle, and that our present methods need to be thoroughly revised?

We wisely began our national life by making generous provision for public instruction, and one hundred millions of dollars are now annually expended in maintaining our schools and colleges. But another and a more imperative work remains to be done, and that is to establish a broad, comprehensive *education in the home*. To do this, the first step will be to instruct the masses regarding the conditions of true marriage. Then parents will be enabled through a clear understanding of phrenology, the laws of heredity, etc., to endow their children at birth mentally and physically with the elements essential to success in life. Parents must be taught that

they can determine very largely whether or not their little ones shall grow up noble men and women with well-balanced minds and bodies. Commanding talents and pure, conscientious, upright impulses are only to be reached through an intelligent obedience to the laws of nature. It is far easier to form correctly than to reform imperfectly. To suppose that the endowing and rearing of children is something which may safely be left to ignorance and chance is to commit a most fatal error.

Appreciating the gravity of these problems, a few earnest men and women have formulated a plan for inaugurating home culture associations throughout the United States and Europe, the object of which is to elevate the Home. The movement has our warmest sympathy, and we take great pleasure in calling attention to it here. Home culture, in its broadest, fullest meaning, will insure a higher, nobler and more expanded civilization. In the sanctified, enlightened, domestic sphere the human race can find the choicest opportunities for its exalted unfoldment. The home is the garden where human life has its inception and where it may flower out in beauty and perfection, or be loaded with deformities and stains. It is therefore with a profoundly vital question and the means of its solution that the promoters of this scheme propose to deal. The time has arrived when knowledge should be organized into power, and especially modern mental science rendered more potential in the elevation of mankind.

The ancient Hebrews were familiar to some extent with the laws govern-

ing the moral and intellectual endowment of their children. Large numbers of the Hebrew women for many centuries earnestly aspired to become the mothers of great prophets, seers, poets and deliverers of their people, and the result of their intense longing, hoping and praying was manifest in the remarkable development of their national unity and religious literature.

The Greeks trained for over a thousand years in evolving an intellectual power and physical beauty which no other historic nation before or since has even approached. Of their methods we learn much of value through Aristotle, Plato, Socrates and Xenophon, who still speak to us in the most wonderful language of this earth. But with all their extraordinary achievements the knowledge of the Greeks concerning the human mental and physical constitution could not be compared with that which we possess to day. It was their *love* of nature, not their knowledge of it, which impelled them to perfect themselves. We know enough to-day to do much better if we would. But our people groan under a perverted and false philosophy. We are taught to talk glibly of stars and stones, logarithms and logistics, but the science of life is a sealed book. A great poet has said of love that it is "Woman's whole existence;" and yet young girls are allowed to set sail on that tempestuous sea without rudder, compass, or even a glass through which to discern the rocks ahead.

In short, our education relates largely to the things farthest removed from our most immediate and vital

interests. We are not trained to love and revere either mind or body; one is naturally concealed in the meshes of the brain, and the other is carefully covered with cloth. To explore the mysteries of one is left to the "fanatical phrenologists," and the privilege of unswathing and developing the other is accorded to acrobats and pugilists.

The pressing need is to diffuse the information now in possession of the minority and to enlarge the appreciation of a truly rational and harmonious culture.

All life, wherever it finds expression, responds to intelligent effort in the direction of improvement. Our rich grasses were once coarse and juiceless; our sumptuous roses came from inferior species; our magnificent horses are developed from small, insignificant creatures which once ran wild upon vast prairies. Knowledge rightly applied may work marvelous transformations. Through trained obedience to the laws of physical and mental growth man may crown himself with the halo of wisdom and perfect peace.

THE BALLOT FOR WOMAN.

THE principle for which the advocates of woman suffrage contend is undoubtedly a just one, so far as they are personally concerned at least. Our government is *of* the *whole* people, but *by* only *half* the people. This is a fact which is not exactly consistent with our pretensions.

Now it happens that a great many members of the "gentler sex" are so constituted by nature and so situated as a result of circumstances,

that they desire, and really need, in order to protect their interests, a voice in the formation and execution of the laws. Denying them the right to say how and by whom they shall be governed, is manifestly unfair. On the other hand, there are perhaps millions of women who would regard the franchise as an onerous duty, nay, as an obnoxious burden. So that to disturb this class in the midst of their domestic devotions or other pursuits, and compel them to exercise their judgment in matters with which they are unacquainted, and which they have neither taste nor talent to comprehend, is equally opposed to justice. In our present conditions of civilization there is a degree of heterogeneity which renders the acceptance of universal laws or customs extremely difficult. That which would benefit one person would break another. As the environments of people vary—as the legacies they receive from ancestors in the matter of health and wealth are unequal—as the encouragement and support which individuals receive from the community are not the same in all cases—in short, as the world does not treat its inhabitants impartially, it is hardly fair to expect the inhabitants to assume an attitude of uniformity toward the world. If in an earthquake the ground opens and swallows a few thousand patient toilers, it is not quite reasonable to expect them to crawl out with their backs broken and their eyes full of dirt, and then to resume work as if nothing at all had happened.

What is true of the physical world is equally true of the moral. People do not share alike the advantages of

social, political, or commercial patronage, and if they receive but little, it cannot be expected that they should give much in return. Hence it follows that as, both by nature and education, people differ in their ability to discharge political duties they should, if possible, be given opportunity to follow the law of their personal equation. If they are adapted to participate in the affairs of State, let them not be prevented by an impassable barrier. If, on the other hand, they are unfit to make or execute laws, surely no one should want them to dabble in the work. Stated thus, the rule applies with the same force to both sexes. At the present time there are just as many incapable men in the enjoyment of the voting power as there are capable women to whom the right is denied. This is not fair, neither is it wise. May not the real solution of the problem lie in a compromise? Should not the laws be framed by those who are most intelligent and who are to be most affected

by their operation? Why should a male immigrant who has been in this country only a short time, and who has not a dollar invested in any interest, be allowed to fix the taxes upon the property of an American woman whose family for six generations have helped to develop the national prosperity, while she has not a word to say?

It is objected that women are not intelligent enough to vote. If this is true it is practically also true of the male sex, for the political parties are composed of men who, with few exceptions, are swayed chiefly by passions and prejudice. If we had less frequent elections, and the people possessed enough sagacity to choose only those candidates who are shown by Phrenology to be competent, the business of elections would not be the demoralizing and corrupting influence which it is to-day. There would then be less political work to do and the quality might be so improved as to render it acceptable and congenial to the majority of women.



Our Mentor's Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Medical Editor will receive his early attention.

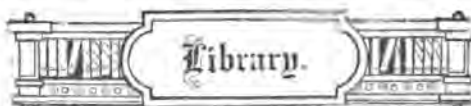
HOW THE PYRAMIDS WERE BUILT.—I.—These immense fabrics intimate a great activity of the constructive organism in ancient times. We have it from Herodotus that the stones were elevated with a machine made of short pieces of timber. This description answers to the tilting process, and that they blocked up after each tilt—a slow but sure method. By the same process the blocks could be taken sideways to their destination. The inclined gallery leading up to the King's chamber has a ledge of stone projecting out about 24x40 inches high on each side. In the top of this projection are holes at regular intervals, evidently chock holes to block up after the granite blocks of the chamber and for taking up the sarcophagus. The Sphinx is carved from rock left in position when excavating for a place to set the pyramids. The stratification of the rock shows across the body and face. So thinks the Philadelphia engineer, Mr. Hartman.

A DRY FOMENTATION.—H. K.—When there is no hot water at hand, but there is a stove, say a heating one, near by, a good substitute may be prepared for the ordinary fomentation. A piece of flannel of a size that, when folded in three or four thicknesses, it will be large enough to cover the place where it is to be applied, is soaked in cold water, then wrung and folded and wrapped flat in a newspaper, then laid

upon the stove or wrapped around the stovepipe. In a short time it will be hot enough to apply, and will not drop like the ordinary fomentation. Of course dry flannel or cloth must be laid over to "keep in" the heat. For local congestions that are painful this will be found a quick and easy mode of relief.

CHARACTER IN HANDWRITING.—W. H. L.—Since the appearance of the article on "Graphology" several readers have sent letters with the request that we give them a reading, with advice as to occupation, and other important matters. In the space accorded in this department it would be quite impossible to answer these letters in the manner that may be expected. Besides, the article itself furnished principles which should enable any intelligent person to make a general analysis of his own or another's chirography. That was the intention of the writer. The head of the examining department will be pleased to furnish readings in the regular way, preferring, for sake of accuracy, and satisfaction to the inquirer, that good photographs be sent with the letters of inquiry. Of course a fee is asked for the trouble to which the examiner is put, and that it may not be prejudicial to the phrenological department, the same terms are set. It may be added that Dr. Drayton will probably prepare another article on the same topic, in which a letter will be analyzed, so that the readers of the PHRENOLOGICAL will have a practical illustration of the principles involved in the art.

PAIN IN VITATIVENESS.—B. C. Y.—The pain experienced in the region of Vitativeness may be due to blood pressure, since near that region of the brain important arterial branches course that supply blood to central and posterior lobes. Slight congestion may set up an irritable state of the membranes which would be indicated by headache more or less severe. The water compress is a good application, hot or cold water according to preference being used. Galvanism is also a much advised treatment, but requires a physician who understands its application. The diet should be managed also with reference to temperament.



In this department we give short reviews of new Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

HYPNOTISM; ITS FACTS, THEORIES AND RELATED PHENOMENA. By CARL SEXTUS. Illustrated. pp. 304. 8vo. Chicago. Published by the author.

If the multiplication of books on hypnotic phenomena be any evidence worth our respect the public is becoming more and more interested in the matter they illustrate. This author goes over the field of history and experiment in no novel manner, adding experiences of his own that are frequently interesting because of certain points of originality in design. Mr. Sextus does not advance any new theories, showing, perhaps, a judicious spirit in this respect, as a large number of writers have entered the field of hypothesis; for while some, like Moll, Bernheim and Ochorowicz, show not a little skill and breadth of opinion in their attempts at elucidation of the difficulties presented by suggestion and somnambulism, they intimate doubts on certain points that leave us almost as much in the dark as before. The illustrations are for the most part good representations of suggested phases of conduct in the entranced subject.

COMMON SENSE CURRENCY—A PRACTICAL TREATISE ON MONEY IN ITS RELATIONS TO NATIONAL WEALTH AND PROSPERITY—By JOHN PHIN. 12mo, pp. 244. New York: The Industrial Publication Company.

A clearly written volume on the subject of money has been the need of the time. There are treatises and treatises written by scientific economists and doctrinaires, but with little adaptation to the intelligence and practical views of the masses. Mr. Phin has sought to meet the demand, and as a practical man, one who understands the

principles underlying great industrial and moral movements better than most of the pretentious observers, has succeeded well. His book is instructive with regard to the nature and function of money, and those great principles that must be scrupulously respected in order to make a currency thoroughly adapted to the commercial relations of a great nation. He shows clearly and without affectation the evils of changes in media of trade, especially when it is attempted to introduce incontrovertible substitutes, whether devised of paper or of metal. He shows the folly or impossibility of a bimetallic standard—and why a currency for domestic exchanges is best constituted of paper. Gold a proper standard, but as a medium of exchange needs to be used only for settling international balances. He claims that much of the currency troubles would be adjusted by withdrawing gold as a legal tender and not having it form part of bank reserves. Special interest should not be allowed to interfere with the adoption of a system of currency, for the convenience of the people at large should be the primary consideration. The author writes for the masses and for the interest of government and gives us a book on a matter of paramount importance that should be read by all classes.

LECTURES ON AUTO-INTOXICATION IN DISEASE, OR SELF-POISONING OF THE INDIVIDUAL. By CH. BOUCHARD, Professor of Pathology and Therapeutics. Translated, with a Preface, by THOMAS OLIVER, M.A., M.D., F.R.C.P., Professor of Physiology, University of Durham. 8vo., 302 pages. Cloth, \$1.75 net. Philadelphia: The F. A. Davis Co., 1916 Cherry street.

A book for the physician, but one that the intelligent in society can read with profit. It points the physiological moral of truth that has been repeatedly urged in the columns of this magazine with regard to the evil effects of improper habits of eating, etc. Poisons are generated in the body through abuses of digestive and other organic functions, and often lead to serious illness and fatal consequences. As the translator says: "Death frequently carries off in a few hours or days individuals who

are in the prime of life and in apparently good health, and at whose *post mortem* the most careful examination fails to reveal alterations of structure such as can explain the fatal stroke. Epidemics, not of a specific character, but traceable to poisoned water or food, have unexpectedly appeared in certain neighborhoods, or members of a marriage party have died without much warning, death being attributed, and very properly, to some article of diet partaken at the wedding feast." The volume covers thirty-two lectures, in which the subject is considered from many points of view. Uræmia, typhoid fever, jaundice, diabetes, cholera, etc., are discussed. The proofs of auto-intoxication as set forth in connection with experimental research, the particular manifestations produced by different toxins, and the therapeutical indications are clearly stated. The volume is a valuable one for physicians, and may better serve as a text-book in our medical schools than any other upon this line of pathological observation that we have seen.

THE PHYSICIAN'S WIFE; AND THE THINGS THAT PERTAIN TO HER LIFE. By ELLEN M. FIREBAUGH. Crown 8vo., 200 pages. Cloth, \$1.25 net. Philadelphia: The F. A. Davis Co.

This piquant relation of the domestic life of some doctors is the outcome of a paper read by the author before a Western society of physicians. It is an interesting, sketchy account of personal experiences having a typical application to the wives of country practitioners. They in reading it will be likely to utter many *amens*, while

the lay readers will also notice many passages of significant application to them in their character of patients occasional or frequent. Of course the truth is told as a rule—but even where it is truth of a sort that has a sharp edge, the spirit of the author is so veined with humor that none can take offence, while the admonition and suggestions included will be understood and accepted. Physicians wives generally will wish to read it, and so will the doctors, too. We commend it to the hundred thousand or more of our American colleagues.

MESSIAH'S MISSION. By JOHN WAUGH. 16mo, pp. 163. Cohocton, N. Y.

It is rare for a verse-maker to attempt nowadays an epic of a religious character. One chief reason recognized by the least practical minds is that verse of the epic kind, especially on great moral topics, does not pay expenses. This fact, however, has not deterred Mr. Waugh from the undertaking to restate the Christian argument for the life and death of the Nazarene, Jesus. His earnest zeal was a sufficient impulse to the doing of so difficult a work as the writing of this poem. Divided into nine books the subtopics discussed by them, respectively, are: The Prison, Prison Wards, Foregleams, Conditions, Advent, Procedure, The Atonement, Embassy, The Millennium. The tone is high, the movement steady and rhythmical, at times suggesting the Miltonic march. Altogether we are gratified with the success of Mr. Waugh in producing this work. As regards scholarly ability and esthetic taste it is deserving of far more than passing mention.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

THE NEW YORK ASSOCIATION OF GRADUATES.—At the last meeting of this society on the 7th of May, the lecturer, Mr. Chas. Weake, a member of the British Phrenological Association, discussed the difficulties in the way of estimating the developments of different regions of the brain.

It was interesting to hear an expression of views from one whose phrenological education and experience had been acquired in England and on the continent of Europe. He stated some things which were

very familiar to us here, and represented some things as difficulties which to us are easy. On the other hand he gave us some views that were novel, instructive and at least suggestive of certain lines of investigation which it will be of advantage to follow up.

Mr. Weake has been associated in Paris for many years with eminent physiologists such as Dr. Charcot, and reports that the leading scientists he has conversed with are now disposed to admit the leading princi-

ples of Gallian Phrenology; although they dislike to acknowledge it in public for fear of endorsing the methods of certain charlatans who bring the subject into disrepute.

PROF. MORRIS reports from St. Paul, a successful season of seven weeks. He will visit Minneapolis for a week before opening at Austin, and go thence to Spring Valley.

PROF. ALEXANDER, class of '84, reports continued success from Racine, Wis. This gentleman seems to find business in all seasons and in all sections.

PROF. HUGO CAMPBELL, class of '89, is still in Toronto, and continues sending orders for books and material, which is an indication that he is prospering.

J. B. HARRIS, class of '88, is in Kansas, and his frequent orders for books show that he is busy and successful.

WILLIAM WELSH, '93, reports an increased interest in his lectures on the subject in Canada, and is hopeful of being able to do much good and receive liberal compensation.

A PHRENOLOGIST WANTED.—We have received a letter from Mr. A. H. Palmer, Shelburne, Vt., stating that a practical Phrenologist might profit by a visit to their section of the State. He says that there is a great deal of interest already among the citizens, and a course of lectures would probably be well attended. If any now in the field intend to include this part of the State in their route, we would suggest writing in advance to Mr. Palmer as above.

PROF. BROLIN reports from Cambridge, Minn., of the interest in Phrenology by the professors and the students of the seminary there.

PROF. VAUGHT, is still in Chicago. Has been compelled to move to new quarters, but has already secured a class of twenty-five or more to study Phrenology, and sends a large order for books and charts.

BROOKLYN.

THE HUMAN NATURE CLUB meets on the fourth Friday of each month at W. C. T. U. Hall, 454 Bedford avenue, Brooklyn. These meetings are attracting a good deal of notice. Of the Brooklyn press, a num-

ber of papers have devoted whole columns to the subject discussed, thus bringing it to the public attention.

On March 23d, Mr. J. B. Sullivan, of Yonkers, spoke on "Character Reading." He began with the very first system every used by man, viz., astrology, saying that of all the methods known or practiced to-day, he believed that only astrology and phrenology were strictly scientific; and that although he believed in both, yet he always presented them individually and never in any way "mixed" them. He spoke of all the different systems ranging from palmistry to egg reading, disposing of them to his own satisfaction and apparently that of his audience.

After all these other methods he came to those more important and more easily acquired, physiognomy and phrenology. To illustrate his remarks, he examined several people. Later Mr. Bausch was blindfolded and made examinations, some of the subjects being the same that had been under Mr. Sullivan's hands, but what they both said was substantially the same.

On April 27th, Mr. C. E. Cady spoke on "Phrenology and Childhood," which was a most interesting lecture, containing much good advice to parents and teachers on the proper training of children and the importance of a knowledge of phrenology in this connection. Mr. Cady made a number of examinations, every one of which was a "hit." This was one of the most successful meetings of the Club. The Hall was packed, and if the interest continues a larger hall will be needed.

On May 25th, the president, Rev. C. A. Brown, will speak on "The Brain, Thought and Memory." On June 22d, the last meeting of the season, Mr. Albert Bausch will lecture. His subject will be "How to Alter Character."

For further information or tickets of admission apply to the secretary, Miss J. R. Floyd, 214 Rodney street, or to Albert Bausch, 100 South First street.

PROF. ALBERT BAUSCH is on a lecture tour in the western part of New York State, under the management of the Star Lyceum Bureau.

MR. I. W. BEARD, '87, is in Detroit, Mich. He has been teaching classes there.



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On February 29, 1884, the FOWLER & WELLS CO. was incorporated under the laws of the State of New York as a Joint Stock Company, for the prosecution of the business heretofore carried on by the firm of FOWLER & WELLS.

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The Subscription Price of the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH is \$1.50 a year, payable in advance, or \$1.65 when premiums offered are sent to subscribers.

Money, when sent by mail, should be in the form of Money Orders, Postal Notes, Express Money Orders, Drafts on New York, or Registered Letters. All Postmasters are required to Register letters whenever requested to do so.

Silver or other coin should not be sent by mail, as it is almost sure to wear a hole in the envelope and be lost.

Postage-stamps will be received for fractional parts of a dollar. The larger stamps are preferred; they should never be stuck to the letters, and should always be sent in sheets; that is, not torn apart.

Change of post-office address can be made by giving the old as well as the new address, but not without this information. Notice should be received the first of the preceding month.

Letters of Inquiry requesting an answer should inclose a stamp for return postage, and be sure and give name and full address every time you write.

All Letters should be addressed to Fowler & Wells Co., and not to any person connected with the office. In this way only can prompt and careful attention be secured.

Any Book, Periodical, Chart, etc., may be ordered from this office at Publishers' prices.

Agents Wanted for the PHRENOLOGICAL JOURNAL and our Book Publications, to whom liberal terms will be given.

CURRENT EXCHANGES.

Magazine of Poetry—a monthly review. May number. Charles W. Moulton, Buffalo, N. Y.

Quarterly Journal of Inebriety.—April number at hand. Discusses topics relating to its specialty, including opinion, paraldehyde and chloral. In the latter showing peculiar eccentricities of habit. Several excellent editorials from the always clear and practical hand of Dr. Crothers. Hartford, Conn.

Eclectic Magazine of Foreign Literature for May contains nineteen selections. New York.

Century—illustrated for May—has a good thing entitled "Hunting an Abandoned Farm in Upper New England," that falsifies a widely prevalent idea regarding the desolation of the Yankee country. Old Dutch Masters, Bookbinding of the Past, the Kearsarge, Across Asia on a Bicycle, Cœur d'Alene, Capture of the Slave Ship Cora and Flash Lights are interesting and attractively illustrated. Century Co., New York.

Review of Reviews—May—floats as its specials a character sketch of Kossuth, the Life Work of David Dudley Field, and a helpful summary of Conventions and Summer gatherings of the year. The Record of Events is unusually full of caricature. New York and London.

Homiletic Review.—An international of religious thought and Church topics. Funk & Wagnalls, New York.

Harper's Magazine in its May number has a sketch of Mr. Howells on My First Visit to New England, with reminiscences of distinguished authors and illustrations; The Miracle of Tishna, Hofnagle, a story; The Chastisement of the Qualla Battosans, Advent of Spring, A Kinsman of Red Cloud, A Little Journey in Java are finely decorated with pictures. The Editor's Drawer has more than its ordinary attractions. New York.

American Art Journal—weekly—review of current matters in music.

Medico-Legal Journal.—Devotes new space to psychological topics, and very properly, with growing interest. Clark Bell, Esq., Editor, New York.

Dietetic and Hygienic Gazette—May number—indicates growth and a liberal spirit consistent with its hygienic claims. Monthly. New York.

Sanitarian—May—discusses food adulteration from a physician's point of view, the propriety of having women as official inspectors, a review of New Jersey's climatic conditions, with an inference of general healthfulness. New York.

Popular Science Monthly (D. Appleton & Company, New York) for May has a pretty entomological sketch entitled The Guests of the Mayflower; another as strikingly illustrated on Frost Forms on Roan Mountain; Economic Uses of Non-edible Fish is also illustrated. The Sloop of Mollusks shows a peculiar line of study, and Waste Products, Cotton-Seed-Oil intimates one remarkable feature of modern progress. A notable issue.

American Medico-Surgical Bulletin is generally to be commended as a digest of practical work in the departments named. 73 William St., New York.

Bishop's "Exact Phonography."—The leading feature of this work, a new and enlarged edition of which is advertised in our columns, is its system of connectable stroke vowels working in completely with the consonant part of the system (Pitman modified), thus aiding simplicity and exactness. The excellence referred to above has commended it to the expert shorthand writers of the country. The book is handsomely printed and bound, with 240 of its 290 pages engraved. Copies for sale at this office, sent by mail postpaid on receipt of price, \$2.00.

" Class of '94.—The American Institute of Phrenology, incorporated by the Legislature of the State of New York in 1886, was the result of a third of a century of hard work, earnest study, and application of phrenology to real life. The public had been by these means so much interested in the principles and uses of the best mental philosophy the world had seen, that it was prepared to welcome the Institute as a needed school for scientific culture, and to appreciate the labors of its experienced teachers.

During the thirty years since its incorporation, the Institute has instructed and graduated more than half a thousand students—men and women. Those who wish to secure the services of the ablest teachers, and to enjoy the great benefit of its unequalled collection of busts, casts, skulls and portraits of the greatest, the best and the worst characters of history, are cordially welcomed to a place in the Institute for 1894, and to the facilities offered them for entering the field of phrenology well equipped for making it a successful and profitable life work.

The term commences as usual on the first Tuesday of September, and continues eight weeks.

A sixty-two page pamphlet, No. 29, entitled "Value of Phrenology," will be sent *free* to those who desire to become students. This will give full information respecting the institute course, the teachers, terms, incidental expenses, diploma, etc. Address Fowler & Wells Co., 27 E. 21st St., New York.

Phonography.—This is a course of lessons in which the principles of the system are presented with accompanying exercises for practice, being a complete self instructor, intended for the individual student as well as a teacher's text book. It is compiled from Isaac Fitman's "Phonographic Teacher," "Manual of Phonography" and other phonographic text books.

The principles are arranged in what, after careful thought, seems to be their logical order. Numerous practice exercises have been introduced, each containing carefully selected words such as would be likely to occur in daily use. Every principle, from the simplest to the farthest advanced, is included, and it is believed that everything is explained in the clearest possible manner. It having been found that the Grammalettes are more easily learned when given a few at a time with each lesson, sixty of the more common ones have been introduced and illustrated by easy sentences for practice by the student. The title of this book is *Serial Lessons in Phonography*, and will be sent by mail postpaid for \$1.00. By W. L. Mason. Fowler & Wells Co., publishers.

That Salesman is the Best who most quickly divines the character and temperament of his customer. The work entitled "The Temperaments," by D. H. Jacques, M. D., contains a storehouse of information on this subject, of the greatest value and of practical every day application in mercantile pursuits. Some men and women are highly gifted by nature with intuitive knowledge of people and their temperaments; how to approach them; what arguments or special emphasis to use or make; while others obtain this knowledge by study and reflection. To all, whether gifted in this line or not, Dr. Jacques' work will prove of incalculable assistance. Sent on receipt of price, \$1.50, postpaid. Address Fowler & Wells Co.

A New View of Phrenology.—"Human Nature Considered in the Light of Physical Science, Including Phrenology, with a New Discovery," is a work of 240 pages and 117 illustrations, by Dr. Caleb S. Weeks, published by Fowler & Wells Co., 27 East 21st street, New York, and presents Phrenology in the light of what the author deems a new discovery of the character and proper classification of the organs. This, the author claims, greatly enlarges and clears the view previously obtained, while confirming the character of the faculties as heretofore known.

He presents the brain to be studied as two lobes, each with two bases—one physical, relating the body to physical substances, and one spiritual, relating the mind and ideals to principles, life and natural laws—and that both bases have their lifters toward a common spiritual summit or mental center, which works with each, and, duly proportioned, makes harmonious and exalting their action. He shows this to explain why width of what is termed the "Moral Faculties," more than their central height makes the high character. He holds the center-top head line of faculties to be spiritually selfish, just as the physical base is physically selfish—relating to and sustaining the selfhood—that "Veneration" is the appetite of the spiritual, as "Alimentiveness" is of the physical system.

This varies slightly the marginal lines of some of the organs, but these have never been deemed exactly determinable, though their centers are readily recognized. The seven chapters of the book are: I. "Human Nature's Physical Basis"; II. "First Lessons in Phrenology"; III. "Phrenology with Its New Discovery"; IV. "Heads and Characters Compared"; V. "Unbalanced Region Developments"; VI. "Organ Combinations in Activity"; VII. "Phrenological Light on Life Problems." Price, \$1.00 by mail, postpaid. Address Fowler & Wells Co.

The Milk Question Again.—In the May number we published an item on the subject of milk. Some readers have been a little puzzled as to how much and just what the writer meant. For condensed milk and common commercial milk being mentioned, the writer says that he has for many years used this, and the question is, which milk? Our opinion of common commercial milk is rather low; our opinion of Gail Borden's condensed milk, from a daily use of it for more than thirty-five years, leads us to place it in the first rank in the domain of commercial milk. Of course, we do not decry milk from a healthy cow in excellent pasturage when the milk is just drawn from the original package; there is nothing, we suppose, that ought to stand higher. But commercial milk in bulk of the ordinary kind, is a fact of unknown quality, and sometimes an unknown quantity.

Milk, like human nature, was created upright, but men have sought out many modifications of naturally honest milk, but condensing milk is a great boon to citizens remote from true rural conditions. The canning of fruits, meats and milk is a blessed revolution in favor of humanity, and this art is only fifty years old.

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Vacation Time is the title of a bright little book by H. S. Drayton, M.D., so well known as a writer on popular hygiene, issued from the press of Fowler & Wells Co., New York.

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The author writes in a pleasant style and really covers a good deal of ground in a few words. He talks of life at the seaside, in the mountains, of boating and bathing, games, excursions, etc., puts in some practical hints on eating and dress, and the management of household economies, and has a word of advice to mothers and housekeepers that they cannot but value. Even the stay-at-homes get a thought or two that must be encouraging. As an epitome of Summer hygiene the book is so good and practical that they who read it and follow its suggestions could not but get real profit out of their summering, wherever they might be.

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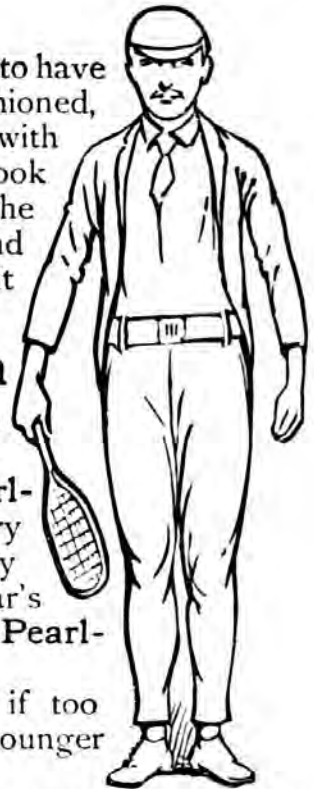
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Volume 97

Number 6

JUNE

1894

THE PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH



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CONTENTS FOR JUNE, 1894.

Frontispiece. Susan B. Anthony.

I. Susan B. Anthony, Phrenograph.	By Edgar C. Beall, M. D.	-	-	-	273
II. The Faculty of Language.	(Illustrated). By J. W. Shull.	-	-	-	277
III. Primary Man.	H. S. D.	-	-	-	281
IV. The Ethics of Jealousy.	-	-	-	-	283
V. A Vision of Life. (Poem.)	By S. W. de Lys.	-	-	-	284
VI. How to Study Strangers.	Chapter XVIII. By Prof. Nelson Sizer.	-	-	-	285
VII. Character Studies.	By Prof. Nelson Sizer.	-	-	-	291
VIII. Sketches of Phrenological Biography.	John Neal and Dr. B. A. Parnell.	-	-	-	-
	By Charlotte Fowler Wells.	-	-	-	300
IX. Child Culture.	What's in a Name.	-	303	Moral Growth in Character.	- 307
	Three Visits.	-	304	Mistake. (Poem.) By W. W. Story.	307
X. Science of Health.	Sir Andrew Clark's Advice.	308	The Effects of Quinine.	-	310
	The Chinese Ladies' Feet.	309	Bad for the Eyes.	-	310

Notes on Anthropology.

Pre-Columbian Voyage to America. Antiquity of Jerusalem. Insanity in Egypt. 311-312

Editorial. Is the Handwriting on the Wall. The Ballot for Woman. - - 313-316

Answers to Correspondents. Library. Phrenological Society and Field Notes 317-320

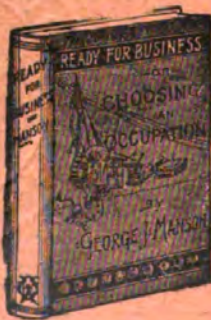
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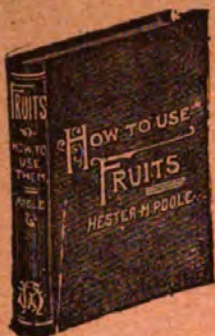
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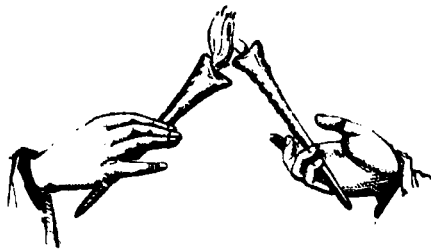
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Contents: July to December, 1894

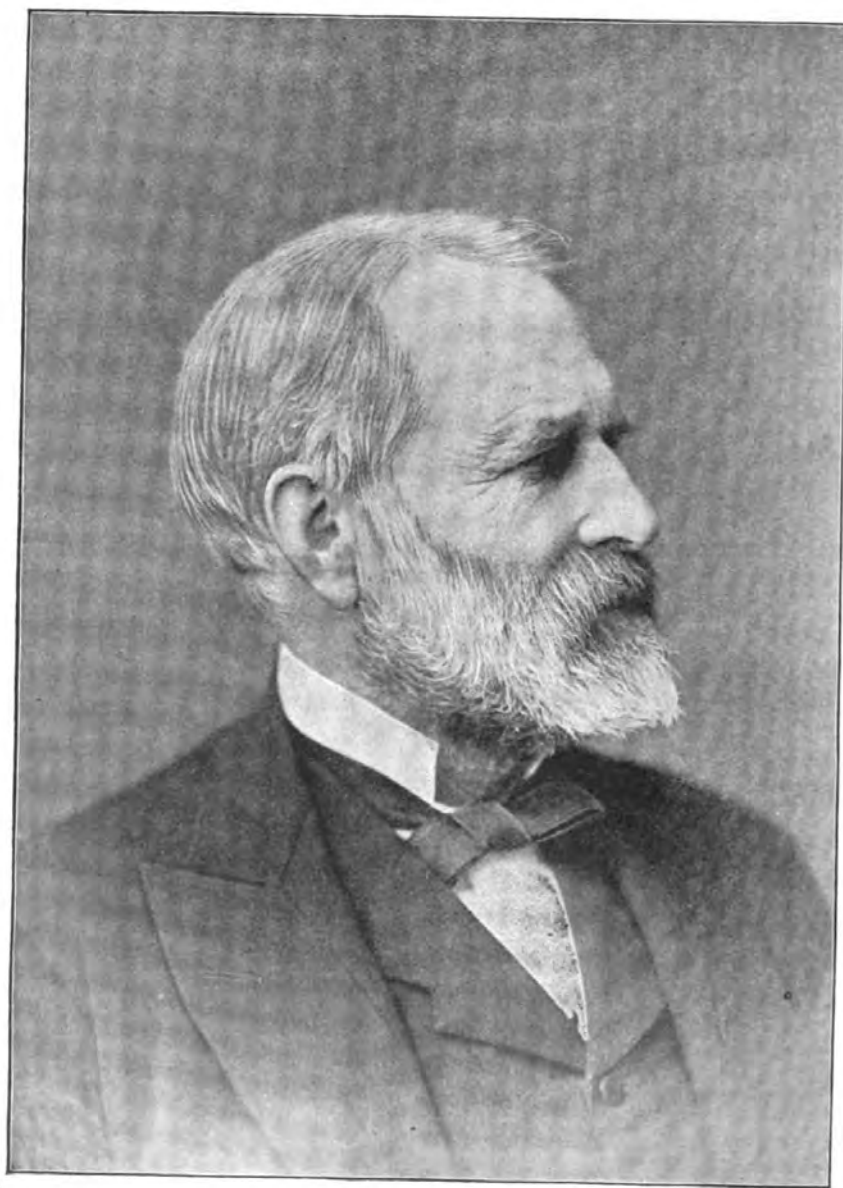
A	PAGE	G	PAGE	P	PAGE
Art Criticism, Phrenological Principles in.....	27	Gallatin, Albert.....	277	Physician vs. Druggist.....	146
Allison, The Hon. William B.....	31	H		Phrenology, The American Institute of.....	49-192
Apple as Food and Medicine, The.....	44	How to Study Strangers (illustrated).....	17-75-121-173-225	Phrenology and Insanity, The Relation Between.....	239
Anthropology, Notes in.....	46-98-149-207	Homeless Children in Australia, Caring for.....	37	Parent and Teacher.....	249
Ants, The Language of.....	48	Headache, Sick.....	44	Priest and a Poet, A.....	269
Abbot, Rt. Hon. Charles.....	121	Human Family, The.....	48	Photographs, Studies from.....	269
Andrew, D. D., James O.....	125	Human Nature, To Students of.....	107	R	
Advantages in America.....	128	Human Nature, Differences in.....	172	Raggles.....	141
An Incident at the Fair.....	143	Hemans, Felicia.....	173	S	
B		Habit and Character.....	232	Spurzheim, An Ode to.....	16
Biography, Sketches of Phrenological.....	11-81-129-182-217	Health and Disease.....	251	Studies from Photographs.....	24-187-269
Bacteria in Water.....	92	Holmes, Oliver Wendell.....	272	Sheehan, Lieut. Gov. Wm. T.....	30
Bread on "Whole Meal".....	96	I		Science of Health, The.....	41-93-144-202-251
Bacteriology.....	129	Ideality, A Study of.....	63	Sensible Treatment of the Sick.....	41
Beethoven, A Study of.....	165	Independent Thinking.....	130	Sitz Bath and its Uses, The.....	42
Blodgett, Senator.....	188	Influences that Mould.....	142	Suicide Among Primitive Peoples.....	47
Bacteria, Disease.....	232	Institute, The.....	158	Street Excavations, Found in.....	48
Brain Theory, A.....	223	J		Scott's Head, Sir Walter.....	50
Botta, The Late Prof.....	262	Jews and Syrians Finding Refuge in Egypt, The.....	90	Shaw, Mary.....	59
C		Jews, Legends of the Wandering.....	149	Silliman, Professor Benjamin.....	80
Character Studies.....	23	Josephus, Something New From.....	149	Story of a Lamp.....	84
Campbell, Ex-Gov. James C.....	30	Journal, Matter for the.....	210	Sanitary Notes.....	262-251
Child Culture.....	36-89-140-197-247	L		Sim, Dr. Thomas.....	120
Conscience in the Child.....	36	Language, The Faculty of.....	33	Social Status, The.....	155
Child-Imagination, The.....	91	Legendary Lore, French Canadian.....	151	Sawyer, D. D., The Rev.....	182
Children, The.....	91	Love, The Depths and Heights of.....	171	Thomas Jefferson.....	182
Children, Muscular Developments of.....	147	M		Skin Clean, Keep the.....	206
Civilization, Of Etruscan.....	150	Manual, Suggestion for a.....	7	Silver Vessel from Gundestrup, The.....	207
Children, Self-Denial For.....	197	"Mother is Holy!".....	99	Sizer, Prof. Nelson.....	217
Child, In Behalf of.....	199	Motherhood.....	90	Smallest Baby in the World.....	255
Child, Mind Development in the.....	200	"Moral" Awakening, The.....	140	T	
Children, Food for Young.....	206	Murders, Twenty Thousand.....	153	Tracy, Gen. Benjamin F.....	23
College, A New Sociological.....	211	Mental Activity, Advantages of.....	186	Teaching by Ideas Tangible to Childhood.....	38
College, The Hygienic.....	255	Mahaffy, Professor.....	248	Teaching Children Badness.....	40
Corrigan, Archbishop.....	269	Medici, Dr. Charles De.....	239	To You Who Haven't Had It (Poem).....	45
D		Musicians and Poets.....	281	Teacher Reproved, The.....	89
Dream, What is a.....	179	Moral Education.....	247	Trepanning in the Stone Age.....	98
Douche Spray and Shower Baths, The Uses of the.....	240	Mother's Influence, A French.....	248	To Some of Our Critics.....	100
Dudley, Ambrose.....	225	Mabel's Complaint (Poem).....	250	"The White Mahatma," A Chat With.....	191
E		More Criticism.....	256	Therapeutics, Comparative.....	146
Exercise, Why Should we Take.....	45	N		The Ideal (Poem).....	178
Egypt Five Thousand Years Ago.....	46	Nott, D. D., LL.D., Eliphalet.....	175	Twentieth Century Humanity.....	228
Ethics for Lovers.....	71	P		Trumbull, Jonathan.....	275
Egyptian Discovery, Another.....	98	Fierpont, The Rev. John.....	11	V	
Eyes, A Brief Study in.....	108	Pierrepont, Hon. Edwards.....	75	Voice Culture, A Plea For.....	116
Ear, The.....	128	Phrenographs.....	59-113-187	Vaccination in the A. M. A.....	145
Engineering in Peru, Ancient.....	150	Physician, The Hygienic.....	144	Vassar, Matthew.....	177
Education in China.....	208	Phrenology, The Outlook for.....	157	Vest, Senator.....	191
Egerton, Francis.....	227	Phrenology, Good Words for.....	157	W	
Equational Problem Solved, The.....	287	Phrenological Society and Field Notes.....	161-266	Where Each Can For Himself a Kingdom Reign (Poem).....	16
Ears, Criminal.....	300	Psychological Idea, A.....	172	Woman's Work, A.....	78
F				West, Prof. Chas. E.....	58
Food, Pure.....	98			"What's in a Name?".....	269
Football—Another Protest.....	97			Woman.....	220
				White, Judge Hugh L.....	257
				Water, As a Drink.....	263

ILLUSTRATIONS

A	PAGE	F	P
Allison, The Hon. William B.	32	Fuller, Margaret.....	64
Abbot, Rt. Hon. Charles.....	123	G	
Andrew, D.D., James O.....	127	Gallatin, Albert.....	278
B		H	
Burr, Aaron.....	18	Hindoo Street Band.....	185
Outline of Head..	18	Hemans, Felicia.....	174
Bellew, Kyrle.....	66	Holmes, Oliver Wendell.....	273
Bacteria in Water.....	98-94	J	
Baldwin, Prof. S. S.....	181	Japanese Women Out for a	
Baldwin, Mrs. Kitty.....	132	Walk.....	187
Beethoven, Ludwig Van.....	164	Jones, Senator J. P.....	188
Beethoven, Mask of.....	167	K	
Blodgett, Senator.....	187	Kaffir, A.....	189
C		M	
Conformateur Outlines		Munkacsy, A. M.....	17
18-19-20 21-22		Outline of Head	17
Campbell, Ex-Gov. James C...	31	Maharajah of Partialia, The...	136
Corrigan, Archbishop.....	271	Maori Chief, A.....	138
D		Medici, Dr. Charles De.....	240
Dancing Girl of Columbo.....	133	Mamma's Sick.....	250
Dudley, Ambrose.....	225	N	
E		Nightingale, Florence.....	65
Eye, The Monogamous.....	105	Nott, Eliphalet.....	176
Eye, The Polygamous.....	105		
Egerton, Francis.....	228	Pierpont, Rev. John.....	12
Equational Problem.....	238	" " From a Cast	13
Ears Criminal.....	261-262	Pierrepoint, Hon. Edwards.....	77
		R	
		Reichmann, Theodore.....	67
		S	
		Sheehan, Lieut. Gov. Wm. T..	29
		Sitz Bath, The.....	42
		Shaw, Mary.....	58
		Shaw's, Mary, Hand.....	60
		Silliman, Prof. Benjamin.....	88
		Sizer, Prof. Nelson.....	216
		Sizer, Prof., at 50.....	219
		T	
		Tracy, Gen. Benjamin F.....	6
		Trumbull, Jonathan.....	276
		V	
		Vassar, Matthew.....	177
		Vest, Senator.....	190
		Vessel from Gundestrup.....	207
		W	
		West, Prof. Charles E.....	79
		Wells, Charlotte Fowler.....	112
		White, Judge Hugh L.....	236
		Y	
		Yogi of High Degree, A.....	134



.



GEN. BENJAMIN F. TRACY.

(See page 23.)

THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

VOL 98. No. 1.]

JULY, 1894.

[WHOLE No. 667.]

A SUGGESTION FOR A MANUAL.

SYSTEMATIC MORAL EDUCATION.

BY H. S. DRAYTON, M. D.

THE series of papers that have been published on "Systematic Moral Education" in this magazine during the past two years have found attentive readers, especially among those who by occupation are brought into contact daily with children and youth. It has been suggested by certain of these readers that an illustration be given of the form that should be adopted in a manual intended for school use.

While the writer would prefer that this should be done by a hand experienced in the preparation of textbooks relating to psychology, and appreciative of the needs of the teacher and pupil in the line of practical instruction, he can but respond to the request by an outline at least of the method that should be followed.

Keeping the principles in view that have formed the text of our discussions let us take for the illustration the faculty of Veneration, a faculty whose function at the present day seems more honored in the breach than the observance by old and young. So much has this sentiment

fallen into disuse or become perverted by various abuses in our later civilization that we occasionally note in both religious and secular literature comments of regret upon the situation, and forebodings more or less rueful as to its later outcome. Our manual would first state the formal definition of the term Veneration in simple Language:

VENERATION is the faculty or power of the mind that gives the feeling of respect for the good and noble, deference to age and careful regard for law and authority.

Effect.—Out of its influence upon the character comes obedience to parents and teachers and worship for the Supreme Being.

Practical Truths.—The child should respect and honor parents because of the natural relation between them. The birthright carries with it not only the duty of the father and mother to provide for the comfort and growth of their child, but also the duty of the child to love and respect his or her parents.

"Honor thy father and mother" is one of the great commandments of

the law of God, and the value of its observance to the good order and happiness of mankind has been ever accepted by the ancient and modern nations. Among the Hebrews, the Greeks, the Romans, the Gothic tribes, full obedience was required from children even when quite grown up. This was expected in some cases too where the doing of the parent's will might expose a son or daughter to great danger. Among the Japanese of our day the deference of children is so remarkable as to engage the notice of travelers in Japan. Mr. Edwin Arnold mentions it as one of the most beautiful elements of Japanese life.

It is related that Ulysses, King of Ithaca, one of the heroes of the Trojan war, was so long absent from home that his wife Penelope, and her son Telemachus, became anxious for his safety. The boy, then about twenty, decided to go in search of his father. In doing so he passed through many trials and dangers by sea and land. The French author, Fenelon, has given the story in a very pleasing and impressive manner.

Shakespeare, in the play of Hamlet, Prince of Denmark, pictures in perhaps too strong a measure the feeling of a son for the memory of a murdered father. The story illustrates for us the over action of the faculty of veneration, as well as the conduct of other feelings under great excitement.

Dear child, it is right for you to look to your parents for nurture and guidance. Society and law make it a matter of common decency as well as necessity for them to watch over you, feed, clothe, protect and guide you until you are old enough to care for yourself. So it follows as a natural right and duty that you should respect and obey those parents as a fair return for what they do for you.

Further, the law and society look upon your father and mother as responsible for your behavior while young. If you do anything wrong

whereby others suffer hurt or loss in any way, your parents will be called upon to make amends by paying for the injury that you have done.

A disobedient boy is careless of the wishes of his parent, and negligent of his duty. His conduct in this respect may go to the extent of open defiance of the authority of father and mother, and this in the view of our common law is so wicked that at their request the boy may be placed in a "house of correction," or a "reform school," where he will be under the direction of officers and keepers who will require from him very thorough obedience and correct behavior every day. If he is careless or negligent about doing what he is asked, in his study or work, or if he break any of the rules he is sure to be punished, and so he finds to his sorrow that the ways of disobedience and wilfulness are far from pleasant.

POLITENESS.

Out of the action of Veneration grows some of the most pleasing forms of courtesy. Politeness is one of these, and yet a person may be polite merely in form; but he that is polite and deferential at the same time shows the character of a true gentleman. Bowing with uncovered head to those who are older, be they friends or teachers or some distinguished people, is polite, but its nature may not be truly deferential, it may be done in an off-hand, careless way; or be doing only what others do, that is imitative simply and have no feeling or heart in it.

ILLUSTRATIONS.

One day a high wind suddenly overturned the stand of a poor woman who sold apples on the street corner. There were several boys playing in the neighborhood. When they saw the upset stand and the scattered apples they set up a shout, and were in great glee over it. The apple-woman was quite lame and could with difficulty go about, so that the accident caused her much distress. One of

the boys, however, did not join in the mirth of the others, but ran and replaced the stand and went to work picking up the apples, and so helped the poor woman to set her property in order again. Some of his companions jeered at him as he busied himself in this act of kindness, but he paid no attention to their rude behavior. Afterward, when one of them asked him why he took so much trouble to help the old woman, he said, "I was sorry for her, and thought that if she had a son and he saw it he would have run and helped her all he could. So I thought I should take his place, and help her as I would my own mother."

One of the most affecting and charming traits in the character of George Washington was his great regard for his mother. From childhood to age, while she lived, he never failed in respect to her wishes and counsel. Once, while a young man, he was offered a place of some advantage in the British navy, and his friends generally thought it would be unwise for him to decline it. He wanted the place very much and made his preparations to go on board the ship and make the cruise that her commander had in view. But when the time came for parting with his mother, the affection and the grief she showed at the long separation that would follow his departure, overcame him, and he said, "Mother, I cannot leave you," and immediately sent word to the ship's officers that he had concluded not to go to sea.

The deep consideration that Washington showed for his mother was paralleled by his respect for authority. The counsel and decisions of the Government under which he lived before and after the Revolution, were always respected. As commander in chief of the American armies, and having great influence with the people, he was careful nevertheless not to go beyond the bounds of the power given to him. Even when the destiny of the nation appeared to depend upon him alone, George Washington never

turned aside from his loyalty to the authority that had given him the charge of its armed forces. No extent of power altered his course, and no act of his may be mentioned that could throw a cloud upon his noble record. It is not wonderful that the American people learned to love him, and that his character rises in our esteem as the years go on. The respect and fidelity of the soldier, general, president, were allied to the reverence for his mother, and to the worshipful regard Washington showed toward everything noble, great and sacred.

Among soldiers the feeling of respect is carried to the highest degree. It is the chief element in the relations that exist between them, and involves that thorough obedience to the superior officer that is necessary to complete discipline. One soldier respects another of the same rank, and is deferential and courteous toward him, while to the man who is entitled to command, both their obedience and submission are given on all occasions. The strength of an army depends most of all upon this spirit. However powerful in numbers and cannon it might be a failure to obey orders in the time of battle would be likely to bring defeat and loss. The same may be said of the navy of a country. Indeed even a higher degree of discipline is maintained on the sea than on the land, a greater respect for rule and authority.*

Obedience then, and respect for others, have nothing of meanness. When practiced wisely, with an understanding of its purpose, deference has an excellent effect upon one's character, and is quite sure to obtain a reward of a pleasant sort.

GENERAL REFLECTIONS.

We should cultivate respect for all our kind, for the "accident" of birth makes most of the differences among men. The true man or woman sees

*The teacher may relate incidents from military and naval history in illustration of the facts given.

his or her fellows in all with whom they have to do, and is sincere and gentle in behavior toward the low as well as toward the high, the servant as well as the master. One has said aptly that in the use of this feeling "we let down our selfishness and pay due deference to the merits of others. To be thoroughly respectful we must put ourselves in the place of others, and see them as they see themselves." In so doing, we learn, too, how they view us.

It is quite easy to have a good degree of respect for oneself and to cultivate a degree of vanity that may render us disliked by others, but to give a just measure of reverence and respect to acquaintances and friends, and to all with whom we may come in contact with requires care and a watchful consideration of our selfish tendencies, keeping guard at the same time upon our words and actions.

It is a worthy aim to be on terms of cordial feeling and sympathy with others, and in no way is that end more easily gained than through courtesy and deference.

QUESTIONS FOR ANALYSIS.

A boy is playing a game with his schoolmates, and all are deeply interested in it when he suddenly remembers an errand that he was to execute for his mother, and that he must go about it at once or he will be too late. To leave will be to break up the game and spoil the pleasure of the eight or ten boys concerned in it. What should he do?

On going from school a boy finds that his father has left a request that he attend to a matter that will occupy the most of his afternoon leisure. Now it happens that he has a difficult lesson to study. He is very anxious to make a good recitation the next day and this is expected by his teacher. But to meet the wish of his father will cause the loss of much time that

the boy intended to devote to his lesson. What should be his proper course?

PRECEPTS TO BE FOLLOWED.

A proper regard for others should make us attentive to such duties and courtesies as the following:

To be mindful at all times of the wishes of our elders, especially our natural guardians and protectors.

To be regular in our place at school, quiet and orderly in deportment while there, answering questions promptly that may be asked us while reciting, and speaking in a pleasant tone.

When indoors to remove our hats or caps, and if in the presence of strangers to wait until they speak.

To be regular in attendance at school, in our study hours and in meeting the common engagements of home—being careful not to keep others waiting, or put them to unnecessary trouble or inconvenience.

To be neat in our dress and toilet, and regular in habits of cleanliness, keeping our clothing in good order, face and hands clean. After play or use that may disturb our dress or soil the hands, to put all in good order before going into the company of our friends.

To avoid making unpleasant noises or practicing any little tricks that are not proper or nice, such as biting the nails, scratching the head, picking the face, sprawling out the feet, leaning upon table or desk with the elbows, and other practices that are common among girls and boys.

To be prompt in apology for forgetfulness or neglect in doing what we had been requested to do, or what is a part of one's duty at home or school.

To avoid showing curiosity when in a room—where there are things we had not seen before—by handling or trifling with any article, or by asking questions about them.

Toward the old and feeble to show a ready desire to assist them in any way that may occur.

To be respectful toward school-

mates and other young people, willing to accommodate them in such things as are convenient and just, even though your own desires must be put aside.

The thought of the golden rule—

“Do unto others what you would have them do unto you,” should be fixed in the mind as a governing principle, for kindness of heart makes courtesy delightful both to the giver and receiver of it.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

THE REV. JOHN PIERPONT.

THE Rev. John Pierpont may well be called a phrenological martyr, for between fifty and sixty years ago he was accused by the members of his church of following “an imported mountebank,” which was understood by him to mean condemnation of his attachment to Dr. Spurzheim and phrenology. In a beautiful apostrophe to the “shade of the lamented Spurzheim,” he thus answers this accusation:

“Thou wast honored in thy life as few in this land have been. Thou wast honored in thy death and in thy funeral obsequies as, in this generation, no other man has been. The munificent merchant of Boston who gave thy bones a resting place in the sacred shades of Mount Auburn, and placed over them that beautiful copy of the tomb of Scipio, was content to cut thy name upon its front as thine only epitaph; feeling that wherever science was honored, or philosophy loved, no other could be needed. It was left for the chairman of a committee of Hollis’ Street Society to express his own views of this philosophy and thy worth; and under the name of ‘Spurzheim’ he writes, ‘the imported mountebank.’

“Yes, gentleman, I *have* entered somewhat into the ‘exciting topic’ of phrenology. I was a hearer of Dr. Spurzheim, and have been since, and mean to be again, a hearer of the lectures of George Combe. To these two ‘imported mountebanks’ I feel

myself more indebted for instruction in the philosophy of mind, and upon the conditions of the healthy manifestations of the mental powers, than to all other men, living or dead.”

A few particulars concerning this fearless apostle of phrenology will be of interest to the readers of these sketches.

John Pierpont, preacher and poet, was born in Litchfield, Conn., on the 6th of April, 1785. His ancestors were among the Puritan yeomanry of New England, many of whose characteristic qualities he inherited, though softened and liberalized by the influence of modern culture. His great-grandfather, the Rev. James Pierpont, was one of the original founders of Yale College, at which venerable institution the subject of this sketch was graduated in 1804, in a class which included many who have since become distinguished in public life. For the next few years Mr. Pierpont was engaged successively in teaching, in law, and in mercantile pursuits, but having long cherished a desire to devote himself to the ministry of the Gospel, he finally determined to enter the clerical profession and became a member of the divinity school at Cambridge in 1818. His reading on theological subjects had already been copious and accurate. He made rapid progress in the requisite studies and within a year from his entrance into the school he received an invitation to succeed the

celebrated Dr. Holley as pastor of the Hollis street church in Boston. He accepted the call, and was ordained in April, 1819. This was a conspicuous and brilliant position.

His predecessor, the Rev. Horace Holley, who had consented to assume



THE REV. JOHN PIERPONT.

the Presidency of Transylvania College in Lexington, Ky., was a man of remarkable gifts, possessing a power of extemporaneous eloquence seldom equalled, with a commanding personal appearance, and with a bearing and manner in society equally impressive and delightful.

His fame as a pulpit orator had extended far and wide. A large and critical congregation had been gathered under his ministry, and his successor naturally became the subject of trying comparisons. However, in spite of these and many other obstacles, Mr. Pierpont soon gained an elevated rank among the clergy of Boston. His discourses were replete with original thought, clothed in a highly picturesque and poetic diction, and attracted attention by their boldness and eloquence. In extemporaneous efforts there has seldom been his equal for continuity of thought,

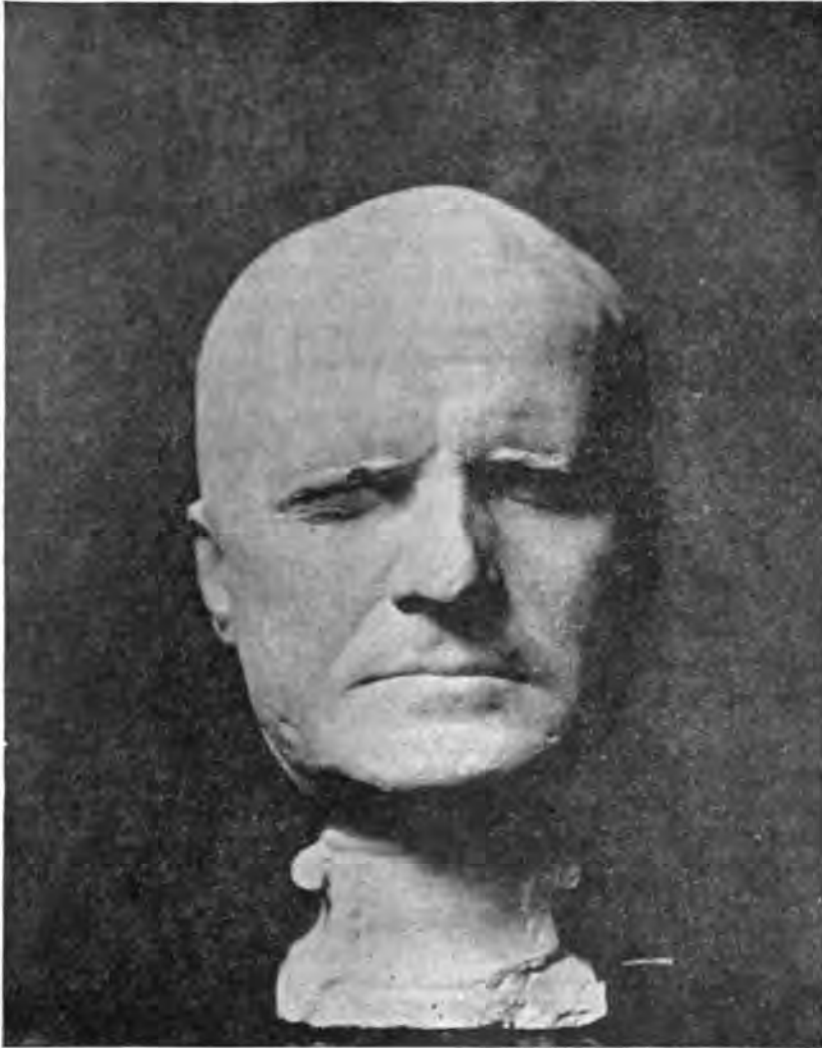
freedom of language, and pithy and pointed illustration. His poetical temperament added greatly to his power as a pulpit orator. Born with a genius for poetry, he would have attained brilliant fame in that direction had not his mind been pre-occupied with absorbing studies and the wearing labors of his profession. His poetical productions, though limited in number, have still a distinguished place in American literature.

During his residence in Boston, Mr. Pierpont, besides devoting himself zealously to the more immediate duties of his profession, took an active part in the progress of science, and in various measures for the improvement of society. His first acquaintance with phrenology convinced him of the correctness of its principles. He studied it with enthusiasm, and delighted in explaining its practical applications. He saw in it a powerful auxiliary to the cause of education, and of moral and religious truth in general. Nor did he hesitate to avail himself of its doctrines for the illustration of his pulpit discourses. In this way he often threw a fresh light on difficult passages of scripture, and brought down divine truth from the cloudy abstractions of the schools into living contact with the hearts of the people. Upon Spurzheim's visit to this country, in 1832, he became his intimate friend, giving him the benefit of his influence, his counsels, and his sympathy, when "a stranger in a strange land." He felt the sudden death of that great philanthropist as a deep personal grief. No friend more faithful stood by his dying couch. No more intelligent or feeling tributes have been given to the memory of the phrenological master than those which fell from the lips of John Pierpont.

With the high moral aims which always characterized his efforts, Mr. Pierpont used his clerical influence for the promotion of many social reforms. His labors in behalf of temperance, anti-slavery, the meliora-

tion of prison discipline, and other humanitarian objects, were abundant and effectual. He threw himself into these movements with peculiar energy and indomitable courage. He had a habit (sometimes inconvenient) of using perfectly plain speech when a

tillers and their families and friends, and finally low mutterings of dissatisfaction were heard. It was thought an unpardonable audacity that a Christian preacher in a Christian church should speak so boldly of "temperance, righteousness



THE REV. JOHN PIERPONT, FROM A CAST.

greater love of concealment would have suggested silence, and of paying the least possible deference to an opinion or an institution which had only the prestige of antiquity in its favor. He uttered his convictions so that every word told. His congregation consisted to some extent of dis-

and a judgment to come." But as yet, the lurking fire of opposition had not broken out into open flame. At this crisis Mr. Pierpont was attacked with a violent fever, which left him almost a wreck of his former self. By the advice of his physicians he made a voyage to Europe, and re-

turned in about a year with renewed energy to the discharge of his official functions.

Soon after his return, the discontent of those who had been aggrieved by his zeal for reform was manifested in open and violent opposition. A painful controversy between a portion of the parish and the pastor commenced in 1838, which continued for six years, when a dismissal was requested by Mr. Pierpont, who had triumphantly sustained himself against the charge of his adversaries. His conduct in this protracted controversy was marked by great energy, determination and wisdom. He felt that he was not merely contending for personal rights, but for a great moral principle. The freedom of the pulpit was at stake. A blow was struck through him at the right of liberty of thought and of speech in the public teacher of religion. He promptly faced the danger, and faced it manfully. Surrounded by timid friends who shrank from the contest, and living in an atmosphere of strong conservatism, he was thrown to a great degree on his own resources. But not for a moment did he falter in his course. He met every charge of his enemies, until, having fully vindicated his position, he withdrew from a struggle in which a further triumph would have been superfluous.

After vindicating his position and sustaining the reforms he had adopted, he retired from the Hollis street church and accepted a call to Troy in 1845, remaining there four years, when he removed to another pastorate in Medford, Mass., which he occupied for seven years.

When the American Phrenological Society was formed in New York in 1849 Mr. Pierpont wrote as follows regarding it: "I feel myself honored by the post assigned me in the society college. I am not without a deep interest in the progress of phrenological science, nor do I see how any man can be who is interested in anthropology or theology; for God reveals

Himself and His laws to man not solely, or, as I think, chiefly, in a written or printed book, but in the works also of His own creative hand in general, and especially in the masterpiece of His creative power—man himself.

"To the extent of my ability I shall gladly coöperate with the other members of the 'American Phrenological Society,' in promoting its objects and recommending its claims to the attention of that portion of the community which feels, and dares to manifest any interest in the welfare of the rest."

Mr. Pierpont delivered an address on "Phrenology and the Scriptures" before the Phrenological Society at Clinton Hall, New York. In this lecture (which was published by Fowler & Wells in 1850) he analyzed the moral and animal faculties; showed why the wicked are sometimes prospered, and why Godly men suffer adversity; he showed in simple yet dignified language, the moral philosophy of Phrenology, and its harmony with the teachings of Jesus Christ and his apostles, gave a beautiful analysis of conscience, and the means by which the standard of right is established in the mind, and explained why equally honest men differ so widely on moral questions. If he had done nothing more than to discuss the philosophy of conscience, the work would be a treasure, but this is only one of the mental gems in the casket.

In Mr. Pierpont we have an excellent illustration of the enlargement of the Phrenological organs as a result of their exercise.

In 1835, Mr. Balley, of Manchester, England, took from life a cast of Mr. Pierpont's head. In 1841 our firm took from life a cast of the same head. The latter showed a decided increase of the whole intellectual lobe over the former. This increase any accurate eye will detect instantly, the latter being deeper, broader, higher, and every way more ample. Benevolence and Combativeness were larger,

while Cautiousness, as shown by the calipers, was $\frac{1}{4}$ inch smaller in the latter than in the former. The cause of this increase of some organs, and decrease of others, is to be found in the vigorous and almost continual exercise of his intellectual faculties in the composition of poetry for which he was justly celebrated in lectures, in the cause of temperance, truth and freedom; as well as in his severe and protracted intellectual and moral contest with the members of his congregation already mentioned.

His unremitted labors in the temperance cause, the number, power and eloquence of his lectures on various subjects, the logical clearness of his letters to his vestry, evince a powerful and continuous exercise of his intellectual faculties, sufficient to account for the increase of his intellectual organs, as well as of Benevolence and Combaticiveness, and the decrease of Cautiousness.

Both casts were taken when he was upwards of forty and both were so taken that the manner of taking could cause none of this striking difference.

John Pierpont, the preacher and poet, was a man on whose shoulders the mantle of true genius had fallen. His pen was never elegantly feeble. He never gave you the glitter of fine words, but the gold of pure thought.

He did not cringe and creep, and bow and lisp, like a literary fop, but like a brave, honest, earnest man as he was, spoke the sentiments that were born in his soul. He was practical and humane, not abstract and dogmatic in his religion; in morals, lofty, pure and uncompromising; in spirit, liberal, aspiring and free; in thought at once logical, imaginative and original. He is thus described by one who knew him: "He was a strong and powerful man, over six feet in height, preserved to his venerable age in perfect health; he stood erect, without the least stoop of age; his long flowing hair and beard, white as the driven snow, falling gracefully over

his massive forehead and finely-chiseled face; his cheeks ruddy and countenance lighted up with a joyous smile as the words flowed from his lips entrancing his hearers with their intense earnestness. His voice had a silvery sweetness, with a singular and most pleasing variety of intonation."

Mr. Pierpont was in every sense of the word a live man. There was nothing inactive in his mental or physical nature, and in his prime, even the hairs of his head seemed to live, for every one of them stood straight out, ready for battle. He had the true patriotic spirit. During the early years of the civil war he applied for the chaplaincy in a Boston regiment. The writer saw him march down Broadway with his regiment, led, she thinks, by Fletcher Webster, son of Daniel Webster. After several months in camp it became plain that to an octogenarian such a life was too great a burden, and his friends procured him an appointment in the Treasury Department.

Mr. Pierpont had a marked constitution, both mentally and physically. His head was large and amply developed in the reasoning, moral, social and executive forces. His high, broad, square forehead gave him the reasoning and analytical power. It was wide at Mirthfulness and large at Ideality, giving him wit, poetry and imagination. He had integrity, steadfastness and self reliance, which made him the master of himself and of whatever subject he attempted to discuss. His strong social nature endeared him to his friends and enabled him to exert an influence wherever he went. He had an excitable mental temperament; at the same time enough of the motive to give him strength, endurance and consistency.

Mr. Pierpont died August 26, 1866, in his eighty-second year. He was the author of the following ode on the death of Spurzheim, which was sung by the Haendel and Haydn

Society at the funeral of Spurzheim, was a man of whom any cause might
being written for that occasion. He well be proud.

AN ODE TO SPURZHEIM.

"Stranger, there is bending o'er thee
Many an eye with sorrow wet;
All our stricken hearts deplore thee;
Who that knew thee can forget?
Who forget what thou hast spoken?
Who thine eye—thy noble name?
But that golden bowl is broken,
In the greatness of thy fame.

"Autumn's leaves shall fall and wither
On the spot where thou dost rest;
'Tis in love we bear thee thither,
To thy mourning Mother's breast.
For the stores of science brought us,
For the charm thy goodness gave,
To the lessons thou hast taught us,
Can we give thee but a grave?

"Nature's priest, how pure and fervent
Was thy worship at her shrine!
Friend of man—of God the servant,
Advocate of truth divine;
Taught and charmed, as by no other,
We have been, and hope to be;
But while waiting round thee, brother,
For thy light—'tis dark with thee.

"Dark with thee! No; thy Creator—
All whose creatures and whose laws
Thou didst love—shall give thee greater
Light than earth's—as earth withdraws.
To thy God thy godlike spirit
Back we give in filial trust;
Thy cold clay—we grieve to bear it
To its chamber—but we must."

WHERE EACH CAN FOR HIMSELF A KINGDOM REIGN.

BY BYRON WILLIAMS.

The serfs who feed a lord,
Or grind his gleaming sword,
Must wear the wooden shoon and hoddens
gray;

The knights who guard his pride
Are clad in coarse bull-hide
Or rusty brass, and often sleep on clay;
But fools, who make him laugh,
All dance in silken scarf
And hose, and rest on beds of down for
aye.

The arms that dig or make
Must swing from backs that ache
And bend beneath the scorn for hated toil;
For those who hurl the lance
Is left the final chance
Of death in wrathful thrust or worthless foil;
The jesters, both despise,
Shall ever take the prize
Of ease from those who win or till the
soil.

In vain the prophet stands
And cries, with warning hands,
Against the paths that lead from wisdom's
way;

In gloom the Christ hath died
That man be justified;
The ingrate cell and faded raiment pay
The need of merit worn
With scourge or stained with thorn,
While pleasure rules the crowd and swells
the play.

But hearts that wait or break
May from the future take
A portion of the fated sum of pain
Which yet the soul shall leave,
More fitted to receive
A prince's share of that supernal gain
By sorrow only brought
Into the world of thought,
Where each can for himself a kingdom
reign. —*Saxby's Magazine.*



HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XIX.

HEADS AND HATS CONTINUED.

THE hat does not determine accurately the size of the brain because it measures only the circumference of the head where the hat touches through the middle of the forehead and on a level with the middle of the back head. A high head gives reason, moral sentiment, firmness and ambition and of these extra developments the hat takes no account; yet a hundred men wearing large hats will take the lead of a given number who wear hats of only average size.

Figs. 153, 154. A. M. Munkacsy, the celebrated Hungarian artist, renowned for his great pictures, "Christ before Pilate" and "Christ on Calvary." This head is nearly round, consequently the Conform strongly approaches the real shape of the head. The left side of the head seems to be larger than the right side; that is, the left hemisphere of the brain was larger than the right.

The peculiarity of this head is the



FIG. 153. A. M. MUNKACSY

enormous breadth of it. Where the hat touches the head it crosses the

region of Ideality, Sublimity, Constructiveness, Caution and Secretiveness. The portrait, Fig. 154, show-



FIG. 154. A. M. MUNKACSY.

ing the whole head, indicates great breadth of face and breadth of head, and not so very much length.

Figs. 155, 156. Col. Aaron Burr, third Vice-President of the United States, and whose life was clouded and his memory soiled by the unfortunate duel with Alexander Hamilton, who fell at his hands.

He was born in Newark, N. J., in 1756, died at Staten Island Sept.

14, 1836. His father and mother both died within a short time of each other, leaving their two children

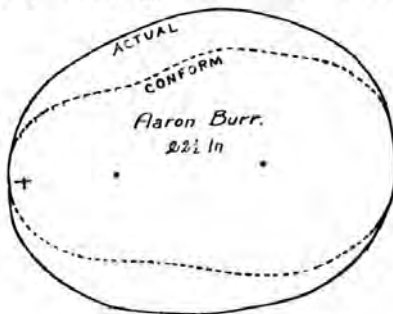


FIG. 155. AARON BURR.

scarcely more than infants, with plenty of means, in the care of an uncle. Aaron was a troublesome boy



FIG. 156. AARON BURR.

and his history might have been far different had his distinguished and talented parents been spared to give him guidance, and he might have been a boon and a blessing instead of a disgrace to his parents and himself and a blot on the escutcheon of the nation. He was brilliant as a scholar and precocious in talent, entering Princeton College at 13 years of age. He entered the revolutionary army under General Benedict Arnold in his

expedition to Canada in 1777, and for gallant conduct was made Lieut.-Colonel. He was in the U. S. Senate in 1791, Vice-President under Jefferson in 1801, fought the fatal duel with Alexander Hamilton in 1804, and was tried for treason in 1806. He was socially dissolute and lascivious, lax in principle and ostracised by his Government and the public and detested by the moral and religious.

The middle section of the head is particularly broad, showing large Destructiveness and Secretiveness. His intellect was intense and acute. He was an able man, the son of the Rev. Dr. Burr, President of Princeton College, and grandson of the great Jonathan Edwards, D. D., also President of the same college.

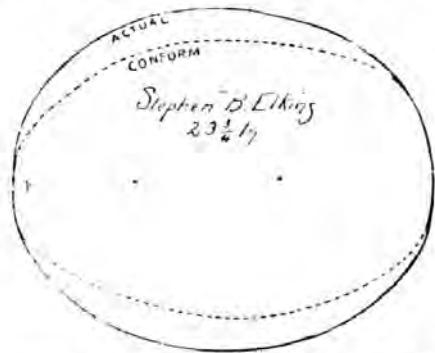
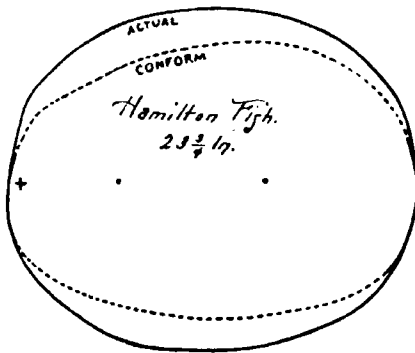


Fig. 157. Stephen B. Elkins, born in Ohio in 1841, studied law, delegate in Congress from New Mexico, 1873, Secretary of War under President Harrison in 1891, resides in West Virginia and conducts large business enterprises. He is a man of national fame and of eminent ability. The width of his head indicates force of character, executiveness, thoroughness, prudence, policy, skill, ingenuity and strong social affections. Few men are as much respected by all classes; none are more popular.

Fig. 158. Hon. Hamilton Fish, Governor of New York 1849-51, Secretary of State under General Grant, 1869-77, U. S. Senator 1857. Born in New York 1803; died, 1892. He had a large head, measuring 23 3/4 inches. This outline indicates also a

broad head as well as a long one, power, force of character and that

have strong Constructiveness and Acquisitiveness and ample development of Secretiveness and Combative-



steady momentum which reaches results without much parade or sensation.

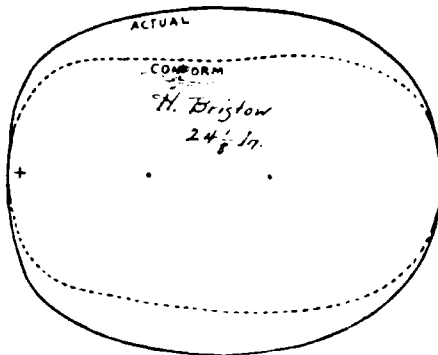
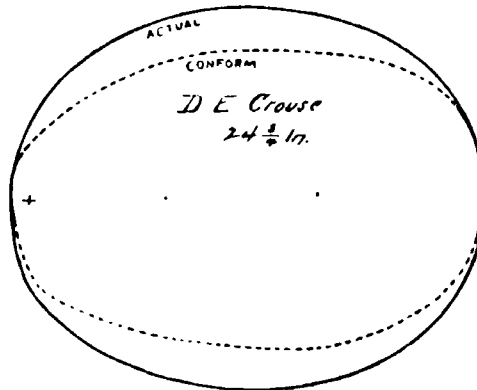


Fig. 159. Ex-Secretary Benj. H. Bristow. Born in Kentucky 1832, studied law, colonel in the Union army in 1861, Secretary of the Treasury under President Grant 1874, resides in New York. A very large head, $24\frac{1}{8}$ inches, and appears to be, where the hat fits it, of uniform and appropriate development. The head is wide at the region of the temples, indicating scientific capability in the direction of engineering. His head is broad at the sides, showing power, executiveness, force of character. It is long and broad at the back head, indicating a great development of the social disposition.

Fig. 160. D. E. Crouse, the well known millionaire, residing at Syracuse, N. Y. His head is naturally large, but is amply developed in every region. It is pinched nowhere. The anterior section shows far reaching thought and talent. He appears to



ness. These give skill and ingenuity, financial capability, thoroughness, efficiency and enterprise. The back head is long, showing ample social power, and a tendency to make friends and serve his friends.

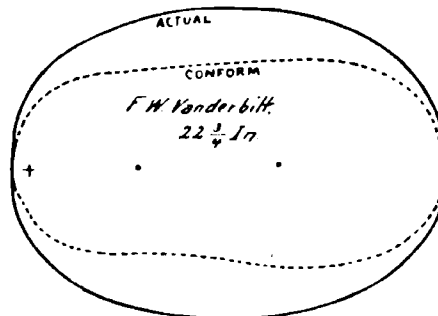
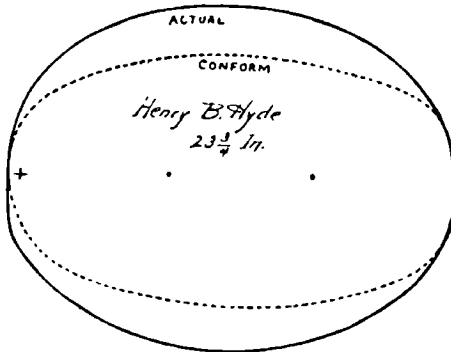


Fig. 161. Fred. W. Vanderbilt. This head is of rather large size, measuring $22\frac{3}{4}$ inches, and is also long, showing less relative development of the selfish feelings than of the intellectual and social. The back head is particularly long, and he ought to be known for social tendencies and ability to win friends and hold them. He has a full share of the element of Acquisitiveness or love of property, and has capacity for scholarship, taste and refinement.

Fig. 162 Henry B. Hyde, President and largest stockholder of the Equitable Life Assurance Society of New York. His head, measuring $23\frac{3}{4}$ inches in circumference, is almost "very large," and from the actual outline of the head and from the

Conform, we judge that he is a man of ability, clearness of thought, ingenuity, practical skill, financial

appears to be harmonious in its outline. He is ingenious, intelligent, active, can keep a secret, and show himself friendly and confiding.



ability, policy, prudence, vigor, courage and strong social elements.

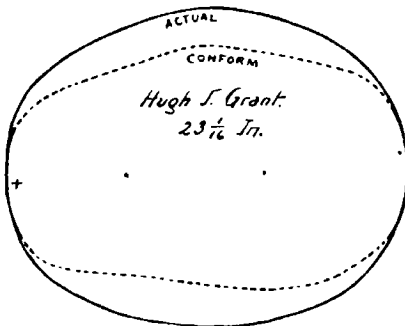


Fig. 163. Hugh J. Grant, ex-Mayor of the city of New York, has a head 23 1-16 inches in circumference, and seems to be pretty well developed in the sides in the neighborhood of the organs of Destructiveness, Alimentiveness, Acquisitiveness and Secretiveness. He has capacity for business, for financial operations and for energy of character.

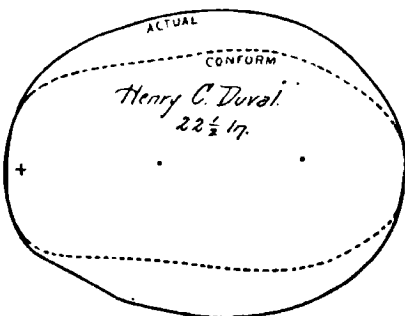


Fig. 164. Henry C. Duval, private secretary to Chauncey M. Depew. His head is from full to large, measuring 22 1/2 inches, and

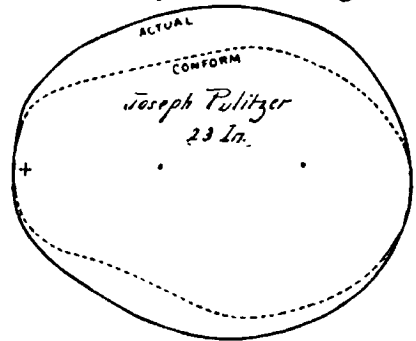


Fig. 165. Joseph Pulitzer, proprietor and publisher of the *New York World*, has a large head, measuring 23 inches, and it is especially broad for the length, indicating strong elements of energy, selfishness, push, policy, prudence, financial ability and intensity of intellect.

Born in Hungary, 1847; private soldier in the Union Army, '63-'65; was a journalist in St. Louis, Mo.; studied law and later became an editor. In 1883 he purchased the *New York World*, then of small circulation and depleted influence. In 1890 he erected the *World* building, the tallest in the city, and has also run up the circulation of the paper to an enormous height, evincing great energy and executive ability in the management.

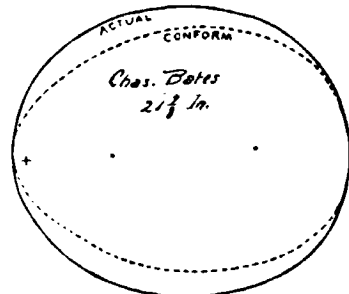


Fig. 166. Charles Bates, well known horse dealer and man about town, whose escapades have filled the columns of the New York press. His head measures 21 3/4 inches, which is about the right size for a man who weighs 150 pounds. His head is

broad for the length. He is naturally a man of policy, tact, is secretive, friendly and agreeable in his manners, and fond of society and notoriety.

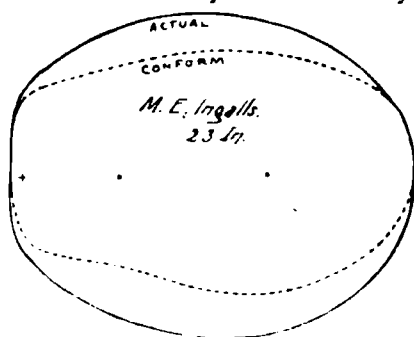


Fig. 167. M. E. Ingalls, President of the C. C. & C. Railroad, and interested in the Vanderbilt system of roads. His head measures 23 inches, and is therefore large. It is well stored in the region of the temples, which gives a talent for planning, for mechanical and engineering capability and understanding of complicated financial affairs.

The region of Acquisitiveness is broad, so also Secretiveness and Executiveness. He is a man of undoubted efficiency, push and enterprise.

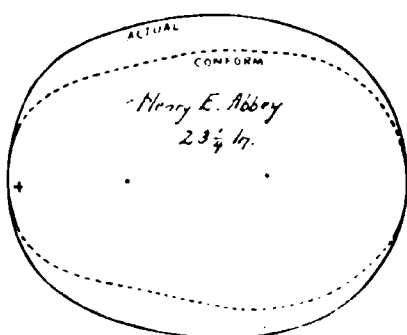


Fig. 168. Henry E. Abbey, theatrical manager, widely known for his professional and business relations with Patti and other great singers, and his connection with the Metropolitan Opera House Troupe. The head is not only large, but it is broad in the interior section, wide in the region of the temples, Imagination, Constructiveness and fondness for music and art, and the capacity to guide and regulate complicated

affairs and make money out of them. He has smoothness and policy, prudence and pliability, and a great deal of sociability, and he understands character and is naturally popular with the public.

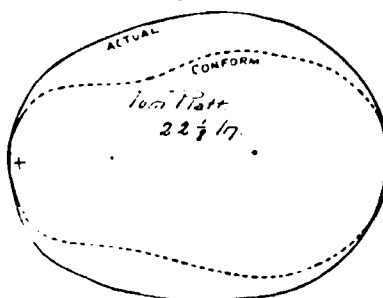


Fig. 169. Ex-Senator Thomas C. Platt, with a head of full size, 22 1/4 inches; he has an intense temperament, is wiry and tough, is full of practical sense and tact and has a great deal of policy and push. He resigned his seat in the U. S. Senate to aid Roscoe Conkling in opposition to Garfield, and both, it was thought, sacrificed future success; and a crazy assassin finished the quarrel by the murder of Garfield.

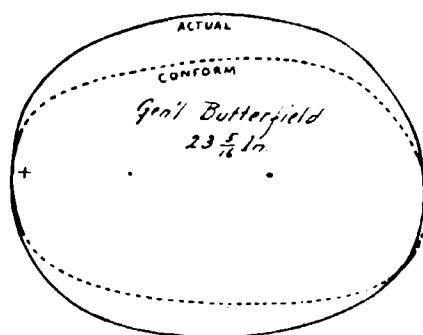
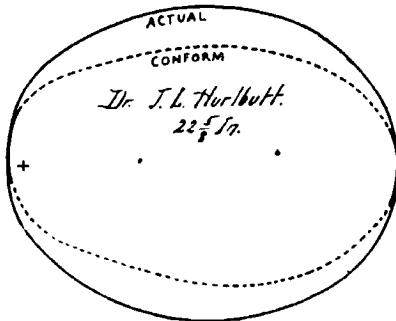


Fig. 170. Gen. Daniel Butterfield has a large head, measuring more than 23 inches. It is broad in the front. He has large Mirthfulness, strong Causality, ability to think in the direction of complications and combinations. Could be a good mechanic or engineer if called to that field. He has large Acquisitiveness and would be apt as a financier; has guardedness and prudence and energy and vim, and a great deal of social feeling, and power to make and to hold friends.

Fig. 171. Rev. Jesse L. Hurlbut, D.D., one of the originators of the celebrated Berean Sunday School Lesson Leaves, founder of the Normal Class for Sunday School teachers, etc. This head is of more than full



size, but its peculiarity is harmony of development and co-ordinate activity. Every part co-operates with and sustains other parts. It is a very handsome form of head, and he ought to have a character of great smoothness and excellence.

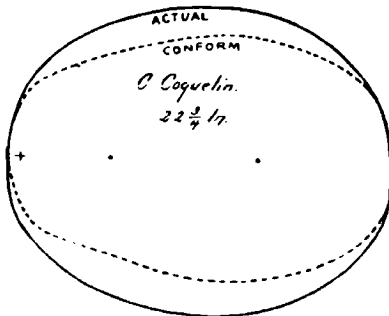


Fig. 172. C. Coquelin, the celebrated French actor. A head measuring $22\frac{3}{4}$ inches, which is rather large. This outline of head shows harmony of development, intellectual activity, imagination, policy, force and love.

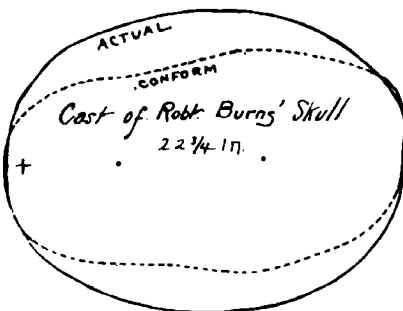


Fig. 173. Cast of Robert Burns' skull, measuring $22\frac{1}{4}$ inches. A very

large skull, and amply developed in the anterior, the middle and the posterior regions. The back head from the opening of the ears is particularly long, and the regions of Ideality and Constructiveness being ample show the basis of poetical imagination; and then the social nature is so uncommonly strong, we have the foundation of his great social power.

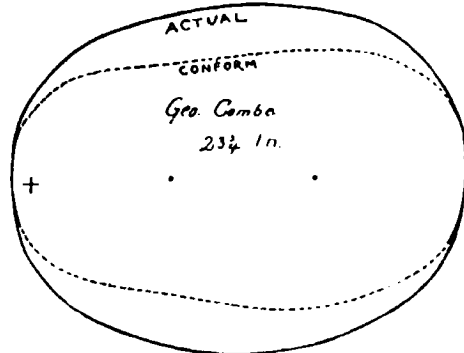


Fig. 174. George Combe—remarkable for its size, $23\frac{1}{2}$ inches, and also remarkable for the uniform development of the anterior, middle and posterior regions. This was taken from the cast of his head. The moral developments are preëminently indicated, and his whole character was elevated and excellent and his intellect clear, broad and vigorous.

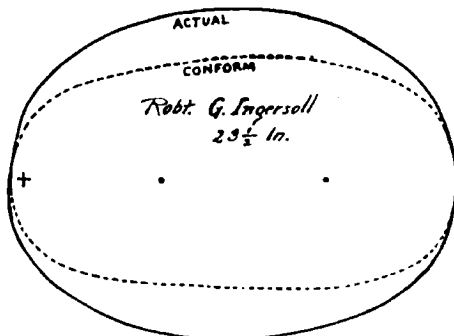


Fig. 175. Col. Robert G. Ingersoll, lawyer and lecturer. A head measuring $23\frac{1}{2}$ inches in circumference. The back head is long, indicating strong social development. He is a keen reasoner and an eloquent orator. The head is rather long for the width, showing that intellectual and social elements are more marked than the faculties which indicate force.

CHARACTER STUDIES. No 10.

By NELSON SIZER.

GEN. BENJAMIN F. TRACY.

For portrait see frontispiece.

[Examined as a stranger and dictated to a stenographer with no knowledge or suspicion of the name or pursuit of the subject.]

We judge that you inherit from your mother more than from your father, and that gives you, strange as it may appear, more weight than you might have had if you had resembled your father. You have a long body, and that counts in weight. You have good vitality, and this a man is more likely to get from his mother than from his father, because the feminine has to furnish nutrition for the young, and we very seldom find a woman who has dyspepsia, unless she resembles her father. You ought to be known for endurance.

You have also inherited the feminine type of mentality, as we use the terms. That means an intuitive method of grasping truth. It is a little like the "flash-light photo;" they get it, and do not exactly know how nor why, only they feel that it is true, and it *is* true. The best judgments that some people have are those that flash on them, and they do not know where they came from, and don't care. Occasionally we find a man or woman who have the courage of such convictions, and act on them with good results.

Your perceptive organs are large and active, and they are formed for intuitive action, not so much for logical and mathematical action; but it is that which the bird does when it flies above all the fences; oxen have to go around by the road. You are quick to perceive; as they say on the street, you "catch on" readily to that which is afloat, and take the hint; it does not need much enforcement to arouse you. And you may sit

and be quiet and not seem to notice or know, and you will hear all that is said, and see how that is done and get the run of the whole arrangement.

Suppose there were some young ladies who came in and were talking of their beaux or some engagement and other things, you will get the run of it without hearing much. Your imagination and your intuition enterprize a dreamy development into a reality; and what you cannot hear you supply. If you were pulling the rope of politics and were among scheming men, all wanting the nomination, you would go into a convention and pretty soon get the inkling of what was up and you would go to some of your confidential friends and say: "I am suspicious that certain plans are being concocted for the promotion of opposing purposes, but we will see how it comes out." In a couple of hours the man comes around and says: "I find the air is full of it." But you would get the inkling early; it does not take much to tell you which way the wind blows.

Comparison is one of your other strong traits. You compare one thing with another and so you link fact and fact, and by analogies you work out results. People sometimes do not believe that you are on the right track: but if they get acquainted with you they find your signs of weather for to-morrow and the next day are pretty sure.

Your interest in human nature *per se* is strongly marked. You seem to read strangers as you meet them. I had a man under my hands one Saturday night in the year 1851, and I did not care to light up, for that was the last I was going to do, and he took a seat as you are sitting, and said: "I wish you would tell me what you think

about my head." And I saw the organ of Human Nature was large, located just where the hair and forehead unite in the middle. I put my finger on it and said, "You would make a good police justice in the city of New York. If fifty culprits were waiting for examination you would look them over after you had taken the seat and quietly adjudicate their cases; and when they came to be developed you would be astonished, almost alarmed, at the accuracy with which you had appreciated them." He arose and said: "That will do. How much is it?" "Oh," said I, "I have said only one thing; I want to say forty-nine more." "That's enough; that is all I care for. I live in Chicago. Mr. Fowler is out there lecturing. The other night they persuaded me to go on his platform for examination, and he put his finger just as you did and said to the audience: 'This man would make a good policeman; he would smell a rogue three miles.'" Said he: "My name is Pinkerton." And that was old Allan Pinkerton.

Well, you have a similar trait, and you could do some detective work. If you were a lawyer, you would talk to the detectives; if you were a policeman or one of the Police Commissioners and you were studying matters, you would give points to men which would naturally grow out of certain facts, and you would be correctly suspicious of certain persons.

Your Benevolence is well developed. You are kind hearted and liberal and sympathetic. I think your mother was so before you, and if she lived in a country village the poor women between sundown and dark would come in with a basket under a shawl, and your mother knew what it meant. And when she was gone they missed her. Other people missed her, but they did not miss her in the same way. You are sympathetic, as she was; and although if people trespass upon you and get your

ire aroused you sometimes feel indignant enough to come down pretty heavily upon them, yet if the wife of the man should come to you and say she hoped you would be lenient with John, you might do as another man did, who let the man go to jail for thirty days, and then harnessed up his ox sled and put on a half cord of wood, a basket of potatoes and a bag of meal and flour and a chunk of pork, and hauled it around to the poor family, and fed the family while the man was justly suffering in jail for his crime. So he carried his justice and his severity in the right channel, and then fed the family with his kindness till the storm had passed over. People think a man cannot carry opposite states of feeling, but that man did, and you could. You could be just to the culprit; you could be lenient to his suffering family, and yet see that justice was administered properly.

I think the middle section of the head from ear to ear over the top is like your father. You have your father's determination, self-reliance and integrity; you are set and decided, and people who have occasion to deal with you, when you come to a point of absolute decisiveness, they begin to be persuasive; they do not give you an ultimatum, because that is not the way to manage with you; as long as they can keep on the persuasive side they can work you. But as soon as they begin to put their foot down and say, "It is going to be so," you remind them it takes two to make a bargain always, and sometimes you will make a man take back something else, and get that old matter square. You say or think: "I want to feel that I have no fence around me; I don't want to be threatened." There have been times in your life when men of calibre and strength have tried to weave a combination around you that would coerce you, and they found out they had to deal with wrought iron instead of cast iron. In casting balcony

railing, when the pattern is a grape vine, inside of that cast iron work, which is light, there is stretched a wire as large as a lead pencil, a good tough wire, so as to hold the pieces together in case it got cracked. People would find they could not break you. There would be something to hold the pieces together; you would be master of yourself and your situation.

You have rather large Self-esteem. You are proud; you are independent; you are an exceedingly firm man; your head measures $15\frac{1}{2}$ inches from ear to ear over the top, indicating steadfastness and stability.

Your Conscientiousness is also large. This gives you a sense of justice, duty and moral obligation, and when you feel obliged to do a thing by what Joseph Cook calls the "sense of oughtness" that is the best bond you can have. If you have given your word of honor, looked a man in the face and shaken hands with him and said, "I will see to that; you shall not suffer by it," you would stand it when the pinch came, if it did cost something. You had given the man your word, and he believed you, trusted you. And you would be able to do it, and you would accomplish it. You might tell him he need not say anything about it "between us." You would not want other people laughing at you about it in case of failure.

Your Cautiousness is large, which gives you a disposition to be on the watch tower, to be guarded against all machinations that may be hatched against you.

I think you are a conservative man in your feelings, and you are a progressive man in your opinions. The feelings and opinions are not the same. You would be likely, in dealing in real estate, for instance, to be more careful about having the papers all right and the searches properly done and everything safely fixed all the way; in writing contracts you put

everything into the document that is good for anything, while the parties are all mellow and willing to do the right thing; and sometimes these rods of wrought iron inside of cast iron avail you something—hold the business together. It don't say much, but it is there, not known till the stress comes. That comes from Caution.

Secretiveness enables you to say nothing when it is not wise to talk, and, as men sometimes say, lie low, and keep shady. If you were playing cards for fun and there was a tendency on the part of somebody to cheat, to do something that was wrong or not according to rule, you would put your hand out and say, "Not quite, John; that won't do; this is the second time you have tried it; I thought I would stop you now." After the game was ended, you would say, "I have played that enough, I think, for to-night." That would be a rebuke. But your Secretiveness and watchfulness would keep you wide awake about it. If you were a lawyer, they would not spring surprises on you; that is to say, you would seem to get an inkling of them before they developed them, and then perhaps have something ready to match it.

Your social nature is strong; your back head is well built out behind the ears. Friendship is especially strong; you like to travel in partnership, in company; you would like to be in partnership in business; you might be the boss of the job, but it would be pleasant for you to have partnership in it and talk it over. Even though every plan was made by you and every decision was made by you, you like to have somebody there to see and help. This means that you are fraternal. You are good on a committee; you would be good on a jury; you would be good on a board of trustees; men would have to be pretty smart to get the best of you, because you have the provident Caution, you have the suspicious Secretiveness, you have the indomitable

Firmness, and you have such a sense of justice that you keep the reins pretty snugly in hand; and then you have the intuition that gets there without being hindered. Your intuition is a little like quicksilver in a man's pocket which runs right through the meshes of the cloth.

You have mechanical judgment; you would have good planning talent in building. You have financial capability, but it is not so much a tricky mode of manipulating matters as it is a wise forethought that plans beforehand. I think you would make good investments, and you would be wise on a finance committee. Your Acquisitiveness does not lie down low; it rises up high in the region of creative invention. I think you would be able to handle property that was a drag on other people's hands if you could get margin enough. If somebody wanted to unload and was willing to make a discount to unload in order to get money so as not to have to go to the wall, and came and urged you to take this extra amount and load yourself, you would manage to divide it with some of your friends. If, to save your friend, you had to go and consult with one or two of your neighbors and agree to divide it up among you, you would be the buyer and divide it, so as to help the man out, and keep him from going under. All a man wants is so many hundred dollars, and he has something that we can afford to buy at a reduced figure and carry it if we are able—he is not.

You have the elements of long life, vitality, power, endurance; you have a good memory of whatever interests you; and you carry reminiscent matters with more clearness than most men. You would, as a scholar, make good progress, and achieve desired results and stand well. You would carry science, business or history in your head, and be able to co-ordinate your knowledge in such a way as to make it effective. If you were a lawyer, you would have won-

derful talent in cross-examining witnesses and the power to do it in such a way that the witness would forget himself, and feel that you were a friend, and he could confide in you and tell you everything that you asked him about, and your memory would enable you to carry a case in your mind, and bring it out in vivid relief in your summing up. Your analytical power would come in to enable you to make nice distinctions. Your logic would aid in combining the facts of a subject, and you would be able to co-ordinate the whole into an effective result.

BIOGRAPHICAL.

Benjamin Franklin Tracy, late Secretary of the Navy in the cabinet of President Harrison, has been a marked and most efficient character ever since his admission to the bar in 1851, at twenty-one years of age. He was born in Owego, Tioga Co., N. Y., April 26, 1830. Was District Attorney of his native county in 1853 and re-elected in 1856; in 1861 elected to the legislature; raised two regiments for the army in 1862; was Colonel of the 109th, which undertook a prominent part in the army of the Potomac. In 1866 was U. S. District Attorney in New York, and rendered signal service to the Government for seven years and then resumed the practice of law in Brooklyn, N. Y. In 1881 was appointed Associate Justice of the Court of Appeals; in 1889 he was appointed Secretary of the Navy, and filled that conspicuous position with eminent ability and commanded the approval of all patriotic Americans.

As a lawyer, General Tracy has been connected with many conspicuous trials, the latest of which was that of the State vs. John Y. McKane in 1894, for election frauds, which lasted twenty-three days and landed the accused in Sing Sing prison. As a patriot, statesman, soldier, lawyer, judge, citizen and friend, Gen. Tracy has sustained a high rank.

PHRENOLOGICAL PRINCIPLES IN ART CRITICISM.

EVERY spectator, says the London *Architect*, sees a picture in his own way, and he perceives its different elements with a degree of vivacity and interest corresponding to the development and cultivation of his own mental qualities. The individual who has a low quality of brain and a small development of the organs of Form, Coloring and Ideality, will be little affected by beautiful forms and coloring or even by fine expression; but if he have much Individuality and Imitation he may be greatly gratified by minute and successful representations of objects with which he is familiar. If another have large organs of Ideality, Causality and Comparison, with a high temperament, but be deficient in Individuality and Imitation, he may despise Imitation as an object of art, and demand grand general ideas, expressed in corresponding forms and colors. A spectator in whom any organ or group of organs is large will recognize and feel interested in the natural language of the corresponding faculties, as it is expressed in the face and attitudes of the figures. Hence men in whom the base of the brain, the intellectual organs, and those of Ideality are large, and the coronal region deficient, sympathize with and delight in what they call the fine, vigorous, manly characters of pirates, banditti, boors and outlaws; they are interested also by pictures representing tortures, slayings and other horrors of human action and suffering, while the truest, most lively, and (to differently constituted men) most captivating expression of the moral sentiments appears to them comparatively flat, stale and unprofitable. If this combination of the organs of the propensities and sentiments be reversed in the spectator, the latter qualities will challenge all his sympathies, while he will turn away with aversion from the former. He will

possess a tact or instinct by which he will recognize and appreciate certain moral characteristics in living man and in pictures and statuary, to which an individual deficient in the coronal region will be nearly blind. The latter may see them, because he possesses the moral organs to some extent, but his mental sympathies will be as limited as his cerebral development, and his interest will be low in proportion to it. The same remarks may be applied to the individual organs. Each acts spontaneously when representations of its own objects are presented to it, and then it gives rise to its own emotions and impressions. When the impressions are agreeable we call the objects beautiful, when disagreeable we condemn them as plain or ugly, and when indifferent we call them insipid. Hence most persons have some instinctive taste for the fine arts, but it is obvious how each should form a judgment concerning them in some degree peculiar to himself, corresponding to its own special combination of organs and his opportunities of mental cultivation.

The views of the *Architect* writer are certainly sound. The personal factor can scarcely be suppressed in our consideration of those subjects especially that interest elements of the mental organism in us that are strong and controlling. As a rule we speak from centers of faculty function that are active, and what we see or hear by its suggestive effect upon the cerebral centers sets going unconsciously feelings of a reciprocal nature. This is but in keeping with our human nature. We need not say that the writer above is a student of mind from the phrenological point of view, as that fact is apparent in almost every line of his criticism, and renders his analysis of art study most pertinent and philosophical.

STUDIES FROM PHOTOGRAPHS.

BY EDGAR C. BEALL, M. D.

SUCCESS in reading character from pictures depends very largely upon the ability to weigh cumulative evidence. It is not safe under any circumstances, and especially in the case of portraits, to "individualize" too much; that is, to depend solely upon isolated cranial or facial signs. One must be cool and avoid haste. The much valued and, when dealing with a living subject, usually reliable, "first impression" must always be set aside for verification, or if at all indulged for the moment, it should be *cum grano salis*. Here it is not nature, but a counterfeit which speaks to us. We must look beneath the glow and gloss.

Artistic beauty in a likeness is often not only valueless as an aid, but in many cases a positive hindrance. The reason for this lies in the fact that many artists are instinctively opposed to everything sharp and rugged, so that in their efforts to adorn a portrait, they consciously or unconsciously obliterate or disguise many of the most salient indices of character. This must naturally embarrass if not seriously mislead the phrenological investigator. Such difficulties apply especially to portraits in crayon or oil or other hand made drawings where the artist is left in great measure to follow his own ideas and sympathies; and, as he needs, on an average, as much as other people, to consider the question of pleasing his patrons, the element of diplomacy sometimes finds a place among the barriers between nature and the mirror of art. Again, not least among the emotional biases of the artist may be mentioned the tendency to idealize and glorify a subject, particularly in the case of an individual who, if not really a great hero, is regarded as such in the popular mind. Instances of this are everywhere abundant. Of

those especially familiar to our readers, we might mention Napoleon, Aaron Burr and Lincoln. A comparison of the conventional portraits of these distinguished men with the authentic plaster casts of their heads which we have before us as we write, will convince any one of the vast difference between the expressions of fancy and of fact. For instance, there are portraits of Lincoln which represent him with an expansion of the head at Ideality almost equal to that of Mendelssohn or Edgar Allen Poe. But in fact he was probably as deficient in that region of the brain as any man of eminence who ever lived.

In modern photography such errors are less frequent and usually of slight consequence, although, as a result of the position of the sitter, or the retouching of the negative, the form of the head, the contour of the nose, or certain expressive lines of the face are sometimes very effectively concealed. In posing a subject for a photograph it is quite natural for all parties concerned to seek the most advantageous effects, and in certain positions before the camera, as most heads are essentially spherical, many variations of development are not visible in the perspective. To illustrate, if a photograph were made of an egg, with the smaller end directly facing the camera, unless the lights were arranged in a particular way, it would be very difficult to determine the shape of the object, or, indeed, to say whether it might not be of globular form. Thus, from an inspection of a photograph of a face with a very retreating forehead, one may easily be deceived as to the actual amount or distribution of the brain in the frontal lobes. If the head is pitched back and sideways at a certain angle, it may produce the appear-

ance of very large Firmness and Self-esteem.

It is in dealing with such conditions that the character reader needs to employ careful judgment in balanc-

the element of character most in keeping with the general combination. Even after observing all possible precautions, cases may be found which present insurmountable obstacles, but



LIEUT. GOV. WM. T. SHEEHAN.

ing up the probable currents or channels in which a given type of organization would naturally find expression. If a certain indication is clearly opposed to the probable drift of the character, and obviously of a nature which would be easily capable of misrepresentation in the picture, the benefit of the doubt should be given to

they are never greater or more frequently encountered than may be met in all other sciences.

We will now give brief descriptions of three well known characters in the political world and try to explain some of the reasons for our statements as we proceed.

In the accompanying portrait of

Lieut.-Gov. Sheehan, of the State of New York, the most striking quality is that of sharpness. We observe this first of all in the nose, which, from its length, is adapted to gather the most subtle odors in the physical world, and which is a sign of apprehensiveness and penetration in the operations of the mind. Next, we note the marked length of the ear, the pinna or upper portion of which is obviously very thin, with the helix sharp, and hence adapted to gather all the delicate sounds which would be appreciated by a sensitive brain. The firm pressure of the upper eyelids upon the balls, and the shortness of the inter-ciliary space, which confers an expression usually described as "keen," may also be considered indicative of the general tendency to activity of the mind. From the form and smoothness of the chin, and as much as can be seen of the under lip, we judge that the mouth is not suggestive of any excess of blood, or any of those appetites or affections which may be said either literally or figuratively to be related to the sanguineous fluid. Looking next at the forehead, which is large in proportion to the lower part of the face, we can be almost certain that we are dealing with a pronounced type of the mental temperament, with a dash of the motive which adds strength to the industry of the brain. If further indications were needed, we might find them also in the quality of the hair, which seems to be fine and soft.

From the stamp of these features, we would not describe the gentleman as an æsthete or moral aristocrat in the sense of having the most exquisite tastes or the most elevated nobility of character. The tone of the organization is related more directly to the practical conditions of life upon a plane where intelligence is the prevailing element. This latter opinion we base chiefly upon the droop of the nose and the compressed eyelids.

In coming now to the more special consideration of the brain, we feel

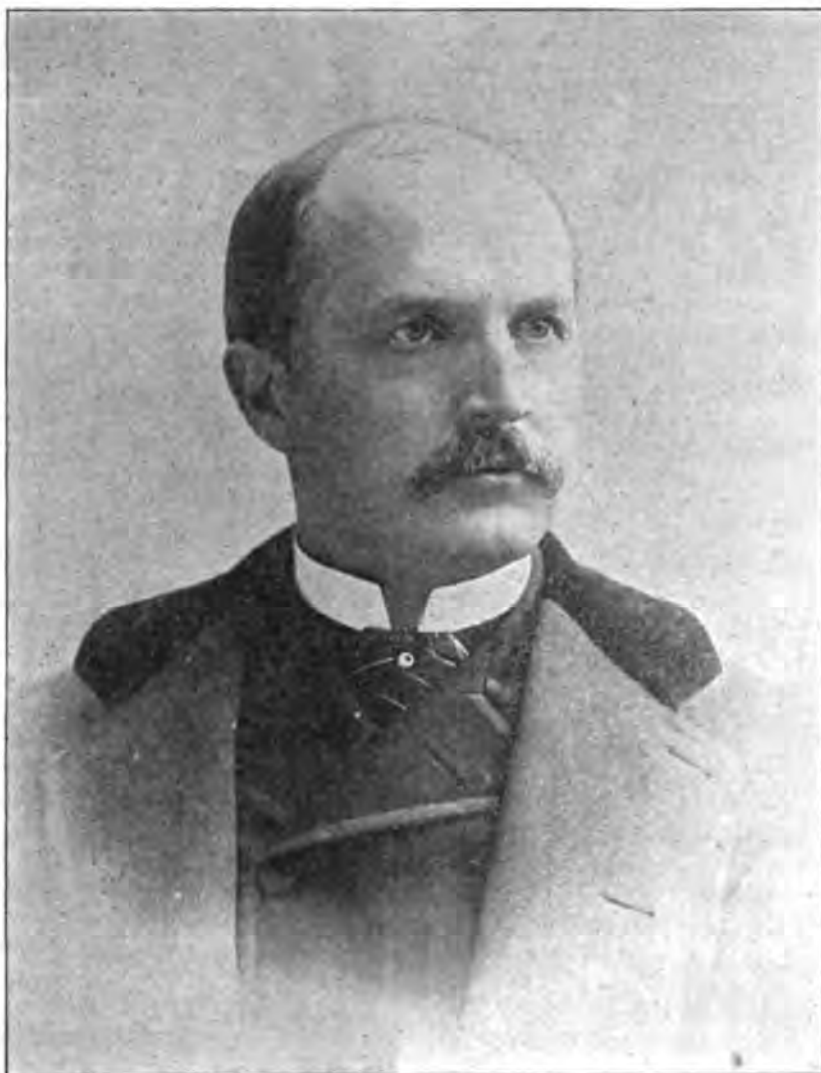
prepared to find certain areas especially developed, although we may be disappointed on account of the difficulties to which we have referred in the introductory paragraphs. For example, we cannot see the exact form of the lower back head at the seat of the love faculty, and yet by inference we would not expect this man to manifest a very profound interest in the opposite sex. This is because of the narrow chin, the narrow commissure of the eyes, thin lips, the temperament, etc. Then for the reason that the amatory element is of subordinate activity, we naturally infer that the love of children is probably strong and in agreement with this view the back head in this region appears to be long. Other reasons for the inference that the center of the occiput is long are in the comparative narrowness of the head in the region above the ears, and in the rather long neck and feminine slope of the shoulders. By a similar process of induction we conclude that Secretiveness, Approbateness, Ideality, &c., are strong, and the contours of the head leave no doubt as to their dominant influence. Such a man will seek property chiefly to gratify an ambition for honor and distinction. He will be devoted to his family, and interested in various industrial arts. He will enjoy a beautiful home, and, if he has a liberal income, he will probably invest a portion of his wealth in fine paintings and other expensive decorations.

As to powers of judgment, reasoning, ingenuity and fertility of resources, he will be exceptionally conspicuous. The ample upper forehead shows great capacity to estimate human nature, with brilliant general intelligence and comprehensiveness, which will insure a high success.

In Ex-Gov. James C. Campbell, of Ohio, we have a superb type of full orbed mentality. Here the key-note seems to be balance, harmony and versatility. Nothing seems to be

lacking, unless it is piety. Note the fine proportion between the three divisions of the face—the lower third showing wealth of affection, the middle third logical intelligence, dis-

extraordinary development of Friendship. As to his mental scope, one glance at the forehead, and a moment's survey of his career in Ohio, the great State of statesmen, will



EX-GOV. JAMES C. CAMPBELL.

cipline, culture; and the forehead a capacious arsenal stored with almost every form of weapon known to intellectual warfare. Few men have such generous endowments. Observe how the back head almost joins the outermost line of the ear in the picture. This is largely due to the

suffice to show that one is but the fulfillment of the other.

The Hon. William B. Allison, the well-known Iowa senator, has an extremely engaging personality, largely due to a very sensitive nature, for which he is probably indebted to his mother. In the refined, delicate

mouth, the tender, dreamy eye, nestling up to the super-orbital bone, and the form of the forehead, also the nose, we recognize the dominance of those qualities which distinguish the

"through his elbows," as it were, than Mr. Campbell. His sympathies and emotions are potent factors in the development of his opinions, and he is less flexible in purpose where affection



THE HON. WILLIAM B. ALLISON.

"gentler sex." The ear and the character of the hair are almost the only signs which reveal the masculine tone. There is a beautiful harmony in this face. The forehead does not bespeak so much brilliant intellect as that of the Ohio Governor, but its intuitions are more subtle. He receives more impressions

and faith are concerned than most men. These are some of the colorings and modifications of the character which we infer without especially considering the contours of the brain.

Glancing now at the extent of the head backward from the ear, we see that the social elements are all present in a very marked degree. For

home, friends, wife and children, his love would be almost equally intense. The head rises to a considerable height at Firmness and Veneration. There is also dignity without arrogance, and ambition to please without vanity.

He is as modest as a girl. Hope is not strong. He is not interested in commerce. He is an indifferent trader. But he is cautious in all things, especially where duty, family and religion are concerned. His face and head suggest a profoundly religious nature, but his faith is the offspring of a vigilant conscience, rather than a fatuous credulity. He is responsive to the deep undercurrents in

human destiny, and in the presence of the eternal mysteries he instinctively bows his head.

He should excel in the acquisition of statistical knowledge, natural science, history and general literature. The full lower forehead shows rare talent for specifying and accumulating facts. But in abstract reasoning he would be less effective. He has the organization of a superior reader of character. This may be seen in the appearance of the central upper forehead where it joins the hair. Here is seated the sense of human nature, which confers a type of mind commonly known as the intuitional.

THE FACULTY OF LANGUAGE.—II.

BY JOHN W. SHULL.

ONE having color small, with power to perceive only white and black, or possibly the primary colors, will learn terms to express only those color ideas which he has. If he hears the words chrome, emerald, mauve, carmine, vermilion, ultramarine, or others perfectly familiar to painters, he will have no distinct ideas of them, and will therefore have no use for the terms. He will lose interest in them and soon forget them. His vocabulary of color words will remain as meagre as his color ideas.

One having Conscientiousness small, will be wanting in the terms of equity and justice; or if he hears the terms applied to concrete instances, he gives them a meaning in accordance with his own estimate of the instance given (which is interpreted in the light of his own character always and necessarily), and thus attaches a different and defective meaning to them, probably of pride, expedience, conformity to custom, or respect for opinion.

No matter what mental element we consider, the rule obtains. If a faculty is strong, the terms for its ideas will be abundant, clearly apprehended

and readily used, if Language is fairly developed. If a faculty is weak, the terms for its ideas will be wanting or will receive a distorted application according to other stronger faculties, no matter how strong the faculty of Language may be, or how fully it is able to express other ideas.

A man's daily conversations are the social expression of his real, persistent character; accordingly, a man's character will be the formulator of his vocabulary, and his vocabulary, to a great extent, the key to his character.

From the ultimate analysis given above, it would appear that the faculty of Language does not alone require a knowledge of grammar. It merely associates a term with a given idea. But if this faculty does not intuitively acquire the grammar, how could the old Greeks and Latins produce such a consistent structure as their respective tongues, and learn that structure generation after generation before the primary distinction of subject and predicate had been reached? And how do thousands of young people to-day acquire an elegant and classic use of English, German or French, without mastering the

grammar? Chiefly by imitation; or, in other words, by a wider form of association than of a single term to a single idea, which is the simplest function of the organ in question.

Language is divided into parts according to this scheme: *discourse*, composed of logically arranged *paragraphs* which are groups of related *sentences*, each composed of one or several *phrases* which are aggregations of single *words*. Thought is divided correspondingly into *subject* made up of logically depending *divisions* which are groups of related *propositions*, each of which is an assemblage of incomplete *thoughts* formed out of several distinct *ideas*.

Now, I imagine that the associative power of the faculty of Language, which indissolubly links the term "blue" to that particular color idea, or the term "scholar" to the idea of an individual of that particular class, can rise one step higher and link a particular phrase or even a whole sentence, to a commensurate group of ideas as a whole. That this occurs is shown by our acquisition of idioms in which a whole phrase, whose words literally taken embody a specific thought, is readily received as expressing a thought only remotely related to the literal meaning. The French language abounds in these: "to cut grass under the feet," for "to supplant;" "to heat the ears," for "to provoke;" "to shave an egg," for "to be niggardly." Proverbs are also in point, where a whole sentence loses its literal significance and assumes another suggested by it: "A bird in the hand is worth a hundred on the thatch," to remind us that what we possess we are assured of and should not sacrifice it for uncertainties of a hundred-fold greater promise, or, "As the tree leans it will fall," to remind us of the fatality which renders to us the consequences of our character and habits.

It is also known that where language is acquired without a study of grammar, it will be correct or incor-

rect, elegant or inelegant, in accordance with the linguistic atmosphere breathed, which demonstrates how large a part imitation plays in the ordinary processes of language. Thus we could learn elegant and correct speech in accordance with grammatical principles without knowing or consciously applying them. It should also be plain why a large organ of Language is capable of easily picking up a conversational knowledge of several languages, while a small organ scarcely masters its vernacular.

Grammar teaches the form of words in relation to certain variations of meaning added to the root value of the word, or to show agreement with other words related in the sentence. It also teaches the proper location of words, phrases and clauses in a sentence to express the real meaning according to the genius of the tongue. Language learns the root meaning of words, the meaning of each particular ending in the noun, adjective, pronoun and adverb declensions, and the mood, tense, person and number signs of the conjugations. Grammar studies must involve Form, Locality and Language. Comparison plays an important role in philology.

The love of particular languages, I agree with Combe, is due to a quality of the mind. A language most certainly embodies the character of those who developed it. Those who partake of these characteristics will sympathize most fully with the language. A modern Cæsar spirit will delight in the rugged, masterful Latin. More volatile, æsthetic and passionate spirits will prefer the softer and more flexible Greek. The airy, naive, brilliant, intellectual and social spirits enter into the genius of the French. So with English, German, Italian, Hebrew, or any other. It is a matter of taste as well as linguistic talent.

Words and ideas are so closely linked that some have thought them inseparably bound together; but no fallacy is more easily destructible. Language in its memory of terms

though it usually acts in connection with other faculties, is essentially independent. Usually a word when seen or heard awakens its idea in the appropriate faculty; and an idea, wherever originating, suggests the proper term; but this process fails in two instances: (1) When ideas are present but words are lacking to clothe them, the occasion of which has already been given; and (2) when the term is present and the idea is wanting, instances of which are numerous. I remember well, some years ago, making a list of words not apprehended in my readings. In the list, as I recall them now, were *incunabulum*, *defiliation*, *fuliginous*, *manducation*, *nympholeptic*, *lanigerous*, *tergiversation*, *nephelegeritous* and *semeiologist*, and I remember them without a note, for a month before having an opportunity to consult Webster. However easy these words may seem to us all now, they were absolutely devoid of ideas in my mind for the time. I imagine that this experience will be confirmed by that of every reader; nor is it wanting in more illustrious proof in the testimony of Frederick Douglass that in his youth he delighted in reciting magnificent passages from the "Columbian Orator" without possessing the least idea of their meaning. The voluminous sound of the words charmed them into his memory, but brought no meaning with them.

Words, however, are not remembered long when not understood, unless language is very large, and thus confers a tenacious memory independently of the idea; for they cannot be used, and, therefore, lack one common element of retention—repetition.

It should be remembered also that a word is only the *sign* of an idea, and not the idea itself; therefore, that a word cannot possibly convey to the mind an idea which it does not already possess.

A new word is received. At first it is not understood. You seek a definition. Now, no term for a simple

idea, as "unit," "white," "space," can be defined save by naming equivalents or synonyms. Complex terms can be defined only by reducing the ideas to their simple elements. Thus, "nympholepsy" may be defined as "a mania produced by seeing a nymph." If you understand each of these terms you comprehend the original. But, if you have not learned the meaning of "mania" and "nymph," you look further and find the one "a disordered state of mind amounting to disease" and the other "a suppositious being which, according to the old mythologies, inhabited woods, mountains or springs." If, now, you find yourself familiar with these terms you understand the original, but you have gained no new simple idea. You have only learned to sum up in one word, "nympholepsy," what before you would have been compelled to express at large as "a disordered state of mind produced by looking on a suppositious being which, in the old mythologies, inhabited woods, mountains or springs,"—a great gain in economy of speech, but no more.

Simple ideas must be had by experience or never be known. New complex ideas, built out of simple ones, may be conveyed by words, if the words are defined in already known terms, which stand for ideas already gained by experience. Hence, the chief business of instruction is to give experience to the mind. Lead it to perceive, feel and think. When an idea is gained, give the appropriate term. Any other method is folly. Combe is justified in calling it "a simple absurdity" to teach terms for which no idea exists in the mind.

Some persons learn most rapidly by hearing. These are persons who, for a long while, have been forced to gain their ideas largely from conversation or lectures. Others find it difficult to remember what is heard, and always find it safest to see the thought in print or in writing. These are the studious and scholarly men, who for years have pored over books. I have

known others who fixed their verbal memory by first writing the matter down, which act rendered the note unnecessary as a reference. Still others, on meeting new words, almost involuntarily repeat them several times aloud, as if their sound would secure their retention. I consider this due to peculiarities in the physical instrumentality of Language. First, there in the cortical center of Language, which phrenologists call the organ of Language. Then, since language requires the nerves of vision and audition for the perception of words, there are distinct centers for word-vision and word-audition in the common sensory center. Since words require the hand or the organs of speech for their expression, there are distinct centers for word-speaking and word-writing located in the motor areas.

The late Dr. Charcot made many observations in brain lesions confirmatory of this view. If this is correct, it is not difficult to suppose that those who learn best by hearing have a superior development of the auditory center for words; those by seeing, the visual center; those by writing, the graphic center; and those by pronouncing, the speech center.

Some have thought that natural language, such as cries, grimaces, gestures, belong to this faculty, but I beg to disagree, on the ground that these are the involuntary expression of feelings, as of content, pain, delight, hunger, fear, cunning, anger, feelings that have not passed into ideas. I consider Human Nature the interpreter of this distinct class of signs of character.



CONSCIENCE IN THE CHILD.

A writer in the *Journal of Education*, Boston, has some practical remarks on the conscientious element in the child mind that are worthy of repetition here:

"Conscience almost never remonstrates in a child, and rarely in an adult, at the doing of anything the positive evil effects of which are not seen, unless there be some well defined opposition, reproof, or public sentiment against it. A child very early learns that he may do certain things and must not do other things. This is his first idea of right and wrong—his first idea of morals and conscience. Whoever successfully opposes his doing of certain things, or reproves for not doing other things, is his moral law.

"Morals begin in the physical world. They are at first related

solely to eating and sleeping; later, to activity of hands, feet, and voice. For a long time morals have nothing to do with motives or sentiment. Whatever the child is permitted to do in eating, sleeping, and touching is right or good; whatever is forbidden is wrong or evil. The chief mission of the home for the first four years is the establishment of physical morality and conscience, while from four to seven years of age certain emotional phases of morality may be blended with the physical.

"The negative work of the home is to prevent the habitual doing of anything that will set the wrong stamp upon the tendency or thought of the child when he establishes his intellectual estimate of morality upon the basis of his acquired activities. The natural activity of the child will lead

him to do something, and if he can not do the wrong, he will of himself do the right. We should not be sharp or decisive in reproof of the occasional doing of a wrong thing, neither need we be anxious about it; it is only necessary that we prevent its becoming habitual. Almost nothing that the child does is harmful unless it becomes constant. It is a serious fault for the parent to call the child's attention too frequently or too sharply to the harmful things he does. Many a child has been punished in such a way as to emphasize the simple doing of a wrong so that it signifies as much in his character as though it had become a habit through oft repeated doing. The aim is not to have the child do frequently any wrong nor to have his attention specially called to any wrong that he may incidentally do."

The following points deserve a special accentuation in our management of the young:

"Change a child's place of sleeping or hour of feeding and it becomes wrong to him, but continue the new order of things and it becomes right, and to return to the old place or time becomes wrong. Right to one child is wrong to another; right at one time is wrong at another time. There is no moral quality that does not arise from regularity or uniformity. Conscience is only developed by great pains, patience, and prudence. It is not spontaneous, in the every day affairs of adults—is not a thing to assert itself. On rare occasions, in unexpected emergencies it may be depended upon, but in the every day affairs of life it is built up by the practices that have formed it. It will 'go to pieces' in a short time if left to itself or if conditions change; indeed, changed conditions always change a man's conscience unless he controls it by special effort. No man can change his business or residence; can form new intimate acquaintances; can adopt any new line of life, or

even go on a vacation without running moral risks.

"In the little child we see the portrait of the man in that a three days' illness will demoralize the eating, sleeping, crying habits of the best child and furnish a new conscience, a new code of ethics, a new basis for right or wrong. For the sake of the man that is to be there needs to be the clearest appreciation of what the physical conscience means as a forerunner of the intellectual and moral consciences that are to furnish the standard through life. The mother has a holier mission and greater responsibility than she suspects in the home life of the child under seven years of age."

CARING FOR HOMELESS CHILDREN IN AUSTRALIA.

IN that new country the people have done much toward solving the problem of providing for destitute children. It is done without erecting great so-called "homes" with all their machinery of mercenary attendance. Each waif is taken to a receiving-house, where it is cared for, until a country home is found. The local volunteer societies canvass their neighborhoods, and send to the Children's Committee of the Destitute Board the names and circumstances of such families as they have found where children may be placed. The Children's Committee selects that home which it judges is best adapted to the development and care of the child in question. No child is placed in a family so poor that the child might suffer hardship. The foster-parents receive a sum averaging \$1.25 per week for the care of the child, and for proper clothing. When of school age, the child must be in school. The local volunteer committee looks after its care and culture, and zealous neighbors often assist in watching the growth and education of these happy children. When the child is fourteen

years old, he begins to work. His savings are placed in the Postal Savings Bank, and at seventeen or eighteen he goes out into the world, an independent man. The State, at an expense of less than \$70 a year, has raised a man or woman to contribute to its wealth, and prevented the manufacture of a criminal, and the expense of courts, prisons and reformatories.

The Philadelphia *Medical Times* commenting on this naturally remarks:

"It may seem strange that Australia, Tasmania and New Zealand have so far outstripped us in this humane, charitable and economic work of child-saving, and the prevention of disease. In our cities the slaughter of children in 'institutions' still goes on, the growth of our defective and criminal class still increases, the calls upon the thrifty and humane still grow importunate, but we are unwilling to learn. It were better to recognize at once, that, as civilization advances, the functions of the State must advance into new fields. The care of the children can no longer be left to the church and the street. As society, represented by the State, must protect itself against enemies from without, so it must protect itself from the greater enemy that it is suckling within. It is unnecessary to point to the influence upon general morality which the daily observation of the life of the children of the streets exerts upon the more fortunate. This depressed moral tone makes our political corruption possible. Hope lies not in restricting, but in extending political activity.

"It should be said that two women of clear perception, with reference to what should be done, Miss Clark and Miss Catherine Spence, destroyed the orphan asylums of Australia, robbed the continent of its orphans, and saved these colonies from a horde of criminals and dependents. Some good man or woman must raze every

orphan asylum and 'home' in the United States to the ground. We have outlived them. We are too thrifty to keep them longer, pretending to perform a function they are unequal to."

TEACHING BY IDEAS TANGIBLE TO CHILDHOOD.

EVERY judgment which the mind forms is a distinct step in the path of knowledge; and the absurd attempts which are made to lift children at once into the regions of science are no less ridiculous than would be our endeavors to make children walk with ease and gracefulness by always carrying them in our arms. The use of the mental faculties, as well as of the limbs, must be acquired by exercise. Such is the law of Nature, and we never gain by opposing her authority.

I have known children who, from the time they could speak, had masters upon masters to instruct them; and what was the consequence? Mere prate; many words and few ideas. Let us suppose one of these children learning arithmetic, which, as I have before observed, may be made a useful means of strengthening the faculty of judgment. It is taught to repeat after the master, "Five and two make seven; seven and seven are fourteen," and so on, till, by frequent repetition, the relative power of number is fixed in the memory, and thus it is able to get through addition tolerably well. Next comes the multiplication table, which it learns by rote and applies in the same way as often as it is wanted. And so on through all the rules, the master assisting all the time, whenever the pupil is at any loss, but never attempting to unfold a principle, or to give a single idea upon the subject. I speak from experience, as it is the way in which I myself was taught, and as, I believe, many others are.

Let us now suppose a child whose

conceptions have been gradually improved by the unceasing, though almost imperceptible, efforts of a judicious and attentive parent. She marks the time when ideas upon the subject of numbers may be given with effect. She seizes the most proper period for beginning her instructions, or rather for leading the mind to instruct itself. By frequently recurring opportunities, she exercises the conceptions and the judgment upon units. She renders all the different combinations that can produce numbers under ten familiar to these faculties; and then proceeds to add ten to ten, till the conception can embrace hundreds. Tables of numbers are then given to be summed up, and at every step the judgment is taught to decide on its truth and certainty. Multiplication is explained as a shorter method of addition, and its principles unfolded in plain and easy terms. By frequent exercise, the mind becomes so familiar to the subject that its knowledge appears intuitive; its ideas are all clear and accurate; and although the rules may not be gone through with a tenth part of the speed with which they were galloped over in the former instance, we cannot doubt that when both pupils come to put their knowledge into practice, the latter will have a great and manifest advantage.

—*Nursery Guide.*

“MOTHER IS HOLY!”

LITTLE Bernard Ruelt, in his white night-dress, at auntie's knee, dimpled hands folded, merry eyes closed, and an expression of sweet solemnity on his baby face. He was lisping part of the “Children's Litany” for his evening prayer:

“Jesu, from Thy throne on high,
Far above the bright blue sky,
Look on me with loving eye.
Hear me, Holy Jesu!” etc.

“Do you know what *holy* means?” asked auntie, when the child had finished, wondering if that oft-recur-

ring word conveyed any definite meaning to the infant mind.

Bernie shook his head.

“It means *good, quite good, always good*, like Jesus was. We must all try to be good like Jesus, you know.”

“Yes,” answered the little fellow, gravely; adding, after a pause, “*Mother is holy.*”

What a precious testimony from those innocent lips! Where is the mother who would not covet similar praise from the true heart of her little child? And who, receiving it, would not feel humbled to the dust with a sense of her own unworthiness, and pray to be made a more fit ideal of moral beauty?

The good opinion of a little child is more easily earned than that of a grown person. He is utterly trustful. He is not in the least critical. Be kind and loving towards him, sympathetic and tender, and his heart is yours. Whatever your flaws of character may be, in his eyes you are perfect; not one word of distraction will he hear. Your peculiarities are unnoticed. Foibles that draw down upon you the censure of others, are beautiful to him. Your very faults are virtues. He loves you, and that is enough. Such responsibility is almost terrifying to contemplate. A child's judgment of right and wrong may be warped for a lifetime by the crises or inconsistencies of her by whom his earliest affections were gained.

Yet, blind as our tiny ones are to sins which the world rightly condemns, they are keen to detect injustice, untruthfulness, unreliability, as far as may immediately concern themselves. Many would claim to be the *beau ideal* of every virtue in the eyes of offspring, or charge, who are far from being worthy so great an honor. “Because I say so,” even from the lips of a parent, is no guarantee of veracity to the child who has once or twice been deceived, and “Because I tell you to,” no assurance that a

command is just when once his faith in our wisdom has been shaken. If a prohibition has once been observed to arise from selfishness or petulance, rather than from necessity, obedience will be difficult to regain. A child's love and admiration must be the spontaneous tribute of its own heart. It can never be demanded, even by a parent, as a right, and to such demands it is little likely to respond.

There must come, moreover, a time in every child's life when, as a being responsible to God, he must question the righteousness of all human authority, compare his every ideal with the one great Pattern of the race. Happy the parent whose character and code of maxims will stand this test! Thrice blessed she whose thinking son or daughter, looking around with the eye of an awakening soul, tasting in early man or womanhood of the tree of the knowledge of good and evil, can still say, with the undimmed trust of infancy, "Mother is holy!"

JENNIE CHAPPELL.

TEACHING CHILDREN BADNESS.

"A MOTHER" says: Did you ever see a child who was cruel who did not have a mother who was given to cruelty? If you have, that is, if you think now that you have, I can tell you how to stand correct on the subject. Make thorough acquaintance with that mother, or whoever has the care of the child. If parents strike, baby will strike, too, or do what it sees done or is done to it. The same of scolding. Teach little ones that "little hands were never made to strike;" teach them by practice, and if you can find such a child cruel you have met an uncommon child. I have seen children who had nobody to strike them; I have seen teachers who did not strike their pupils; I have

seen mothers who would never do it. It is my opinion that the shortest way to bring civilization is to stop striking; stop cultivating combat, resents and destructiveness. Never strike or scold a child. A child that cannot be governed by reason, that cannot be dealt with by a steady hand and spoken to in a natural tone of voice, can scarcely be found.

If a child is lied to it will learn to lie. A threatened child will not obey. I take the side of the child, and tell the parents to use self control and that will control the child. Genuine kindergarten teachers never strike a child. There is no need of it. What can there be in any child that a strong woman or man should strike it? The elders have all the power to break and bruise the young and tender child, and in all discretion should use that power for protection, and not brute force, toward dependent and helpless little people. Many a mother is daily damaging and ruining for life her child, whom she should guard and guide with more care and culture than her garden rose tree, and violets, and lilies. She never strikes them. She only inclines them with gentleness.

Malice is not an attribute of children, neither is cruelty. I have often known adults who, on seeing a babe, wanted to pinch it, and that they called playing with the babe. It cried; it had to cry; it had no other mode of self-defense; it could make no other effort toward self-preservation, which is the "first law of nature." That child is taught to pinch, and it will do it as soon as it knows enough. And the mother will try to show the little thing how it feels to be pinched by pinching back. The same may be said of striking, scolding, etc. When adults put this and that together in rational manner, and are civil, then children will be civil too.—*Union Signal*.



SCIENCE OF HEALTH

SENSIBLE TREATMENT OF THE SICK.

ARE intoxicants medicinal, and should they be given? If we admit the claim that medicines must be poison, and that their efficacy depends on the degree of this, we must adopt intoxicants, since they are among the deadly poisons. (I am reminded of the views of a noted drunkard who said, "One should be strong and healthy to be able to withstand the effects of liquors," and when asked to state under what circumstances one could take them, as a beverage, promoting the good of society and the individual, replied that he was not able to do so.) He gave me two strong temperance arguments. Modern science, all science, proclaims the great truth that alcohol contains no real nourishment, nothing to afford strength, and that it is never digested, like ordinary food. This being admitted, it is difficult to see how it can be of any service to the human system, or how it can "bridge over" or "tone up" the invalid. Science teaches us that it can never afford an appetite, but that it impairs it, deranges it, when it naturally exists.

Since the sick have but imperfect appetites, and since an appetite is a necessary indication of the propriety of taking food as a means of affording the needed strength, the invalid should refrain from what necessarily proves an obstacle in the way of his recovery. It also teaches that it impairs digestion. Now, since a loss of the appetite, with enfeebled digestive powers, is usual to invalids, always proving a decided hindrance to recovery, added to weakness, it is absurd to suppose that anything which

discourages food-taking, as a means of affording the needed strength, should ever be taken, particularly by the sick, though such a course may sometimes prove advantageous to gluttons and those accustomed to take much more food than the system demands.

Again, intoxicants impair the action of the lungs. Admitting the fact that the impurity of the blood and of the whole system must prevail in sickness, as a prominent cause of such debility and disease, it is of the utmost importance to secure the greatest efficiency of the lungs, that the internal fires may not be smothered. Similar to this condition is the influence of intoxicants on the action of the heart, the great motor of the system, the effect being, according to the estimate of the learned Dr. Richardson—the most noted of European scientists—that "the toils of the heart are increased from eighteen to twenty-four tons each twenty-four hours," a tax ill afforded by those already depressed in vital force and scarcely able to contend with their prevailing disease. This loss of power may be appreciated when we know that the office of this organ is to send the life-infusing fluid into all parts of the body, affording nutrition, that the repairs may be made, the strength afforded for needed activity, as well as to aid in the purification of the blood, the sick being especially deficient in these particulars.

Still again, alcohol prevents the natural escape of the waste and poisonous particles of the body, which always add to its impurity. This is

particularly unfortunate, since it is the peculiarity of the sick that the whole system is in an impure state, one of the missions of disease being—if not interfered with by officious meddlers—to remove these impurities. This class have the effects of the disease and those of intoxicants to contend with—more than they can afford.

To add facts to principles, I will say that in a certain hospital with which I was connected the convalescent ward was divided into two parts, as an experiment to ascertain the effects of such on the sick—one-half to take intoxicants as usual, while the others were to have no stimulants. As a natural result, that was afterwards published, twelve and one-half per cent. more recovered without the stimulants than with! I can conceive of no fairer experiments than this, all of the patients being in about the same condition at the commencement.

DR. J. H. HANAFORD.

THE SITZ BATH AND ITS USES.

THE Sitz, or sitting bath, is, as its name implies, a mode of applying water to the abdominal and hip regions for the purpose of obtaining desirable alterations of organic and tissue states. Inflammation or congestion of pelvic organs is treated in this manner with success; waste matters eliminated from the blood; liver dullness, kidney disorders, etc., may be relieved, and recovery from positive or impending disease promoted.

The sitz bath is administered of different temperatures, according to the discretion of the physician, and bears the designation of hot, warm, tepid, cool and cold respectively, the hot being taken in water from 100° to 108° Fah., the warm from 96° to 100°, the tepid from 85° to 96°, the cool from 85° to 75°, and the cold from 75° to 32°. The warm and tepid are the most frequently

employed, while the occasional use of the hot is advised in case it is necessary to induce activity of the skin, which shall relieve local and internal congestions.

A resumé of the procedure in a recent number of *Good Health* is drawn upon for the following directions: The apartment in which the bath is given should be comfortably warm, say at about 75°, and if the person to whom it is to be administered be feeble, all preparations should be made in advance, the room and apparatus being ready before the



patient is placed in it. After removing his clothing a blanket should be placed around him, his head and face dampened with cool water, and a hot foot bath given for a few minutes before he is put into the tub. His feet should be left in the foot bath while he is in the sitz. If it is desirable to induce free perspiration he should be given hot water to drink and well covered from the head down with blankets.

The patient should be watched when in the hot sitz bath, as he may faint from the effect it has of drawing the blood from the brain to the abdomen and lower extremities. If the

patient is weak it is best to limit the treatment to ten or fifteen minutes; then, if desirable to prolong the sweating, have a warm blanket on the bed ready to wrap him in. In that case the patient should go directly from the bath to bed without cooling the bath or checking the perspiration, simply drying off with a warmed towel. In other cases the patient, after remaining ten, fifteen, or twenty minutes in the hot bath, should have the temperature of the water lowered five or ten degrees and then be sponged off, or be sprayed a little, or have cooler water poured over him. The feet may be cooled off by stepping into the sitz tub, and the whole body should then be rubbed vigorously with a Turkish towel to keep the blood at the surface. The patient may then go to bed in a cool, well ventilated room and be covered lightly.

This form of bath is very refreshing in the case of sore muscles due to over-exertion, chilling, or other exhaustive exposure. It has the same soothing and eliminating effects as result from the hot full bath, the vapor bath, or any other hot bath. It is useful in all cases of pain in the pelvis, retention and suppression of urine, colic, the cramping pains of cholera morbus, tenesmus and dysentery. The troublesome symptoms of the last named disease are often relieved by a hot sitz bath, followed by rest in bed.

The *warm* sitz bath is useful to soothe and quiet the nervous system when over-excited, to relieve irritation due to hemorrhoids or external chafing, and to relieve the dragging, uncomfortable feeling so often experienced by women who suffer from chronic pelvic congestion after being on their feet. The tired housewife, or any of the world's workers who are suffering from want of nerve energy and unable to get needed sleep, would find this form of bath a source of great relief taken before retiring, as it conduces to natural sleep and

escape from those feelings of languor and malaise that usually follow the use of narcotic drugs.

The *tepid* sitz bath is appropriate in cures of chronic abdominal congestion, torpidity of the bowels, bladder and urethral weaknesses, and excessive irritability of the genito-urinary organism. In chronic dysentery and diarrhoea and other catarrhal conditions of the mucous surfaces it comes into service helpfully. It may be longer in duration than those already mentioned and should always be followed by a brisk rubbing or massage. Its tonic effect is marked, and in case of persons of strong constitution may be followed by vigorous exercise. As a rule morning is the better time for it, but it is also a very soothing bath taken just before retiring.

It may be well to remark that in cooling a sitz bath, we should not pour the cold water on the patient, the water should be poured slowly down the edge of the tub. When giving a cold bath, it is best to begin with tepid water and cool it off gradually. With a hot bath we begin with a warm temperature and raise it gradually.

The *cool* and the *cold* sitz bath are sometimes used to reduce fever, but are inferior to the full bath and the cold pack for the purpose. They are often useful in controlling hemorrhage of the bowels, bladder, and other abdominal organs, and where there is more or less acute congestion with local heat and engorgement of the blood vessels of the abdomen. These baths are especially useful in the latter condition. The cold bath is excellent as a tonic in torpidity of the bowels and incontinence of urine due to weakness of the bladder or urethral walls.

Five or six minutes is long enough to continue this bath, and a brisk rub should follow it, to secure a thorough reaction. After taking a cool bath, the patient should always be rubbed until the surface circulation is vigor-

ous enough to produce a warm glow all over the body. Never let him remain chilly and uncomfortable, with a pale, clammy surface, which indicates internal congestion.

When the foot bath is not required, if the feet are warm, the shoes or stockings may be left on, or the feet may be placed on a warmed piece of soapstone, a hot board, or on a furnace register, if there is one in the room. When there is a tendency to cerebral congestion, a cool cloth should be kept upon the head, and the face frequently wet with cool water.

In preparing for a bath, too much water should not be poured into the tub. No definite rule can be given, as the quantity must be graded by the size of the patient and of the tub. A small patient will of course leave more room for water, while a large patient may fill up the tub and so leave but little space for water. For small children a common earthenware bowl is sufficient.

The size of the tub for sitz bath purposes should be about eighteen inches in diameter at the bottom and twenty-four at the top with a depth of twelve inches. One may be made from a good cask or strong barrel. A common wash tub will serve, but it is best to have one made specially for the purpose, and in our large towns it is usually not difficult to find such a tub; its high back as shown in the illustration serves as a support to the patient and keeps the covering out of the water. H. S. D.

SICK HEADACHE.

CERTAIN forms of headache that have a way of coming on periodically are termed as above. As a rule they are related to the stomach, and accompanying intestinal disturbance. The amount of suffering differs according to the temperament of the person and the state of health.

Good advice in the treatment includes attention to diet and surround-

ings and local applications. The light in the room must be darkened, so that the eyes, which are so sensitive during an attack of "sick headache," will be relieved from any strain. The temperature must be kept even, although the patient may prefer a lower one than is ordinarily comfortable.

The hands and feet are usually cold, at least during a part of an attack of "sick headache." When this condition prevails, a hot foot bath, soaking the hands in hot water, and putting a warm piece of flannel about the body are often of great service in lessening the pain and in shortening the duration of the attack. While employing these measures, a mustard leaf—such as your druggist sells in little tin boxes—applied to the back of the neck may be found to be serviceable. Or one of the rubber neck bags filled with hot water will serve the purpose, and be less irritating to the skin.

Persons who suffer habitually "sick headaches" can nearly always predict the advent of an attack; and if they take a thorough rectal injection accompanied with free drinking of hot water when they feel an attack coming it may be entirely averted. As a matter of routine domestic treatment, a good plan is to wash out the stomach in the beginning of the attack, even when it has not been anticipated. This may be done without much discomfort by swallowing lukewarm water enough to give the stomach a feeling of tension. The rejection of this clears the stomach of mucus and irritants which might tend to increase the disorder. Associating an occasional rectal enema with the stomach washout will further relieve the system of irritating elements, and conduce to comfort in the abdominal organism.

THE APPLE AS FOOD AND MEDICINE.

THE apple has been called the "king of fruits," and there seems to be good warrant for its coronation when its properties are considered.

Chemically, the apple is composed of vegetable fibre, albumen, sugar, gum chlorophyl, malic acid, lime and much water. Furthermore, the German analysts say that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. The phosphorus is admirably adapted for renewing the essential nervous matter—lecithin—of the brain and spinal cord. It is, perhaps, for the same reason, rudely understood, says the *North American Practitioner*, that old Scandinavian traditions represent the apple as the food of the gods, who when they felt themselves to be growing feeble and infirm, resorted to this fruit, renewing their powers of mind and body. Also the acids of the apple are of singular use for men of sedentary habits, whose livers are sluggish in action, those acids serving to eliminate from the body noxious matters, which if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. Some such experience must have led to the custom of taking apple sauce with roast pork, rich goose and like dishes. The malic acid of ripe apples, either raw or cooked, will neutralize any excess of chalky matter engendered by eating too much meat. It is also the fact that such ripe fruits as the apple, the pear and the plum, when taken ripe and without sugar, diminish acidity in the stomach, rather than provoke it. Their vegetable sauces and juices are converted into alkaline carbonates, which tend to counteract acidity.

WHY SHOULD WE TAKE EXERCISE?

The *Glasgow Herald* tabulates ten reasons for the necessity of muscular activity:

1. Any man who does not take time for exercise will probably have to take time to be ill.
2. Body and mind are both gifts, and for the proper use of them our Maker will hold us responsible.
3. Exercise gradually increases the physical powers, and gives more strength to resist sickness.
4. Exercise will do for your body what intellectual training will do for your mind—educate and strengthen it.
5. Plato called a man lame because he exercised the mind while the body was allowed to suffer.
6. A sound body lies at the foundation of all that goes to make life a success. Exercise will help to give it.
7. Exercise will help a young man to lead a chaste life.
8. Varied, light and brisk exercise, next to sleep, will rest the tired brain better than anything else.
9. Metal will rust if not used, and the body will become diseased if not exercised.
10. A man "too busy" to take care of his health is like a workman too busy to sharpen his tools.

TO YOU WHO HAVEN'T HAD IT.

When you feel as though a streamlet
From old Jack Frost's own domain
Goes a-trickling down your backbone—
Then goes trickling up again;
When your hands and feet feel frozen,
While your face with fever burns,
When the hotness and the coldness
Chase each other off by turns;
When you feel as if you'd like to
Lay off, just for this one trip;
You may then begin to wonder
If you haven't got the grip!
When you feel as though you'd practiced
"Manly art," for 'bout a week;
Feel as if you'd burst your thorax
Every time you tried to speak;
When you know your spine's been broken,
And then put together wrong,
And your head feels like you might have
Stayed out several nights too long;
When each big and little bonelet
Which the human framework needs
Tries its best to ache the hardest,
And when every one succeeds;
Then you'd better call a doctor,
Let him either kill or cure!
For you'll know, beyond all doubting,
Grip has got you this time, sure!

ADELE R. INGERSOLL.

FOOD AND STRENGTH.—What we eat and how much we eat have a relation to our mental and physical energy that must be regarded with care by everyone who would be active, strong and competent to meet the duties and enjoy the privileges of life.

Physicians, who ought to know whereof they affirm, declare that insufficient nutrition and nothing else is the fundamental cause of much of the illness with which they are confronted. Many persons prefer to spend their incomes for clothes and "appearances" and deprive themselves of sufficient wholesome food in order to compass the outlay. Nature is very accommodating on the surface. If one chooses to spend most of his income on fashionable

appearance at the expense of his stomach he may "get used to it," but for all infractions upon a normal standard of nourishment he that trifles with nature is sooner or later called upon to settle up in the form of missing vitality and loss of energy. It doesn't pay a man in the end. It is a good deal in the nature of the experiment the man once made upon his horse by reducing his daily feed until he had brought him down to a single grain of oats, when the animal thought fit to die and spoil the experiment.

Many people, however, suffer from a semi-starvation, not because they do not eat a large quantity of material at table, but because what they eat is lacking in the elements essential to nutrition.

NOTES IN ANTHROPOLOGY.

Egypt Five Thousand Years Ago.—The later conclusions from study of ancient Egyptian remains have many things to surprise and interest us. The mural paintings, for instance, disclose so much of the common life not only of the Egyptians themselves, but of contemporaneous nations.

The types of mankind shown on these very early paintings are of peculiar interest. There is the swarthy Egyptian plowman, holding the primitive wooden plow, not, however, of the earliest type, which was only a crooked pointed stick driven by hand, whereas this is drawn by an ox, and has a cross-handle, painted red. Then there are the bearers of the palanquin, two of whom appear to be shaven, as was the manner of the Egyptians; whilst a third wears a full crop of hair or a wig, probably to denote superior rank. In another painting, rank is shown by the leopard-skin robe, worn apparently by an overseer, who is directing two workmen; and it may be remarked that even to the present day the leopard skin denotes the priestly caste, medicine-man, or chieftainship in all parts of Africa.

Perhaps the most interesting of the human figures depicted is a group, or rather procession, of red-haired, light-skinned, blue-eyed people, supposed to be Lybians, the men bearing in their hands crooked clubs resembling boomerangs, and having other weapons, notably a huge knife, thrust through their shaggy red hair; whilst the women carry their children in baskets on their backs; and two are depicted bearing monkeys instead of children. Conventionally, the Egyptian women are always represented as much lighter in color than the men, and two groups in these paintings are especially remarkable. In one, two women are represented standing facing each other, one foot raised, touching that of the adversary, one hand being also placed on that of the other, whilst a round object, supposed to be a bladder, is attached by a long string to the hair of each at the back, hanging down to the shoulders. This is evidently a game, in which the performers whirl round and strike each other with the ball or bladder attached to the hair; and it is easy to see that if the ball were not very light, the game might be an exceedingly rough one.

In the other group, two women tossing balls are seated on the backs of two other women, the supposition being that when they fail to catch, they in turn become horses for the others. These two games of ball strike one as new, and especially noteworthy from the performers being women. The great peculiarity in all these human figures is the extraordinary length of the fingers and toes. In those days it was evidently a mark of beauty to have a long foot and hand, and the artists must have complimented their subjects by exaggeration in these points.

Here, too, we may see the mode of making fire in the twenty-fifth century B. C., for we see a man represented using a fire-drill such as is still in use among some uncivilized races, which consists of a thong or bowstring twisted round a pointed stick, inserted in a very dry board, the thong being pulled rapidly backwards and forwards until fire is produced by friction. This is, of course, an advance upon the earlier practice of rubbing two sticks together, which is the custom among very primitive savages, and upon the drill twirled in the hand, which is also still in use.

The ancient Egyptians had tools for stone working equal to anything in use to-day. They used both solid and tubular drills and straight and circular saws. The drills were set with jewels, probably corundum, and even lathe tools had such cutting edges. So remarkable was the quality of the tubular drills, it is said, and the skill of the workmen, that the cutting marks in the hard granite give no indication of wear of the tool, while a cut of a tenth part of an inch was made in the hardest rock at each revolution, and a hole through both the hardest and softest material was bored perfectly smooth and uniform throughout. Of the material and method of making the tools nothing is known.

The figures and hieroglyphs of these tombs, which are situated in the rocky ground on the east bank of the Nile, in the provinces of Minieh and Assiut, in Upper Egypt, differ from the generality of Egyptian hieroglyphs, which are usually incised in the granite, whereas, in these the figures

having been first traced on the stone, the interspaces were then chipped away, leaving the design in relief, these raised figures being afterwards very carefully and beautifully painted. The Arabs have taken advantage of this raised-work, and have diligently chipped away the figures from all the fragments which have fallen into their hands, either out of pure love of destruction, or more probably in order to sell the painted hieroglyphs thus detached as amulets. The value of these paintings and hieroglyphs in illustrating the history of the world cannot be over-estimated. In them we see life as it existed in the most civilized country of the world three thousand years and more before the birth of Christ; the manners and customs, dress, and even the amusements of this remote time are here revealed to us. We can trace their commerce with distant lands, their modes of navigation and agriculture, etc., all so faithfully delineated as to be unimpeachable witnesses of the truth of ancient historical records.

Suicide Among Primitive Peoples.—Anthropologists generally have held that suicide is almost unknown among savages, but S. R. Steinmetz, in the *American Anthropologist*, thinks that the reverse is the case. He has collected many cases of suicide among primitive peoples, and much indirect testimony. Among the cases collected twenty were the result of love, sorrow, or like emotions; thirteen of offended pride or injured feelings; five of fear of captivity or slavery; seven of depression, melancholy, etc.; and four of family quarrels. The feelings with which suicide is regarded by different tribes differ widely. The Dakotas think that a suicide goes at once to hell; the Chippewas consider him a foolish man, but do not believe that he will be punished; the Ossetes regard him as a sinner; the Karens think he is a coward, and refuse him honorable burial; the Pelew Islanders think his act neither sinful nor commendatory; the Dyaks think that it will be punished after death. The conclusion is that suicide is even more prevalent among savages than among civilized peoples, perhaps owing to more positive faith in a future life, and the slighter resistance of instinct.

The Human Family.—The human family living on earth to-day consists of about 1,450,000,000 souls—not fewer, probably more. These are distributed liberally all over the earth's surface, there being no considerable spot on the globe where man has not found a foothold. In Asia, the so called "cradle of the human race," there are now about 800,000,000 people, densely crowded, on an average of about 120 to every square mile. In Europe there are 320,000,000, averaging 100 to the square mile, not so crowded as Asia, but everywhere dense, and in many places over populated. In Africa there are, approximately, 210,000,000, and in the Americas—North, South and Central—110,000,000, these latter, of course, relatively thinly scattered over broad areas. On the islands, large and small, there are probably 10,000,000 more. The extremes of the blacks and the whites are as five to three, the remaining 700,000,000 intermediate, brown, yellow, and tawny in color. Of the entire race 500,000,000 are well clothed—that is they wear garments of some kind that will cover nakedness—250,000,000 habitually go naked, and 700,000,000 only cover the middle parts of the body; 500,000,000 live in houses, 700,000,000 in huts and caves, the remaining 250,000,000 virtually having no place to lay their heads.—*London Exchange.*

Found in Street Excavations.—In Rome the eighty-two miles of new streets made last year yielded the following "dugups:"

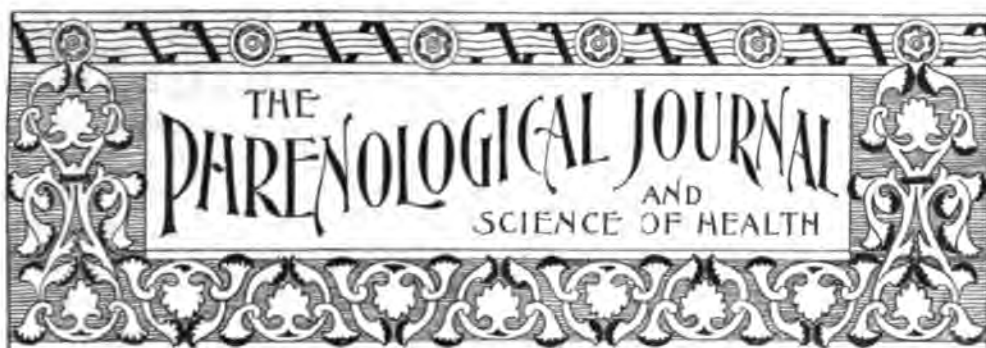
- 905 amphoræ.
- 2,360 terra cotta lamps.
- 1,824 inscriptions on marble.
- 77 columns rare marble.
- 313 pieces of columns.
- 157 marble capitals.

- 118 bases.
- 590 works of art in terra cotta.
- 540 works of art in bronze.
- 711 intaglios and cameos.
- 18 marble sarcophagi.
- 152 bas-reliefs.
- 192 marble statues.
- 21 marble figures of animals.
- 266 busts and heads.
- 55 pictures in polychrome mosaic.
- 47 objects of gold.
- 39 objects of silver.
- 36,679 coins.

Even this astonishing list does not cover everything, but embraces only those objects which were worthy of a place in the museums.

The Language of Ants.—It has long been believed that ants have means of communicating with each other, and Lubbock and Landois gathered from their researches on the subject that the insects do so by means of sounds too high in pitch to affect the human ear. Janet, a French naturalist (*Annales Entomologiques de France*, LXII.), has recently shown that certain ants make stridulating noises analogous to those of crickets, produced probably by the rubbing together of some of the many rugose or rough surfaces to be found on their bodies. Those noises, too slight to be heard when made by only one insect, may be detected by imprisoning a mass of ants between two pieces of glass in a space surrounded by a ring of putty. On holding this to the ear, one may hear, by listening attentively, a gentle murmur likened by M. Janet to that made by a liquid boiling slightly in a closed vessel, varied now and then by distinct stridulating sounds. These sounds are heard only when the ants are disturbed.





Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M. D., EDITOR.

NEW YORK, JULY, 1894.

THE AMERICAN INSTITUTE OF PHRENOLOGY.

THE great majority of students in the conventional schools and colleges are guided very largely by custom, precedent, and authority. The example of those around them serves as an external stimulus to follow certain beaten paths, to accept certain standards of wisdom, and to look forward to certain achievements as the proper goals for the highest ambition. Within their own minds they are impelled by a desire to conform, to imitate the prevailing methods, and, perhaps, to revere the leaders under whose charge they happen to be placed.

In this manner the highest and best mental faculties are often enlisted in the interests of antique absurdities and musty mistakes, to the neglect of important truths relating to the living issues of the hour. Still it is well that there is in the natural constitution of the mind a conservative instinct—a principle of cohesion, as it were, on the moral and intellectual planes—otherwise the social fabric

would soon ravel back to simple threads and become scattered to all the winds of heaven. But the yoke of restraint should not be drawn too tightly. All civilization depends upon a nice balancing of these two opposing elements, the centripetal and centrifugal forces of the psychical life. As there are afferent and efferent nerves, both tending to serve the physical entity, so there are positive and negative influences at work on the lines of mental progress. Each acts in its own way, and each does immense good. Wise is the man who can see when either force departs from the equilibrium. The difficulty heretofore has been to keep these forces on their own ground. Too often the conservatives, as we have already said, have protected error and falsehood, while the reformers have uprooted both weeds and flowers. The leading colleges are obliged to avoid giving offence to the people who support them, hence, as regards mental philosophy, the professors in

such institutions promulgate only the doctrines with which the misinformed masses can agree. They ought to teach the cream of the world's thought, but they give only the whey.

The American Institute of Phrenology is not supported by the aristocracy of wealth, but its philosophy is held by the aristocracy of brain. It cannot boast of the superb appointments of Yale or Harvard. Its buildings are less imposing, and it has no regatta. But it does teach the grandest science known upon this globe—a philosophy adapted to enlighten and direct mankind in a way which no ancient system of metaphysics can do. This school has the supreme merit of imparting fresh truth. It leaves old speculations, theories and dreams to those who affect to despise this world. It deals with the greatest facts of human life—facts which concern not only the grave problems of heredity, legislation, marriage, etc., but which apply to the most practical, every-day affairs. It fits a man to meet his fellows upon every plane.

Other schools describe the bowels of the earth, its icebergs, its noisome caverns, empty shells and unanswerable rocks. This school unlocks the warm, throbbing brain and breast of man. Which kind of knowledge is the greater, the more ennobling, and the better adapted to smooth the pathway of life? We may never ascend a mountain or dive into the sea, but wherever we go we must carry heart and brain. The machinery of our own bodies always needs an engineer, and no one else can fill that place so well as we ourselves.

The American Institute of Phrenology offers not only a priceless fund of information for individual use, but prepares its students for a profession which is now rapidly coming to the front. There is to-day more reason than ever before to encourage men and women of talent to enter this field, and there is no other department in which a little learning or natural ability can be made available in so short a time. Phrenology is on the eve of a great revival. Those who are ready for it will reap the first advantages, the greatest of which is the luxury of doing good to others while furthering the interests of self.

SIR WALTER SCOTT'S HEAD.

A CORRESPONDENT has called our attention to an Open Letter that appeared in a recent number of the *Century* magazine, in which the brain of the great Scottish novelist is discussed to some extent. The writer takes the ground that the exterior surface of the head could not have formed a proper basis for the predication of Scott's capacity, because its peculiar form was largely due to an arrest of the bone development that occurred early in his childhood. There was a premature union of the two parietal bones along the sagittal suture due to an arrest of bone making along the edges of the suture which closed like a vise upon the expanding brain. This closure affected only the sagittal suture; the coronal suture was left free, and the brain pushed the vault of the skull up and back creating the oblong shape so noticeable in the mask, etc.

The same writer goes on to speak

of the brain as being small. In the phrenological museum of Edinburgh there are several casts of Sir Walter's head, taken at different times, and in themselves affording an interesting study in change of development. When we had the opportunity to examine them, twelve years or so ago, we were not impressed by the "small size" of the head, because of its narrowness or moderate circumference at the midway points customarily taken for the purpose of measurement, but on the other hand it appeared a large head because of its great upward extension. The peculiar contour in itself suggested some kind of pathological interference with its normal development, so remarkably piled up were the brain parts. The estimate founded upon the brain's condition after the death of Scott, if any were made, would be faulty because of the mental degeneration that had been going on for some time previous to his final illness, and which must have been attended with loss of brain substance, probably an atrophy traceable to the long continued pressure.

Sir Walter's temperament conduced to nervous excitability, thus imparting a natural activity of his faculties; but in addition to this temperamental relation the abnormal state of the cranium, it is most likely, accentuated the excitability and so gave him the great capacity for mind action for which he was remarkable. Mr. John Gibson Lockhart is referred to by the writer quoted. At the time of Scott's death Mr. Lockhart was editor of the *Quarterly Review*, but previously he had contributed to that periodical certain studies of character,

and among them a brief one on the novelist, in which he employs the phrenological method to an extent, although not an avowed disciple of Combe, nor yet deeply read in the philosophy of Combe's science. He remarks: "I do not think the head is so long from stem to stem as Lord Byron's, which probably indicates some infirmity in point of profound feeling. Like Lord Byron's, however, the head is in general well brought out in every quarter, and there is a freedom in the air with which it sits upon his shoulders. * * *

The forehead (Byron's) is defective in much that Scott's possesses, but it is very fine upwards, and the top of the head is wonderfully capacious." According to some reporters, Byron's head was of immense weight, over seventy ounces, which would imply extraordinary size, so that the comparison made by Lockhart, as above intimated, would lead reasonably to the conclusion that Scott's head, taken in the general, was decidedly large. Byron's head was very broad and greatly developed in the base, the upper or sincipital region being relatively small. On this account some writers have claimed that his head "was small!" Mr. Lockhart's admiration for the literary genius of the two men might have been prejudicial to his attempt at a craniological estimate, while he does show by certain statements that he was far from being accurately instructed in the technicalities of Phrenology. He speaks, for instance, of the development of the organ of Imitation as "prodigious" and "the contiguous organ of pleasantry (!) is scarcely less remarkable." Further, in certain respects, the rela-

tion of the forehead to the "top of the head," he finds "some resemblance to the bust of Shakspeare, but a much more close resemblance to those of the great Corneille. * * * No minor poet ever approaches to this conformation," etc.

It should be mentioned, by way of offset to what the *Century* correspondent has to say regarding the apparent errors of the Scottish novelist's head, phrenologically considered, that the eminent observers of Scott's day, such as Combe, Spurzheim, Elliottson, evidently recognized the abnormality in the disposition of his brain, and for that reason had but little to

say regarding it. Further, and this is a point worthy of attention, there is no reference to any inconsistency existing between his known character and the head development in the writings of those critics who were notoriously opposed to the doctrine of Gall. Certainly such malignants as Gordon and Jeffrey and so earnest an objector as Sir William Hamilton would not have suffered so brilliant an opportunity to slip their attention had it not been accepted partly at least by the learned that the form of Sir Walter's head was due to abnormal causes.

H. S. D.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address.

ALL CONTRIBUTIONS MAY BE SENT TO THE GENERAL editor, Dr. Edgar C. Beall; but matters relating to CHILD CULTURE, SCIENCE OF HEALTH, or of a strictly medical nature, should preferably be sent to Dr. H. S. Drayton, who has special charge of these departments.

WE ALSO EARNESTLY REQUEST OUR CORRESPONDENTS to write as legibly as possible. Wherever practicable use a typewriter. In this way you will lighten labor, avoid misunderstandings, and secure earlier attention.

PALMISTRY.—D. A. H.—There is much in the hand. Its form and peculiarities of

structure furnish many definite suggestions regarding temperament, tendencies, physical and mental, etc. Being related by nervous and muscular connection to certain fairly ascertained parts of the brain, the hand presents a sort of spectrum in which the experienced observer may read not a little of the physical and mental physiology of its owner. But the hand is only a part of the man—and in its consideration should be taken as contributing evidence to the general fund of information that the reader of character needs on occasion. To say that palmistry is as good as phrenology is about the same as saying that a part of a thing is equal to the whole. The hand is a part of the man—phrenology treats of the head and brain, which dominate the entire man, and also correlatively phrenological science considers the whole body. It studies the physiognomy of every part and notes the modifying effects of environment upon the physiology. Those who devote themselves to a special part of the body, be it the nose, the eyes, the hands, the feet, are inclined to exalt the importance of each part. This, we think, is much the case with the advocates of palmistry.

DUALITY OF THE MIND.—I. B.—The theory of the double nature of mind was ventured long before the time of Gall, its basis physically being the duality of the human organism generally. Some physiologists noted the bipartite or hemispherical structure of the brain and argued from that the double functional nature of mind faculties. Sequard, Richardson and others, who are on the record for later assertions regarding the double action of the brain, are indebted largely to Gall and Spurzheim for the explanation of such facts as they cite for the demonstration of the theory. Many of the phenomena that have been referred to the limbo of mystery, such as dreams, double consciousness, etc., assume an intelligible clearness when once the double organization of the brain and its capacity for multiple combination are accepted.

EMBARRASSMENT.—G. W.—A young person with a sensitive organization, moderate Self-Esteem and Combaticiveness, and large Approbativeness and Caution, is likely to be affected by this trying state when circumstances render him or her an object of attention. The books on mental science have counsel on the subject, and it, in brief, is to the effect that the person should strive to overcome it by giving attention to the work and duty in hand to the extent of absorption, so that self shall be forgotten. Be self-reliant, knowing your ability to do what you undertake, feel that you are entitled to the respect of others for what you do. Believing that you are the equal of others do not subordinate yourself or accept their thoughtless criticism. Stand bravely up and out, and speak more with reference to a higher authority than the mere opinion of those who surround you. Let the sense of being right inspire action, and then criticism and raillery designed to confuse and embarrass will not have so much effect.

VOCAL EXPRESSION AGAIN.—L. M.—It must be remembered that the voice depends upon physical apparatus, and the condition of that apparatus determines very much of its quality and effect. A chronic catarrh may render the tone permanently rough or husky. A clear, flexible tone intimates an excellent condition

of the apparatus, and if it have also the qualities of softness, modulation, gentleness, we should infer characteristics of mind that are in accord. The mere capability of singing well up in the scale with clearness may be without special significance as regards the character. Hundreds do that as the result of training; and the effect of pursuing a certain school of music may impart qualities to the singing that might mislead, if we did not know how much imitation has to do with musical expression to-day. To judge of character we must study the voice in its moods and rhythmic changes. Great flexibility means susceptibility; quickness and assurance of tone means self-confidence and decision. A penetrating sharpness in the rendering may intimate irritability and selfishness, etc.

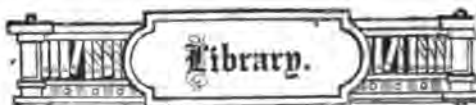
DIFFERENTIAL EFFECTS OF BRAIN INJURY.

—Question.—On page 31 mention is made of a man who received an injury which affected the organs of Inhabitiveness, Parental Love, Conjugal Love, Self-Esteem, Firmness, Friendship, Approbativeness, Combaticiveness and Destructiveness. Of these organs several continued to act in their natural course, but with increased activity, while others were perverted in their action. Will you please to explain why this should be so? It seems to me that where two or more organs are equally affected by a similar injury or disease all of them should tend to act in the same manner, that is, both be perverted in their action or both be impelled to increased activity in their natural channels.

C. E. P.

Answer.—It could scarcely be expected that all organs affected by an injury to the brain should act or function equally, because the degree of inflammation would necessarily vary in different parts. The point at which the injury was received might involve destruction of tissue, with resultant paralysis of function, so that the organ or organs thereat would not be indicated at all. Or that point being the focus of an inflammatory process the highest excitement would be exhibited there, with corresponding disturbance of the faculties. The degree of excitement might vary in

relation to the distance of the brain centre from the central lesion or injury, and this variation itself would tend to irregularity and unbalance of mental manifestation. The organ most excited by the injury would exhibit eccentricities of effect upon the action of other organs, and at times so overpower their action that monomania of an aggravated kind result. Insanity is not an unusual consequence of brain injury, and this is likely to cause discordance in the action of the mind generally, with temporary or prolonged perversion of the intellect and emotions.



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

THE COMING RAILROAD. The Chase-Kirchner Aerodromic system of transportation, St. Louis, Mo. G. N. CHASE, Lieut. U. S. Army; H. W. KIRCHNER, F. A. I. A.

We have known for several years that Lieut. Chase had in his mind a new device for rapid railroading and are pleased to be complimented with his illustrated descriptive pamphlet. As indicated by the title the topic considered is that of rapid aerial navigation. A few extracts will better explain Lieut. Chase's idea than any words of one not better informed on such subjects than is the present writer:

"Aerial navigation represents an air ship capable of being floated at any convenient height, rising, falling, turning, starting and stopping at will and landing with safety; capable of being propelled at great speed, successfully resisting air currents, in short, breasting all the sudden meteorological changes of the atmosphere, crossing continents and seas, carrying passengers and freight with economy and speed, in comfort and safety."

"Experiment has long since demonstrated the fact that it is possible to construct a vehicle possessing the ability to rise in the air, carrying a considerable load and capable of being propelled. The obstacles which have so far baffled man's ingenuity are his inability to control the machine under even the most favorable circumstances, and his failure to provide energy enough to propel it to any considerable distance. This latter difficulty cannot be overcome by any known method of storing up potential energy in a structure which is designed to sever all connection with terra firma, and in which levity becomes of primal importance. While it would perhaps be rash to predict the failure of all future efforts to overcome this obstacle, it is fairly safe to affirm that the securing of a reasonable safety will delay indefinitely the full realization of aerial navigation."

"The problem which the inventors have undertaken to solve is the construction of a machine which will be able to run upon the air at great speed, guided by a track in absolute safety, and supplied with power by a means now available."

"The application of a hitherto little understood principle of flight to transportation, is novel, but from the scientific data upon which it is based, it can scarcely be considered experimental."

"The aerodromic system of transportation is, in brief, a compromise between the present railways and aerial navigation. It eliminates from the former problem the obstacles to great speed, namely, grades, grade-crossings, and lateral curves, and from the latter those of starting, stopping and guiding. Like Antæus, by its contact with earth, it draws from it an inexhaustible and economic supply of power."

This is an exceedingly fascinating subject, and we hope that in this modified form of air ship the real solution to an old problem will be found.

EPILEPSY.—ITS CURABILITY ESTABLISHED. By A. G. Selman, M. D.—A little reprint that extols the virtues of Solanum Car, in the treatment of this desperate malady. We confess ourselves more inclined to favor hygienic methods and hypnotism in the management of epilepsy because of rather

marked success that has attended our experience with this disease in young and old. Yet if Dr. Selman has found a substitute for the paralyzing bromides in *Solanum C.* that produce the good results he announces we are ready to give it currency.

DIRECT LEGISLATION by the Citizenship through the Initiative and Referendum. By J. W. Sullivan. This pamphlet, published by the True Nationalist Publishing Company, treats of a most excellent method of securing what is the aim of modern politics professedly, government by the people. For small nationalities it would serve, but for large, with mixed population, it would find many difficulties.

FIFTIETH ANNUAL REPORT of the Board of Managers of the Protestant Episcopal Church Missionary Society for Seamen in the City and Port of New York. An important New York church and reformatory work, that has for many years elicited our interest and esteem. Treasurer, Mr. J. J. Smith, New York.

THE TESTIMONY OF HISTORY TO THE TRUTH OF SCRIPTURE. Historical Illustrations of the Old Testament, Gathered from Ancient Records, Monuments and Inscriptions. By GEORGE RAWLINSON, M. A., Camden, Professor of Ancient History, Oxford. With additions by Professor Horatio B. Haskell, D. D., LL. D.

The indefatigable publisher, H. S. Hastings, sends out a volume, as a number of his "Anti-Infidel Library," this time at the staple price of twenty-five cents. In about 230 pages Dr. Rawlinson comprises a broad field of scientific evidence bearing upon the truth of historical statements in the Bible record, and gives us a very interesting account of events relating to the times of the Babylonians, Syrians, Egyp-

tians, etc. Mr. Hastings writes a very pointed preface. Scriptural Tract Repository, Boston.

EIGHTEENTH ANNUAL REPORT of the New York Bible and Fruit Mission to Our Public Hospitals shows that the work comprises much more than giving fruits and flowers to the sick, but is saving of the souls and bodies of many neglected and unfortunate people.

REV. MR. W. T. BLODGETT'S ANNUAL REPORT of the trustees of the Public Library of the City of Boston. A growing institution.

REPORT of the Commissioner of Education for the year 1890-91. Vols. 1 and 2. Vol. 1 is a broad work, covering general education, with statistics of school work in foreign countries relating to all classes.

Vol. 2 is devoted to the United States mainly, and is also a valuable work of reference with regard to the condition of our public and secondary schools. A very complete table supplies a vast array of details relating to the public institutions of all classes and also the private organizations, especially those of a higher and technical nature. Dr. Harris is to be complimented for the production of a decidedly important report, which evidences great general growth in later years of educational systems.

NEW YORK PRACTICAL AID SOCIETY, in the late report of its energetic superintendent, shows a deal of good work on a basis of economical management that is remarkable. This society helps poor women and children, and is earning the notice of the charitable because of its efficiency. Contributions may be sent to Mrs. Goodwin, superintendent, at 327 West 36th street, or to Dr. H. S. Drayton, of the medical staff, 27 East 21st street.



PHRENOLOGICAL SOCIETY AND FIELD NOTES.

EMPORIA, KAN.—We hear many encouraging things about Dr. F. M. Cooper, of Emporia, one of our brightest graduates.

The following clipping from a Western paper will be read with interest:

DR. COOPER'S LECTURE ON PHRENOLOGY.

"In conversation with a *Republican* reporter this morning, Prof. E. E. Balcomb talked entertainingly of Dr. M. F. Cooper's recent lecture on Phrenology, before the Scientific Club.

"The Doctor, in his interesting lecture," said Prof. Balcomb, "made clear one of the foundation principles of phrenology, that of the three typical temperaments. By calling from the audience examples of these temperaments, he impressed the audience not only with the fact that there were differences in the every-day man's head which they had not observed, but also with the impression that there were fundamental truths here that must be of universal application.

"His lecture was well illustrated with charts, skulls and a very handsome phrenological bust from Prof. L. N. Fowler, of London, England.

"The Doctor does not hurry over the ground so rapidly that his audience is mystified but makes each point distinct.

"He held the closest attention throughout and the audience were sorry of only one thing, viz: that he should stop so soon. In fact it was the most interesting lecture that we have been able to secure since I have been president of the Scientific Club. We hope to hear him in a continuation of the subject at an early date.

"The Doctor has had several invitations to lecture at other points, two of them under the auspices of the church. It is his intention to comply with these invitations as soon as his large practice at home here will enable him to do."

THE NEW YORK ASSOCIATION OF GRADUATES.—On June 9th, this society met at Passaic, N. J., at the home of its president, Mr. Albert Turner. The last public meeting for the season having been held in May, there was no urgent business, and a most delightful afternoon and evening were spent in social enjoyment.

Games of various kinds claimed the attention part of the time. Prof. Albert Bausch gave a number of very interesting delineations from photographs, and, in his usual witty style, Mr. Charles E. Cady also read the heads and faces of several. After tea, musical selections were rendered by a number of the ladies, and the city dwellers enjoyed the treat of a stroll by moonlight,

from which they returned with bunches of daisies and field grasses.

The "good-byes" were said at a late hour, and both host and hostess received many thanks for the pleasures which had been provided for those present.

Previous to leaving, Mrs. Turner bestowed upon the members great branches of beautiful laurel blossoms, which, with the daisies and roses also carried away, received many admiring glances in both train and street car during the homeward journey.

The New York Association will not soon forget its "June meeting" of 1894.

MARY T. HAYWARD, Secretary.

THE following letter was received too late for publication in the June number of the JOURNAL, but as the good work to which it refers is still going on, we are glad to give it a place in this issue:

ST. PAUL, MINN., April 22, 1894.

Prof. Geo. Morris has just completed a course of twenty-three lectures on Phrenology, Physiognomy, Health, and kindred topics, including several private lectures, under the auspices of the St. Paul Phrenological Society. These lectures have attracted considerable attention, and the attendance has frequently been so large as scarcely to leave standing room in the spacious hall. The professor's engagement here, which was unpremeditated, may be pronounced a great success in all respects. The lectures have created a deep interest in the study of human nature and an awakening to the importance of self-knowledge, which fact may be more readily appreciated when it is stated, that as a result of those "revival meetings" more than 80 applications have been made to the society for membership, in consequence whereof it has been found necessary to provide for better accommodations. As a further illustration may be mentioned that to-day a sermon was preached in one of our churches on the subject of "Phrenology and Christianity." One of the main features of those meetings, or that which seemed most interesting to the majority, was the public examinations at the close of each lecture, which, as a rule, were striking and amusing. Prof. Morris has established a lasting reputation in this community, and, in fact, throughout the Northwest, and leaves with the well wishes of all with whom he has come in contact, especially the members of the society, which body he and Mrs. Morris organized four years ago.

CARSTEN HANSEN,

Secretary St. Paul Phrenological Society.



MARY SHAW.

THE
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AUGUST, 1894.

[WHOLE NO. 668.]

MARY SHAW.

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

BY EDGAR C. BEALL, M.D.

THERE has always been a wonderful fascination about the stage. Our conscientious ancestors were suspicious of its influence because it was unquestionably a fountain of great pleasure, and, as they feared, likely to divert the mind too much from the serious questions of duty and destiny. In this intelligent age, however, human nature has become such a study, and so much gravity has been infused into our existence, that we regard the drama as not only among the most important sources of healthful amusement and recreation, but as an immense vehicle for the development and transmission of æsthetic culture, knowledge of the mental constitution, a broad sympathy for moral heroism, and devotion to lofty ideals.

The people who perform the plays we love to see—who dazzle us with all the arts of costume—who charm us with grace of motion and the witchery of speech—who “hold the mirror up to nature”—are also of peculiar interest. As couriers to us from the “invisible-visible” world of art, we fancy that in the delivery of their message they give us also

something of themselves. We wonder what secret thoughts and judgments lurk beneath their borrowed plumes and gilded crowns, and whether warm hearts throb behind their purple robes and jeweled armor. We are curious to know whether Othello is jealous off the stage, or whether Cordelia is true and good to her old father at home. And well we may be. The actor is not a mere pool of limpid water from whose placid surface we see reflected clouds of passion, stars of hope, or the golden sheen of joy. There are currents in his own soul often as swift and deep and as rich in color as those he portrays by the mimic art.

Among the many bright and truly intellectual members of the dramatic profession, Miss Mary Shaw has held a prominent place for several years, and of late her popularity has been deservedly increasing at quite a rapid pace. She has a strong personality, a will of her own, and an abundance of what the Bostonians designate as “views.” But she is not in the least “mannish.” She has all the instincts of her sex, the poetry, the sensitiveness, the affection, but upon a much larger scale than is ordinarily found.

Her height is 5 feet $5\frac{1}{2}$ inches, and she weighs 150 pounds. Her temperament is a fine illustration of the nervo-sanguine, or that phase of

Its great flexibility, the pointed finger tips, the length of the nails from the roots to the ends of the fingers, and the smooth joints, are



MISS SHAW'S HAND.

Rockwood, Photo.

the mental-vital in which the intellect is characterized by great activity, and the feelings by impulsiveness and ardor. Her hair is reddish golden, her eyes are blue-gray, and her skin is of that very thin, translucent texture which is an almost unfailing sign of great susceptibility to impressions.

The form of her hand also indicates many of her temperamental qualities.

all accompaniments of the sanguine-vital constitution, and very characteristic of the female sex. This is also a very artistic hand, using the term in the generic sense. It is not the type commonly found among artistic mechanics. The fingers are too pointed for mechanism. But it belongs especially to singers and actors. It is not a hand to work

with hammers, chisels or saws, but its motions can express almost as much as words.

The volume of Miss Shaw's brain is far above the average of either sex. Her head measures twenty-two and one-half inches in circumference and, in the main, is well proportioned. There are no very striking developments in the lower back head, except at the love of young. She has a fair degree of attachment to friends and home, but is not dominated by any phase of adhesiveness. Continuity is small. Her versatility is remarkable. She is never tedious or prolix. She has that peculiar facility of execution which marks the difference between genius and mediocrity. She does not halt or hesitate, but strikes out boldly and seldom misses her aim. Spontaneity is perhaps her most conspicuous trait. This is, of course, incompatible with uniform precision in detail, but with her, it never mars the general effect. She may occasionally miss a word, as a musician "drops a note," but a flash of her eye will fill the blank.

With a smaller frontal brain, Miss Shaw's lack of concentration would be a serious defect; but having exceptionally strong talents, she learns with great rapidity, and sees all the different sides of a subject without confusion. This explains in a great measure her success as an actress. Nature is a great kaleidoscope. The heavens smile and weep in a strangely alternating fashion, and our human tears of joy and grief are often mingled in a common stream. Hence to paint a picture of the human heart, a certain sympathy with its caprices seems to be an advantage. The artist must not plod in a furrow. He must not bury himself in a cavern, for if he does, his drawing will be geometrically stiff, and his coloring painfully dull.

Amiability is one of Miss Shaw's predominant qualities. She has what people call a "good disposition." That is to say, her combative in-

stinct is weak. On rare occasions she can be roused to destructive anger, but her normal desire is for peace and universal good will. Her appetite is temperate, and her sense of possession, or love of property, is very feeble. She is also exceedingly deficient in the impulse to conceal. Few persons are so frank and open in speech. Caution is moderate, and self-esteem was naturally wanting, but has been developed to a fair degree by experience in her profession. Approbativeness is large, but well tempered by generosity and good sense. When her sympathies are not touched she can be firm; and in the execution of her work she will be industrious and persistent if let alone. Otherwise she may be influenced against her interests. Her moral sensibility is keen. Benevolence is especially strong. It tinges and mellows all her thought and sentiment, and throws a radiance over her entire life.

It would be difficult to find a more finely expanded forehead. There is great breadth at the temples showing mechanism and love of beauty. But as her temperament is emotional she will manifest her constructive talent almost entirely in literary and dramatic work. She is also by nature very musical, and if she had been especially trained to sing, she might have become famous as an operatic star. She has the long, narrow form of ear by which we can usually distinguish the singer from the instrumental musician, and the diameter of her head at the seat of the musical faculty is very marked. Just above music at the upper corner of the forehead there is a noticeable fullness indicating the fun-loving sentiment. Imitation is also very large, and when we add the influence of her temperament, it is easy to explain the lady's extraordinary powers of mimicry and general brilliancy in conversation.

Another interesting development is that of the perception of

shape. This is well shown in the portrait by the remarkable width between the eyes. Such a distance between the eyeballs is the rule among the French, who are a nation of artists.

Agreeableness, or suavity, is also a very active element in this singularly capacious forehead of which scarcely more than two-thirds are visible in the portrait. Comparison is large, also judgment of color, weight and size. Memory of events is strong, also the love of words. Order is deficient, and the sense of human nature only average. She can sympathize with almost every noble wish and will, but she is too idealistic to read the motives of those who differ widely from herself. In this respect she resembles many other brilliant women.

One reason for the last named peculiarity may be found in the fact that nature does not seem willing to bestow the sense of motives upon heads of this form. The character reading faculty is more natural to the long, narrow brain, in which there is greater social attachment, and more dependence for happiness upon people as individuals. In the long, narrow head there is a more profound and undivided interest in people. Hence an impulse to read or judge character is naturally evolved along with such a head to serve its predominant interests. In the present subject, the brain is chiefly forward of the ears, rising and expanding laterally the more as the distance is greater from the ear. This then is the head of the artist, who sees the world as it ought to be, rather than as it is, and whom nature permits to err in a matter of specific judgment in order to secure the power to glorify and adorn.

Mary Shaw's father was an American, and her mother Irish. She was

born and educated in Boston, and after teaching a year or two, adopted the stage as a profession. She was a member of the Boston Museum Stock Company for two seasons and then came to Daly's Theatre in this city. She was leading woman with Madame Modjeska for five years, and then, after a season of starring, became leading woman of the New York Theatre of Arts and Letters. Her work has been entirely in Shakspearean and high-class modern drama. She has frequently contributed to papers and magazines, and is often interviewed on dramatic topics.

Great credit is due her as one of the founders of the Professional Woman's League, which is a most worthy and commendable organization. As a member of its Executive Committee, she has labored continuously, writing for the press, and delivering addresses.

The dramatic editor of the *New York Times* says of her: "Miss Shaw brings to her art a graceful figure—a mobile face capable of strong and varied expression, a full, musical voice under perfect control, a winning personality and a deep and unvarying intelligence."

Elwyn A. Barron, another eminent critic, says she is "an actress of the highest intelligence and power of expression, and the best leading actress on the American stage."

The unique performance of "As You Like It," given in New York by twenty-five women last January, in which Miss Shaw was the Rosalind, was pronounced by Joseph Jefferson, Ellen Terry and Henry Irving, to be the most complete and ideal presentation of the comedy ever seen.

Such a woman, who not only strives to excel in her profession, but gives her time and labor for the advancement of her sex, is certainly entitled to the greatest encouragement and respect.



A STUDY OF IDEALITY: AN ANALYSIS OF ITS FUNCTION.

BY JOHN W. SHULL.

ONE of the rarest and divinest faculties with which the human mind is endowed is the faculty of Ideality, yet it seems so transcendent in its sphere, so separate from the world of the real and actual, that only choicest souls are permitted to understand it. The rough, wholesale facts of its function are known and well known. Every great poet has been wonderfully endowed with it. Shakespeare, Milton, Tennyson, Goethe, Schiller, Tasso, Lamartine, Longfellow and Bryant all had the upper portion of the temples immensely developed, as shown by the remarkable diameter at that point. All the great painters, sculptors and musicians have shared this development. But it is wanting in those who have no love for the spirit of art and beauty—whose ultra-utilitarian souls rest entirely content with commonplace ugliness, to whom a lovely rose or lily, a beautiful poem, an exquisite painting, a marvelous bit of statuary, a ravishing song are of no more interest than a weed, a table of commercial statistics, a cheap advertising lithograph, a bush-hammered hitching post of plain geometric design, or a country swain's monotonous snatches of half-forgotten psalm tunes which turn in endless cycles in his idle brain.

What we call beauty seems unquestionably involved in the function. What we call the ideal seems equally involved. Yet *beautiful* and *ideal* are not the clearest and most determinate words of the language. Like the words honor, justice, charity, patience and other moral and sentimental terms, they have meanings that vary with each individual who employs them.

Nature, however prodigal in conferring functions on her creatures, practices the strictest economy. She is

never wasteful enough to provide two sets of organs to accomplish a single end. So in studying the function of Ideality, we may rest assured at the outset that it is something not performed by the other faculties. This basic principle should be remembered in all mind studies, that we are not to assign two or more distinct organs for the same function. One sufficient cause is quite enough for any phenomenon.

And here let us insist, as usual, that a faculty is not analyzed until that statement of its function is reached which is true in every instance. It must not be an approximation nor may it have exceptions to prove the rule.

To call Ideality the organ of poetry, painting, sculpture or music, would be no more rational than to call Destructiveness the organ of murder, or Acquisitiveness the organ of theft, simply because these criminal phenomena attend their excessive development. The undoubted fact that all great poets, from Homer and David down to our latest galaxy of bards, have been generously endowed with Ideality, proves only that it is an element, perhaps a chief element in poetry, but not all of poetry; for if poetry and this faculty were necessarily related as effect and cause, Edison would be one of our greatest poets and all of us would be in a greater or less degree favorites of the muses.

To call Ideality the organ of beauty you must first let us know in just what beauty consists, and not mock us with a term which has been quarreled over by philosophers until no one knows just what it means. You must assure us beyond a doubt that without this faculty we shall have no means of appreciating the beautiful.

To call it the organ of the imagi-

nation you must assure us that imagination is not very largely provided for in the other faculties and is not identical or nearly identical with intellectual processes named otherwise. To call it the organ of taste you will have to define taste, and show us that it is separate and distinct from all other mental powers. This opens up

faculties. When we have completed this subtractive process the residual function will approach nearly to Ideality's true function. Taking these residuals of poetry, painting, sculpture, music, beauty, imagination, taste, and comparing them to find the constant factor of each, we shall have the ultimate analysis beyond which



MARGARET FULLER—IDEALITY EXCESSIVE.

the question and indicates how difficult it really is and how little justice can be done to it here.

However, let us begin by eliminating from each of these things which have been discovered to have some close relation to the organ in question those elements which belong to other

we cannot go. We shall have the simplest statement of the faculty.

No one dreams of saying that music is a function of Ideality alone. It is referred to Tune for all its harmony and melody, and to various other faculties for the sentiments embodied. To say just what there is in "Annie

Laurie" or "Home, Sweet Home," "America" or "God Save the Queen," "Die Wacht am Rhein," or "Pour la Patrie," besides the sentiment and the melody and the harmony, is difficult, unless you hear them rendered by different singers. The sentiments are always the same, but one will give a perfect mechanical

which is richer and better than life's common experiences?

Sculpture is generally referred to Constructiveness, Form, Size, and in groups of statuary it embodies sentiments as various almost as music. Just what element over and above these is concerned in sculpture might be shown by the fact that these same



FLORENCE NIGHTINGALE—IDEALITY SMALL.

execution, while another will breathe every note with a warmth, enthusiasm and ecstasy which are enrapturing. We do not affirm that this is all due to a difference in Ideality, but it is believed from observations that it is largely due to this. And why should music exist save to express an exalted something

will build brick walls and iron towers, construct railroads, suspension bridges, or ocean steamers. There is a striving after the exquisite in form, expression and attitude that will satisfy our dreams of the beautiful, good, grand or heroic—satisfy a longing which no actuality can wholly satisfy.

Painting is sculpture on canvas, and attempts to realize in color or by lights and shades, forms of loveliness which the percepts have never seen in the actual world, but which, by a divine striving for the perfect, they have dreamed into a per-

ments and emotions, has this one great distinction—it is not content with the actual. It is creative or it is not poetry. It is constructed out of the experience of all of the faculties, but rises above them in dreaming out new and better experiences, in



KYRLE BELLEW—IDEALITY LARGE.

fection of being, though built out of the elements of actual experience.

Poetry is descriptive sculpture—word-painting—and, while depending basically on Language and all the intellectual powers, and all the senti-

which all that was exquisite and lovely in actuality is intensified, and all that was common or unlovely is eliminated. In tragic scenes the painful is intensified above the actual. The characteristic of the poetic in

every form is that it *creates*. It luxuriates in all that is unreal, as visions, phantasms and extravagances, as well as the more orderly dreams of beauty, truth, purity, perfectness and divinity, which are but the intensified and purified cravings of all the soul's faculties.

degrading, especially the social and moral sentiments, and, some have ventured to add, a beauty of logic and of mathematical deduction. Beauty, in general, belongs to each faculty in its own sphere, and is a pleasurable state of the faculty when affected by per-



THEODORE REICHMANN—IDEALITY MODERATE.

Beauty is a term applied to that quality of objects or thoughts, whatever that quality may be, which gives us pleasure. Thus, we may find beauty of form, of arrangement, of color, of harmonic movement, of any sentiment not absolutely sensual or

ceptions or thoughts which fulfill, to a degree, the laws of the given faculty, as when Form is pleased with symmetry, or Color with the lines of Amora or Iris, or Inhabitiveness with thoughts of domestic happiness. However, beauty need not rise above the

actual and real, for we have beauty in natural landscapes and in actual experiences, aye, rich beauties of every type. Where it does not rise above the actual it seems evident that each faculty interprets the beauty for itself and feels it. But beauty in the higher sense of art—the beauty of poetic creations which rise above the actual—is not all due to the faculties whose past experiences furnished the bases for the creations. That beauty rises as high as the creations and is correlated to them.

Imagination, strictly speaking, is the power of forming images, which is purely intellectual and involves all the percepts, jointly or separately, and sometimes the stimulus of active sentiments. Under ordinary circumstances this function is related to the actual, but when the process of artistic creation begins, the imagination is the intellectual instrumentality employed. This means that when the artistic enthusiasm develops itself intellect becomes intense, and, instead of acting in the real, rises to the creation of images of unreal things out of the stock of past real experiences, at the behest of the magician Ideality, which is delighted only with the most exquisite and perfect, and can find no place to rest and rejoice in all the wide world of actualities.

Taste is a broad term. It involves the power of passing just judgment on the true or false expression of every sentiment in the human mind. Only well-developed, large-hearted, broad-minded men can have excellent taste; but taste, in the form of sound judgment, need not rise above the existing and actual. Yet to reach its highest sphere it must sit in judgment where creative art fashions its dreams and visions. It must rise as high as art, and thus must partake of this creative sense, and this exaltation and perfectness.

There is one quality running through all this, and that is the creation of the unreal, the transcendence over the actual; the discontent with

things as they exist and are known to our experience. I conceive this to be the function of Ideality. I have no quarrel with the name. It is suggestive and appropriate if we remember that the Ideal is always a transcendent development out of the real. I believe that this dissatisfaction with actualities, this longing for more exalted reality, will be found in strict correlation with the lateral expansion of the upper temples.

After this analysis it goes without saying that all the great creative poets, painters, sculptors, musicians and critics have been liberally endowed with Ideality. One might rest assured that all successful novelists, especially of the romantic school, and all great orators (who are oft indeed true poets) have it.

It aids the inventor, for he is not content with what is now accomplished, but is continually dreaming of newer and better forms of applying mechanical principles. It aids the scientist in his discoveries, for it delights him with the possibilities of undiscovered realms of knowledge, and sometimes with its airy suggestion, working on known facts, creates the hypothesis and stimulates the exertions, which result in the verification of some new principle or law. I sometimes think that Ideality played a large part in the discovery of America, in the discovery of the laws of gravitation, and in the formulation of the nebular hypothesis, and most of the great acts of human progress. A plain, unpoetic, uncreative soul, however profound, would have accomplished none of them, for reason sticks close to facts. She must go hand in hand with the Ideal when in search of new worlds of truth.

It aids the reformer and statesman, for better social conditions are not born out of old ones without a touch of the Ideal. Men without ideals are a dead mass of crude metal and must be wrought into new forms at the forge of Prometheus in the glow of the celestial fire, and the Prometheus

is the social leader or group of leaders who personate the spirit of the age, and the celestial fire is this unrest and discontent in the imperfections and unloveliness of the actual.

In personal characteristics Ideality will love beauty of this rare kind, delight in the exquisite and ethereal, and be content with nothing when once realized or attained. Attainment is the fulfillment of a past dream and only makes way for a new one more exquisite. This is why the poets often become dissatisfied with their richest productions. These have become actuality by attainment, and no longer appeal to their creators as unattained ideals. The personal character must grow more beautiful, must daily gain in loveliness, or existence seems a failure. On the other hand small Ideality gives complete contentment in common-place circumstances. The only thing that awakens such to efforts to better their present condition is the pain of urgent physical and social want. Personal comfort and ease are their highest goal. They are likely to become coarse in manners, because they cannot appreciate the higher types of beauty, which can only be described as a striving toward the perfect. If they learn courtesy it is but formal courtesy, devoid of the spirit of beauty and gentility.

Ideality in combination with other faculties would make an interesting study. In whatever connection we consider it, it will be present in its own proper role as a forger of discontent with reality, a dreamer of exquisite dreams, an inspirer of enthusiasm for the lovely and ideal. In music it touches the sentiment with the most exquisite sweetness and

truth; it demands the most perfect melody, the richest harmony, and the most perfect execution. In sculpture it demands the most faultless lines, the most faithful reproduction of the lovely images in the artistic mind, which shall have power to awaken ideals or thrills of beauty in the beholder. There shall be no mere copying. All must be creative. In painting, the canvas must be forgotten in the forms that act and speak and think upon it; every lineament and hue and shade must be so perfect that an artist soul can find no loveliness wanting. In poetry the reader's world must be forgotten as he yields responsive to the poet's unreal world, and he must find in that world his best hopes, purposes and dreams, intensified and exalted.

In poetry there are two chief types, the objective and the subjective. The difference is not in Ideality. Both classes have this creative enthusiasm; *one*, however, treats of sentiment and meditation, like Schiller, in whom the reflective intellect and moral sentiments held a preponderance, and the *other* of description, imagery, external action, landscape, like Goethe (quite a contrast to Schiller, his great contemporary), in whom the perceptive intellect and lower sections of the head in general were large and influential.

In closing let it be understood that Ideality is a sentiment, a thrill, a yearning, an enthusiasm, which employs intellect as its servant (as any other sentiment may and does), but that it is in no sense more intellectual in itself than our grosser propensions to self-gratification. Let us not call it a "Semi-Intellectual Sentiment."



ETHICS FOR LOVERS; OR, MORAL RESPONSIBILITY IN COURTING.

BY GRACE PIERSON.

"Men treat women exactly in accordance with the standard the women set before them. This is an invariable rule. If a girl carries herself with becoming dignity she will receive similar treatment. We receive just what we invite in this world. A girl never enhances her business prospects by putting aside her dignity toward her employer. Her treatment by her employer depends entirely upon the way in which she carries herself before him."—"At Home With the Editor," in *The Ladies' Home Journal*.

DOES the editor of *The Ladies' Home Journal* really believe that all moral responsibility rests upon the shoulders of women, and that there is no dignity among men except an enforced dignity? Does he honestly think that it is "an invariable rule" that men treat women exactly in accordance with the standard the women set before them? Will he make no honorable exceptions for the credit of his sex, or for his own credit? Would Ruskin, Tyndall, Whittier, or J. G. Holland ever have been anything but dignified gentlemen in any position in which they might have been placed? Would girls in the employ of such men ever be treated with anything but kindly dignity, let their own conduct be what it might? But we do not need to go among the great to find true, manly dignity. Neither do we need Diogenes' candle to find such men, for they are with us in our homes; and every woman who has a father, husband or lover whom she honors will turn fondly to him in thought, and feel that Mr. Bok's words have done him wrong.

If he had said: "Many men treat women exactly in accordance with the standard the women set before them," we might have confessed with regret that it was true, for since men first read the story of Adam and Eve many of them have been ready to say in excuse for every sin, "The

woman tempted me;" and young girls who are just starting out into the world to earn a living are told that they are not only responsible for their own conduct, but for the treatment they receive from men often old enough to be their fathers. It is as though we should tell a lamb if it keeps very quietly in a certain path it will be safe, but if it should vary from this way ever so little there is a wolf ready and waiting only for this chance to devour it. We know there are wolves in men's clothing that are waiting only for a young girl to wander, often innocently and unconsciously, within their reach, and it may be necessary to warn her against these beasts of prey; but to throw all responsibility upon her weak shoulders, without one word of censure for the wrong that makes it necessary for her to assume it, to tell her that she alone is to blame for any indignities she may suffer, is cruel and unjust. Yet men who hold such narrow, one-sided views of moral responsibility will call woman the weaker sex and speak of man as her natural protector, while they test her strength to the utmost, and picture man as her natural destroyer, from whom only her own moral strength will save her. Consistency, thou art a jewel!

It is true that if all women were modest, and truly womanly, all men would, of necessity, be dignified; but it is equally true that if all men were dignified, gentlemanly and courteous, all women would, of necessity, be modest. The gayest, freest girl will subside into quite modesty in the presence of a dignified man. We recall one such girl, who freely proffered and accepted kisses from the fathers and brothers of her girl friends, even after slight acquaintance, but who quietly offered her hand and gentle, womanly words to the father

of one girl whom she called, very kindly, "dignified Papa H——" Nor was this father stern, cold, and unsocial. On the contrary, he loved to have his daughter's friends visit her, and was always interested in their music, dancing, or their conversations, and invited them to attend concerts and lectures with his family.

Is some one ready to remind us here that we are wandering from our subject; that it was of employers and their employees that we were writing; that fathers treat their daughter's friends with much more dignity than they treat their employees? We have heard some such talk as this and would like to ask: Is it true? Does a true man ever forget that his employee is somebody's daughter, that she may be somebody's wife, or somebody's mother? If his employee is not his social equal there is all the more reason that his conduct toward her should be dignified. A man may with propriety treat his daughter's associates with a more friendly familiarity than he could show to his employees. Where a man is many years the senior of his employees, he *is* and *should be* considered more responsible for their conduct than they are for his.

We have often seen pictured the moral wrecks wrought by unscrupulous employers of young girls. Let us once trace the lasting benefit which one noble, dignified, and kindly employer of young girls could confer. Day after day, as he treated them with kindly, quiet courtesy, their respect for him would increase, until he became their ideal of true manhood. They would go forth after their hours of employment armed with faith in masculine virtue and dignity, not the faith born of novel-reading and day-dreaming, but a quiet, steadfast faith that would unconsciously influence their own conduct and enable them to draw around them better masculine associates, while those that were not worthy would wish for a little time at least that they were better; for who can measure the influence of one wo-

man with an unflinching faith in man's honor and truth? After a while these girls are wooed and won by honest, moral men, and new homes are founded where the beauty of purity is taught to little children, and sons go forth armed with faith in their father. And so the good influence goes on through many generations.

Now, let us turn back to this employer and his own family where he finds his reward for his honorable conduct (if he needs any greater reward than the consciousness of such a beneficent influence over many lives). He may have sons and daughters of his own, and the silent influence of his life, far more than his precept, will send them forth to walk in paths of virtue and honor. His daughter will not listen to words that question man's moral integrity, for in doing so she feels that she is wronging father and brothers. She may know that there are some dishonorable men, but she will turn away even from the thought of such with a shudder; and the father could not throw a surer safeguard around his daughter's pathway than the faith in her own father's honor.

Now let us turn to another editorial page of *The Ladies' Home Journal* and read Mr. Bok's advice to girls concerning their conduct toward young men.

"Young men should be made a study by girls before they accept them as a reality in their lives. They will find them very peculiar creatures in some respects. Very often what they apparently most desire a girl to grant them is precisely what they most desire she shall not give them. That sounds incongruous, doesn't it? But it is true, nevertheless. I have known young men to resort to every artifice their minds were capable of conceiving to kiss some girl of their acquaintance. The more stoutly she refused the more ardent became their wish. But when they secured it? Well, it is in just such a case that we see very aptly reflected the truth that

the most desirable things in this world are those we cannot get. Once secured, however, how much of their value is lost! So with the familiarities which foolish girls allow, but which wise ones refuse. It is astonishing how much of the freshness of a girl's lips is absorbed in that first kiss. He never strives so eagerly for the second one. And somehow or other his esteem for her decreases just as his energy diminishes. Young men soon lose their respect for such a girl exactly in proportion as she allows them any familiarity."

Is it true that "very often young men will resort to every artifice their minds are capable of conceiving" to kiss a girl, knowing that it will lower her in their estimation if she permits it, and while they feel in their inmost hearts (if they possess such a thing, which is doubtful) that it is not right for her to permit it? If it is true, has not Mr. Bok one word to speak in censure of such atrocious conduct? What would he think of a girl who would use every art to beguile a young man into taking a glass of wine, and then, the more persistently he refused, with still more delicate allurements continue to tempt him, knowing all the while that he would lower himself in her estimation if he yielded, and she really believing that it would be wrong for him to drink? What kind of a wife and mother would such a girl make? Yet she would be a worthy companion for such a man as Mr. Bok pictures. If a woman offers a young man a glass of wine and he refuses it, saying that he does not believe it is right to drink it, if she still urges him to take it he should shun her society. A true man would not wish the companionship of such a woman. If he waits to be tempted he is weak, and has no appreciation of true womanly honor. This same principle may be applied to a girl's conduct. If a young man asks to kiss her she should say: "What right have you to kiss me?" If he answers that he had no

right, but was tempted for the moment to ask it, and would not repeat the offence, she might pardon him. But if he answers: "I just wanted to see if you would let me kiss you, but I respect you for refusing," a fitting reply would be: "You have lost my respect by asking me to do that which you thought I ought not to do. While you were trying me I have tried and condemned you." If she simply refuses to kiss him without any questioning until he marries her, as one man said he had done, "because she would not kiss him," she has more self-conceit than true, womanly honor, or her faith in masculine virtue and honor is nil. Yet this man will have been met with duplicity equal only to his own, if, after marriage, she tells him that she "had lost several men before she learned the innate modesty and indifference rôle."

If, after repeated efforts, a man finally wins a kiss, he need not call himself a conqueror, for his subject was weak, else she would not have permitted the repeated attempts. In a word, a girl should be taught that a man who offers a familiarity is not worthy of her respect, and should be banished from her society. And young men should be made to feel that they are as worthy of condemnation for offering a familiarity as a girl is for permitting it; and that a true woman will lose her respect for him exactly in proportion as his conduct verges toward familiarity. Let us place a high ideal of womanhood before our girls, and teach them to love dignity and purity of character for their own sakes, and not simply to learn the outward signs of such a character for the sake of winning men that are not worthy to be won; or who, if worthy, would be woefully deceived by this semblance of modesty.

Is it true that the most desirable things in the world are those we cannot get, and which, when once secured, have lost much of their value? It is true only in so far as the thing sought

is really not desirable, or is not sought for its own sake, but merely to please the vanity or inordinate and misplaced ambition of the seeker. Mr. Bok proves this by his own words when he says that the kiss which loses its value so quickly when won was not really desired. When a man really wishes a home of his own, and labors until he has won it, he does not cease to care for it. Even this inanimate possession receives his almost constant attention. He is continually forming plans for its improvement, not satisfied with it as it is, but loving it well enough to strive to make it what he wishes it to be. A man who really loves flowers will not buy a great many plants and then neglect them, but will select them carefully and watch them grow in beauty under his watchful eye. He will not go among the flowers that are not his, plucking the blossoms and leaving them despoiled for other eyes. Even so a true man will look upon the beautiful human flowers that are not his, but touch them not until he has selected one and has won the right to call it his own. Then it will not decrease in value because it is won, and he will use every art to win it into a still more perfect and exquisite growth.

If a girl's conduct is always modest and womanly, that should be a sufficient guaranty to any man of her moral character. Would he wish the proof of strong temptation for himself? To test woman's virtue and not man's is a relic of barbarism handed down from the time when women whose virtue could not be proved were stoned to death. Is woman most to blame for this relic of barbarism? Was it she who stoned her sister to death in the olden time? Surely not, for though she may have shared the prejudices of that barbaric age, yet she was a slave and man was her master, and it was by his will that this injustice was meted out to woman. If she still condemns her own sex more than a man, she is still following the example of men in so doing. If men pride themselves on being the stronger sex, let them set the example in at least condemning men and women equally. I believe that woman can emancipate herself from these old prejudices, and by her moral strength bring about more than her half of the world's moral redemption; but if I were a man I would appeal to men to shoulder more than half of this burden of responsibility, and thus prove their right to be called the stronger sex.

A WOMAN'S WORK.

BY HELEN EVERTSON SMITH.

TWO years ago a woman in a Minnesota town hung herself in despair when she found that the vote of that town had gone against the local prohibition of the sale of intoxicating liquors. No doubt there was some one near and dear to her whose moral elevation or degradation seemed to her to be dependent upon the vote that day cast.

In the same town the following spring a woman stood all day at the polls, and used all the weight of a strong personal influence in favor of

prohibiting the sale of intoxicants within the town's limits. She won by forty votes. To this woman the question was not one of personal moment, but of an earnest, broad minded love of humanity. She may be a no better woman than the poor creature who gave up her existence in despair, but to the community in which she lives she is worth thousands of those who have not the courage to face defeat to-day, that they may hope and work for a victory on the morrow.

Women have always shown an im-

mense amount of courage in the endurance of pain and privation of various sorts, especially when by such sacrifices they could serve those whom they love. That the same degree of courage only needs to be turned in other directions to achieve results which, because of their wider application, are much greater, requires no proof. Given a certain power, the uses to which it shall be put depend upon the demand.

The present age already has more women who can and will endure every sort of suffering and personal privation for the sake of their sons, husbands, fathers or brothers, than it demands. It has great need of women who have not only enduring courage, but the strong, aggressive spirit which seeks to remove the roots of the Upas tree, rather than to administer palliatives, which only dull the sense of the dweller beneath its branches to its noxious droppings.

We know nothing personally of the grand woman who had the fortitude to stand all day at the polls, submitting, we have little doubt, to humiliations which would have been torture to most women, and very probably were such even to her brave spirit; but we do know that she has set a most noble example. During that long ago time of woe which ended in the deliverance of our country from the curse of slavery, we knew of one woman who, in a town in Maine noted for its enmity to abolitionists, was largely instrumental in saving the vote of her town to the Union cause. The young men of the place had almost all gone to the war. Those left at home were either too old or too young to go; or—if not declared foes—were but lukewarm supporters of the Union. The coming vote would in any case be a very close one. Unless special exertion should be made it would in all probability result in the sending of a pro-slavery representative to the Legislature. Who was to make this exertion? Public speakers were not plenty—so many were in the

armies—and all that were available had to devote their efforts to the cities and larger towns.

One woman felt this call as addressed to herself. She was a childless widow, neither handsome, young nor wealthy. Hence she could derive no influence from either of these auxiliaries. Neither was she yet old enough to possess the weight allowed to age. She had but one weapon and that she resolved to use to the utmost. Her voice was weak and her presence not inspiring, so she could not speak in public, but she had a remarkable power of touching the hearts of those with whom she could talk freely in private. Day after day, night after night, this earnest woman—who has long since passed away from the world she once honored by living in it—went from house to house, sometimes driving, if she could get a lift from a neighbor, otherwise walking long distances over hill and dale, forest and morass, until she had personally “interviewed” every doubtful voter in her large and straggling township, and obtained his pledge to cast his ballot for the Union candidate.

On the day of election she stood by the polls accompanied only by one woman, the sole woman in all that wide township who had courage enough to stand by her, and with an air of serene confidence that no man *could* go back of his pledged word, reminded each of his promise. Her confidence was justified. The town which had been expected to return a pro-slavery member to the Legislature gave a large majority for the other candidate.

This was the result of the labor of one woman who had the courage to use for great public ends the powers of persuasion with which nature has endowed most of her sex. Her work was worth as much to the Union cause as that of her brother, who gave his life at Lookout Mountain. To her sisters we need not say that it required as much true heroism.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XX.

TALENT AND CULTURE.

HON. EDWARDS PIERREPONT,
LATE MINISTER TO ENGLAND.

This organization was an excellent one. The head was large, the face strong and substantial, giving adequate support to the head, and the quality of the organization, bodily and cerebrally, was admirable. There was a wealth of dark, strong hair, indicating the Motive Temperament; the distinctness of the features and the strength and altitude of the body evinced an adequate development of that temperament. The muscles and bony framework were good. He had power and endurance for the emergencies and labors of life. The largeness of the brain indicates the Mental Temperament, and the build of the brain was in harmony with that temperament. The Vital system also was well represented by the amplitude of the chest, by the good development of the base of brain, by the form and massiveness of the face. So the power to convert food into nutrition and to use that nutrition as motive power was rather a marked manifestation.

The strength of that countenance is shown by the width of the cheek bones, by the strength and distinctness of the nose, by the prominence of the eyebrows, by the strength of the chin and by the general width of the head. The quality of the organization, as made up by the combination of the different temperaments, constituted a basis for the exalted talent and superb character of which

his whole life was a brilliant exposition.

He was of good stock. The two family names which constitute his personal name, Edwards and Pierrepont, have sustained and graced the history of letters, of law, of divinity and science in this country. There have been no better names than those that are blended in his stock and blood, and the positions which he occupied, the titles and distinctions which he earned and has borne, and which, till his death two years ago, his life exemplified, and whose departure left fragrant for history, constitute a memorial for his country and his friends which is seldom equaled and never surpassed. He was a great, a capable and an excellent man. His physiology was harmonious. His mind, brilliant and strong, worked easily and effectively. His talents and characteristics made him welcome in any circle, and acceptable in any field of effort where capability and integrity were required.

Phrenologically speaking, there is not a more practical, intelligent and critical intellect to be found. All the perceptive organs were amply developed. He gathered knowledge readily and understood its facts and their forces. He had a wonderful memory of the historical, of facts, of places, and the practical working of all the factors of influence.

He was an orderly thinker, accurate to a fault, clear-cut in his judgments, fertile in resources, ingenious, skillful, and intellectually an all-around man.

Observe the width of the region of the temples; he might have made the best engineer the world has ever seen; he might have been excellent in surgery, physiology, chemistry, natural philosophy, history, belles-lettres, anywhere. He might have been an inventor with Ericsson or Edison, a historian with Bancroft; he might have been a poet, a mechanician, a financier, a dramatist. He had the head of an editor, the power to gather knowledge, to collate, analyze, and combine it into forceful statement and vigorous argumentation. As a lawyer he was endowed with the ability to find out and appreciate the truth; his biography shows how he held positions requiring eminent talent and wide culture, and that he filled them admirably. He had large Benevolence; the front part of the tophead rises highly.

He was not a copyist; he studied the laws and qualities and conditions and reasons of things, and adapted himself to them according as he judged proper without inquiring to know how another man would do it or had done it. While he was a conservative in many ways, he was radical and reformatory; he dared to seek new paths, to make new tracks, but they were always on an ascending grade. The breadth of his head gave him executive force, the kind of power that resisted opposition or overcame it. He had a wise reticence, ability to conceal his own purposes, and watch the manners and management of others to learn their drift and purpose, and then ability to counteract the undercurrents of opposition. And, without seeming to be suspicious, was able to guard against subterfuge and finesse. He would make an argument in such a way as to shut all loopholes, avoid pursuit and evade interjected opposition. Such a head as that in law would be wise and clear and historical and full of precedent and knowledge of all that would serve his purposes or guard his position against surprise or encroachment.

That head is a beau ideal of diplomacy, not that mean, tricky unfairness which diplomacy has sometimes been disgraced by, but that polite, smooth, comprehensive sense of the wants of others, and the proper way of treating their side of the case, and the safe and judicious method of preserving intact the rights of his own side, and fortifying every point he made; and thus, as a diplomat, he would be smooth, easy to get along with, and, at the same time, he would be all the time molding his cause and claims, so as to secure what he had a right to seek, and put safeguards around his own cause for the future. He never was asleep to the interests which he was protecting or seeking to promote.

His Firmness was large, and also Veneration. He was steadfast and determined; he was respectful and polite; he was a reader of character rarely equaled.

His Cautiousness rendered him prudent; he had a good degree of Self-esteem; hence it was easy for him to maintain an equable demeanor in elevated and responsible positions.

He must have had rather large Destructiveness and Combativeness; these gave to his mind, as muscle gives to the hand, a grip and hardness. Hence, there was a certain dynamic power, smoothly wielded, that reached successful results, and commanded respect, and ministered to his own prosperity or that of his cause. He resembled his mother; hence he had a gentleness and smoothness which was feminine. He had an intelligence that was almost ubiquitous; he could converse on many and varied subjects, and seem an expert in all. The richness of his intellectual discourse was masterful and commanded the respect of people who are expert in their peculiar fields, and recognized in him an equal even in their own department. He could converse and entertain and be the chief speaker, or he could wisely question those who knew much in certain

directions, and become master of all they could communicate, without manifesting any want of information on the subject. And his memory en-

and, backed by such memory and discrimination and criticism, and urged with the earnestness that belonged to his nature, his public speeches, his



FIG. 176. HON. EDWARDS PIERREPONT,
LATE UNITED STATES MINISTER TO ENGLAND.

abled him to haul in and coil, as sailors do ropes, the line of argument or instruction from any quarter of the realm of knowledge; and his memory enabled him to reproduce, to pay out the line when it might be called for.

His Language was excellent, voluminous, copious, compact, clear-cut;

written arguments, his analysis of causes in court, and his opinions from the bench, were models of vigor, clearness and completeness.

BIOGRAPHICAL.

Hon. Edwards Pierrepont, who was born in North Haven, Conn., Novem-

ber 4, 1813, was descended from a great family named Pierrepont in England, members of which settled in Boston, Mass., and New Haven, Conn., about 1650. Sarah Pierrepont married the great Jonathan Edwards, D.D., President of Princeton College, and Timothy Dwight, D.D., so long President of Yale College, was her grandson; thus the Pierrepont, the Edwards and the Dwight families became united in blood. Sarah Pierrepont Edwards' brother, Joseph Pierrepont, was the great-grandfather of our subject, Hon. Edwards Pierrepont. He graduated from Yale in the class of 1837, studied law in the New Haven law school, settled as a lawyer at Columbus, Ohio, in 1846 removed to New York, in 1857 was elected Judge of the Supreme Court of the City of New York, in 1860 resigned his judgeship and returned to the practice of his profession and public affairs. In 1862 he was appointed by President Lincoln as a commissioner, with Major-General Dix, to try prisoners of State; in 1864 he led in organizing war democrats in favor of the reelection of Lincoln; 1867 was elected a member of the Constitutional Convention of the State of New York; in 1867 was selected to conduct the prosecution of J. H. Surratt for the murder of President Lincoln; in 1871 he received the degree of LL.D. from Columbian College, Washington, D. C., and also from Yale in the same year. President Grant appointed Judge Pierrepont in 1868 Attorney of the United States for the District of New York. In 1870 he was one of the most active of the "Committee of Seventy" against the "Ring Frauds" of New York. In 1873 Judge Pierrepont was appointed Minister to the Russian Court, which he declined. In 1875 he was made Attorney-General, and remained in President Grant's Cabinet until 1876, when he was appointed Minister to England. In 1878 Oxford conferred on Mr. Pierrepont the degree of D.C.L., the

highest honor in its gift. He died in New York, March 7, 1892.

PROF. CHAS. E. WEST,

FORTY YEARS PRINCIPAL OF BROOKLYN

HEIGHTS FEMALE SEMINARY.

This picture was taken of the venerable Professor on his eightieth birthday, and we judge that such a majestic masculine head and face, ample in development, rich in endowment, would command the respect of an observer instantly and everywhere. We have no doubt that this in its prime was not only a manly but one of the handsomest faces of his generation. He has a delicate and yet a commanding nose, which rises high at the bridge; it is well formed at the point and at the wings, and indicates at once dignity, strength, intelligence, goodness and grace. The firmness of his upper lip, the length and breadth of it, and its excellent model; the amplitude of the under lip, indicating sociability and affection; the breadth, prominence and strength of the chin, are marked elements in the physiognomy, which will assure an observant stranger, win confidence and command respect. He has a mild and steady eye; his ample forehead indicates capacity for acquiring and holding knowledge, and for the ability to dispense information and especially to comprehend the breadth and strength and scope of subjects and topics involving great reasoning power and vigor of mind.

The side head seems long and high, and yet not so very broad. He would command anywhere respect and confidence in his own field of service as principal of a young ladies' seminary. He was doubtless regarded by his pupils as a strict disciplinarian, yet not as a severe and hard master. Pupils in the glow and enthusiasm of feminine youth and hope would accord to him the respect which his age and talents merited; they would regard him as a father, as an elder brother, as a friend, and give him the

respect which his position warranted, and the sincere fealty and duty which their position as pupils naturally required.

The reader will see that the head in front is high; that the forehead is

indicating kindness, and just in front of that organ Human Nature is very strongly manifested, giving the ability to judge of the qualities and characteristics of strangers, and a certain tact, combined with frankness, to



FIG. 177. PROF. CHARLES F. WEST,
FORTY YEARS PRINCIPAL OF BROOKLYN HEIGHTS FEMALE SEMINARY.

broad and nearly vertical; that from the opening of the ear forward the length is great, showing power of observation and memory and ability to reason soundly upon facts and experiences. The top head, running along back clear to the crown, is well elevated. Benevolence in the front part of the top head is large,

relate himself to others in a way that would command their respect and win their confidence and at the same time their friendship and affection.

In the back part of the top head, where Firmness and Self-esteem are located, there is a good development, showing great steadfastness, inspiration, devotion to duty, and the dignity

which sustains stability and integrity.

His Conscientiousness is decidedly large. His word was law; he was believed to be upright and correct in his methods and principles. As he has retired from his position as principal we may, in these respects, speak of him in the past tense. He was dignified, upright, kindly, intelligent, frank, equitable, straightforward, and thus influential.

The back head is amply developed, as we judge by the features, and his long service in such an institution in such a place as Brooklyn Heights is evidence that he had strong affection; he could win friends and hold them; he had a loving and affectionate disposition; he had integrity and dignity, prudence and thoroughness. He has the natural development of an umpire, and while we think his discipline was strict it was parental, it was judicial, it was the end of the law; it was firm but kind, sound but smooth, correct yet not tyrannical. He might have been a good judge on the bench; he might have graced the pulpit, the healing art or the editorial sanctum. As an educator he was a success; as a citizen, acceptable and honored.

The physiognomy has been modified by age and the shortening of the teeth, so that the upper lip does not occupy so commanding an attitude as it did in earlier life; but where can a man be found eighty years old, with a more comely face, with a more dignified mien, and a kindlier and stronger expression?

Among the reasons why so magnificent a picture can be derived from a man eighty years of age, and why he should maintain his youthfulness so as to enjoy now a trip to Europe at eighty-five, may seem surprising to most people. In the first place he had a capital organization, inherited strength, endurance, and, above all, harmony of physical development. It does not matter so much about the size of the man or the animal as

about the harmonious relations of the different vital functions in regard to the health and the length of life. But it does make a difference whether the man is large or small, even if he is harmonious, in regard to the amount of duty he is able to perform, the load he is able to carry and the might of muscle and of mind which he is able to manifest. It is said that preachers are longer lived than other men. In the State of Massachusetts the statistics show that clergymen live longer than other people. There are reasons for that aside from the mental activity which they have to manifest. One reason is that clergymen have to amount to something mentally and physically to get an education; they must have manliness and talent to hold a place from early manhood to old age; they generally behave better and live more equable lives than other people. They go into fewer dangerous occupations, such as breaking horses, felling the forest, blasting rocks and climbing the masts in sea-faring life. But the reason why Prof. West has so young and so healthy and harmonious a face, and is so youthful at his great age, is that he has not only had an active state of mind, every faculty has been in healthful exercise for a long life, and the body sympathizes with the mentality and is stimulated to health and vivacity by the activity of the mind, but he has been among young people and has sympathized intimately with their cheery and hopeful enthusiasm. Intimate relationship with young life serves to cheer, sustain and prolong youthfulness and health to old age.

When ready to put this matter in the printer's hands, I went to the house of Prof. West and was informed that he had started an hour before for a trip to Europe, and that he was eighty-five years of age, hale and hearty. Thus I failed to get the date of his birth and the time of his commencing and closing his career as a teacher.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

PROFESSOR BENJAMIN SILLIMAN.

PROFESSOR SILLIMAN was one of the most noted scientists in the United States, and probably did as much as any other man in this country toward the development and diffusion of scientific culture. He was born in North Stratford, Conn., on the 8th of August, 1779. He was graduated at Yale College in 1796, and in 1799 was appointed tutor. He studied law, and was admitted to the bar of New Haven in 1802.

Chemistry, as a science, was then almost unknown in America, being taught, even in its rudiments, only at Philadelphia and Cambridge; but the brilliant discoveries of Lavoisier, Sir Humphrey Davy and others, had attracted much attention.

Dr. Dwight, then president of Yale College, became interested in its introduction into the college course as a regular department of instruction, and with that view offered to Prof. Silliman in 1802 the new chair of chemistry. He consented to abandon the legal profession and accept the new position if he could be allowed time and opportunity for preparation. Accordingly he passed a part of the next two years in Philadelphia, as a student with Dr. Woodhouse, and on his return to New Haven in 1804, delivered a partial course of lectures on chemistry to the students of the college.

In 1805 he gave his first full course of lectures, and in the spring sailed for Europe to prosecute still further studies in physical science, and to procure books and apparatus for the illustration of chemistry and physics in the college. In 1818 Prof. Silliman founded the *American Journal of Science and Arts*, better known both in Europe and America as *Silliman's Journal*. For twenty years he was sole editor, and for eight years more

the senior editor. For nearly fifty years his journal was recognized at home and abroad as the chief repository of American physical science. In 1838, his son, Benjamin Silliman, Jr., became associated with him in the editorship, and in 1846 it was transferred by the senior editor to Professors J. D. Dana and B. Silliman, Jr.

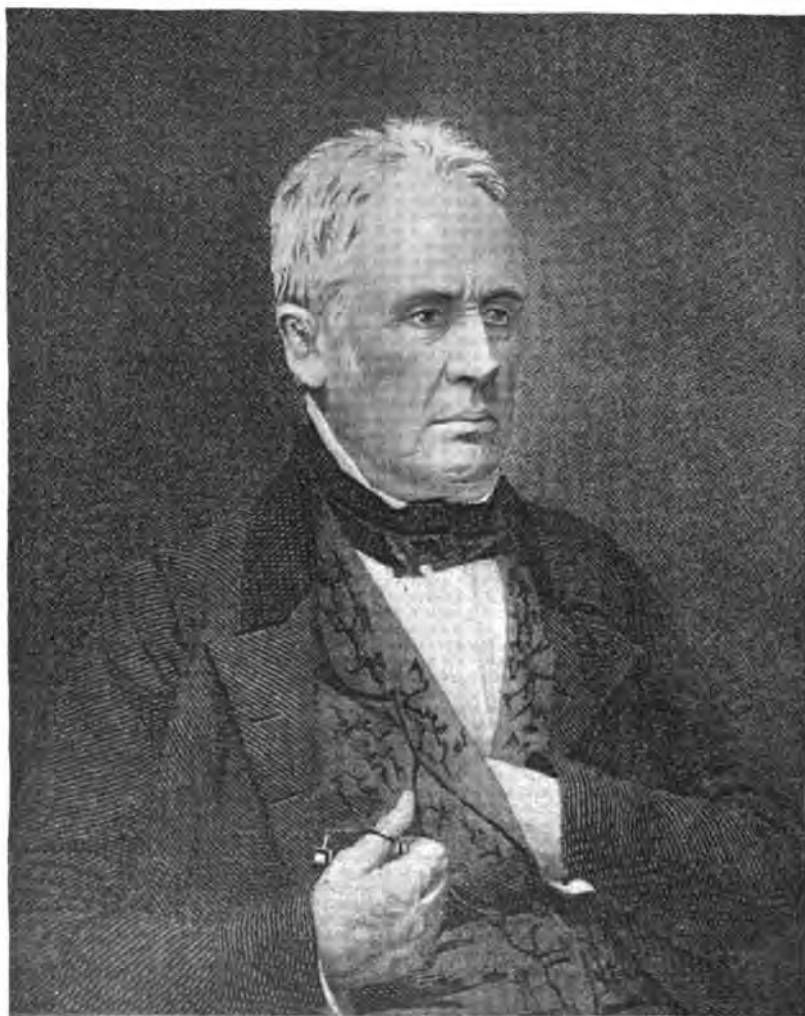
Professor Silliman was one of the earliest American lecturers on scientific subjects to large miscellaneous audiences. For many years he had given public lectures in New Haven upon chemistry, geology and allied topics with excellent effect in promoting a taste for science and a desire for its advancement. In May, 1834, he was invited to Hartford to deliver a popular course on scientific subjects, and in September following, to Lowell. In 1835 and 1836 he gave more extended courses in Boston and New York. In 1839 he opened the "Lowell Institute" of Boston by a course on geology, and in the three succeeding years followed with courses on experimental and theoretical chemistry in the same institution. In 1830 he published a text-book on "Chemistry," in two volumes, for the use of his students. In 1851 he again visited Europe after an interval of forty-five years, and spent six months there. The narrative of this journey, replete with scientific observations, was published in 1853 under the title of "A Visit to Europe in 1851" (2 vols., 12mo, New York), and passed through many editions.

In 1853 he resigned his professorship, and was made professor emeritus; but at the request of his colleagues he continued to lecture on geology till June, 1855, when he gave his closing academic course.

George Combe, in his "Tour in the United States," after speaking

favorably of his visit to New Haven, said: "We had the pleasure of cultivating the acquaintance of Professor Silliman, whose scientific reputation

ing character, full of kindness, and his manner is so pleasing, that it is a common observation in Boston and New York, where he occasionally



PROF. BENJAMIN SILLIMAN.

stands high not only in the United States, but in Europe. *The American Journal of Science and Arts*, which has now reached its thirty-eighth volume, has long been and still is conducted by him with the most indefatigable zeal, and serves as the grand channel by which the discoveries of the old and new continents are reciprocally interchanged. He is a man of the most amiable and interest-

delivers lectures, that he can speak more plain truths to his class, without giving offence, than almost any other lecturer they hear."

Although Professor Silliman was a most attentive and laborious student in his peculiar department of science, and contributed so largely to its store of knowledge, and to elevate it in all our seats of learning, he was also an attentive observer and warm

supporter of the great elements of progress in other branches of learning. When Spurzheim came to this country in 1832, Professor Silliman extended to him his hand of welcome, as a benefactor and man of genius, attended upon his teachings, and lent him the aid of his friendship, and his pen to testify to his skill, and to call around the great reformer the attention and respect of the western world. It could hardly be expected that a man with Professor Silliman's great cares and responsibilities in one almost endless field of research, should devote much time to the cultivation and development of another branch even as important as that of Phrenology. But as an evidence of his sagacious appreciation of the new mental science, and his manliness and candor in readily yielding to its support the weight of his great name, he wrote an elaborate article in favor of Phrenology for the *American Journal of Science and Arts*, in 1841, creditable alike to his sincerity and talents.

The origin of this article is as follows: At the close of George Combe's lectures in New Haven, Conn., in 1840, Gov. Edwards brought forward a series of resolutions, which were seconded and sustained by some remarks by Prof. Silliman, and the article on Phrenology alluded to above, purports to be the substance of his remarks offered on this occasion. Among other things, he remarked:

"Mr. Chairman, I have no claim to be called a Phrenologist, for I have not studied the subject sufficiently to form an opinion upon the science *as a whole*, and it is not probable that my engagements will ever permit me to give it a thorough investigation. All I know of it is derived from the courses of lectures which I have heard, and of which this is the fourth; from observation of such facts as have come in my way; from credible attestations of its practical applications published in various works, and from personal communications with some

of its cultivators. . . . It appears to me, sir, that Phrenology involves no absurdity, nor any antecedent improbability. The very word means the science of the mind, which all admit to be a pursuit of the highest dignity and importance, both for this life and the life to come; and the appropriate inquiry of the Phrenologist is, whether the mind, with its peculiar powers, affections, and propensities, is manifested by particular organs corresponding with the conformation of the cranium, that defensive armor by which the brain is protected from external injury. . . . Are we then expected seriously to assert, that which appears self-evident, that the seat of our mental operations, and of our affections and propensities, is in the brain? My consciousness informs me so, and this is the highest possible evidence to me, although *my* consciousness cannot be evidence to another person. . . . The residence of the mind being in the brain, it is not absurd or irrational to inquire whether it can be read in the form of the cranium as well as in the expression of the features."

These remarks show that Prof. Silliman was satisfied that the principles of the science were well founded, and that, in his case, conviction bore a close relation to observation on the subject.

In person Prof. Silliman was large, tall and every way well proportioned. The framework was perfect, and had he engaged in muscular labor instead of almost exclusively mental pursuits, he would have become a very strong and athletic man. His brain was large, the quality good; the mind comprehensive; and he was eminently intellectual, highly moral and religious, and of a warm social nature. He was very sensitive in matters of honor, fond of appreciation, and became a very popular man. He was mirthful, hopeful and joyous, and very kindly disposed. He was much more intellectual and scholarly than executive—a man of peace, piety and popularity,

rather than a destructive or a radical reformer. He was by organization as well adapted to theology as to science, and had he entered the ministry, he would have become a bright and shining light in that sphere.

The simplicity and moderation of Prof. Silliman's physical habits, and his constant activity, contributed to give him a firm and vigorous old age, free from mental or bodily infirmity; and to the last he took a great interest in the progress of science, hu-

manity, and freedom, at home and in foreign lands. He was a member of numerous American and European scientific societies.

A cast from the head of this honored and honorable man was taken, and for many years has occupied a conspicuous place among other distinguished Americans in our extensive collection.

Prof. Silliman died on the 24th of November, 1864, in the eighty-sixth year of his age.

STORY OF A LAMP.

BY ANNA OLCOTT COMMELIN.

IN an old-fashioned room, in the heart of a great city, by a flickering gas light, sat a young girl, engaged in painting designs on some delicate cups and saucers and other fancy articles that were spread out on the table before her. The scantily furnished room was very neat, and some soft muslin drapery at the windows and a few luxuriant plants in bloom relieved its barren aspect. The slender girl, in her black dress, had a weary look on her pale face, and her eyes were swollen and red. She was very fair, and her fine, blond hair was wound about her prettily shaped head in braids. The door opened, and a girl, seventeen or eighteen years of age, entered the room. She had a bright, happy face, curling, brown hair, and an appearance of health and bloom which formed quite a contrast to that of her delicate, elder sister.

"Rosie," said the elder girl, "I can hardly see by this flickering gas light, and it is so high up that it does not fall on my work at all. I expected to finish all these different pieces to-night, but my head is aching terribly, and my eyes are so strained that I scarcely see the table. I wonder why Tom does not come home; it is getting late. He has not spent an evening with us for two months. Poor boy, I

cannot blame him. It is dull for him here."

"You shall work no more to-night, Hester," said Rose, taking the brush out of her sister's hand. "Mrs. Harold will be satisfied if she has the painting done for the Christmas festival. You look positively worn out. Go to bed, and stay in it to-morrow, or you will have one of your ill turns. First let me bring your glass of milk."

Rose went into an adjoining room, and returned with a pretty goblet, filled with milk, and insisted that Hester should drink its contents. Hester awoke next morning feeling somewhat ill, and Rose advised that her room should be darkened and the day given up to rest. At twilight, however, the invalid was much refreshed, and, putting on a light wrapper, she started for the little parlor. A flood of light streamed a friendly greeting to her from the open door, and as she entered she saw that a handsome lamp stood upon the table in the center of the room. Its translucent shade of pearly delicacy was ornamented with graceful branches of wild roses in their greenery of leaves. The radiance from within gave it the appearance of a huge opal, in which the freshly cut roses bloomed and

glowed until Hester fancied that she breathed their delicate fragrance.

"Where did this come from?" she said, as Rose, looking much like her name, appeared, smiling at Hester's surprise.

"Ask no questions. Hessie," said Rose, mysteriously, "I shall tell you only that it is honestly ours."

When Tom came home to supper he was also curious to hear the lamp's history, but Rose would give him no more satisfaction than she had vouchsafed to Hester. But Tom was struck with the beauty of the shade's design, as Hester had been, and pleased with the cheery aspect of the old-fashioned room. He threw himself on the sofa, and said, "I think I'll stay at home this evening, and not look for the 'boys.' I say, girls," looking around the room, as he spoke, "if I could catch that executor of father's, who lost our bonds, and the thief who stole them, I'd like to wring their necks. It isn't bad for a stout young fellow like me to have to work, but it does make me feel bitter to see you deprived of so many comforts."

"I do miss my pictures and books," said Hester, sighing.

"I do miss my Steinway grand," said Rose. "Oh for a Steinway upright!" Then she began to sing,

*"Cleon hath a thousand acres,
Ne'er a one have I."*

Tom broke in here. "Then all that mining stock is a dead loss—confound it!" And Tom looked as savage as it was possible for a young fellow to do, whose natural expression beamed kindness and good-will to all his fellow creatures.

"Never mind," said Hester, "we have Tom with us this evening. Let us be as happy as we can together."

At this sisterly remark Tom went to the fireplace, and piled coals on the embers until they snapped and sparkled and flamed and crackled in the liveliest manner. Rose brought forth, for Tom's delectation, the book she had brought from the library, though no one knew how or when she

had found time to go there, for Rose was housekeeper, financier, and domestic factotum generally. Then she drew forth the little tea table, and laid the cloth, and her toast was praised and her omelette appreciated, and Tom did not take up his book for some time, though it was Holmes' latest, but told stories, and Rose sang snatches of old songs, and a glow of color came to Hester's pale cheek, and the evening was glad with its simple cheer and affection.

The happier they seemed the more brightly burned the lamp, until the soft colors in the heart of the roses seemed to glow as if with life.

"It is a fairy lamp," said Rose.

CHAPTER II.

Affairs seemed to improve with the "Wilder girls," as they were called. Hester had gained some new pupils. Tom had staid at home evening after evening, although his friends had begged him to join them, and Frank Harold, his old school-mate, had urged him repeatedly to come and play whist at his home with some young folks.

"I don't know what ails Frank Harold," said Tom, on Christmas evening. "He seems so quiet of late, and twice he had asked me if I could tell him the name of a beautiful girl who came in the store one day to buy something. He described her to me, and if she is anything like the being his fancy paints, great Scott! she must be handsome. I told him I had never seen such a girl, and if I ever had the luck to meet one like her I wouldn't tell him or any one."

"Oh," said Rose, "you'd try to win her yourself, generous boy."

"Yes, if I ever see such a paragon in human form as he describes you may be sure that I'll try. In fact I asked him to show her to me, but he said he could not do it. She came to his store once, and once only."

"How I should like to see her," said Rose, dimpling. At the same time she seemed to be seized with a violent fit of coughing, unusual in one who boasted of immunity from all the "ills that flesh is heir to."

At that moment Hester came in. She had been to Mrs. Harold's house in the morning to carry her completed work and had met Miss Lucy Harold, a refined girl, with whom she had had a delightful chat. Since then she had given several lessons, and now, as twilight approached, she had hurried home, eager to talk over the events of the day.

"I felt a little timid at asking for Miss Harold," she said, "as she was a stranger to me. The servant showed me into a handsome drawing-room, where I found so much to interest me that the time flew. I was intently looking at a bas-relief by Thorwaldsen when a light footstep surprised me, and Miss Harold, in the prettiest of white morning dresses, appeared. I apologized for the delay in my painting, but she said it did not matter at all, as long as everything was completed in time for the festival this evening. She asked me to come again to see her."

"She is Frank's sister," said Tom, "and if she is half as good as he is she must be a nice girl."

"Yes," said Hester, "she seemed very thoughtful. She feared that there was a storm coming, and offered me her umbrella and arctics, as my boots were thin, and I was so far from home. I was thankful to have them this afternoon when the snowstorm came and gathered on the sidewalks so quickly. It is a cold storm."

Rose drew the curtains, lit the fire, and then the lamp, which beamed benignly on the little group. At that moment a loud knock was heard, and Rose, on going to the door, was handed two large packages—one directed to Hester and one to herself. On opening them two fine etchings appeared, whose beauty had long been noted by the girls as they

hung in the window of a print shop near by. No name was with them, but Tom's face told the story, though he affected a blank expression, and tried to disclaim all knowledge of the donor. He went to work with a good will to hang them on the wall, and Hester and Rose were so pleased and proud and happy that Tom himself was quite elated with the good taste he had shown in selecting the prints they had so much admired.

"You see, girls," said Tom, "ever since that mysterious lamp came here I've been thinking that I would like to do something to make this room pleasant, so I thought that I would give up cigars and billiards and stay at home evenings and save my money and get something nice for you. And to-day my employer has given me an interest in the business, so, perhaps, after a while, I may be able to get a piano for Rose and all the books for you, Hester, that you can read."

"How good you are growing," said Hester. "Yes," said Tom. "I know it. I feel it. But there's a spice of wickedness in me yet. I am wild to discover that girl who bewitched Harold and cut him out."

"How generous!" said Rose, putting on a long face, though she suddenly covered it with her handkerchief, and looked very smiling when she emerged from behind it.

"How cosy the room looks," said Rose, as, with housewifely pride, she looked at the walls, bare no longer. "I fancy that I am in the country, on that sunny road, and the trees are before me, and the birds singing in them. And when I look at Longfellow's Bridge, that you gave to Hester, it is so beautiful that the whole of the poem is suggested. And yet I think I like my country road—my etching—the best."

The ruddy flames leaped in the old-fashioned chimney, and the lamp—what a soft light fell from it on the pictures, on the fair young faces, on Rose's brown curls, and Hester's gold braids, and on Tom's manly face.

The warmth of home affection glowed in the girls' happy faces, the warmth of a good deed done shone in Tom's look of content, and the lamp, like one of the household genii of old, in their midst, shed a perfect flood of radiance over all, until Rose, looking at it and the pictures, said:

"It is Aladdin's lamp."

CHAPTER III.

Two months had passed since Christmas, but Hester and Rose had felt the blessed influence of its spirit in their hearts and their home ever since. Hester, it is true, had suffered from a slight recurrence of illness, a kind to which she had been subject, and had lain for several days on the sofa in the little parlor; but her illness was less severe than her former ones had been, and the little parlor was pleasanter to her eye and cheerier than it had ever been before. The flowers bloomed more luxuriantly, Tom had brought home new books and magazines, and an atmosphere of prosperity had grown about them. Singularly, though, while Hester was ill, the lamp seemed to burn less brightly, and to flicker and sputter in the most unwarrantable manner.

"It is a fairy lamp," said Rose, "a spirit dwells behind that transparent shade. It feels all our joys and sorrows. You must get well, Hester. Then it will astonish us all with its brilliancy. Do you notice how much better it burns already?"

Just then Tom came in. "Miss Harold wants you to drive with her, Hessie. She thinks a few drives in such air as we have to-day will cure you completely. And, by the way, I have invited her and Frank to come here to-morrow evening, and we will have a little supper and a game of whist. Frank is the best fellow I know. He seems to have gotten over that fancy about a Venus who appeared in his store and has never been seen since by mortal eyes. I

haven't heard him mention her for weeks. But just imagine how 'struck' he was. The last time he spoke of her he said that she had possession of him, and that he had the feeling that she was the girl who would suit him for a wife, and he wished he could find her. He's a sensible fellow on all other points. However, he seems all right now. We must have a nice supper, Rosie, oysters, salad, coffee, etc."

"Very well, brother," said Rose, demurely, as she warmed Hester's boots, and brought out furs and comfortable wraps for the drive.

Hester came home looking better than she had done for many days, and was enthusiastic in her praises of Lucy Harold.

"You will love her, Rose, I am sure; she is so refined and so kindly. I am glad that she is coming to visit us. I wish our carpet was a little fresher."

"It is very neat and in good taste," said Rose.

"I will send home a rug to-morrow," said Tom. The next day was a busy one in the Wilders' small housewifery. Tom sent home a handsome rug, rich in coloring, but one that blended well with the subdued tints of the carpet. Rose polished the brass andirons and Hester arranged flowers in the vases. Then the table was laid, with its pretty china and glass, and everything was ready for the expected guests. A servant had been added to their small ménage some weeks before, through Tom's thoughtfulness.

Rose, usually expeditious, seemed nervous over her toilette. She arranged and rearranged her curls more primly than she was accustomed to do, but they would luxuriate in their freedom, and escape from bondage and pins. Then she donned a pale blue cashmere gown and tied a ribbon of the same shade in her hair and fastened some roses at her waist. Hester was already in the parlor when Rose entered and looked very fair and sweet in her dress of lilac,

which Tom, who had just come in, had adorned with some graceful sprays of her favorite flowers of the same shade and name.

The bell rang, and Miss and Mr. Harold were ushered in by the small servant. Hester went forward to welcome them and introduce Rose, after Lucy had presented her brother, but he started in such a peculiar manner on seeing Rose, that Tom stared and then said, "What is the matter, old fellow?"

"Oh, nothing, nothing," Frank said quickly, and he began to comment upon the weather and other exciting topics to Hester, while his eyes followed Rose in surprise and admiration as she blushed under the scrutiny of his glances.

What a merry little supper it was! The china and glass glittered, the flowers shed fragrance, the fire glowed and filled the room with warmth and cheer, and the lamp—not once did it flicker or sputter—but its opal sparkled like a jewel and its roses blushed like living things.

When the meal was over and Hester and Tom and Lucy were chatting Frank said to Rose, "I have long desired to make your acquaintance—ever since you came and bought the lamp. But I did not know your name or where you lived." Then, turning to Tom, he said, "Here is the young lady of whom I spoke to you and whom I was so desirous to meet."

It would be difficult to describe Tom's consternation. His sister! his little Rose! nice girl she was. He knew no better. But where was the wondrous beauty he had heard described? He looked at Rose. She was a good-looking girl, that was a fact. Now that he thought of it, where were finer features, more bloom, prettier hair or teeth than Rose possessed? And where was there a blither, cheerier household goddess than his little sister? Then the proverb, "a prophet is not appreciated in his own country," passed through

his mind. How stupid he had been! Rose was a beauty, and no mistake. And he would lose her just as all her perfections were dawning on him. Still, Frank was a noble fellow, and if Rose liked him—why, he could not help himself.

It was evident that Rose did like him. When a girl, for the first time, meets a handsome, agreeable young man, whose principal ambition is to find favor in her eyes, she is naturally not insensible to his attractions. In the months that followed an attachment grew between them that was as sincere as it had been sudden on Frank's part.

One evening Frank said to Tom, "Thomas, I want to marry Rose. I have her consent; have I yours? Hester approves."

"Yes," said Tom, "although there is a slight objection."

"What is it?" said Frank, ruefully.

"I vowed that I should marry that girl you raved so about, if I ever found her. As she proves to be my sister, I am unable to carry out my kind intention."

Frank's face brightened.

That evening Frank and Rose were affianced in the presence of Hester, Tom, Lucy and the Lamp.

"Tell us the story of the lamp," said all to Rose.

"Well," said Rose, "it came from Frank's store. I saved the money to buy it out of my housekeeping fund. Do you remember, Tom, the time you said that I kept you on 'short commons?' Then I bought the lamp of Frank. I was so anxious to keep it a secret from Hester that I carried it home myself, and hid it away until evening. So Frank did not know where I lived, or that I was your sister. Then you began to stay at home evenings and all our happiness dates from that time."

"Tom," said Frank, "I want to make one suggestion to you. I think that, young as you are, you need spectacles."

"What for?" said Tom.

"Because," said Frank, "when I described Rose to you, as accurately as possible, you said you had never seen such a person."

"Hum—mm," said Tom, "I had a habit of looking at other fellows' sisters; but now I confess that mine can not be excelled by any, unless—I always was noted for politeness—perhaps, by yours," and he looked admiringly, at Lucy as he spoke.

And the lamp suddenly burned so brightly that the whole room was illuminated as never before. A ray of

color from the heart of a cluster of wild roses fell on Frank's fine face and touched with its soft glow the brown curls of Rose, and then, deepening the tint of Hester's cheek, it wandered to Tom and Lucy and painted them with its rich carnation.

Rose glanced from one bright face to another, and said, "Did I not say it was a fairy lamp?"

"It is Rose's own lamp," said Frank, "it was bought by her loving efforts; it has shone over home affection; it is, like her, the very spirit of Love!"



THE TEACHER REPROVED.

IN the *Journal of Education*, Boston, Esther Converse tells a good story which has its lesson for many teachers, such as are found in the public or district schools:

Milly held in her hand a package of photographs with which she had been entertaining me, her mother's guest. A face attracted my attention. "It is my teacher, Miss Cuyler," said Milly, regarding it lovingly. "She is just splendid—but, Miss Lyman, would you believe, *can* you believe that we really hated her when she first came to our school! Shall I tell you about it? It isn't much of a story, but it began when Miss Giles went away. Miss Giles was lovely, and when she went away we didn't want to love anybody else. We were determined not to like Miss Cuyler, and made ourselves as disagreeable as possible. The boys—you ought to have seen how the boys behaved! By and by, as Johnny said, Miss Cuyler 'got her back up,' and began to scold and punish awfully, but it didn't

do a bit of good. We just hated her, and wouldn't behave. But something happened one day that turned us all around, and that's what I want to tell you about—that one day last winter. One morning when we went to school the boys in the school yard were pelting each other with frozen pieces of food and griddle cakes that had been spilled from one of those horrid little wagons that go slopping around everywhere.

"There was a new boy in school—Chuddy Hopkins; isn't it a funny name! Nobody knew anything about him, only that he lived in Lumber Lane. He looked awfully poor. He wasn't the worst boy in school, but things seemed to fall upon him. Don't you know how it is sometimes? You are caught yourself when you don't deserve it half so much as some other girl. It used to happen that way to Chuddy; every little thing he did was found out, and pretty soon Miss Cuyler thought he was the mischief-maker. Chuddy was bad, but

then Miss Cuyler was horrid; every boy and girl thought so.

"The morning I am going to tell you about was one of the very worst mornings. You know how it is some days; it's hot, or it's cold, and you feel miserable. Funny things happen to make you laugh, or you get mad with the teacher or somebody, and nobody has a lesson, and by and by everybody is cross and naughty. I wonder what makes such days. If I were a teacher I'd just let the children go home if I couldn't improve things. That's the kind of morning we had before this dreadful thing happened to Chuddy, and Miss Cuyler was awfully cross. I haven't told you that somebody had been taking our lunches; we couldn't leave a thing in the cloak room. Just after recess Morgan Hubbard told teacher that Chuddy had stolen his lunch, and was eating it in school. We all looked at Chuddy, and such a guilty face he had! He denied it, but he looked as if he had taken it. Morgan said he was hiding it under his jacket and that he had seen him take three bites.

"Miss Cuyler pounced upon Chuddy, as usual, and told him to come to her. Chuddy wouldn't go. He sat near the front, and Miss Cuyler just pulled him out of his seat to her table. I can't tell you quite how it happened, but when he refused to unbutton his jacket, she jerked him around—you wouldn't think she could be so strong—and the poor old jacket came all apart, torn off him, and there Chuddy stood, naked to the waist! He hadn't a bit of shirt or anything; and—I almost can't tell you about it—I want to shut my eyes when I think of it, for right across his back were great red marks where he had been whipped!

"On the floor, with the old jacket, lay pieces of those old griddle cakes the boys had been throwing at each other. The room was perfectly still. Some of the girls cried. You ought to have seen Miss Cuyler. She didn't cry, but her eyes were full of tears

and her face grew white. She stood a moment looking at Chuddy. Then she put her arm very gently over his shoulders and said, 'Chuddy, I beg your pardon; I ask your forgiveness for my unjust suspicion and my cruelty.' Then she told us she had treated Chuddy unjustly and would try to make amends. I can't tell you all she said, only that we were excused. We went out softly, and were too frightened to stop and talk about it.

"We've been good friends with Chuddy ever since. He wore a new suit when he came to school again, and Miss Cuyler found a place where he could work for his board, so I don't think he is ever hungry now. He is a real good boy, and none of the boys trouble Miss Cuyler. But, then, Miss Cuyler has been very different ever since."

MOTHERHOOD.

If there is ever a time in a woman's life when she needs to give herself into the hands of an All-Wise Guide it is during the period of prospective motherhood.

The nervous system is, at this time, in that state of morbid sensitiveness in which every adverse word and look is noted and dwelt upon; and however brave and cheerful one is determined to be, trifles are liable to assume undue proportions, and before the individual is aware her serenity is disturbed and a lasting impression is transferred to the tiny creature for whose future welfare she is responsible.

What an amount of nervous irritability and bad temper mothers might save their children by the faithful carrying out of this simple rule. A mother's responsibility is awful. Few realize as they ought how much of the child's sin is to be laid to their charge. Bodily punishment is ever the result of wrong doing, and in its body must a child pay the penalty of a parent's sin.

What a thrill of joy comes to the

mother's heart when her child is first placed in her arms! There is no such rapture this side of Heaven! And yet, for the sake of a moment's indulgence in some unlawful temper, this fair image is marred and sent up to its Maker at the judgment day, tainted by the mother's selfishness, tinctured by her peevishness.

This beautiful earth was intended for the abode of a happy race of beings made in the image of God. Whenever a mother by wrong doing mars her offspring she defeats the original plan, and hinders the coming of the time when peace shall reign.

MRS. S. E. KENNEDY.

THE CHILD-IMAGINATION.

THE way in which children represent things is very interesting, especially those objects that are beyond their comprehension. Prof. Sully speaks of it in a recent essay:

Children's fanciful readings of things, as when they call the twinkling star a (blinking) eye, are but an exaggeration of what we all do. Their imagination carries them very much further. Thus they may attribute to the stone they see a sort of stone-soul, and speak of it as feeling tired.

This lively way of envisaging objects is, as we know, similar to that of primitive folks, and has something of crude Nature-poetry in it. This tendency is abundantly illustrated in the metaphors which play so large a part in children's talk. As everybody knows, a child describes what he sees or hears by analogy to something he knows already. This is called by some, rather clumsily, I think, *apperceiving*. For example, a small, oscillating compass needle was called by a child a bird, on the ground of a faint likeness of form and fluttering movement. M. Taine tells us of a little girl who calls the eyelids pretty eye-curtains. Distant and unknown things, for example, the moon, will naturally come in for much of this vivid imaginative interpretation. Thus

the moon, when reduced to a crescent, was said by a boy of three to be broken. American children described it ingeniously as half stuck or half buttoned into the sky. Similarly with sounds. The spluttering of coals in the fire was called barking by a little girl of four and a half years. The American children already referred to described thunder variously as a throwing down of toys, a shooting in of coals, and so forth.—*Popular Science Monthly*.

THE CHILDREN.

Only to keep them so,
Soft, warm and young;
The wee, feeble fingers,
The babbling tongue,
Tears that we kiss away,
Smiles that we win;
Careless of knowledge,
As guiltless of sin.

Only to keep them so,
Frank, true and pure;
Of our full wisdom
So lovingly sure,
Our frown all they shrink from,
Our fiat their law;
Our store, whence all gladness
They fearlessly draw.

Only to keep them so,
Sweet hands that cling,
Sweet lips that laugh for us,
Sweet tones that ring;
Curls that we train to wave,
Feet that we guide,
Each fresh step a wonder,
Each new word a pride.

Only to keep them so!
Women and men
Are the tinies that circled us
Lovingly then,
Gentle and good to us,
Patient and strong,
Guarding our weaknesses,
Bearing us long.

Tenderly mocking us,
Old thoughts and ways,
That scarcely keep measure
With life's rapid days,
Good to us—waiting,
Our sunset shows fair!
But, only to have them so
Just as they were!

All the Year Round.

THE SCIENCE OF HEALTH

BACTERIA IN WATER.

AN article by M. L. Grimbart in the *Revue Encyclopedique*, of Paris, furnishes an excellent conspectus of this interesting subject. An abstract of the article appeared in the *Literary Digest*, from which the following is taken:

"It is not so very many years ago that the only method of determining the purity of water was to subject it to chemical analysis; but water may afford no indication of the presence of mineral salts, nor even of organic matter; it may, indeed, present all the appearance of distilled water, and be declared by the chemist to be of equal purity, but may, nevertheless, on investigation by the bacteriologist, be found to be impregnated with the germs of fatal disease.

"It is admitted, in principle, that all waters contain bacteria of some sort, with the exception of springs coming from a great depth, which have been deprived of the germs in the original source by filtration through the soil. The rain as it falls is permeated with microbes taken up in the atmosphere, and even spring water after it comes to the surface is soon impregnated with decomposing animal refuse from various sources, constituting a favorable medium for the rapid multiplication of disease germs.

"Before submitting a sample of water to bacteriological analysis the first point to be attended to is to heat the bottle in which it is to be tested to a temperature of 212° F. to destroy any germs it may contain. The sample must then be examined at once for its bacterial contents, because multipli-

cation is extremely rapid. A sample of water from the Vanne (France) which contained 56 bacteria per centimeter when drawn contained 32,140 after twenty-four hours, and 590,000 after three days. At low temperatures the bacteria cease to multiply.

"Two methods are employed for the enumeration of bacteria, depending on whether one adopts a liquid or a solid medium. The adoption of a liquid medium is Pasteur's, but it has been employed by Miquel since 1879. The water to be examined is diluted to $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{1000}$, etc., with sterilized water. This method, although it has given very excellent results in the hands of its author, is fast giving place to the system of culture in solid media invented by Koch. The medium employed is a gelatin solution of such a strength that it will solidify at ordinary temperatures, but remain liquid at a temperature ranging from 100° to 110° F. This is what is known as a nutrient gelatin culture. If to a small volume of this liquid gelatin be added a cubic centimeter of the water diluted as above described, or not diluted, according to circumstances, and after intimate mixture this gelatin be poured on a glass plate to cool, it will solidify on cooling and imprison the germs contained in the water. Each microbe thus isolated begins to multiply at once, and to give rise to spots in the gelatin more or less apparent, and of a form and aspect varying with the species. These are called colonies (Fig. 1). After a certain time there will be as many of these colonies in

the gelatin as there were individual microbes in the cubic centimeter of

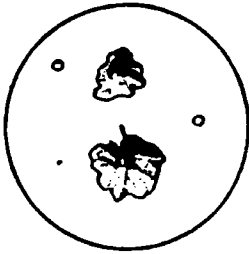


FIG. 1. MICROBE COLONIES.

water. This system appears much simpler than Pasteur's, but it has some serious drawbacks. The gelatin is liable to liquefy at a tempera-

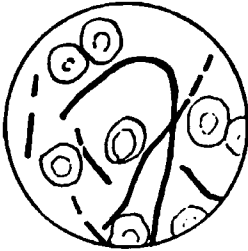


FIG. 2. VIBRIO OF GANGRENE.

ture above 82° , and some microbes have the property of liquefying gelatin.

"From experiments made by Miquel



FIG. 3. TETANUS.

it appears that the number of microbes in a given sample of water increases with its impurity, and that the water, whether of rivers or of springs, is found most impregnated during the rainy season. Ice is found to be impregnated with the microbes that were in the water; most bacteria,

whether pathogenic (disease causing) or not, being capable of withstanding a great degree of cold.

"But the number of microbes is a matter of little significance in comparison with their character. The enormous rapidity of increase, under favorable conditions, is such that if pathogenic germs are present their

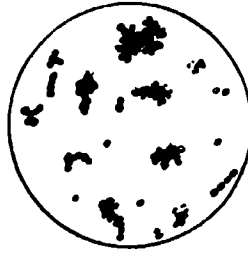


FIG. 4. S. P. ULCERS.

number is a matter of only secondary consideration.

"The principal pathogenic microbes which have been identified are here



FIG. 5. B. TUBERCLE.

illustrated. The *Vibrio septicus* (Fig. 2) is the cause of gangrene; the bacillus of tetanus (lockjaw) (Fig. 3) exists normally in the soil; the Staph-

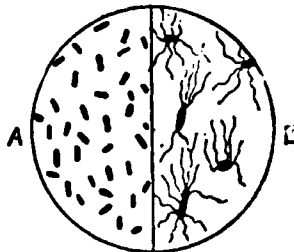


FIG. 6. B. TYPHUS.

Staphylococcus pyogenes (Fig. 4) resembles a bunch of grapes, and is

found for the most part in purulent ulcers, abscesses, whitlows, etc. The *Bacillus tuberculosis* (Fig. 5) is the



FIG. 7. B. C. C.

cause of consumption. The spores are sometimes found in the waters of certain meadows where diseased ani-

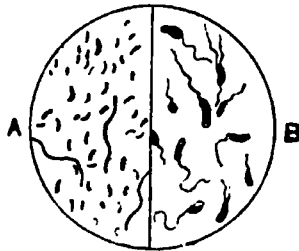


FIG. 8. B. C. MORBUS.

mals have been buried, and similarly in some wells. The bacillus of typhus

fever (Fig. 6) does not liquefy gelatin. Its movements are very lively, and when largely magnified (B) it is seen to be armed with long vibratory cilia. The *Bacterium coli commune* (Fig. 7), also furnished with vibratory cilia, is not unlike the last-named;

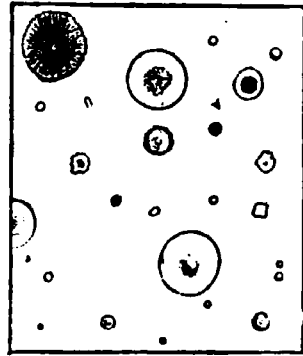


FIG. 9 C. COLONIES

but its presence in water, although evidence of contamination by sewage, is of no very grave significance. The *Bacillus virgale* (Fig. 8) is the vibrio of cholera morbus, and is found in the water of certain Indian rivers. Fig. 9 represents a series of colonies of this bacillus in gelatin, reduced to one-fourth the natural size.

SANITARY NOTES.

NO. 1.—BACTERIOLOGY.

WITHIN fifteen years a new world has been discovered—a world teeming with life and motion. The millions of living forms that inhabit this lower world hold an important relation to the higher plants, to the lower animals and to man. The microscope has made a new revelation to the world of science. Many of the old scientific theories are entirely abandoned. We used to believe that oxygen soured our milk. Now we know it never did. The changes that occur are caused by myriads of microbes. We used to rot manure by exposing it to oxygen. Now we have learned that the rotting is a process of breaking down the woody tissue by bacteria.

Bacteriologists claim that until within fifteen years the medical profession did not know the cause of disease. Within this time Pasteur, Koch, Steinberg and other workers in the field of microscopic research claim, or it is claimed for them that they have demonstrated, that the microbe causes disease. Dr. Bastian found myriads of living forms in decaying substances and so concluded that life sprang from decay. This supposed discovery excited great interest not only in the biological scientific world but in the theological world as well. Some scientists thought this must be the key to solve the problem of the origin of man. Bastian's theory was soon overturned by an elaborate series of

experiments of Tyndall arriving at an opposite conclusion, that, instead of decay, putrefaction and fermentation being the origin of living bacteria, the bacteria were the cause of decay, putrefaction and fermentation; that all organic matter, with life extinct, exposed to the air, was subject to attack and destruction by these bacterial agents. That Tyndall discovered the true law there is no doubt. Indeed it is as well established as any scientific problem in biology. Nor is there any doubt of the existence of this new world. These low forms are found in luxuriant abundance in the soil, in water and in the air. Their reproductive power is most wonderful. Professor Lau says: "These minute organisms will double their number every hour. When in good condition an average specimen of bacterium will produce 16,677,200 individuals in twenty-four hours. In forty-eight hours the offspring from a germ one-fifteen-thousandth of an inch in length will have increased in bulk so as to fill a pint measure and will exceed 281,500,000,000." These deductions are proven to be correct. Dr. Adametry, the Swiss savant, says that there may be more living, breathing creatures in a pound of cheese than there are inhabitants on the globe.

It is also a well established fact that some of the forms of these living bodies are parasitic to man. They are found on the body and in the cavities, as the mouth, the stomach, the intestines, etc., while the body is in a state of health. They are found in the discharges from all the emunctories of the body, and in the sanguiferous and capillary circulation in condition of disease.

The point of controversy now in scientific circles and among the medical profession is—are microbes really and directly pathogenetic, and if so, in what forms of disease, and to what extent? If it is true, as it is clearly claimed by Leslie E. Keeley, M.D., LL.D., that within fifteen

years the medical profession had no science of medical practice, and did not know the cause of disease, then truly the discovery that all diseases may be the result of parasites is of most vital importance to man's well-being, and for the ages to come Dr. Koch will take the place of Esculapius, who has stood for ages past as the father of medicine. This discovery, if true, must cause a revolution in medical practice. The physician will no longer study symptoms and seek the remedies indicated, but will find out what form of bacteria has invaded his patient's body and marshal his tactics to fight this microbe. If he is successful he will only need the one remedy which will kill the form of bacteria he is fighting. And as there are very few forms of disease bacteria he will need only a corresponding number of remedies; so the many hundreds of remedies now in use must lay on the shelf of the drug store, and the profitable business of the medical druggist will be a thing of the past. The majority of the medical world for hundreds of years have been in opposition to specific remedies; so, notwithstanding all the claims of bacteriologists in relation to the cause of disease, I do not look for any great revolution in medical practice.

Having the leading and well-established facts concerning the myriad forms of life in this new world, it is the duty of the scientist, and especially of the physician, to make the subject one of special study. Questions must arise and should be answered. What is disease? is a question as old as medical science. Yet the profession has never given it a rational answer. Nor have bacteriological scientists answered it. If bacteria be the cause, then what is the thing or condition caused? The cause and its effect cannot be the same. Physicians should study the complete biology of the world. All plant forms from the tiny bacteria to gigantic oak, and all animal forms

from the monera to man, have always been interesting fields of study. Just now biology will be of especial interest, as it threatens to revolutionize medical science. A. G. HUMPHREY, M.D.

ON "WHOLE-MEAL" BREAD.

THERE has been much talk of late regarding the properties and food value of bread made of whole-wheat meal. In England, according to the London *Caterer*, a section of the medical profession have condemned the use of whole-meal bread in any form, as favoring the degeneration of the arteries. Arteries are the vessels which convey the pure blood from the heart to all parts of the body. They are highly elastic tubes, and it is by their elasticity that they are able to expand to receive the contents of the heart. The maintenance of the normal circulation of the blood largely depends on the arteries retaining their elasticity, so that anything which lowers the elasticity of the arterial walls is decidedly injurious. It is well known that as old age advances the arteries become more rigid, owing to the deposit of earthy matter (lime) in the walls, and the circulation is materially modified. Whole-meal bread is popularly supposed to be rich in lime, and, therefore, presumably is favorable to the "atheromatous" degeneration of the arteries, as the condition is named. The same objection has also been urged against rice.

The doctors who make the objections to whole-meal bread on this account can not have examined whole-meal bread for lime. Whole-meal bread is deficient in lime. One pound of whole-meal bread (7,000 grains) only contains $3\frac{1}{2}$ grains of lime, and experiments have proved that the best wheats do not contain sufficient lime to support life. The mineral matter of wheat consists mainly of phosphates, the large proportion of which are alkaline. In 100 parts of phosphates from wheat are found:

72.54	parts of alkaline phosphates
20.08	" " magnesium "
4.99	" " calcium "
2.39	" " other "

so that wheat is comparatively poor in lime. Rice also is very deficient in lime. Whatever may be the effect of other vegetable foods, wheat is certainly not to be feared on account of a probable development of "atheromatous" degeneration of arteries. From other food sources is derived the quantity of lime salt that is necessary to supply the needs of tissue growth.

PURE FOOD.

THE chemist of the Department of Agriculture, Mr. H. W. Wiley, said in a lecture on food adulteration, delivered before the Franklin Institute:

Lying at the root of the question of food adulteration is the inquiry, What is meant by pure food? In the laws which have been enumerated, attempts have been made to legally decide what pure food is. Divested of all legal technicality, pure food is a wholesome article of food or drink which is sold and consumed under its proper name. With each particular article there must be established a separate standard which a consensus of experience with a great number of known pure substances in that list shows to be required. For instance, take the case of milk, which is one of the most common articles of food and perhaps has been more generally adulterated than any other one. Analyses made all over the world on hundreds of thousands of samples of healthy cows' milk have shown that the average content of solids therein is practically nearly thirteen per cent. A normal milk which falls below this standard shows some peculiarity in the animal giving it—either an incipient disease, deficient nutrition or some idiosyncrasy. The mixed milk of a herd of healthy animals will rarely fall below this standard. For

this reason the standard of twelve and one-half per cent. of total solids in milk has been adopted in most countries having laws on the subject. In some cases the benefit of the doubt is given to the vendor, and a standard is fixed at twelve per cent. Now, of these total solids a certain quantity in normal milk must be butter fat. It is not often that the butter fat of a perfectly healthy cow's milk falls below three per cent. of the total weight of the milk. It is much more apt to be three and one-half per cent.; hence, in fixing a standard of pure milk, not only must the percentage of solids be given, namely, twelve or twelve and one-half per cent., as the case may be, but also the quantity of fat contained therein. This percentage varies in different laws from two and three-fourths to three and one-half per cent.

In a similar method the standard of purity of any other article of food must be determined by a careful examination of pure samples from all quarters, and by then fixing a standard below which an article must be regarded as suspicious or adulterated.

FOOTBALL—ANOTHER PROTEST.

THE season for out-of-door games has again opened and football is conspicuous among them in the attention given by the sport-loving public. We have said certain sharp things already with reference to the conduct of this game in the collegiate matches, etc., and have challenged the interference of those who have the direction of scholastic affairs and of social morality, to suppress the dangerous abuses that have been permitted to grow and flourish in the game. During the season of 1892-93 there were in England, according to the *Westminster Gazette*, twenty-six deaths from football "accidents." Besides the encouraging information is furnished that among other "acci-

dents" there were thirty-nine legs, twelve arms and twenty-five collar bones broken, and many other injuries more or less serious were sustained by the emulous footballers.

The statistics of the game in this country are sufficiently rueful, for the same spirit in its prosecution rules among our young men as governs the game in England. Every match has its chapter of "accidents," with results of maiming and disfigurement.

To be sure, some of the college authorities have spoken out against the barbarities that are tolerated in the game, but in that half-hearted manner that has but little effect upon the managers of athletic movements. The latter appear to believe that there is a popular demand for vigorous work on the sporting field; that the thousands are drawn to witness an encounter between trained athletes in the football stockade just as the Romans of old crowded the amphitheater to witness the gladiatorial combats. They want blood; and the savage by-play that breaks heads and limbs, and requires the immediate presence of the surgeon, is but an essential part of the performance. In the old time young men were not sent to school or college for training in muscular development that they might meet in appointed matches for the pleasure and excitement of a promiscuous assemblage. The sports of the arena were a matter by themselves and did not involve much special training.

It has been a subject for wonder to us how fathers and mothers, who have sent their sons to college for the purpose of study, permit them to take part in athletics involving so much time for training and so much danger to life and limb in the public exhibitions.

Further, we cannot conceive by what warrant the captains or managers of the games subject the players to such dangers; certainly there is neither legal nor moral right in exposing a person to "accidents" that may cost his life.

H. S. D.

NOTES IN ANTHROPOLOGY.

Another Egyptian Discovery.

—The oldest gold ornaments thus far.—The Egyptological world, says the *Literary Digest*, has never been so startled as it was lately by the announcement that M. Jacques de Morgan, Director-General of Antiquities in Egypt, had found, in the pyramid at Dashur, not only the oldest pieces of jewelry ever found, but also that these treasures belonged to the Twelfth Dynasty, about 2500 to 2300 B.C.

The Gazette des Beaux Arts, Paris, speaks of Dashur as an insignificant village near the old necropolis, Memphis. "At this place four dilapidated pyramids were found, and many attempts, hitherto unsuccessful, have been made to enter them. M. de Morgan began his work by sinking shafts here and there, and soon found his way to subterranean passages which ran under the pyramids, where he found sarcophagi and mummies in great number, several pieces of mortuary furniture, Canopic vases, etc. Everything bore the royal cartouche of the Kings of the Twelfth Dynasty, Usertsen II. and III., and Amenemhat III. The most remarkable and beautiful pieces are the pectoral ornaments which bear the names of Usertsen III., Usertsen II. and Amenemhat III. Ninety-five pieces of jewelry, besides a great number of fragments and scarabei, etc., were found."

Dr. A. H. Sayce says, in *The Academy*, London: "At a cost of only £400 some of the finest and most costly antiquities ever discovered have been brought to light. They are new revelations of ancient Egyptian art. By the side of them the famous jewelry of Aah-hotep looks poor and degenerate; and they are so perfect and so fresh that it is difficult to realize that they belong to the remote epoch of the Twelfth Dynasty. But the treasures are but a part of the discoveries which M. de Morgan has made. Tombs and sepulchral chambers of hitherto unknown princesses of the Thirteenth Dynasty, and of nobles of the Sixth, huge sarcophagi of translucent

polished alabaster, and shattered fragments of temples long since destroyed, are among the spoils."

Dr. Sayce also reports that M. de Morgan, in the southern brick pyramid, found "the tomb of an unknown king, Horus Fu-ab-Ra, who may be the Horus referred to in Manetho's version of the Israelitish Exodus. One of the objects contained in the tomb is an ebony statue of the Pharaoh, nearly four feet in height. Besides this tomb he has also found another, that of a princess, which had never been opened before. In it there was another treasure of the Twelfth Dynasty jewelry. Even the golden diadem of the princess was upon her head."

The earliest relics of antiquity hitherto found were not earlier than 1600 B.C. No wonder, then, that *Le Bosphore Egyptien* says: "M. de Morgan: His perseverance, coupled with the true torch of the savant, has been crowned by results which have created a real sensation in the learned world."

Trepanning in the Stone Age.

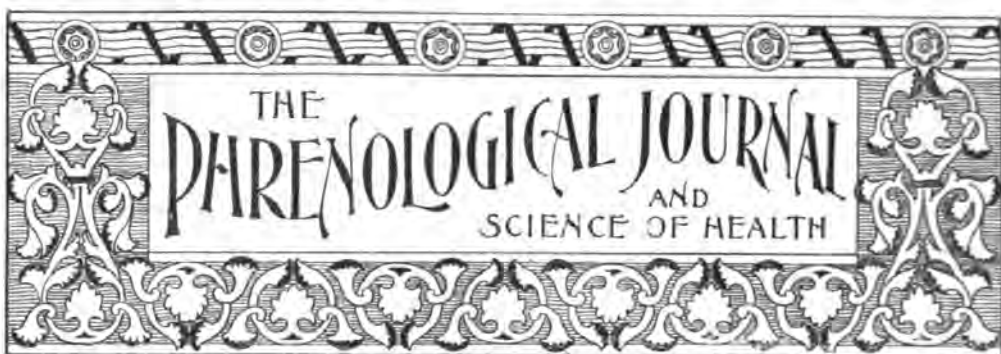
—One of the most remarkable revelations made of late years by prehistoric archæology relative to primitive man has been that of the extent to which trepanning was practised by the men of the polished stone age—the men who erected the rude stone monuments of which Carnac and Stonehenge are the highest expression. The race which practiced trepanning, as far as can be ascertained, entered Europe by the shores of the Baltic, from the Caucasus and Crimea, strewing the plains of Pomerania, Hanover and Gröningen with their monuments, erected out of the stones left by the rafts of ice that floated over these submerged plains in the glacial period. This race occupied Denmark and Sweden, crossed into Great Britain, and has left its remains in Scotland, Ireland, Wales, the west of England, Dorset, Wiltshire and Kent. It entered France, made Brittany its stronghold,

traced up the river to the central plateau of France, but never occupied the upper waters of the Elbe, the Rhine or the Meuse, was never on the Danube at all, and though it descended from the central mountains of France to the Rhone, yet never advanced far east beyond it. On the other hand, it crossed the Pyrenees, erected its rude stone monuments in Spain and Portugal, traversed the Straits of Gibraltar, and after setting up some circles and cromlichs in northern Africa disappeared altogether. What this race was is not known; it was not a pure one, for among the skulls found in the sepulchral monuments some are round and some are long headed; but in all probability it was a long headed race that had subjected other peoples, and had brought along with it wives and slaves of alien blood. The tools and weapons of this remarkable people are of beautifully polished flint, chert and jade. Pottery was also known among them. They did not burn their dead at first, but frequently scraped the flesh from the bones before consigning the remains to the sepulchre. The bones preserve the scratches made by the flint scrapers, and they are not always correctly placed to form the skeleton in the tomb, a left arm being sometimes put to a right shoulder; and sometimes important bones are missing. After awhile bronze became known to the people of the megalithic monuments. It was introduced from the south; it seems to have traveled up the basin of the Po. In the trepanned skulls, the openings, though not geometrical in shape, are quite regular; they approach more or less the shape of an ellipse, in length about 1½ inches, the sides are gradually reduced in thickness, and are always cut obliquely at the expense of the outer surface of the bone. These holes occupy different positions, some being at the side, some on the top of the head, but never on the brow or any portion not covered with hair. An examination of the edges of the wound reveals the manner in which the trepanning was effected. There remain the scratches formed by the slip of the tool employed, and the marks of the flint scraper which effected the operation. In the majority of cases the skull was mutilated during life, and it was done with

such skill as not to injure vitality. The tool employed seems to have been invariably a flint scraper with a sharp edge which was worked round and round the portion of the skull to be removed until the bone was cut through, when the disc was taken out whole; the process in an adult could not possibly have taken less than an hour. Apparently all the trepanned persons walked around with a soft spot in their heads. But sound skulls have been found with discs from other men's heads securely lodged within their own. These discs must have been introduced after death, and must have had a religious purpose. Prehistoric trepanning was also practised in America. There is in the Peabody museum a skull thus treated.

The Jews and Syrians Finding Refuge in Egypt.—

Mr. William Swing says, with reference to the movement of peoples in the East: Egypt, the land of ancient oppressions, is now once more the refuge of oppressed Syrians. As a province of the empire at the birth of Christ, under the strong hand of the Roman prefect, it offered a sphere for the activities of many Jews with good hope of sure returns. Of these advantages they were not slow to avail themselves, and in Lower Egypt they were to be found in considerable numbers. Tradesmen of the various crafts formed themselves into unions for mutual help and protection. . . . During the rule of a recent pasha Mount Lebanon was a district not without its dangers for men of education and ability, of venturous freedom of spirit. The fear of a dungeon and worse always before them, no wonder if they lifted their eyes in search of some retreat, whence they might still exercise some influence on the destinies of the mountain. Egypt had again passed under the power of the West, and beneath the paw of the British lion the hand of oppression was paralyzed. Not a few of the better classes of the natives of Lebanon may now be found there, pursuing their calling as physicians, dispensers, teachers, etc., occupying posts of trust and responsibility.



Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M. D., EDITOR.

NEW YORK, AUGUST, 1894.

TO SOME OF OUR CRITICS.

IN matters of abstract science a phrenologist may himself be an exceptionally severe critic, because his special studies constantly lead him to observe very fine distinctions, both as regards organic peculiarities and the language necessary to describe the subtle operations of the mind. But in dealing with people, in considering their frailties and shortcomings, the phrenologist, if true to his principles, must be the most charitable of men. He sees, or ought to see, more clearly than any one else, the limitations of human knowledge, so that in answering his adversaries he will forgive their faults and seek to correct them.

At the same time we believe in promptly exposing the mistakes of those who misrepresent us, and we now propose, in a spirit, as we trust, of mingled justice, kindness and cheerfulness, to examine some recent instances of a species of error into which public teachers have persistently fallen ever since the first announcement of Dr. Gall's discoveries nearly a hundred years ago.

In the *Brooklyn Eagle* of July 1st the following paragraph was published which appears to us to be even more "remarkable" than its author probably considered the specimen of our work to which he refers :

"The PHRENOLOGICAL JOURNAL has a remarkable article upon Susan B. Anthony. It says that 'her temperament is fibro-osseous.' That she has 'a predominant sincipital development of brain.' It remarks that 'she is incapable of enjoying many of the pleasures which she willingly renounces.' It adds: 'The arrows of Cupid fall harmless at her feet.' The discovery is further announced that 'the signs of connubial sentiment are wanting in the lower back head.' 'She will feel a mother's love and solicitude for the whole race, but will not directly share the joys and sorrows of little children. If somebody would only translate what the PHRENOLOGICAL JOURNAL says, Miss Anthony would become quite intelligible to the world.'"

In reply to this, we wish to say that the thought and purpose of any writer may easily be distorted by selecting isolated passages, or transposing and mutilating certain phrases. For example, let us quote a few words of

Scripture, using the peculiar method followed by the editor of the *Brooklyn Eagle*: "Judas departed, and went and hanged himself. Go, and do thou likewise." Now this, we think, is a very fair illustration of the discontinuity which characterizes the fragmentary sentences from the PHRENOLOGICAL JOURNAL which our critic has been pleased to publish.

In regard to the term, "fibro-osseous," to which the *Eagle* seems to object, we beg to remark that in our paragraph of twenty-six lines preceding the expression, we think we said quite enough to render the meaning clear even to those who are unfamiliar with the literature of Gall, Spurzheim and Combe. We did not directly say, as the *Eagle* states, "Her temperament is fibro-osseous." We previously spoke of bone and muscle, of lean, angular people, even going so far as to introduce the hackneyed reference to Cæsar's speech about the thinness of Cassius. Then we said: "In the fibro-osseous temperament, a predominant sincipital or coronal development of brain, as in the present instance, precludes all desire for frivolous amusements, etc."

From the foregoing passage it will be seen that we did not ascribe to Miss Anthony any "sincipital" development such as the *Eagle* mentions. We do not know what "sincipital" means. We have given some attention to etymological science, and in regard to this vocable, we are disposed to feel the same necessity for an interpreter which has probably moved the *Eagle* editor to suggest the need of a translator of our remarks. If the word "sincipital" signifies some occult, mysterious, or perchance for-

bidding, uncanny or ignoble attribute, and the *Eagle* editor really thought we applied this epithet to Miss Anthony, perhaps he may have been justified in a certain degree of conviction that our language was objectionable. We should be sorry to have appeared to describe so good a woman as Miss Anthony in any terms that might reflect upon her unjustly; and in our ignorance of the word "sincipital" we do not know to what depth of guilt the *Eagle* editor may think we have descended.

If it would not be impertinent, we might suggest that possibly the editor of the *Eagle* meant to quote our word "sincipital," and, being unacquainted with it, failed to spell it correctly. But as such a theory would be an insinuation against the erudition of our aquiline contemporary, we hesitate to offer it as an explanation, and merely beg to repeat that we have neither intentionally nor accidentally accused Miss Anthony of possessing any "sincipital" traits.

Now as to the "arrows of Cupid." We confess with a slight thrill of pride, that since our boyhood that phrase has been perfectly intelligible to us, and that we never should have believed it possible for a Brooklyn editor to feel the need of having it "translated." And to people who have only a slight acquaintance with phrenology, there is certainly nothing obscure in the statement that "the signs of connubial sentiment are wanting in the back head." We even think that this is easier to understand than some of the newspaper discussions we have read concerning the tariff, bimetalism, the McKinley bill, etc.

Finally, we admit that we said Miss Anthony would "not directly share the joys and sorrows of little children, although we believed that she had a broad maternal regard for the whole race. We fancied we had made this clear when we said that the lady's temperament "produces a degree of seriousness and dignity somewhat incomparable with the plasticity and playfulness of the infantile character." Perhaps the *Eagle* editor will understand us better if we say that women who are not fat, but who are very lean and bony, and who care only to read dry books all day and then make long speeches to big crowds at night, do not have much taste or find much time to play with little children.

But seriously, it is not quite fair to complain of a few technicalities or a peculiarity of literary style in a magazine which is professedly devoted to a particular science. Medical journals contain numerous words and phrases which are wholly unintelligible to the ordinary reader, but which are very simple to the members of the profession for whom they are intended. The same is true of the literature of chemistry, mathematics, electricity, or philosophy. Indeed, we think we keep the pages of the PHRENOLOGICAL JOURNAL comparatively free of technical terms. In describing the form of a head, we could often do it in a manner much easier for us by naming the various cranial sutures, the *auriculo-bregmatic line*, the *asterion*, the *inion*, *stephanion*, *pterion*, *ophryon*, *nasion*, and other anatomical landmarks. But we try to avoid such words where we think they would only embarrass the majority of our readers.

The real difficulty with the *Brooklyn Eagle* is more likely an impression that phrenology is a sort of pariah among sciences, and, therefore, a fitting subject for ridicule. But we venture to express the hope that our distinguished neighbor over the river will some day become acquainted with the wonderful science founded by Dr. Gall, in which, we can assure him, there are rich treasures that will enlarge his usefulness and add greatly to his enjoyment of life.

We will now devote a few moments to the *Christian Advocate*. In that esteemed paper of July 5th, in the column headed "ANSWERS TO INQUIRIES," occurs the following characteristic question and editorial comment:

"Q. 3989. About forty-five years ago phrenology was all the rage. In the West it seemed to be generally accepted, but for thirty years I have hardly heard a word of it. Lately the lecturers have been around again, selling charts, etc. Now what is the status of phrenology? Did it pass into the list of humbugs, or did it become an accepted science?"

A. Phrenology is sometimes distinguished as the old and the new phrenology. The old has not been accepted as a science. The old charts have no scientific standing. Yet science accepts the proposition that the brain is the chief organ of the mind; that certain parts of the brain are connected with particular manifestations. The best illustration is in connection with language. But the old method that mapped out the skull in spaces much smaller than those on the ordinary checker board, locating the organs under them, running the finger along a short distance and declaring that underneath it were the organs of time, tune, weight, order, and color; dividing up the memory and feeling here for eventuality, there for individuality, and there for locality; distinguishing alimentiveness,

philoprogenitiveness, combativeness, veneration, and human nature, and so forth, to above sixty cranial divisions, has no basis in science."

Now this worthy editor, we are sorry to say, is evidently unfamiliar with the facts in the case. In saying "Phrenology is sometimes distinguished as the old and the new," he refers to a distinction which some of the modern physiologists have attempted to make between the old, only and true phrenology, and a few comparatively unimportant discoveries they have made concerning the location of certain *motor* centers in the brain. When they find the nervous mass which enables a dog to wag his tail, or a pigeon to flap its wings, a rabbit to swallow a bit of cabbage, or a frog to leap, they seem almost as much elated as if they had discovered a new continent of the earth. Some of these *motor* centers are of considerable value in surgery, and perhaps the greatest thing that can be said to their credit is that in many instances they corroborate the localization of Gall and Spurzheim. But for the physiologists to apply the term *phrenology* to the results of their electrical experiments is not only impertinent, but unscientific and inaccurate in the highest degree. *Phrenology*, both etymologically and historically, means science of the *mind*, and relates to the propensities, sentiments and intellectual activities of human nature as distinguished from the mechanical functions of the organism. Hence there is no propriety in speaking of a "new phrenology."

The old phrenology is to-day essentially the same system as it was sixty years ago. Half a dozen faculties

have been added, but the thirty-five primary mental powers then recognized by Spurzheim and Combe remain with scarcely an alteration even in name. Various additions have been made to the literature, and many new applications have been made of the science. But its principles are unchanged because they are true to nature.

The *Advocate* says the "old" phrenology has "not been accepted as a science." By this he means that it has not been accepted by the professors in the conservative colleges. Neither has Protestantism been accepted by the College of Cardinals or the Pope, but the *Advocate* would hardly consider that circumstance an objection to the creed of Luther and John Wesley.

Now as to the "old method that mapped out the skull * * * to above sixty cranial divisions." How the *Advocate* has multiplied the thirty-five faculties of the "old" phrenology, or the forty-three we now recognize, into "sixty," we do not understand, although it is perhaps no more than we should expect from a critic who is obviously unacquainted with the subject.

He speaks of "feeling here for eventuality, there for individuality, and there for locality." This sounds as if he labored under the old "bump" delusion. If he will allow us to correct him, we will say that we rarely need to touch a forehead to estimate the faculties he has named, because the developments are indicated by variations in the proportions of one part of the forehead as compared with another, and can be measured by the eye. We respectfully and earn-

estly request our critic to compare the portraits on another page, of Margaret Fuller and Florence Nightingale. He cannot fail to see a striking difference in the upper temporal *diameter* of the two foreheads at Ideality, although he will perceive neither a "bump" in the one nor a hollow in the other. Then, if he will remember that all profile developments are measured by distance from the ear opening, he will at least begin to understand how grossly phrenology has been misrepresented.

Lastly, he says the phrenological mapping "has no basis in science." He is doubtless utterly unaware of the fact that Gall, Spurzheim, Combe, Vimont, Caldwell, and hundreds of their followers have observed millions

of evidences of the doctrine. Gall and Spurzheim proved their discoveries over and over thousands of times. No one who has not seen their superb books can appreciate the value or extent of their labors.

Suffice it for the present to say that the method of Gall *was scientific*. He observed that certain forms of brain accompany certain radical mental qualities, and he repeated his observations until all the demands of the scientific method were fully met. To deny that he did this is simply to show a lack of information on the subject. We advise our critics to read the literature of Gall, Spurzheim and Combe before they denounce phrenology again.

A BRIEF STUDY IN EYES.

WE give herewith two illustrations which very faithfully represent the eyes of two distinguished persons, and we hope to point out certain peculiarities in them which we think will be of especial interest to young bachelors and maidens. But by way of preface, we wish to state that in the observations which are to follow, and in all of our subsequent writings upon the subject known as physiognomy, we wish it distinctly understood that we do not separate the science of Lavater, as some have called it, from that of Gall. We include under the term Phrenology all that is of value in physiognomy so called, regarding the latter merely as an aspect or department of the former. Our definition of Phrenology is very similar in scope to the idea we associate with the term medicine as applied to the

medical profession. The education of the intelligent physician comprehends a vast deal besides the knowledge of drugs, and a phrenologist would be very narrow indeed if he knew nothing of the human organism beyond the topography of the brain centers and the names of the mental faculties.

The subject of love is as interesting as it is old, and as important as it is interesting. Surely young people who are thinking of marriage, either as an immediate or distant probability, should be glad to learn those signs of character which throw light upon the quality of constancy. Conjugal fidelity is a great theme with lovers both young and old. Tremendous consequences hinge upon loyalty to the marriage vow. There is something a long way behind and below the anxiety of the young lover to

know whether his sweetheart is going to be true. The lover perhaps imagines that his feelings alone are

immense safeguard to the integrity of our whole social system, and relates to interests which will continue



THE MONOGAMOUS EYE.

to be considered, or that his happiness alone is at stake; but the instinct

throughout the entire future of the race.



THE POLYGAMOUS EYE.

which takes account of singleness of love between the sexes serves as an

In the first pair of eyes, which are copied from the photograph of a cel-

celebrated English woman, even the inexperienced observer will recognize an expression which he will naturally associate with sincerity, candor and truthfulness. This form of eye may be said to be almost typical of woman as she exists to-day in the highest civilizations. The owner of these eyes is, in our estimation, one of the noblest women in the world. She is singularly devoted to her chosen work, and the development of Conscientiousness, as shown in the form of her head, is probably the most perfect which we have ever personally examined. Furthermore, from what we have heard of her history, we have good reason to believe that her loyalty to the only worthy man she ever loved was most extraordinary.

We might describe this form of eye in brief as the round, or dove eye. Its peculiarity is chiefly due to the form of the lids, and not to the shape of the ball. Few people seem to be aware of the fact that eye-balls are essentially of the same form in nearly everybody. We shall probably, on a future occasion, have much more to say concerning the philosophy of the round eye in relation to constancy in love. We will now only remark that the action of certain muscles is associated with the exercise of certain faculties.

In the second illustration we have a type which is quite the opposite of the first. These eyes belong to a United States Congressman who has recently acquired an especial notoriety on account of his admissions that he was not a monogamist in practice, whatever may have been his theories and precepts. We have no desire to

assume the attitude of a censor in this case, and prefer to discuss the subject merely from a scientific point of view. These eyes, we may say in general terms, are characteristic of the oriental nations who, for the most part, are polygamists. For example, they are quite common among the Chinese, Persians and Turks. The distinguishing feature is a flatness of the commissure, or opening between the lids. Brigham Young had eyes very similar to these, and they may be observed very frequently in men who are addicted to frivolous amusements and the indulgence of the appetites, rather than moral and intellectual pleasures. Almost the same form of eye may be seen in the photographs of the well-known son of one of the oldest female sovereigns of the Old World. It need scarcely be added that the top head on a line with the ear, at the seat of Conscientiousness, in these cases usually presents a very precipitous slope.

Now in conclusion, we would advise young men and women who expect to marry, to beware of such eyes as those in the second illustration. Still, we must not be understood as saying that one isolated sign should decide the question. We mean simply that a person who has the polygamous form of eye should be carefully studied, and that the opposite sign should be taken as evidence in favor of its possessor. There are exceptions to the rule we have stated, more apparent than real, however, and we regret not having the space at present to explain them. But we think a word to the wise will be sufficient.

TO STUDENTS OF HUMAN NATURE.

WE wish to call attention to the thirty-first session of the American Institute of Phrenology, which opens on the fourth day of September. More than five hundred bright men and women have been graduated since the school was incorporated in 1866; and as a result of work in the lecture field, in the professions of divinity, law and journalism, as educators, from the presidency of colleges to numerous popular public schools, and also in commerce, these graduates have made their mark with double their former power in guiding their clients to improved personal culture, the right selection of life pursuits and the choice of proper associates in business and in marriage.

To understand one's own character is the highest attainment of knowledge. To know others correctly is

a passport to success, wealth and happiness. A knowledge of human nature augments, ennobles and enriches life. It multiplies individual resources and the power to influence for good all who enter its radiant sphere.

The teachers of this oldest phrenological institute in the world, with the largest experience and the most extended and complete outfit for instruction ever gathered for the purpose, are prepared to impart to students all the assistance they need to equip them for professional duty and the achievement of reputation and success. It is believed that the season of dullness and disturbance in the business world is about to be changed to general prosperity, and that a cordial welcome awaits graduates to a field of effort full of promise.



Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address.

ALL CONTRIBUTIONS MAY BE SENT TO THE GENERAL editor, Dr. Edgar C. Beall; but matters relating to CHILD CULTURE, SCIENCE OF HEALTH, or of a strictly medical nature, should preferably be sent to Dr. H. S. Drayton, who has special charge of these departments.

WE ALSO EARNESTLY REQUEST OUR CORRESPONDENTS to write as legibly as possible. Wherever practicable use a typewriter. In this way you will lighten labor, avoid misunderstandings, and secure earlier attention.

"SCIATIC" RHEUMATISM.—A. L. O.—Sciatica, sometimes called sciatic rheumatism, is an affection of the great sciatic nerve, the largest nerve of the body, that runs from the back part of the hip down the leg to below the knee. It is caused mainly by exposure to cold and dampness, or may be due to strain or physical debility. Often the pain is very severe and resists treatment, this especially if the disease has its origin in the spinal connection of the nerve. To treat sciatica we must know its cause and the condition of the patient. A good diet and a careful routine of daily habits are important. Local applications to relieve pain and soreness include electricity (galvanic), massage and sedative lotions. We do not

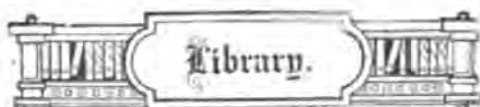
approve hypodermic injections, blistering or the cautery.

INDICATIONS OF QUALITY.—Inq.—If you will consult the later treatises on phrenology or temperament you will find that differences of quality present physiological indications that are recognized without difficulty after some experience in observation. The structure and character of the skin, muscles, bones, hair; their fineness, density, size, softness, tension, grain, hardness, rigidity, etc., bear a close relation to the quality of the general organization, and intimate the natural tone and growth of brain and nerve. The thickness of the cranial bones and of the brain membranes, the density of the brain substance itself and the susceptibility of the organic functions may be estimated with much accuracy by these structural characteristics. Those who deny that quality cannot be estimated by external indications, or "surface marks," are simply unacquainted with the indications. They can as rationally deny that the good forester is unable to determine the character of timber by the showings of the bark.

SLEEP AND STRENGTH.—S. P.—The exact amount of sleep required by a person depends upon his or her temperament. Some can get along very well with six hours, others require nine. Habit has much to do with the matter, to be sure. Mr. Edison is quoted as saying four hours is enough, but Mr. Edison is not a physiologist, nor yet a hygienist, and if he be accustomed to follow such an opinion he will rue it ere long in broken health and nerve weakness. A man, whatever his constitution, cannot habitually abridge the period necessary to recuperation, even by a short time, without doing serious injury to his physical and mental faculties.

NECESSITY OF SUNDAY.—G.—Yes, we believe in the Sunday rest as a very important human need. Divinely appointed or not, in the scriptural sense, it is a physiological ordinance that bears upon the welfare of society in both its physical and psychical relations. Constant labor is exhaustive. Taking one day in eight has been tried and found insufficient. One in seven appears to be the fair medium. But by rest we mean that change from the routine of the six days that affords repose and recuperation to the brain and muscles. Thousands of people in our cities consume more nerve force in their Sunday excitements and so-called diversions than in two or three days of ordinary work. Society needs a great change in the prevalent Sunday methods or we shall witness an unhappy degeneration in the mental and physical health of the masses. Who will say that many of the abuses and vices now so manifest in the life of our people, especially the younger portion, are not due to Sunday excitement and strain?

THOUGHT COMMUNICATION.—W. S. D.—Your principal's statement is opposed to the generally received psychology and the fundamental doctrines of education. Practically applied in the extreme analysis it would appear that, if one could not receive a thought unless it already existed in his or her mind, or awakened something of the same character that was there, children possess all the thoughts or ideas that are imparted by so-called education. They are not instructed, therefore; but only the recipients of hints and suggestions that awaken to conscious recognition or express ideas and thoughts stored up already in their sensorium. Strange, on this theory, that children must commit to memory so much of their text-books and examples. Strange, too, that so much of what people say and do is nothing more than repetitions of what they have memorized and acquired in form and manner from others. Faculties differ in their mode of receiving and using ideas according to the individuality of inheritance and the impressions of development, but faculties uneducated, untrained, show little power to receive or understand thought, however communicated.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

THE INFLUENCE OF THE ZODIAC UPON HUMAN LIFE. By ELEANOR KIRK, assisted by J. C. STREET A.B.N. 16mo, pp. 179, cloth. Price \$1.50. Brooklyn: The Idea Publishing Company.

It would be easy to dismiss this well-written book with a sneering reference to the reappearance of another bit of ancient imposture, but on looking at the authorship and noting the name of a writer who won reputation years ago for her love of the true and of culture we turn over its leaves with some curiosity. We remember that the great Kepler accorded to astrology the position of a science, and that a distinguished professor of it was admitted into the court circle of Charles I. Palmistry has been taken up by a host of the educated in these later days, and why should not astrology, that after all has some principles at the bottom which deserve respect, be accorded similar attention. The writers of this book certainly place the subject in a felicitous light, and show clearly enough certain moral relations between the stellar world and the mental nature of man. The spirit of the teaching in it is elevating. We may not accept the formulated significance of the wonderful calendar that finds place in the book, but we do perceive not a little truth in a summary of this kind:

"The progressive student will soon find that his power depends upon the harmonious development of his natural genius and the establishment of true polarity. He will live each day a willing server, his mind ever fixed on the boundless opulence of nature, able to look steadfastly through nature up to God."

If the study of astrology will quicken the

ethical pulse and make the heart warmer in its aspiration toward goodness or perfection we should incline to accept it as at least an aid worthy of consideration. Perhaps to some people such a book as this would be a beneficence—getting, as they might, much more than they expected from it.

THE WONDERFUL LAW. By H. L. HASTINGS, editor of the *Christian*. Published at the Scriptural Tract Repository, Boston, Mass.

In this compact volume the author has given a comparative analysis of the ancient laws of the Jews. He shows how the prescriptions of Moses embody principles of the highest economy and virtue, not only adapted to a people living in a remote past, but in most, if not all, particulars to the welfare of the modern community. The spirit of the "Wonderful Law" appears to have a permanent character and a remarkable relation to the people who exhibit the same physical and mental peculiarities to-day that were theirs by historical evidence twenty-five hundred or more years ago. The book is interesting in both its rational and historical sides.

THE AMERICAN FAMINE OF 1893-94, by Rev. JAMES C. FERNALD, author of "The Economics of Prohibition," strikes the vein of fundamental truth which professional economists are too much inclined to treat lightly in discussing social distress and misfortune. We refer, of course, to the vice of drink. Whether or not the great financial depression could have been avoided were there no dram shops we are not prepared to say, but are certain that were there no dram shops our population would not experience a tithe of the misery

and distress that are attendant upon every period of commercial stagnation. The pamphlet contains important statistical information, the result of careful, painstaking labor. It should be read by teachers, preachers, editors and voters in the land. Price 10 cents. J. N. Stearns, Publishing Agent, New York City.

NEW OCCASIONS, for June, contains "Locomotion and Its Relation to Survival," an admirable paper by Dr. M. L. HOLBROOK. In this essay the author discusses, with much care, the biological facts of muscle growth, and then proceeds to show by argument and illustration what facility of movement in the air or on the land has to do with development of higher organisms. Turning to the human being, he shows what physical culture, the education of muscle and form, has to do with health and competence in body and mind. Thus an excellent hygienic lesson is read concerning the importance of exercise to human welfare and true success.

ON SYSTEMATIC HETEROPHORIA. By JUSTIN L. BARNES, B.S., M.D., Assistant Surgeon to the Manhattan Eye and Ear Hospital, etc. Reprint. New York.

A fairly considered topic, which, it should be said, occupies a conspicuous point of discussion among eye specialists. The position taken by Dr. Barnes is that of moderation, both in the examination and treatment of the eye defects that are classed under the title given.

WHAT HE THINKS OF IT.—"I am a recent subscriber to THE PHRENOLOGICAL JOURNAL, but I must say that it comes nearer to giving value received than any other periodical I know of. Respectfully, C. E. PAYNE, North Dakota."



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CHARLOTTE FOWLER WELLS

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CHARLOTTE FOWLER WELLS.

A PHRENOGRAPH FROM A PERSONAL EXAMINATION.

BY EDGAR C. BEALL, M.D.

"Auf jedem Gipfel ist Ruh."

NEXT to the supreme joy of living a life of devotion to a lofty ideal, the greatest pleasure is to commune with heroic souls who have climbed the heights which we can only see, and whose brows are radiant with the mellow light of peace. But if this privilege be denied us, we can still derive profit and delight from the study of a noble example.

Distance cannot sever the bond of sympathy between those who earnestly seek, and those who have found the greatest jewel of this world—the consciousness of loyalty to the highest duty—nor can time dim the brightness of a spirit ruled by kindness and charity to all mankind. Goodness is immortal. Our eyes may be blind to its presence, but it is a part of the Eternal, and we can always see it if we look up. No matter if the incarnation be real or ideal—a luminous figure of tradition, or a breathing companion of our daily toil. If we only seize the thought, its warmth will reach our hearts.

It is, therefore, with a peculiar pleasure that we attempt to describe the character of Charlotte Fowler Wells—a woman who has

probably never had a personal enemy in her long life of four score years, and whose friends, if the whole world knew her, would include all the good people of every clime.

Mrs. Wells would attract attention in any company, although she might remain seated in silence with folded hands. Her face bears a stamp of superior gentility which cannot be mistaken, and which charms by its rare purity, like the soft luster of a perfect pearl.

Her head is of the full size, measuring twenty-one and a half inches in circumference; and a moment's glance at the silken hair and the delicate skin will suffice to show that the quality of the brain is unusually fine. The temperament is that phase of the mental, or encephalic, in which the nervous system is exceedingly sensitive throughout the whole body, thus producing a remarkable capacity for receiving impressions of every kind, together with the most acute sensibility to pleasure and pain, responsiveness of emotion and alertness to the slightest signal from the realm of the unknown. She has such confidence

in the all-conquering force of truth that she cannot resist the belief in the final triumph of every good cause. She is never surprised to learn of a victory for the right; and if she hears news of defeat she will only reply, "Other days are coming; wait until the end." With this optimistic view of life she instinctively labors for the noblest and the best, and her whole nature becomes attuned to this dominant chord. Her belief in goodness sits like an enthroned monarch within her brain, and issues mandates to every fiber of her being. It thus silently sustains her amid grief and disappointment and enables her to resist physical disease.

Few women have a greater wealth of affection. She is exceedingly devoted to all that is implied in the idea of domestic life. She is also deeply patriotic. She is thrilled by the hymn, "My Country, 'tis of thee," and the sentiment of "Home, Sweet Home," finds in her heart a quick response. The maternal instinct is one of her ruling traits, and has not only made her lovable to the members of her family, but has endeared her to all the many hundreds of students who have learned from her during her long career as an instructor. It was doubtless this element which prompted her in her youth to become a teacher of children, and which later influenced her to organize the first class in phrenology ever taught by a woman. She was born a philanthropist, and nature so endowed her that her sympathy has not only gone out to others, but has drawn their hearts to her in return.

She is not a belligerent woman. Destructiveness and will-power are full. She has the spirit of industry, and enough courage to use the machinery of war when dealing with enemies that must be repelled by force. But she greatly prefers a policy of arbitration, and will resort to severe measures only when all other means have been exhausted.

The sense of acquisition is weak.

She thinks of money only as a means; but if she owns a thing of intrinsic value, she may prize it as highly and preserve it as faithfully as those who are moved by the mere sense of possession. This is due in part to her peculiar temperament, and to her strength of attachment. Veneration also exerts an influence here. All that adds to happiness or comfort is hallowed in her eyes, and objects become almost sacred by association. Whatever penetrates the aura in which she dwells quickly arouses her either to a sense of warm friendliness or a chill of indifference; and when she takes sides in favor of a thing it is no idle choice. Thus she can guard a treasure with the greatest care, but if the time comes to dispense it she can give it out with lavish generosity.

Another of her virtues is the rare gift of patient application. She can finish a tedious task without permitting an interruption, but if obliged to stop she can return to her work without that confusion which is peculiar to people of little discipline.

Secretiveness is moderate, and is manifested only on the negative plane. She lays no snares and wears no masks. That is to say, she can refuse to disclose her thoughts, but she has no love or talent for concealment as an art. She naturally represses expression whenever attacked, but it is simply a retreat within her castle, the gates of which she declines to open.

Cautiousness is one of her most conspicuous qualities, and it would be difficult to find a more modest woman. The lack of confidence in her talents has handicapped her through life, and but for the aid she has received from phrenology she does not believe she could ever have assumed the responsibilities she has carried so many years. Self-esteem being so deficient, her regard for approval has been doubly acute. But she has not so much the desire for fame and distinction in the world at

large, as a love of the good will and sympathetic response of those with whom she is associated.

The sense of justice, reverence, faith, hope and charity are all exceptionally strong, and are shown in the almost perfect coronal development. Few heads are ever found with such a symmetrical arching of the superior portions. In the portrait the lateral regions seem much broader than they are in reality. In fact the head is long and narrow when seen in profile or from above, and the width in the temples is chiefly due to the sense of mechanism. This appearance is also partly caused by the relative size of the brain in comparison with the lower face.

Sublimity is rather large ; love of beauty is fairly developed, and sense of the ludicrous, and judgment of shape, distance and motion are all very influential. Order is large, as are also the higher reasoning powers. She is philosophical in her methods, and naturally first considers the principle involved in a question. She cares more for matter than manner of expression, and believes that words have value only as they are couriers of thought. But the serenity in her character is the quality which most impresses those who meet her. It is not a quality which all appreciate, but it is one which all must observe. It is a repose which betokens a position upon high ground ; and though not a mark of great honor in the eyes of the selfish and cruel, it is the seal of a happiness which only those can know who have attained victory over the baser and cruder things of life.

Mrs. Charlotte Fowler Wells was born at Cohocton, Steuben County, New York, on August 14, 1814, and it is partly in honor of her eightieth birthday that we present her in the *PHRENOLOGICAL JOURNAL* at this time. The publishing business of which she is now the head was established sixty-two years ago, and she has been

identified with it almost from the start. During many years, before her brothers resigned from the firm, Mrs. Wells was the ruling spirit in the house while her brothers were absent on lecturing tours, so that she has been remarkably diligent as a business woman.

There is scarcely any department in the phrenological field which has not been graced by her active presence. She began as a practical examiner, and as an assistant in the publishing business, and she has been a factotum in the establishment for half a century. She has served as proofreader, writer, editor, business manager and instructor in the American Institute of Phrenology.

She was married to Samuel R. Wells on October 13, 1844, and her wedded life, though not blessed with children, was singularly happy. Her husband was a man of rare gifts, both physically and mentally. He was a handsome man, capable of winning friends among all classes, and as they worked together in a cause which was equally dear to them both, the union was in many ways the realization of an ideal.

Mrs. Wells has been a member of the select woman's club called Sorosis during the twenty-five years of its existence, although she has been too closely occupied with her immediate duties to give to that organization very much of her time. She has also been an active trustee of the "New York Medical College for Women."

We are highly pleased to know that Mrs. Wells, in spite of her years, betrays no evidence of failing health, and we are sure all readers of the *JOURNAL* will join with us in congratulating her upon having passed so far beyond the age attained by the great majority of our race. We also earnestly hope that with every recurring 14th of August for many years to come we may be permitted to repeat our expressions of the pleasure we feel to-day.

A PLEA FOR VOICE CULTURE.

BY MARY SHAW.

THE scientific facts of tone producing, the correct breathing, the muscular expulsion, the play of the vocal cords, and the forwarding of the column of air converted into sound, can be easily demonstrated in a few minutes; but the actual performance of these things is quite another matter, requiring months, sometimes years, of intelligent practice. After pure tone is once produced, then follows its use through all the subtle and varying phases of expression. We must master resonance, rhythm, volume, quality and modulation, with all the wonder, grace and beauty of stress, of flexibility, of intonation, of enunciation and of word painting through the beauty of the open vowel and the rugged strength of the consonants. These and countless other things in the mechanism of voice expression are freighted with meaning, and any adequate treatment of the subject of the human voice requires that all these shall be clearly set forth.

Of the singing voice there is no need to speak. It speaks for itself in clarion tones that sound along the high places of the earth. The world is full of earnest, loving workers in its cause.

But while the choir, the concert hall, and the operatic stage show forth wonders of delight and perfection, the pulpit, the senate, the bar and the stage are filled with abominable mouthers, mumblers and chanters of monotony. What is the reason for all this indifference? It is lack of conscience. The art of speaking, like the art of singing, rests upon exact laws. And law implies conscience just as surely as heat implies motion. The conscience of the singing voice is alive, active, eager and imperative. The conscience of the speaking voice is, if not dead,

at least sleeping soundly. What miserable sinners we all are against its simplest laws! How content we are with our audacious ignorance and wilful indifference! How little sense of guilt we feel at burying this one talent of ours! Nay, we are even murderers of speech. If you doubt this, watch a thought as it tries to spring forth from the soul. We fall upon it, strangle it, bite it in two, attempt to swallow it. The victim escapes us at last, and limps forth as embodied thought, but so maimed, distorted and twisted out of shape that the listening soul of the hearer can not comprehend. We need self-examinations to awaken our intellectual and artistic conscience. There is no greater pleasure or profit to ourselves or the world than to know, and then to speak well what we know.

Where shall we begin to build up the intellectual and artistic conscience? In the cradle. And then we should foster it steadily through life. If we are under any impression that this gift can be ignored, neglected and abused during the formative period of youth, when the soul's forces are being marshaled, trained and equipped for the battle of life, without serious and lasting injury, we are entirely mistaken. If any one tells you that at any period of your life, when the mood happens to strike, you can undo all your faults of speech by a few months' training, a little reflection will show you that it is not true. Even if you could give as much time to the correction of faults as was occupied in the formation of them, which is nearly every minute, every day for many years, even then you could not accomplish such a result. In childhood the pliant throat grew in structure to fit your deficiencies; the membranes toughened to resist inflammation; the cords and muscles hard-

ened or relaxed to the measure of your vital power. At twenty all is quite fixed for life. No structural change can be brought, about no matter what the effort. The only voices that are susceptible of great cultivation after that period are those whose natural organs are fine and whose faults are few and superficial. This is the painful truth, and every teacher worthy of the name knows it well. Then why juggle with the truth? Why lure any soul with promises of the impossible? Why help to swell the ranks of professions already overburdened with incompetency, by encouraging the vanity of people whom nature or circumstance has forever debarred from excellence in that field? The gods have a curse for those who show another the wrong road. What the teacher can do, even when things are at their worst, is still wonderful enough to pay for all the time and money that can be spent on them. She can bring some measure of meaning out of chaos, some proportion of elegance and distinctness into speech. She can unfold the beauties of speech to the mind and stimulate the ear to undreamt of harmonies.

You see, then, that in the awakening of conscience we must begin with the infant. Talking baby talk to children is a crime against them. If trained to utter its thoughts in perfect speech the diction of a child of five is as finished in its limited vocabulary as that of a cultivated adult. But children are subjected to a worse condition than no training. They are deliberately trained to errors. The false models of the family are bad enough, and they are supplemented by daily intercourse with ignorant nurses and servant girls, who usually speak in dialect. Then the teacher steps in to help complete the ruin; the accumulated wisdom of the ages is piped at them in husky, dry, repressed squeaks, or poured forth upon them in harsh, unnatural tones of endless monotony; a simple statement is launched forth in aggres-

sive tones that would befit the edict of a Cæsar; an unimportant question is lifted out of its proper pitch and surcharged with tone until it takes on the majesty of a judicial examination of a prisoner at the bar. The inevitable result is seen in all schoolrooms. The children speak in a false key; they shout back answers; they chant matter-of-fact statements; they read the most beautiful thoughts in a dull monotone. They are already quite like grown people, in that they see no connection between the variety, beauty and strength of the thought and its outward expression in speech. And so, when they stand on the threshold of manhood and womanhood, the throat is quite hardened, the finer sense of hearing quite destroyed. Vulgar indeed must be the utterance, terrible indeed the discord, that can move them to protest. They have been trained to endure defects in speech, not to enjoy its beauties. Perhaps they are to be envied in the present state of things. One gifted with a finer sense of hearing and daily tortured with the average human voice is sometimes apt to think, out of sheer weariness: "Who will awaken the conscience of mothers, fathers and teachers?"

Turn where we may, all is apathy. The outlook is almost hopeless. From the great mass of the people whose first thoughts and efforts must be spent in getting food and clothing, we have no right to expect any great interest in the cultivation of the voice. But what arraignment is too severe against the fortunate ones who are exempt from the pressure and anxiety of incessant labor? Why is so much time devoted to singing, drawing and dancing, for which accomplishments there is often very little talent, and no care or pains at all taken with speech, which all must constantly employ to make known their wants and feelings? Why is there so much regard for dress and externals, and so little for that which reveals character, for that which tells to the listener more

than the speaker dreams, more than she often would care to have known? And especially what words of condemnation can be strong enough against those professions that employ the voice as their chief instrument? It is no excuse for an actor or public speaker to say, "I speak as well as those about me." The artist stands self-committed to the best in art. Let us glance over the voice professions (as I shall call them) and see how numerous are the sinners against pure tone and distinct enunciation. Take the preacher. He claims to have a message from God himself and would shape the destiny of man not only in this life but in the life to come. The interests at stake here he regards as those of life and death. The chief method of influencing the soul is by exhortation. Surely here one might reasonably expect to find the heights and depths of possibility in the human voice controlled by these divine message bearers. But what do we find? As a matter of fact they rarely study vocal expression at all. They are so ignorant of the simple physical law of tone production, that a distressing throat affection caused by the abuse of the voice is prevalent enough among them to be named the clergyman's sore throat. We are all familiar with their commonplace, colloquial, irreverent invocations to the Deity, the affected society drawl of their prayers, and the meaningless fits and starts of the sermon. All this is strange enough in life. But oh! stranger still in the hour of death. In that silent presence, consecrated by the perfect sorrow of deep and abiding grief, there is nothing in human speech so near a mockery as the metallic intoning of a ritual. What becomes of the most triumphant death-conquering message of faith, hope and consolation when uttered in an unfeeling croak? Surely we would be shocked if we had not been trained from childhood to the bizarre and false in speech. It is interesting to speculate on how mighty and far

reaching might be the influence of these workers if to magnetism and sincerity were joined grace, beauty and strength of speech.

We escape the lawyers for the most part. Their harangues for truth and fair play are confined to those who employ them or must listen. But from those who *know*, comes the same testimony of carelessness, inelegance and ineffectiveness of declamation. The summing up and plea for prosecution and defence are often dreaded by both judge and jury. The irritation and antagonism produced by a lawyer's voice may account for some of the strange verdicts that are rendered. Very likely murder that was swift and sure seems less of a crime than the six weeks' extended torture of the counsel's voice.

It often seemed to me when I was in the High School that the lecturers on special branches, such as chemistry, art and literature, must have been selected for their idiosyncrasies of voice and manner. It seemed impossible that it could be an accident that they were always unintelligible. As a girl I honestly thought there was some inevitable connection between intellectual profundity and abominable elocution. I do not recall a single professor who had a simple, elegant delivery. And later on, when I was a student of the art of acting, I had, for some time, the same impression with regard to actors. I thought that genius and cast-iron mannerisms of voice were an inseparable combination. Young actors are not to blame for drawing such a conclusion. And it is not surprising that so many beginners set themselves to acquire fixed peculiarities of speech as a sort of trade mark. This, of course, could never happen if one had to master a knowledge of the use of the voice before entering the profession of acting. But as no amount of ignorance or deficiency is any bar at present, the only wonder is, that left unaided and unhindered to their own

strange devices, they accomplish as much as they do. There seems to be something in the very nature of the histrionic art which leads to a realization of the importance of the human voice. Whenever an actor rises into the atmosphere of pathos or passion he always conveys an impression of a striving after vocal effects. I say, advisedly, striving after; for, to speak the truth, very few actors suggest anything more than an earnest struggle after some half-guessed truth of expression.

In music the method is fixed. The laws of shading and phrasing are final, and nothing remains for the trained artist but to light up with true feeling the harmonious whole. But in speaking we are left to flounder about in a sea of sound, without rudder or compass, ignorant of the elements in which we are sailing. We have to trust to some lucky chance, some supernatural haphazard, to inspiration—that makeshift of the lazy and incompetent. What would be thought of a singer who sang an aria differently every night, who waited till the moment of performance, and then depended for effect on nervous agitation and a desperate desire to succeed? Can this be called an art? What claim to that sacred name has a profession that binds itself to no fixed principles, that exacts no obedience to the universal law of order, that proclaims without shame from the house tops that *acting is only a matter of opinion*—that respects in its heart no verdict but that of the box office?

Fortunately the art of acting has been lifted to a point somewhere near its true height by other races than ours. If it had been left to us to fix its status, it would have been lost long ago amid the traffic of the world. For the Anglo-Saxons are nations of shopkeepers, and the very marrow of their bones is filled with the influence of the counter and the money drawer. But artists are of no race or country; they belong to the universal brotherhood of man. If they will live up to

the artistic impulse, as a sacred trust, they can leaven the whole condition of thought and feeling, and bring about a general demand for higher ideals.

Why was there no training of actors for their profession in the early days of the English drama? Because at that time the actor was a vagabond and an outcast, and had no place in the artistic or social fabric of society. What training was necessary to become a vagabond and an outcast? The world might well laugh at such a proposition. The kindest feeling toward them was a pity that bordered on contempt. The greatest praise they won was the supercilious patronage given to inferiors. If one of them had dared to call himself an *artist*, a howl of righteous indignation and horror would have shaken the then small artistic world from center to circumference. In those stern days of physical force, when individual sovereignty was a religion, what hope had the impressionable, plastic, chameleon-natured actor?

Does not this explain the absence of all thought of training at first? And yet even now, when there seems to be among actors a sense of the dignity of their work, and a half hearted love and respect for it, the same old prejudice and hate of change prevail. "It was good enough then, why not now?" The few who are sent into their ranks from schools and teachers of elocution are for the most part badly taught. They are unnatural, affected and pedantic. True, the average actor is careless, inelegant and untruthful in expression also, and to the impartial observer there may be little choice between them. But the actor naturally likes his own faults the best. From the barren results of his teaching he jumps to the conclusion that all teaching is bad. Is it any wonder, then, that he holds teaching in contempt, and when all hope and joy for him in his profession has departed he still

retains that mistaken prejudice against teaching, and only rushes to it as a last resource? He never dreams that the teacher's heritage, like his own, is a gift from God, distinct and rare; that knowing a subject thoroughly in all its branches and hidden meanings is not enough. To be a teacher, one must be able to impart that knowledge, inflame the imagination, and guide the talent of the pupil. What is it to be a good teacher of speaking? Her skilled ear only needs to hear a few tones to judge of the whole capacity. The precise caliber of the owner's character is revealed to her. The speaker's voice tells of a fine or coarse grained nature, of a well-trained mind stored with pure thoughts and bright fancies, or of one tainted by ignorance and low companionship. Especially does it tell of the shallowness or depth of morality, whether the life is regulated by principle or flimsy pretext.

Voices differ in physical structure, it is true, and the uninitiated may detect no difference between a structural defect and one that is mental or moral. But the true teacher knows and can estimate just how far nature or circumstance will allow of its eradication. Is there any excuse, then, for aught but the plain, unvarnished truth from teacher to pupil? She knows well that the actor, like herself, is born, not made—that she can guide

and develop whatever talent is there in embryo, but that she cannot create one atom of thought or feeling or power. She knows that no miracle will be wrought; that in this art, as in the whole universe, all is law and order.

When will the true teachers come forth to aid our children and glorify our art? When we deserve them; when we have learned to love our art better than we love ourselves; when we are entirely possessed by an impulse to labor in its service, which is something higher than greed or vanity. When we are pure in heart and purpose and have cast out all vain glory and delusion—then the teachers will be at hand.

O teacher! O artist! You cannot serve Art and the world. Time is precious and our need is pressing. If your faith is small, your purpose weak, fall back among the money changers, who take Art's sacred name to haggle and bargain for place and profit. But do not stand in Art's path irresolute. Stand back! Make way, and let the great souls pass—those who can endure and wait, who can die unregarded, unrewarded, unknown, but who cannot betray, or lie, or steal in Art's name! Let us follow these shining ones up to Art's shrine. Let us stand with them before her altar and listen to their invocation.

INDEPENDENT THINKING.

THE characteristic sign of a mind of the highest order is that it always judges at first hand. Everything it advances is the result of thinking for itself, and this is everywhere evident by the way in which it gives its thoughts utterance. Such a mind is like a prince. In the realm of intellect its authority is imperial, whereas the authority of minds of a lower order is delegated only, as may be seen in their style, which has no

independent stamp of its own. Every one who really thinks for himself is so far like a monarch. His position is undelegated and supreme. His judgments, like royal decrees, spring from his own sovereign power and proceed directly from himself. He acknowledges authority as little as a monarch admits a command. He subscribes to nothing but what he has himself authorized.

SCHOPENHAUER.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XX.

TALENT VARIED AND PECULIAR.

**RT. HON. CHARLES ABBOT,
LORD COLCHESTER.**

THIS portrait is a most interesting study. The word literature might be erected over it as an arch, and would be expressive of every feature of his face and head. The word teacher might be applied to him with a significance that is rarely equaled. Any phrenologist looking at such a mouth as his, such a nose, such eyes, such a formed forehead, such a temperament, need not hesitate one moment in pronouncing him a teacher, a writer, a speaker, and especially a man capable of literary excellence. Of course, he could be a man of science also, but he should be related to such sciences as depend largely upon literary talent to appreciate and remember the nomenclature.

We read the title, "Master of Arts;" this man might also have "M. W.," meaning "Master of Words." If he were a botanist, a chemist, a physiologist or an archæologist, subjects so largely dependent on the peculiar terminology, requiring literary capability to appreciate the names and to remember them, he would be at home in such a field. As a preacher, as a teacher, as an editor, writer, lecturer or talker in the social circle or in the Court or Senate, he would be not only at home, but the master of the home.

The form of the mouth, the opulence in the length and pliability of the upper lip, indicate to the observer a tendency to play with the words.

His under lip has the indication of freedom of expression, and also of the loving element, the spirit of cordiality, the desire to communicate, to make conversation, to affiliate with others; and that is a wordy mouth, and one likely to give most remarkable fullness and freedom of enunciation; words rippling from his mouth would seem polished and critically formed, every letter would seem to have its place. Even silent letters would be hardly silent.

The nose is also that of the teacher, the talker, the man who explains; the droop of the septum indicates analysis, criticism, precision, interest in details and particulars. The nose also indicates brilliancy of temperament, clearness of thought, brightness of mind, and pertinency of expression. Then the liquid eye, large, ardent, brilliant, prominent, is the mother of words; the fullness below the eye indicates affluence of expression; not one word would be lacking in polishing his periods and completing his statements. The pushing forward of the eye, as if there were hardly room enough for it under and forward of the brain, indicates accuracy of statement as well as affluence and definiteness of diction.

The large perceptive organs, shown in the prominence and fullness above the eyes, length from the opening of the ear forward to the center of the forehead between the eyebrows, displays length of the anterior lobes of the brain, and the talent to understand things or entities and their

qualities and peculiarities. He would grasp an idea and load it with adjectives, and send it out like a ship with holiday dress. He would state a fact or mention a thing, and then refer to its qualities of color, form, magnitude, elegance; and his Language would enable him to make his thoughts glow with wonderful fullness of expression.

The external angle of the eyebrow seems to be pushed out into squareness and width, showing large Order, making him one of the most systematic of men. If he were devoted to literature, and not merely to land and baronial estates, he would write or speak with an accuracy of statement and an orderly adjustment of words, so that each word, like the stones in an arch, would fit and fill and serve the requisite purpose. If he were a learned judge on the bench, it would be a charm to listen to a charge of his to a jury; the fullness and clearness and accuracy of his statements would be marvelous; and every sentence would have its full sweep and breadth and all the necessary words to make the sentence and the sentiment complete would be employed; there would be nothing left for inference; it would all be stated in select phraseology.

Causality is large in this forehead, showing, in the language or composition, a sharp regard to the consistency and logical propriety of the words used. His Comparison is also large, and that organ serves to give definiteness to the comparative degrees of excellence or demerit relative to subjects, and therefore the words would be pruned and trimmed to an accuracy of adaptation.

Then the Mirthfulness is large. He would use language in such a way as to evolve the witty or absurd sentiment involved in his statements, enabling him with such language to touch a topic without wallowing in it, as a swallow stoops in her flight to pick up a water fly from the surface of the lake without wetting her wings.

The faculty of Agreeableness is also large; and it would be a lesson in elegant decorum to listen to a man who could put his thoughts into words as fully, smoothly and delicately as this man could. His praise would be as delicate as the distant odors of flowers. He would flatter without offending; he would praise without having it seem to blame others. The graces of diction and the mellowness of his phraseology would be a charm in cultured circles. He could talk in the presence of Lord Chesterfield, and acquire the reputation of being thoroughly earnest and true, and yet his accuracy would not be offensive, and his censures not rude. What a teacher he would have made of a young ladies' seminary! What a teacher he would have made of elocution or dramatic skill! What a presiding judge, what a president of a deliberative body, what a public debater!

His Ideality was large; hence he had the element which appreciates the niceties of elegance, refinement and beauty. He should have been a poet, or an artist, at least decorative, in his tastes.

His knowledge of character seems strongly marked, and that organ is located on each side of the center of the forehead, about where the hair begins to cover the head. The distance from the opening of the ear to that point is remarkable, and, although the front of the forehead is broad and the top is elevated on each side of the center, still the distance is such from the opening of the ear that Human Nature must have been large; and, understanding character as he did, and being such a master of words and so fertile in fancy and brilliant in wit and sound in logic, he must have been one of the best orators or conversationists of his time.

If we could go back and examine the form and force of the middle and crown sections of the head we could show the friendly, the loving and the dignifying forces of his character.

We find above and behind the top of the ear large *Combateness*, which would have made his invective sharp and his words scathing if they were deserved.

His *Secretiveness* shows fullness of

expressions. I can imagine him a lawyer writing contracts of vast importance in a marriage settlement or in the transfer of lands and estates. His *Caution* would prompt the wisest prudence and his *Language* and his in-



FIG. 178. RT. HON. CHARLES ABBOT. LORD COLCHESTER.

the side head; hence his thought and his statements had guardedness and the lack of abruptness, and a judicious leaning which would have made his discourse smooth and fascinating.

His *Cautiousness*, at the higher part of the side head, the upper back corner, as we sometimes hear it called, was large. Hence prudence would always preside over his actions and

telleet would find the words and give expression to all that is requisite in such composition. If he were drawing a bill for Parliament the carefulness and fullness of the composition would show the masterful force of accurate language; and the *Caution* and *Secretiveness* would be evident at every point where danger was possible.

His head above and a little forward of the opening of the ear is broad enough to give him a clear sense of value in regard to property; and he would have made a fine merchant or a good public financier.

The top head, which is apparently high, is so obscured by the abundance of the hair that a definite statement of each of the organs cannot be expected, but the mass of the top head is large; hence Conscientiousness, Firmness, Self-esteem, Veneration, Benevolence, Spirituality, all appear to be amply developed.

The temperament is mainly mental, and also fairly well represented through the indications of the vital and the motive temperaments. If that man had been born without hereditary title and estate, and had been obliged to begin at the bottom of the ladder of life, and work his way through difficulties to the top, he would have been a magnificent specimen of culture, talent and success.

This picture was published in the *European Magazine* of London on the first of October, 1817. His equal or superior has not often been found since. Talent does not all belong to the ancients, nor yet to the last half of the nineteenth century. This head and face would stand conspicuous in any age or nation.

A friend asks me: "Is not the title under which you are writing, 'How to Study Strangers,' a strange title for a book?" My reply is, Therein consists its significance. Partial friends can write the excellent traits, but that is not biography. Do you not know that strangers are the only ones whom necessity often requires people to know thoroughly, and at once, and that nearly the entire work of phrenologists is with strangers? Men and women come for examination as strangers. Many hide their name by borrowing some threadbare one; they disguise their identity or their profession by borrowed clothing, and often by raw, ungrammatical conversation, or by silence and bash-

ful stupidity, so that the phrenologist has to meet strangers even under many devices to put him on his mettle. Six clergymen on an innocent lark came disguised by dress and manners borrowed from the bar room or the Sunday fishing banks, and tested the stranger; but they introduced themselves at the close, and it was manifest that their object was to get an analysis of one of their number whose conduct had recently caused a scandal, a notorious trial and an abandonment of the "cloth."

In finding significant and marked varieties of heads and faces to illustrate such a work as this there is considerable difficulty. The portrait of Lord Abbot which we present is the first of many that are to follow which were purchased from a vendor of old engravings, taken out of old magazines, and reaching back to the sixteenth century. These vendors come in possession of tons of magazines and strip out the frontispieces for sale, and send the old stock to the paper mill. One such person recently came with perhaps 500 portraits, and I made a selection which are interesting as human pictures, some with names and ancient dates running back of memory and available cyclopedias.

I completed my analysis of Lord Abbot (and some hereditary lords are execrable), not caring for or expecting a biography, when a clerical friend who saw the picture had the curiosity to consult his "Encyclopedia Britannica," and copied for me the following:

BIOGRAPHICAL.

Charles Abbot, Lord Colchester, was born at Abingdon, England, in 1757; was the son of Dr. John Abbot, rector of All Saints, Colchester, and, by his mother's second marriage, half-brother of the famous Jeremy Bentham. From Westminster School Charles Abbot passed to Christ Church College, Oxford, where he gained the Chancellor's medal for

Latin verse and the Vinerian Scholarship. In 1795, after having practised twelve years as a barrister and published a treatise proposing the incorporation of the judicial system of Wales with that of England, he was appointed to the office previously held by his brother, of clerk of the rules in the King's Bench, and in June of the same year he was elected member of Parliament for Helston, through the influence of the Duke of Leeds. In 1796 Abbot commenced his career as a reformer in Parliament by obtaining the appointment of two committees—the one to report on the arrangements which then existed as to temporary laws about to expire, the other to devise methods for the better publication of new statutes. To the latter committee and a second committee, which he proposed some years later, it is owing that copies of new statutes were thenceforth sent to all magistrates and municipal bodies. To Abbot's efforts were also due the establishment of the Royal Record Commission, the reform of the system which allowed the public money to lie for some time at long interest in the hands of the public accountants, and, most important of all, the act for taking the first census, that of 1801. On the formation of the Addington ministry, in March, 1801, Abbot became Chief Secretary and Privy Seal for Ireland; and in February of the following year he was chosen Speaker of the House of Commons, a position which he held with universal satisfaction for fifteen years, till 1817, when an attack of erysipelas compelled him to retire. In response to an address to the Commons he was raised to the peerage as Baron Colchester, with a pension of £4,000, of which £3,000 was to be continued to his heirs. On the 8th of May, 1829, he died of erysipelas, aged 72.

To rise without wealth or title, to preside over Parliament for fifteen years, during such a period as covered the career of Napoleon and the

second war with the United States, and then be raised as a reformer to the peerage, justify all that may be said of his talent or worth.

JAMES O. ANDREW, D. D.

LATE BISHOP OF THE M. E. CHURCH.

This organization is very interesting to the student of constitution and character. He is a specimen of the strongly marked motive temperament. The features are large, the face long, the head running up to a ridge in the center, representing the ruling elements of character, and the head, like the face, is comparatively narrow. There is an abundant muscular development, but not much adipose tissue, which constitutes, when prevalent, plumpness, smoothness, beauty. The layers of muscle seem to hang over the framework of this face, and we suppose there was not an extra pound of flesh on his form.

He has a very frank, honest, sincere look. There is not in that face any expression of enthusiasm or tendency to magnify a straightforward, honest truth. He thinks and talks in straight lines, believes what he says, utters it fairly and squarely, and calls it finished. He is the soul of frankness, does not "cloak or dissemble his thoughts before the face of Almighty God," or in the presence of his fellowmen. And that sincerity and openness is depicted in every feature. He does not try to fix his face so that it will look placable and genial and mellow or persuasive. His eyes look straight at you without wavering or trying to be soft. His strong, plump lips have a firmness and absoluteness which do not carry an apology for what he has said or what he intends to say.

His large Individuality, shown by fullness above the root of the nose, leads him to speak to the point, and his thoughts are convergent; he focalizes what he thinks, and makes it specific; and he is a wonderful dealer in facts, and inclines to make

his statements historical. He speaks truth a thousand years old as if he had been there and seen it and knows all about it. If he believes it he nails it and does not send an apology to lubricate its acceptance. If he disbelieves he does not try to soften it.

His large Comparison makes him analogical, critical. His knowledge of character is wonderful. He reads men like a book, and, though he has not a particle of cunning or under-current in his tendency, his mind is like a cleaver which opens out the subject in an unreserved way. Few men understand strangers as well as he. The organ of this faculty is located at the top of the forehead where it begins to recede into the moral region. The reader will notice a high ridge along the center of the top head, beginning with Benevolence, which is largely developed and a strong factor in his character. It helps to make his face look gentle, kindly, patient; and though he has plenty of authority in his nature his Benevolence seems to give it a softness and make it acceptable.

His Veneration is uncommonly strong, where the top of the head is lost among the light covering of hair on the center of the top head, that part of the head which was the crowning quality of his moral life. He has a look on his face as if he had settled several questions as to God and man and destiny. In that top head and in that face we can read the words of the Psalmist, "My heart is fixed, oh God; my heart is fixed." "In God have I put my trust; I will not be afraid what man can do unto me." The large Firmness, which lies back of Veneration and supplements it, gives the impression of fixedness, of trust, and we think his Self-esteem is well developed, which gives him a consciousness that his judgment in the matter has been properly settled.

In his face there is a motherly expression, as if he had derived it from his mother; and yet the general

frame of his face and head is masculine. We judge the back of the head was very full, showing large Parental love and strong Conjugal love.

The flatness of the side head would indicate that he had but little Secretiveness, not an extra amount of Cautiousness nor very large Acquisitiveness. He could preach a good sermon over an empty pocket; he had excellent common sense, but not a great deal of secular wisdom.

He had but little Imagination and not much Imitation. His manners and methods were his own, and he did not take on the ways and usages of others readily, and that which he believed to be true and desirable he would hold in uncompromising tenacity. He had much more kindness than complaisance or Agreeableness. He had more Veneration, Firmness and Self-Esteem than of Conscientiousness or Spirituality. People knew he was sincere, true and kindly, but his frankness was sometimes alarming. He would preach in an uncompromising way the truth as he understood it. It might have been kindly, but it was straight and unflinching; and there never was much trouble in knowing how much he meant and just what he meant. There was no false pretense or pretense of any kind. His utterances were plain, direct, unvarnished; and wherever he moved he made his mark.

BIOGRAPHICAL.

The foregoing estimate of Bishop Andrew having been dictated and completed, I went to the cyclopedia to learn of his birth and the outline of his career, and was pleased to find that his determination and strength of purpose had been verified in the great controversy which divided the Methodist Church of America.

James Osgood Andrew, D.D., an American clergyman, one of the Bishops of the M. E. Church, South, was born in Georgia, May 3, 1794, and died in Mobile, Alabama, March

2, 1871. At the age of eighteen he was licensed to preach, and in December, 1812, was received into the South Carolina Conference, and was elected Bishop in 1832. His second wife being the owner of slaves, the

remains." The Southern delegates entered their protest. The result was an amicable division of the M. E. Church into two independent jurisdictions. The Southern division, under the name of the M. E. Church,

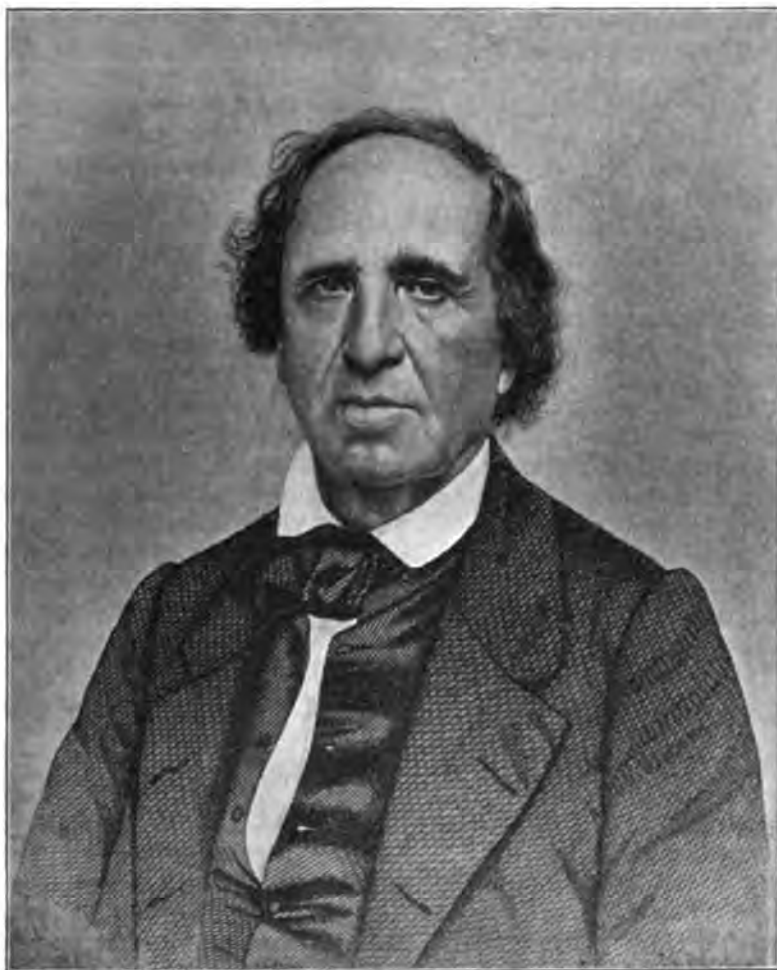


FIG. 179. JAMES O. ANDREW,
LATE BISHOP OF M. E. CHURCH, SOUTH.

Northern delegates to the General Conference in 1844 judged "that this would greatly embarrass the exercise of the office as an itinerant General Superintendent, if not in some places entirely prevent it." Accordingly the majority of the body resolved "that it is the sense of the General Conference that he should desist from the exercise of this office so long as this impediment

South, held a General Conference at Petersburg, Va., in 1846, and Bishop Soule and Bishop Andrew gave their adhesion to the Church, South.

Bishop Andrew continued to exercise his Episcopal functions till 1868, when he retired from active duty on account of age and died 1871 aged 77. His volumes of "Miscellanies" and on "Family Government" have been widely circulated.

THE EAR.

THE ear is a wonderfully comprehensive instrument. As compared with the eye, it is vastly superior in the extent of the sensations it is capable of experiencing. The eye possesses barely an octave and a half of sensations, whereas the average ear has a range of six or seven, while more acute ears have a compass of fully eleven octaves.

And then the ear is a wonderful accurate instrument, and capable of appreciating minute differences that would be wholly impossible in the case of the eye. According to Dr. W. H. Stone, "an architect or draughtsman who, between two lines neither parallel nor in one plane, made an error of estimation by eye not exceeding one-thirtieth, would gain credit for unusual precision. But in the ear one-thirtieth amounts to the quarter of a tone, and by ear one-forty-fifth of a tone is easily determined." A skillful pianoforte tuner can do much more. He is called upon, for instance, to distinguish between a true and an equally tempered fifth, where the difference is only the one-hundredth of a tone. He should, accordingly, be able to recognize at least six hundred different sounds in an octave. More than this, according to the investigations of Professor Mayer, it is possible under specially favorable conditions to distinguish from each other notes which do not differ by more than the one-hundred-and-twentieth of a semitone.

In the rapidity of its appreciation the ear is remarkable. In a fraction of a second it can accurately refer any note to its place in the scale and can just as easily and as quickly separate from each other widely different notes. According to recent investigations, the ear is capable of hearing a sound when only two vibrations are made.

With proper training and practice the organ of hearing can be rendered remarkably sensitive and accurate.

There is rarely any physical defect in the ear itself. The defects ordinarily noticed and spoken of are such as can be easily remedied by cultivation. It may, it is true, never be able to attain the remarkable range of audition we have spoken of above, it may never become so "apprehensive and discriminant" as the ear of Mozart; but its delicacy can be increased and its general appreciation of musical sounds wonderfully improved. This is especially true if the work of instruction is begun in childhood, when the organ of hearing is naturally most sensitive and most readily susceptible of cultivation.

In making experiments with rods and tuning forks giving very acute sounds, says a writer in the *Minstrel*, I have frequently been struck with the very great difference in the ability possessed by young and old persons to perceive such sounds. This fact is a striking commentary on the necessity of beginning early the training of the young, when eye and ear are ever on the alert, and quick to detect sounds which at a later period would entirely escape their observation.—*The Keynote*.

ADVANTAGES IN AMERICA.

THE upper classes in America have not that exquisite refinement which exists in the highest circles of society in Europe. But if we take the whole people through and through we find them the most civilized nation on the earth. They preserve in a degree hitherto without example the dignity of human nature unimpaired. Their nobleness of character results from prosperity; and their prosperity is due to the nature of their land. Those who are unable to earn a living in the East have only to move toward the West. This, then, is the reason that the English race in America is the more happy, more enlightened and more thriving than it is in the motherland. WINWOOD READE.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

DR. THOMAS SIM.

DR. SIM is worthy of mention in these sketches, but the writer regrets that she has been unsuccessful in her endeavors to obtain more definite information respecting him. He was one of the early Phrenologists, and an excellent one, conscientious in his delineations, direct and correct.

The following incident related partly in O. S. Fowler's words, and partly in Dr. Sim's, illustrates the accuracy of the latter's delineations when following the principles of the science, though at the time, he was considered to be totally in the wrong:

"The supposed failure of Phrenology in regard to Rathbun, the forger, of Buffalo, was trumpeted all over the Union. Scarcely a paper but copied it; it was in everybody's mouth, and has been cast in my teeth a thousand times. The examination was made by Sim in the Rochester jail. Thinking to test him, they took him to the jail, had him blind-folded, and then, instead of introducing prisoners, as was proposed, they brought forward several citizens manacled in irons as if they had been convicts. When Rathbun was brought forward he was pronounced a talented scoundrel, capable of forgery, counterfeiting and swindling on the largest scale, etc. When the Phrenologist was told of his supposed error, he replied that if that man was not in prison he *ought* to be, and would be if he was not careful. At that time Rathbun was the 'father of Buffalo;' a short time after, he was in Auburn State Prison."

Dr. Sim gives the following account of the same incident: "I have often had occasion to exercise prudence in examinations when the faculty of acquisitiveness was found in an over-active degree in persons ranking high in the community for honesty of dis-

position. As an instance of this, it may not be improper to mention here the case of Benjamin Rathbun, once the great financier of New York. Some years ago I was requested to examine several heads blindfolded. I complied, and the first head submitted was described as that of a very talented man, of great business capacity, deficient conscientiousness, which had decreased; very large perceptive organs and constructiveness, with inordinate acquisitiveness. I described him as prone to dishonesty, but said that he never would be a petty thief; that he was capable of being a swindler on the largest possible scale. A bystander asked, 'Suppose he was a convict, what crime should you suspect he had committed?' I replied forgery. The handkerchief was taken off, and behold it was the individual above mentioned. There was a mistake! the phrenologist had made out the very Rothschild of the West—the most trusted and the most talented business man in the State of New York, a man whom the banks and everybody delighted to trust—a *dishonest man*, a *forger*! Loudly did the opponents of phrenology then triumph and numberless were the jokes passed on the poor phrenologist, who in their opinion had made such a mistake. The newspapers heralded the fact from one end of the country to the other—all pronouncing phrenology a humbug. But what changes have a few years wrought! Rathbun is now confined in Auburn Penitentiary for committing a series of the most daring and complicated forgeries ever known. Phrenology, like murder, will out."

Dr. Sim was so much abused for this supposed great blunder that he

left that part of the country and we next hear of him in Andersontown (now Anderson), Ind., where he published a paper entitled *The Western Athenaeum and Journal of Phrenology*. This was a weekly newspaper and met with good encouragement. In this paper were the opening chapters of a work entitled: "A Text Book of Phrenology. By Thomas Sim, M.D.—Pupil of Spurzheim." It had the following motto: "*Opinionum commenta delet dies, naturæ judicia confirmat.*"—Cicero. This was a valuable treatise on the science of Phrenology. After this we heard of him still farther west, near St. Louis, where we are informed he died. We have been unable to secure any particulars of his life and death. As nearly as can be learned, his family did not approve of his being a Phrenologist, preferring to have him follow the medical profession.

To a letter sent to his brother, asking about Dr. Sim, was received a very curt reply, signed Sim, saying that Dr. Sim had resumed his medical practice, dropping that of Phrenology.

It is to be regretted that Phrenology thus lost the labors of so capable a man and so worthy a champion. There are others in the field now of as good a stamp, and still others are coming. Many of the students of the American Institute of Phrenology stand high in the profession wherever they are known, and we hope they will be able to accomplish as good work as Dr. Sim did while he was in the field.

At the time of the blind-fold examination in the jail, Mr. Benjamin Rathbun was a man looked up to by all who knew him, and his influence

reached even New York City. He had a large brain, well supported by a good body. The ruling mental traits were in his sentimental nature, and embraced Mirthfulness, Agreeableness, Human Nature, Benevolence, Hope, Approbativeness and Adhesiveness. These gave him a sort of magnetic power which drew to him all who came under his influence. They trusted, appreciated and loved him. He knew this and it made him happy. He had other qualities equally strong, such as Acquisitiveness and Secretiveness; and the whole intellectual development, which was very large, aided him in gratifying his organs of Acquisitiveness and Secretiveness without rousing the suspicion of those who trusted him. He probably did not even himself suspect the power which was ruling him; had he done so he would not have allowed himself to be dressed in prison clothing and manacled, and brought before a Phrenologist.

Dr. Sim was governed by his science, and when told that he had examined Rathbun's head, he still said he must abide by the science, and he would not yield an inch. Subsequent events proved that in following his principles he was right. He was a Phrenologist at heart, and all the way through. He did not indulge in guessing, but depended upon facts. He had the courage of his convictions, and would have suffered rather than not speak what he thought to be the truth. All lovers of Phrenology should honor Dr. Sim for his manliness and consistent devotion to a strict scientific method which he had tested and knew to be true.



A CHAT WITH "THE WHITE MAHATMA."

BY THE EDITOR.

MANY of the New York papers have recently devoted several columns to illustrated articles describing the wonders and bewilderments witnessed and produced by Professor Samri S. Baldwin, known in the Orient by the title of "The White Mahatma."

Prof. Baldwin is a public entertainer, and ten or twelve years ago was well and favorably known in this country, but more especially in the Western States, on account of his weird exhibitions, duplicating on the stage many so-called spiritual and psychic manifestations usually given by professional mediums. Prof. Baldwin himself is a materialist and does not believe in spiritualism. He found after years of experiment and investigation, that a large majority of the so-called manifestations were produced by clever deception, though admitting that in some cases, especially where mental and telepathic manifestations occurred, they were not caused by deception or fraud. His entertainments, therefore, were in the nature of exposures of the deceptions practiced by many spiritual mediums. After having made a fortune in the United States, unfortunately his health broke down, and he was ordered to take a long sea voyage. He went to Australia, thence to India, Siam, Borneo, Java, China and Japan. In the larger cities in all of these places he gave his entertainments, and, judging by the very voluminous press notices we have seen, he must have been very popular.

In India he devoted a large portion of his time to investigating the doings of the Yogis, Gooroos, Fakirs, Foongi and Mahatmas. In fact, he became

so fascinated by his investigations that he made four visits to India, spending many months there. He is one of the few white men who have penetrated into the recesses of Thibet.



PROF. S. S. BALDWIN.

He spent five or six months in a tour on horseback through that country. He was obliged to take quite a little retinue with him, but was determined, if possible, to make the acquaintance of the strange Mahatmas so much lauded by the late Madam Blavatsky. His own exhibitions caused so much wonder that he there received the title, which he has since used, of "The White Mahatma."

It was our good fortune to know Prof. Baldwin years ago in Cincinnati, where he was born. We called

on him at the Mansion House in Brooklyn, where he is now stopping, preparatory to commencing an American tour, and we spent a long time in looking over his unique collection of photographs and curiosities, gathered in all quarters of the semi-unknown parts of the world. Pray-



MRS. KITTY BALDWIN.

ing machines from Thibet; charms given him by an African witch doctor; diamonds presented by the Mikado of Japan; rubies and sapphires from Sultans, Maharajahs and Indian Princes; rare and costly gems, jewels, etc.; scalps from North American Indians; and boomerangs from Australian aborigines,—were shown in such profusion that the hours slipped by unheeded, and we were surprised to find that what we had intended to be a half-hour's chat had stretched itself into a visit of four hours.

Prof. Baldwin is accompanied by his wife, an English lady, and she is the medium, if we may so use the term, through which many of his peculiar manifestations are produced, chief of which is a phenomenon which he calls somnomancy. In this experiment, when given in public, ladies and gentlemen in the audience who wish to test the matter merely think of a question of any sort such as, "Where is my brother?" "Who stole my diamond ring?" "How long shall I live?" etc. These queries are not mentioned even indirectly to any one. The questioner merely thinks intently of the subject on which he desires an answer. Mrs. Baldwin, while in a hypnotic condition, it is said, accurately replies to a large number of these unknown mental questions. She mentions full names, dates, places, and gives minute descriptions that are startling.

Through the courtesy of Prof. Baldwin we are enabled to present in this number of the JOURNAL some excellent foreign photographs of types of character which may be met daily in the Orient. We asked a number of questions as to the honesty, intelligence and other mental characteristics of the various people. According to Prof. Baldwin, the natives of India among the cultivated and educated classes show great intelligence, but are deficient in thrift and honesty. They work because they are forced to do so, but by nature they are spendthrifts, much money being expended in display of the most childish character. The fingers of a Hindoo woman are often covered to the very tips with rings, in many cases making the hands stiff and unwieldy. Their arms are covered from the hand to the el-

bow with gigantic silver bracelets. The ankles, sometimes from the ankle bone to the knee, are covered with huge silver rings, often having small

rings, some of them four and five inches in diameter, are pendent.

They are deficient in honesty among the lower classes, theft being



DANCING GIRL OF CUMBUCO.

bells attached. Rings are also worn on the toes; and from the nose as well as the ears of the women, heavy

almost universal. They are also deficient in conjugal affection. There is no word in the Indian language

which corresponds to the English "Thank you;" no word expressive of thanks or gratitude. Many Indian natives can hardly be made to comprehend that they are treated justly and kindly by foreigners from the mere desire to do right. An Indian servant is always more attentive for being treated with a certain degree of harshness. He must be com-

lower class has any respect for one of his own station. He respects only those above him, whom he fears. To obtain good service from Indian servants it is necessary to be just and impartial, but to command. The imperative mode is to be used at all times. As instances of this, Prof. Baldwin related that while in Calcutta a gentleman and himself were listen-



A YOGI OF HIGH DEGREE.

manded, not requested. The caste system in India permeates all classes to such an extent that if a servant is asked, "*please* do this," or "*please* do that," he would fancy that it was done to conciliate him. He could not understand that such a request was made through courtesy. He would very likely consider that his master was of low caste on an equality with himself. No Hindoo of the

ing to the talk of five or six of the servants, who were discussing the merits of their relative masters. Most of the servants were ridiculing one Kitmugar, because his master was too "soft." They were poking fun at this man for having to suffer the indignity of working for an Englishman of such low degree that he would say "*please*" to his servants. They seemed to imagine that he must be

low born to put them, as they thought, upon a level with himself. Prof. Baldwin's own personal attendant was quite sure that his employer must be a gentleman of high caste, for he bragged with much gusto that the professor usually cursed him "up hill and down dale," and then finished the oburgation by giving him a rupee. This was his ideal of a good master.

impassive, stoical, cruel race. Should a man fall overboard from one of the numerous junks in the overcrowded rivers or harbors, no effort is likely to be made to save his life. This is due to a prevalent superstition that all the sins of a drowning man will be credited to his rescuer.

The Japanese are the French of the East. They are polite, agreeable, affable and intelligent, with



HINDOO STREET BAND.

The Chinese are a strange mixture. In some things they are extremely intelligent, but governed largely by their superstitions. A Chinese business man, as a rule, is far more reliable and honest than his neighbors among the other nations of the East. He is often sullen, sulky and unpleasant to deal with in business matters, but among the better classes a promise is generally a bond, and contracts made with Chinamen are usually carried out to the letter. They are an

great imitative power. They are also kindly, loving and affectionate, but not nearly so reliable in commercial affairs as the Chinamen. A Japanese will smile and bow and receive you courteously and pleasantly and will apparently be delighted to do business with you, but he never dreams of carrying out a contract if he thinks he will lose any money by it, no matter how strongly his word may be pledged. They are by far the most agreeable race of the East to deal

with, and are by far the most civilized. Railroads, electric lights and all the appliances of modern civilization are nearly as common in Japan as in America.

As to Thibet and the Mahatmas, Prof. Baldwin does not give much credit to the miraculous stories told

power of more quickly mesmerizing or hypnotizing any subject that might be susceptible to that influence through him. The Indian Yogis have learned the art of mesmerizing large numbers of people at the same time. This power is not yet possessed by European or American mesmerists,



THE MAHARAJAH OF PATTIALA.

by travelers from that region. Personally he has visited the performances of nearly every celebrated Fakir and Yogi in the East, and he unhesitatingly states that the majority of the accounts given by travelers are very largely exaggerated, and in many cases are pure inventions. He thinks that many of these tales are like the man's razors, "made to sell." The only thing which he claims to have learned which is of any advantage to him in his entertainments is the

and many of the travelers who report such marvelous experiences perhaps imagine that they have really witnessed the things they describe. As a matter of fact they were simply placed under a mesmeric glamour, and the occurrences as narrated by them were merely phantoms of their imagination.

In the accompanying illustrations our readers will find many points of interest. For example, in the three rather handsome Japanese women it

will be noticed that the eyes of the two on the right are distinguished by an obliquity of gaze which indicates the

Frequent references have been made by phrenological authors to the narrow skulls of the Hindoos. An



JAPANESE WOMEN OUT FOR A WALK.

lack of honesty to which Prof. Baldwin testifies. The long space between the eyelashes and the eyebrows is another sign of moral weakness.

excellent corroboration of our teaching in regard to this race is afforded in the head of the dancing girl of Columbo. To our subscribers who

have studied the subject, the deficient Acquisitiveness and Destructiveness will be strikingly apparent. But to

which reveals the defects we have mentioned. We invite "skeptics" to remember that indolence and



A MAORI CHIEF.

the unfamiliar reader, we may say that it is the thinness or narrow diameter of the head just over the ears and in the region just back of the temples

thriftness are well-known peculiarities of the Hindoo people. We may add that the narrow temples agree also with their comparative in-

difference to mechanical invention and music. Why do not some of our critics compare these narrow Hindoo crania with the broad heads of the executive, money saving, mechanical and musical Germans, and explain how the facts agree with Phrenology?

Surely everybody knows that the Hindoos as a people are less stocky

known characteristics are verified by the teachings of phrenology.

It is folly to dispute such well known racial differences as those we have mentioned. But we may carry the statement further, and say that the Americans, Irish and Negroes also have relatively narrower heads than the Germans, and that it is



A KAFFIR.

than the English or Germans, as to general build, and that what is true of the body is likely to be true of the neck and the head. The Maharajah of Pattialla is perhaps an exception, just as Grover Cleveland is an exception among our people. But there is no escape from the main fact that the natives of India belong to the narrow-headed races, and that their

equally easy to prove that those nations are less thrifty than the Germans. In music the difference is still more striking.

Prof. Baldwin is preparing a book on the subject of the oriental nations, and as he is exceedingly fluent and brilliant in the use of words, we expect that the volume will be both instructive and entertaining in a high degree.

CHILD CULTURE

THE "MORAL" AWAKENING.

PROF. DEWEY, of the Michigan University, has an article in *Popular Science Monthly* for August with the title, "The Chaos in Moral Training." The points urged are for the most part founded upon the professor's personal experience or observation and strikingly confirm the propositions that have been formulated in articles published by me. The claim was made in an early article that moral development was largely a matter of haphazard, not one parent in a thousand giving careful attention to it with that proper understanding of the child's mental growth which must supplement true ethical method. The reader of this magazine for the past two years will remember the insist of the present writer upon formulated instruction in morals as the only solution of the "troubles" existing in society; that the schools must take up the work, making moral teaching a special part of the regular studies of their curriculum, the primary schools in particular giving much time to such teaching. Whether or not my reflections on this hitherto much neglected line of human conduct have been influential in awakening the attention of educators, it is as certain as it is gratifying to note the interest now exhibited by many. Professor Dewey takes similar ground with the writer with respect to the evolution of the moral faculties in early life, and attributes to a child capabilities of perceiving, under guidance, the nature and bearing of the simple acts that belong to his life. He says in the paper mentioned, "Surely if morality means (as all moralists are agreed) not

simply doing certain acts but doing them with certain motives and disposition, rational training would emphasize the moral features of acts only when it is possible for the child to appreciate something of their meaning, and in other cases simply manage somehow to get the acts done without saying anything about questions of right or wrong. To continue the present method of holding, on one side, that a child is so irrational that he can not see for himself the significance of his conduct, while on the other, with regard to these self-same acts, the child is punished as a *moral* delinquent, and has urged upon him, on *moral* grounds, the necessity for doing them, is the height of theoretical absurdity and of practical confusion."

The great need underlying the state of things thus pictured is sighted by Professor Dewey in a later remark, wherein the necessity of presenting moral truths in such a way to the young that they may realize for themselves what is right action and "an habitual disposition" be created for action in the right direction. I have endeavored to illustrate the method, that in my opinion is founded upon the natural constitution of the mind—a practical necessity in itself for successful results—and am pleased to know that its main categories are confirmed by the writer from whom I have quoted.

From another quarter comes also a degree of support that is gladly recognized. A paper on "Boys as they are Made, and How to Remake Them," recently published by Mr. F.

H. Briggs, of the State Industrial School, earnestly appeals for manual training as a most important ally in moral culture. This teacher would substitute the kindergarten for the home and the street for the young child, and later have the boys—and girls, we may assume—placed in schools where they would have manual training. "The workshop should form an inseparable concomitant of every school. Children delight in doing; this is why the kindergarten is so effective as an educational agent."

Drawing, modeling, wood-working, have in their processes elements essentially moral, according to Mr. Briggs, and "lie at the foundation upon which our remaking structure should rest."

I have several times urged such training as important because of its tendency to inculcate habits of accuracy both of observation and expression.

The use of wood-working tools certainly "helps a boy to find out what square means. When he can saw to the line every time he has a greater respect for truth. When he habitually becomes exact in the use of tools the great battle is won. Your skilled mechanic is not usually a liar. His respect for exactness makes him hew to the line in his speech."

The habit or practice of a teacher in encouraging his pupils to be clear and accurate in the recitation of their appointed lessons, and also in the statement of such personal observations as may be incidental to class room work, is of far-reaching influence, and should be associated with whatever means are otherwise employed. The clear, definite statement implies a clear perception of the subject to which reference is made. The pupil is quite sure of his facts in such a case and can realize the relation of truth inhering in his statement. So the doing of good work—clean, finished, suitable work—inspires respect for the good and true, and an intelligent apprecia-

tion of the reasons and motives that lie behind worthy and honorable conduct.

H. S. D.

RAGGLES.

UNDER this heading *Our Dumb Animals* has a pretty story that will please many readers, old and young. It runs:

Raggles was only a scrubby little Indian pony. His owner had evidently considered him of no use, and had cruelly turned him loose on the bare prairie to shift for himself.

He was a sorry looking little fellow as he stood one morning at the gate to Mr. Hudson's large cattle ranch, in Western Kansas, shivering in the wind, and looking with a wistful gaze at the sleek, fat ponies inside.

Mr. Hudson noticed him and started to drive him away. But his little daughter Lillian said: "Let him in, papa, he looks so hungry." Mr. Hudson opened the gate, and the pony walked in, just as if it were his home.

Mr. Hudson made inquiries, but no one knew anything about him; and as no owner ever came to claim him, Lillian claimed him as her special property, and named him Raggles, on account of his long tangled mane and tail. He was a docile little creature, unlike the rest of the ponies on the farm. He soon came to regard Lillian as his mistress. She learned to ride him, and could often be seen cantering over the prairies with her father.

But Raggles seemed to consider that she was not much of a rider, for he would carefully avoid all the dangerous looking places and holes in the ground made by coyotes and prairie dogs, which are very plentiful in Western Kansas.

When the next spring came Raggles did not look like the same little scrub. His rusty brown coat had all come off, and a new black one had taken its place.

By the next fall the neighborhood could boast of a public school, and when Lillian began to go Raggles found he had regular duty every day.

Lillian would saddle him and ride to the school house, which was two miles away, then tie up his bridle and send him home. At about half-past three Mr. Hudson would saddle him again and send him for Lillian.

He always arrived on time, and if he was a little early would wait patiently by the door until school closed.

Some of my readers will remember the blizzard that struck Western Kansas in 1885, when so many people lost their lives, and thousands of cattle were frozen to death. The storm commenced about noon, and the weather grew steadily colder.

The snow blew so thick and fast that Mrs. Hudson was afraid to trust Raggles to go for Lillian, but Mr. Hudson was sick and there was no one else.

She went to the barn, put the saddle on him, and tied plenty of warm wraps on. Then she threw her arms around his shaggy neck, and told him to be sure to bring Lillian home.

He seemed to understand and started out with his shambling trot in the direction of the school-house.

One hour passed slowly to the anxious parents. When two had passed their anxiety was terrible as they strained their eyes to see through the blinding snow his shaggy form bringing their darling safely home. At last he came with Lillian on his back, bundled up from head to foot.

The teacher had fastened her on the pony and given him the rein; and so he had brought her safely home none the worse for her ride, except being thoroughly chilled.

INFLUENCES THAT MOULD.

A WRITER in *Harper's Bazar* gives some wise and valuable thoughts for those who are studying the problems of the best way of living for themselves and children. It is often a

problem, says this writer, with parents whether it is better to save for the children or to spend for them; whether the wiser way is to live very frugally and plainly, keeping a watchful eye on every expenditure in order that a fortune may accrue by the time the little ones are grown, that land may be added to land and house to house, so that the father, when it comes to making his last will and testament, may have something to leave and distribute among his heirs, or on the other hand, whether a judicious investment of means all the way on is not really the better thing for the children.

In the one case lessons of self denial and thrift are certainly instilled—the boys and girls learn the value of money; sometimes they learn to look upon money as the only good rather than as the means to an end. In the other case they are surrounded by beautiful things during the period when impressions are most readily taken, and when character is moulded, and the style of the future man and woman formed for life.

One thing may be set down as absolute, without exception: there is not only folly, but lack of integrity, in deliberately living beyond one's means, and children who are brought up in a home where they see little care for the payment of just debts promptly and fully are in great danger of becoming themselves dishonest. Granting, however, that the parents have a sufficient income to pay their way without too much anxiety, it would seem that the truer economy of life would be to spend freely rather than grudgingly.

A beautiful environment helps to mould character. Children who grow up in a home in which they are used to elegance and refinement absorb these qualities from the atmosphere. If the mother has sufficient help in doing her work to enable her to give much of herself to the children, the children are the gainers. Contact with pictures and books is in itself

elevating. It is a good thing to live in a house where books abound, even if one does little more than become familiar with their bindings.

AN INCIDENT AT THE FAIR.

AN official at the World's Fair said lately: "One of the interesting sights of that aggregation of most significant objects was a single visitor—a little girl.

"She was an attractive child, neatly dressed, and came to the grounds in charge of a young woman who talked to her by placing her fingers on her cheek or lips.

"It soon became known to the crowd around them that the child was blind and deaf and dumb. Her companion was the teacher, who, with incredible patience, had brought her into a full, intelligent connection with the outside world, had literally wakened 'a soul under the ribs of death.'

"As the objects around were explained to her the girl's face sparkled with delight and wonder. Sometimes she laughed with a sudden, peculiar wave of the hands, as if to grasp something out of the endless darkness and silence in which she lived, and bring it close to her. It was a most pathetic gesture. I saw hard-

faced men turn away with a sob when she did it.

"Wherever she went the crowd gathered, respectful and eager to help her. Women holding their own bright-eyed children close to their hearts looked at her with tears in their eyes.

"The exhibitors of every country opened their cases that she might pass her light fingers over the treasures inside most of them, making some little affectionate joke, which they earnestly begged might be interpreted to the child, greatly pleased when she laughed and nodded to them.

"I saw her as she was leaving the grounds on the first day of her visit. She was pale from weariness, but her little face fairly shone with pleasure and gratitude."

Not one, probably, of all the crowds whose sympathies were touched by the unconscious child had her lovely sense of thankfulness for the enjoyment afforded by the marvels of the great Exposition. Nevertheless, it will be remembered as an object lesson for many a day by the men and women who saw it.

This little girl was Helen Keller, of whom the JOURNAL has made mention several times, because of her wonderful intellectual development despite those sense defects that are commonly regarded as inhibitory of all mental growth.



SCIENCE OF HEALTH

THE HYGIENIC PHYSICIAN.

IN the *Dietetic and Hygienic Gazette* for July last is an article with the above title by that well-known and advanced hygienist, Dr. Chas. E. Page, of Boston. The editor of this department is pleased to note the recognition that Dr. Page receives in circles that are regarded conservative of the old medical practice, and gladly copies the bulk of his article, not only because of its frankness but also because of its truth:

"I tell you, Mr. —," said an eminent regular to an equally eminent preacher, "the one important thing is to have unbounded faith in your doctor; and then if he doesn't give you too much medicine you'll be likely to get well!"

But what is this but the faith cure, pure and simple? Is there really nothing more than this? I know better; there are hundreds of practitioners who know better; but if this is the highest view of some of the brightest men in the profession we must cease sneering at, and restricting the practice of, the confessed faith cures, or mental scientists. The homœopathist, the placebo regular, and the faith cure, who do nothing beyond exciting in the breasts of their patients great hope and cheer, depend, consciously or unconsciously, upon the inherent power of the living organism to effect a cure. There is no appreciable difference, really, in their practice. It is only in their incantations that they differ!

So far as the nursing is concerned—and this, it should be understood,

is the all-important part of active treatment of the sick—it is practically the same, and in some respects very bad indeed, under regular, eclectic, homœopathic, mental science, or other "treatment." It follows, therefore, from what has been said—if we are to stand by the theory of the eminent medical man as quoted (no less a light in the profession than Surgeon-General Dale)—that, generally speaking, the attendant who is capable of exciting the greatest degree of faith and hope in the heart of his patient will do the most good, providing he does not counteract the helpful influences of such faith by poisonous drugs.

But when we come to the consideration of the work of the hygienic physician, who is really an expert in his line, and who can fitly stand between his patient and the unhygienic practices of friends and nurses in attendance, and teach these to carry out absolutely correct methods of nursing, including the proper ventilation of the sick room, right treatment of the sick stomach (that is, when to feed the patient and when to withhold food), skillful hydrotherapy, etc., etc., we have found a method that overtops completely the faith cure in any of its phases, for under such management some of the most hopeless, faithless and despondent patients, those even who have lost all desire to get well, begin to rise and improve in condition until their very progress puts an entirely new look upon the whole matter. They

are actually getting better, and returning health brings them, mind and body, toward the normal state; their faith is revived, hope comes back, they again want to live, and then the cure goes rapidly on to completion.

I was educated in the most regular fashion; I was a busy reader for all the text books; I had ample private instruction preparatory for the college course, including a year's study and riding with a fashionable physician; other experience in private practice before entering on my college course, and finally the college course itself, followed now by over ten years' very busy practice. With all these advantages it may safely be assumed that I know what I am talking about, and I am prepared to say that if I practised after the plain teaching of the text books and what the honest old professors sought to teach me—what, in fact, the teachers in all the schools are to-day teaching—as to the employment of poisons in the treatment of disease, and what most physicians actually do practise, I would not be able to sleep of nights for thinking of the havoc I was making, the needless death certificates I was signing. But, having been from my earliest recollection a devout student also of hygiene, or the health laws of nature, I had learned some very important principles before I got very deeply into the medical vein, so to say—points that very few medical men ever fairly consider; that are so radically opposed to the routine instructions of the schools as to be beyond the capacity of the average medical student to comprehend—and I have thus been enabled to avoid many of the mistakes so common in practice. The doctor who has learned much of the laws of life has a pretty clear idea of the irrational phases of the prevailing methods of treatment; and if he also knows how to apply all known hygienic agencies he will save his patients from so much that is

harmful, and give them so much that is really helpful in treatment, that he can often truthfully promise relief, perhaps even cure, in cases that would necessarily result fatally under routine drug treatment.

VACCINATION IN THE A. M. A.

THE "orthodox" wing of the medical profession in this country appears to entertain some doubt regarding the virtues of vaccination as commonly practised. At the late meeting of the American Medical Association a paper by the late Dr. Ezra M. Hunt, so many years prominent as a public health officer of New Jersey, was read. In this paper the author stated his opinion that vaccinia, or the cow virus, is probably human variola modified by transmission through the cattle. He referred also to the difficulty that sometimes arose in distinguishing varicoid from varicella (chicken pox) and urged the necessity for giving close attention to the history of each doubtful case. He also referred to the organized opposition in England to vaccination and the grounds for it. In the discussion that followed several physicians were of opinion that it was expedient or necessary to modify the procedure, or to employ better material.

Dr. Hewitt, of Minnesota, advised return to the practice of arm-to-arm vaccination. Dr. Orme said that vaccination has gone into discredit from imperfect methods. He favors arm-to-arm vaccination. Dr. Ruggles favors humanized virus as surer, milder and equally protective. Dr. Herrick considers bovine virus a poor reliance, and especially in secondary vaccinations, when the object is to assure persons of safety or test their security. Dr. Ross alluded to the spurious sores which frequently follow the use of bovine virus, and which are too often trusted as protective, and prefers human virus when procurable of good quality.

Dr. Stone concurred in the last view. Dr. Chipman thought the propagation of vaccine should be under government control and a constant supply guaranteed.

Thus it would appear that the utterances of accredited members of the American Medical Association are to the discredit of the common method of vaccination, notwithstanding that in some States the arm of the law is invoked to force it upon the people.—*Ed. S. of H.*

PHYSICIAN VS. DRUGGIST.

IN some of the States the Legislatures are doing a great deal in the line of "regulating" the practice of medicine, but it seems very difficult anywhere to meet the wishes of the different "schools" of treatment. In Michigan especially, the doctors appear to have been diligent, and the druggists too, the latter having gained a little on their brethren the prescribers, and practically made them by statute the subordinate class, so far as the employment of medicines is concerned. For instance, the law, as recently construed, debar a physician from selling drugs to any besides his own patients, even if he have no financial interest in the sale. He can sell all sorts of medicines to his patients, but may not fill the simplest order of a brother doctor, or barter even a mustard plaster to a person not his patient. But, on the other hand, how is it with the druggist, who appears to do pretty much as he pleases without let or hindrance? He can not only fill prescriptions and sell anything from a jill of carbolic acid to a toothpick, but he can advise customers what to take for a pain in the stomach or a sore throat, and dispense a considerable line of "remedies" of his own making. He can even go so far as to suggest changes in the medicine advised by the doctor, who may live just "around the corner" from his

pharmacy. The incongruity in the relations of physician and druggist to the public would be very ludicrous if it were not so serious a matter. In some cities the medical societies concern themselves much about the few individuals that may be discovered practising medicine without a diploma or license, while the druggists who are doing the same thing by wholesale are not even censured in an official manner.

We can well understand that if the druggists were compelled to depend upon the physician's orders for the sale of medicine over their counters the majority would find it necessary to seek other fields of employment. Perhaps the health and pockets of the people would not suffer by such an order of things therapeutical.

Looked at squarely, the matter demands adjustment. If there should be legislation to protect the community from imposture in medical practice it should discriminate fairly between the physician and the druggist. The province of the physician to advise concerning the remedies that a sick person may take should be respected, and the druggist should not be permitted to usurp the physician's place. The time is coming when hygiene will be accounted of more value than drugs; prevention better than measures of cure; the physicians who are in the advance in this respect are those who will have little use for the druggist, and will care less for his "interferences."

H. S. D.

COMPARATIVE THERAPEUTICS.

A CHICAGO publication furnishes the following statement:

"Cook County Hospital is located in Chicago, and is one of the largest in the world. It contains from 800 to 900 patients all the time. Dr. Streeter has furnished the following statistics for the past five years.

The total number of patients ad-

mitted to the hospital during this time was 43,598. Of those 28,121 were assigned to the Allopathic school, 8,509 to the Homœopathic school and 6,968 to the Eclectic. The total number of deaths in the hospital during this time was 4,774. Of the Allopaths' 28,121 they lost 3,340, a death rate of 11.88 per cent. Of the Homœopaths' 8,509 they lost 766, exactly 9 per cent. Of the Eclectics' 6,968 they lost 668, or 9.56 per cent. This it will be seen that, while the entire death sum total is 4,774, if the Allopaths had treated all the patients in the hospital for five years the number of deaths would have been 5,179, or would have cost the country 405 more lives to have had the institution altogether under Allopathic control. Another way of putting it is this: While the death record shows 4,774 losses, if the Eclectics had treated all of the patients the number of deaths would have been 4,167, and if the Homœopaths had treated them all it would have been but 3,923."

The statistics as they are given are valuable in a comparative sense, although it must be said that to reflect upon them in the manner indicated by the writer in the closing lines of the paragraph savors much of the *ad captandum*. It is but reasonable to admit that we can scarcely compare cases of illness or disease, although coming under the same diagnostic class, as we would pumpkins or gooseberries, and draw absolutely true conclusions from their mortality; nevertheless showings of the kind given must have a derogatory reflection upon the less successful methods. There is one class or school of therapeutics, however, that we should like to have seen represented in such a competition, viz., the hygienic, for we believe that with a fair opportunity it would show to our Homœopathic and Eclectic contemporaries some advantage in the mortality rate over them. What "experimenting" there has been in hospital service in the

hygienic or hydropathic line by physicians, for the most part by no means well equipped for the work, has obtained results very prejudicial to the common drug method. When, however, the question is asked why the hygienic procedure is not adopted since its effects are so far superior to the other? we are met by the answer—quite impracticable to introduce it generally. D.

MUSCULAR DEVELOPMENT OF CHILDREN.

THE American people have provided one of the finest school systems in the world for the development of the mental faculties of their children, but have made very meager provisions for the development of their muscular systems. Evidently the American people place a higher value upon brain than upon brawn. Brain is important but brawn is not to be despised or ignored. In former ages when the result of warlike contests between nations and tribes was decided to a large extent by the muscular strength of the contestants the value of a powerful physical organization was held in higher estimation than at present. Without detracting from the superiority of the mind over mere physical strength, yet there is much to be said in behalf of the desirableness of more systematic efforts to secure a better development of physical strength. The proper time to secure this development is during youth. Youth is the period of growth and development, and unless the muscles are developed and strengthened thus they never can be brought to any high degree of vigor. A muscle that is not used does not grow—no, it does even hold its own, but shrivels up and in time will become useless. An arm that is placed in a sling and not used at all in time becomes wasted and incapable of use. On the other hand the arm that is used daily draws blood in large quantities into it and is nour-

ished, strengthened and becomes larger.

Look at the blacksmith's right arm that is daily vigorously exercised in pounding the iron, and see its swelling muscles and iron-like sinews. What exercise and work will do for the blacksmith's arm will do for all the muscles of the body if equally exercised. The hard work and vigorous exercise of the blacksmith's arm not only strengthens and develops the brawny arm but also imparts like vigor to the whole system and makes it capable of great endurance. A development to some extent of the blacksmith's vigor and endurance is what is needed for all of our youth to make them strong and stalwart young men and maidens, able to endure the hardships, struggles and varied storms of life. You seldom see pale, feeble, weakly boys or girls who have been accustomed to use their muscles daily in some kind of work or exercise. The frail and delicate ones are those who have been reared tenderly like hothouse plants without much effort on their part. They have grown, but their muscles have never been developed and made strong, and consequently the rest of the system has not become strong. Some children have activity and energy enough about them so that they cannot keep still, and find ways and means of giving themselves enough exercise to secure fairly good muscular development. But many will fail of real development unless special provision is made to secure it.

Many youths who are disinclined to engage in active exercises are more studiously inclined and consequently give close attention to their books, developing the mind out of proportion to that of the muscles. Such youths may become brilliant and proficient students, but for the lack of a vigorous muscular development possess only medium powers of endurance and are predisposed to break

down under any severe strain or at an early age. Occasionally a pale, frail-looking boy or girl will evince a suspicious power of endurance and go through what could scarcely have been expected, but still the rule is that the more vigorous the muscular and general system becomes the greater the powers of endurance.

It is especially important that our girls should receive careful muscular training and development. Give them daily muscular exercises, sufficient to develop and strengthen their muscular systems, and they will grow up strong and vigorous and become strong and healthy women, capable of enduring the strains and hardship and work of matured years. Many girls have been reared tenderly, never been called upon to engage in daily muscular exercise sufficient to develop their muscular powers, and when in mature years they have married have broken down because they had not the strength to endure the work and hardships which come to their lot, while if they had been reared strong and vigorous they would have been able to go through it all in triumph. Even if the girl who has been reared strong and well, marries, and is placed in easy circumstances, her vigor and health is a great blessing her, enabling her to enjoy much more from living than she would if reared delicately and tenderly.

Health is one of the most desirable blessings of life, and no earthly possession can compensate one for its loss. Upon systematic and regular muscular development in youth we insist, because it is one of the most important factors in securing to each youth vigorous health and all that its possession implies. It is a blessing to any boy or girl to be obliged to engage in manual labor to a limited extent every day, and it is conferring no real favor upon them to exempt them from it.

HENRY REYNOLDS, M.D.

NOTES IN ANTHROPOLOGY.

Legends of the Wandering Jew.—The story of the "Wandering Jew" has been recently investigated by L. Neubaur, who seeks to assign it to its true place in literature. Attention is drawn to this work by Karl Engel in a paper in the current number of the *Zeitschrift für vergleichende Literaturgeschichte*, Berlin, from which the *Literary Digest* translates the following:

"There are three main traditions from which all the legends about 'The Wandering Jew' are drawn. According to one, the oldest of all, the shoemaker Ahasuerus sat outside his door when the Lord Jesus Christ passed by on His way to Golgotha, carrying His cross. The Lord wished to sit down on Ahasuerus' stool, but was prevented and driven away by the cobbler. The Lord looked severely upon him and said: 'I shall get rest, but thou shalt wander about till I come again.' The second tradition is that Pilate's doorkeeper, Kartaphilas, drove the Lord away from Pilate's door and struck Him severely in the face. As a punishment he wanders restlessly throughout all lands and for all time. A later addition to this tradition tells that Kartaphilas was afterward baptized by Ananias, the same who baptized Paul, and that his name was changed to Joseph. According to the third tradition 'The Wandering Jew' is that servant of the High Priest who struck the Lord (John xviii, 22). A later addition identifies this servant with Malchus (John xviii, 10), whose ear Peter cut off. An Italian legend says that Malchus had an iron glove on when he struck the Lord, and now must wander round and round the base of the column to which the Lord was chained at the time. He has several times tried to kill himself by running his head against the column, but he cannot die.

"The oldest records that can be proved to be historical are those of the monk Roger of Wendover (1237), of St. Alban's monastery in England. His 'Flores Hist. toriarum' has been preserved by Matthæus

Parisiensis of the same monastery. But the popular tale about 'The Wandering Jew' is no older than the beginning of the seventeenth century. At this time we also begin to hear anecdotes from people who claim to have seen Ahasuerus. Paulus von Eitzen, Bishop of Sleswig, saw him once in Hamburg passing in clear view in front of the pulpit, from which the bishop was preaching. He has given a detailed account of his experience; and his pupil, Chrysostomus Dudulaus, has printed it. It is this account which lies at the bottom of the legend as told in the famous *Volksbuch* of 1603, and from it come most of the tales known. From this time on the legend is found in the greatest variety of forms in novels, poems, stories, dramas, ballads, etc.

"Later, we find many impostors making use of the legend, and impersonating Ahasuerus. They made it a good business, and collected large sums of money from those who pitied them. The most notorious of these frauds was the one who, in 1868, imposed upon the Mormon farmer O'Grady, in Utah."

Something New from Josephus.—Professor Bratke, of Bonn, in the *Theologisches Literaturblatt*, of Leipsic, Nos. 16 and 17, reports and discusses a literary find of considerable importance to Bible students—a new testimony of the Jewish historian, Josephus, concerning Christ. The new testimony is found in certain acts reporting a religious discussion in Persia in the fifth century between Greeks, Jews and Christians, the question at issue being the claims of Christ and of Christianity. Just as Bratke was preparing these acts for publication they were issued almost simultaneously by the German church historian, Wirth, "Aus Orientalischen Chroniken," 1894, and by the Russian savant, Vassiliev, in his "Anecdota Græco-Byzantina," I, 1894. In the course of debate the Christian disputant brings up a long list of Israelites, mostly

taken from the New Testament, such as John the Baptist, Nicodemus, Joseph of Aramathea, Caiaphas, and others, and closes the list with the remarkable words: "Josephus, your historian, who has spoken of Christ as a just and good man, manifested from divine grace, doing good to many through signs and wonders." This testimony, which seemingly has never before been utilized by Christian historians, is regarded by Bratke as a testimony concerning Christ entirely independent of the one in the Antiquities; and by its contents and wording, very probably historically correct, antedating even the other and doubtful testimony.—*Sunday School Times*.

Ancient Engineering in Peru.

—Not the least interesting group of facts in reference to the ascendancy of our Western hemisphere in engineering has been developed by recent investigations and excavations in Peru. These show conclusively that on the western slope of the great Andes Mountains dwelt a community possessed of wonderful skill in engineering and the useful arts. These arts were carried on to a degree of perfection which was really remarkable, and we may safely say was equal to, if not beyond, anything that has been developed in the long line of researches among the ruins of Eastern antiquity. Canals, roads and fortifications of wonderful construction, remains of buildings and fountain beds, concrete domes and porphyry reservoirs, all indicate the high degree of perfection in masonry and stone work with which the Incas were surrounded. In moving massive blocks of huge stone they were wonderfully expert. Some of their fortifications contain blocks of stone the individual weight of which runs as high as 361 tons. These were moved great distances, over ravines and obstructions which were met with in but exceptional instances, if at all in similar processes, by the ancient Egyptians and Persians. In building walls their method of laying and connecting stones, mortising each one into the next, hewing and fitting mortises as we now hew and fit wood, exceeds in workmanship and magnitude anything that can be found on the Eastern continent.

The great question has arisen as to what tools the ancient stone workers used, both in the Western world and on the borders of the Mediterranean. Little doubt now exists that both used saws and drills, and in fact core drills, with jewels set in their face which formed an almost indestructible cutting edge, so that as a matter of fact our deep well-boring diamond core drills of the last decade are only revivals of tools known to the ancients. Another method was the use of soft bronze saws or drills with sand and water. In many power stone yards in our great cities this process can be seen in operation to-day of cutting flag stones by gang saws consisting simply of blades of soft iron dragged back and forth over their path, which is constantly being worn away by sand and water poured freely into the slit. Many of the cavities and saw cuts wrought by the ancient Egyptians and also by our own Peruvians give evidence of excellent skill in these arts which are supposed to be modern. As to this method of drilling holes in stone, it will be remembered that the first waterworks in the City of Edinburgh were supplied with pipes made of solid stone with holes bored through them by a rotating pipe freely fed with sand and water, and some of these old waterpipes are to be found in place at the present day.

Of Etruscan Civilization.—The Etruscans had a religion, of course. It was on the same general plan as that of the Greeks and Romans, with gods of different attributes and for different purposes. They seem to have had private gods—the *Lares* and the *Penates*—for each household. The figures, made of bronze and terra cotta, are still found in the tombs. There seems to have been less individuality, less opportunity for independent action or belief than among the Greeks and Romans. There was more mysticism. Their gods seem to have been more exclusive. Their great gods could only be consulted by the authorized priestly authority at the appointed times and after the requisite ceremonies. Their decisions, as made through the priests, were absolute. In this way they more resembled the Druids.

The Etruscans had a language, and

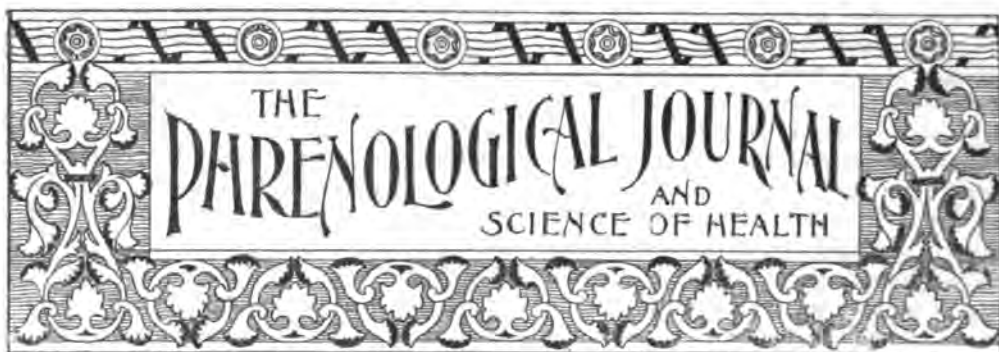
must have had a literature. Roman historians mention definitely the fact that there were Etruscan writers of history, tragedy, song, hymns, etc., etc., etc. These have all perished, and the world has no means of their recovery. The inscriptions, sometimes painted, sometimes engraved, on their tombs can be and have been studied at leisure. Although the Etruscan alphabet is well known and the Etruscan words are easily rendered into living language, yet their meaning, when thus rendered, is unknown. All the learning and labor bestowed on them have in this regard been without result beyond defining our want of knowledge. These inscriptions have been discovered until they number thousands. The cardinal numbers from one to six, the names of which were given on the sides of a cube of dice, but their order—which is one and which six—is unknown. The numerals known to us as Roman were really Etruscan. The writing both of figures and letters was usually from right to left, though instances have been found to the contrary.

The Etruscans were skilled in art and architecture. Their principal arts were painting, sculpture, principally in relief, engraving, always intaglio on the scarabii and by incised lines on thin bronze, the working of precious metals, and the making and decorating of pottery. These arts are principally known to us by the preservation of objects in the tombs. The art of Etruria, like its civilization, has many epochs. Some of these epochs show great similarity with Grecian art, others with Egyptian art. The sculpture, engraving and working of precious stones and metals were unique, apparently bearing no relation with that of any other people except the form of scarab with that of Egypt. Of architecture but few examples remain. That the Etruscans were the inventors of the arch is shown in several ways. It is conceded even by the Roman historians that the arches in the walls around Roma Quadrata were the earliest work belonging to Roman civilization, and that they were built by Etruscan workmen. In walls, too,

which have been found, bearing their own evidence of being Etruscan, the arches show various stages of progress until they arrived at the perfect arch, shown in the earliest Roman work."—*American Antiquarian*.

French-Canadian Legendary Lore.—Many traditions are held in the Province of Quebec and on the shores of the Gulf of St. Lawrence as firmly to-day as they were in the ancient days of faith. These myths have become as much a part of the people's environment as storm and sunshine, sowing and harvest, and have been accepted with a conviction as simple. Among a people so credulous that a toothache is cured by a charm, that a medal is hung around a cow's neck as an efficacious remedy for a cough, a Latin prayer fastened on a barn door as a protection against fire or the invasion of thieves; where the dust collected from a dead woman's coffin is supposed to relieve disease, it is evident that superstition has retained its hold. The Canadians have an unquestioning belief in witchcraft, and in the possession by the Indians of magical powers. The early settlers brought with them rich stores of story from Europe, and adopted many beliefs from the Indians. Many of these old stories are whimsical, but they portray qualities of sentiment and imagination, quaint drollery, pure morality and primitive philosophy; and all are sweetened by human sympathy. In the rural districts of French Canada Satan's company is looked for on all occasions. Canadian rustics never answer "*Entrez*" to a knock at the door, always "*Ouvrez*." This is founded on an old legend of a young woman who said "*Entrez*," when the devil came in and carried her off.

But it is when the priest is sent for to attend the sick that one needs all his wits to annul the machinations of the devil. At such a time the devil is stimulated to his greatest activity, for it is a question of the loss or gain of a soul; but notwithstanding his zeal and versatility of resource and his knowledge of human nature he is often outwitted by mortals, as many vouchers attest.—*All the Year Round*.



Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M. D., EDITOR.

NEW YORK, AUGUST, 1894.

THE OUTLOOK FOR PHRENOLOGY.

IN past years there have been many difficulties in the way of the promulgation of Phrenology in this country, with which people outside of the profession are seldom acquainted. Unlike almost every other department of natural science, this subject is so identified with questions of reform, problems of religion, philosophy, government, marriage, and, in short, the whole social system, that the true phrenologist represents a tremendous force in the development of civilization and the evolution of the race. As such he is entitled to considerable credit, and if he is loyal he will receive it; but until recently, the rewards of the phrenologist have been chiefly in the nature of glory and the delights of a clear conscience. However, it gives us pleasure to repeat that the times are rapidly changing, and that there now remains only a thin crust between our profession and the hearty recognition and encouragement of the general public.

Phrenology is a most stupendous

fact, and the conventional world cannot, in the very nature of things, remain much longer uninformed in regard to it. Conservative people are as anxious as any other class to benefit themselves, and when they learn that Phrenology will be of wonderful assistance to them in bettering their condition and enlarging their enjoyment, they will gladly accept it. In New York City within the last year, there has been an unmistakable revival of interest in the subject, as every one who has read the great newspapers and magazines of this metropolis must have observed. In many of the large Sunday papers, which have a circulation of a quarter of a million, there have been articles varying in length from one to four columns devoted to the subject, and in some instances these articles have been syndicated, and thus spread to all parts of the country. Among the most notable of these articles was one which occupied several columns in the New York *Sun*, giving a detailed history of the American Institute of Phrenology and its work. Well

known phrenologists have been quite frequently interviewed, and their opinions have been published in a way to indicate that they were highly esteemed.

It is safe to say that when the leading newspapers of this country give a great deal of space to a particular topic, it is a conclusive sign that the masses of the people are anxious to know about it. Another hopeful sign may be found in the consideration of the general wave of liberal thought that has swept over the United States in the last fifteen years. There are now hundreds of magazines, books and papers devoted to various phases of investigation and reform, which aside from their value or sound-

ness *per se*, are certainly indicative of a widespread tendency to accept new truths whether consonant with the old systems of thought or not. Among these may be mentioned the already large and increasing literature of Theosophy, Spiritualism, Monism, Unitarianism, Psychological Research, and Socialism, to say nothing of the numerous aggressive advocates of natural religion and agnosticism. In all these departments the discussions have a tendency to cultivate a critical and discriminating disposition; and if truth is discoverable, as we firmly believe it is, and the people are only led to make efforts in the direction of truth seeking, we may be sure that their labors will be crowned with success.

TWENTY THOUSAND MURDERS.

IT is reported that Representative Blair, of New Hampshire, introduced in the House, on the 3rd of August, a resolution calling for an investigation by the Department of Labor of the increase of capital crimes in the United States. Speaking of this resolution, Mr. Blair said:

"The number of murders in this country during the past four years has been more than twenty thousand. In 1889 the number was 3,568. These increased to 4,290 in 1890. There was a still further increase to 5,908 in 1891, while in 1892 the total was 6,790.

"This, you will see, is an increase of ninety per cent. in three years. During that period 331 persons were executed according to legal process, and 558 were lynched. The number of lynchings in 1892 were 241. Of these persons 158 were negroes.

"These figures are appalling, and

are a disgrace to our boasted civilization. The Department of Labor, through its ramifications, can investigate this subject thoroughly, and I believe that the resolution will be favorably reported from the Committee on Labor, to whom it was referred.

"There will probably be some antagonism to the resolution, but I believe that it will be adopted. I don't look for any action upon the resolution, however, until the next session of Congress."

In view of these facts it seems incredible that there should be any class of people, except criminals, who would oppose or in any way discourage the spread of the phrenological explanation of crime, or the means of prevention which the phrenological masters have suggested. Of course we admit that in refusing to teach phrenology in the colleges and schools,

the educational leaders are unconscious of the frightful blunder they are committing. Nevertheless, it is our duty to keep prodding the lethargic leviathan of public opinion until there is a general realization of the social improvement which a knowledge of our teachings would bring about.

The Americans are absurdly lax in regard to the production of criminals. There are laws against making counterfeit money—but why should there not be laws against making counterfeit men? There are laws against carrying concealed weapons—but why should there not be laws against carrying concealed desires to commit crime? Laws exist which forbid murder—but where are the laws to prevent the development of murderers?

Some day the people will learn the advantage of a prophylactic policy in moral education as well as in medicine. They will see the injustice and folly of allowing European and Asiatic tramps to swarm into our country without submitting to both medical and phrenological examinations. The authorities are careful to exclude lepers and others who are physically incurable, but nothing is done to restrain the moral lepers who land upon our shores. Not a straw is laid in their way. Surely no reasonable person can dispute the propriety of subjecting all immigrants to a rigid phrenological examination by a scientific board appointed for that purpose. We think we can see the practicality of this idea as plainly as we can see the terrible results of vice.

Furthermore, the criminal class should not be allowed to marry without a license or certificate granted by

a board of phrenological experts. Why should the people who are least fitted to become parents be encouraged or even permitted to assume such a grave responsibility?

With many people the date of the marriage ceremony marks the boundary between a condition of apparently reverent obedience to woman's slightest wish, and a state of infamous license to trample every sense of delicacy in the dust.

Under the cloak of marriage, many men are guilty of a species of villainy for which, during the period of courtship, they would be lynched. And "society" stands aside with its white hands folded, and neither asks nor cares to lift the veil. But if the moral endowment of children is thus entirely left to blind impulse and ignorance—in other words, if neither law nor science is allowed to have any voice in determining the conditions of heredity, what can be expected but a vast herd of human wolves such as we have in our land to-day?

There is no reason why the State should not prevent crime by striking at the root of the matter. The real source of the trouble is in the ill-shaped brains, and the ill-formed brains are the products of wrong conditions.

There is a great deal of talk now-a-days about improving "the social condition of the masses," and it is well to attend to all phases of environment; but let us not forget that the most important conditions are the habits and mental states of prospective parents. Vice often flourishes in palaces, and the dower of moral genius is far from rare in the humblest cottages. For this reason it is clear

that the culture of the inner life stands first in the order of value. But to cultivate the mental faculties with intelligence it is necessary to know them, and this knowledge can be obtained only by a study of the science founded by Dr. Gall.

THE SOCIAL STATUS.

AS the years go on the thoughtful, analytical observer of affairs civil and social sees more and more faults and abuses. In this country, with what is claimed the best form of modern government, evils seem to abound in every quarter. The system over which the Stars and Stripes wave by its very liberality affords opportunity for the growth of forms of irregularity and wrong in political life, in commercial life, in social life, where the spirit of the system is neither respected nor understood.

The principle of rule by the people, for the people, is most noble, and in its promotion by authorized guardians who sincerely appreciate its significance, and faithfully endeavor to discharge their duties, the best results must accrue to the public at large. The fathers of the Republic were of that earnest, decided sort that great crises and trials produce, and in their fervent loyalty to the commonwealth organized the system that we so much admire as the *modus* of government, but which appears to have become chiefly a subject of oratorical reference, while its formularies and precepts are forgotten in every-day practice.

The "eternal vigilance" which is declared to be "the price of liberty" has been relaxed in the dazzle of

material prosperity, and those institutions that were designed to be the safeguard of the community and the individual, and to advance their happiness, have become the feathercock of the demagogue or successful politician. The remark of Burke when considering the atrocities of the French Revolution has some application to American affairs to-day: "What is liberty without wisdom and without virtue? It is the greatest of all possibles, for it is folly, vice and madness, without tuition or restraint."

Our American forefathers laid a good foundation for solid growth and greatness, doubtless expecting that their posterity would understand their motives, and with a like earnestness would labor for the perpetuation of the national structure in its symmetry and glory. They did not foresee how passion, partisanship, sectionalism and selfish greed would embarrass and impede the working of the system they were at so much pains to establish. They did not foresee the disloyalty and corruption of so large a number of the men to whom important posts of public duty are intrusted, and the consequent arrest or paralysis of movement in affairs of vital interest to the community, even in the administration of law, personal greed and party affiliations having control to the discomfiture of justice and order.

The body of the law-and-order abiding have in later years had their eyes gradually opened to the perilous situation in State and society, and now are turning to economist and statesman with the inquiry, "What is to be done?" It is not easy to answer the question. To inaugurate

wholesale changes and reforms would be attended with danger, and be well nigh impossible. Public sentiment has so much to do with the existence of many of the more serious abuses that any attempts to alter them would meet with open opposition.

And yet we are witnesses of great gatherings in all parts of the country, ostensibly for the discussion and promotion of social and moral improvement. The many temperance, Christian Endeavor, Church Club and Brigade, ethical and educational conventions and meetings bring out immense assemblies, and the press reports great enthusiasm in the proceedings of these and mutual congratulations over wonderful "gains and advancement during the past year." Notwithstanding, where is the gain to general society? What has been done to stem the tide of vice and crime and the tendency to local disorders? Where is the effect upon moral sentiment? In what respects are the laws better administered? Is there any diminution in the ranks of the anarchists, the vagabond and hoodlum classes that menace public and private safety? What of socialism and labor agitations, and the widespread discontent of the working masses?

Perhaps we are showing a woful ignorance or a willful impertinence by reflections such as the above. Perhaps our horizon of observation is very limited and we do not rightly discern the signs of the times. God grant it be so! that all these agitations, with their dread account of disaster and loss to life and property,

mean a near resolution of the troubles, social and political, and a great moral awakening. We are, nevertheless, skeptical of any sudden development of moral amelioration. The mixed constitution of the American population renders that altogether improbable, if not impossible. The evils that abound are too deeply rooted to be torn up and destroyed in a presidential term. In the Divine economy changes are wrought out gradually. The evolution of a world requires many eons.

The problem of social amelioration must be found; measures must be set under way for the development of the moral nature of the people. We cannot expect to do much with the adult masses as they live to-day, but for the children—much may be done to inculcate them with principles and habits of conduct that will flower into a better manhood and womanhood than their parents exhibit.

In education, then, the hope of the future lies; education that has for its chief concern the moral enlightenment of the young, the establishment in their conduct of habits of order, truth and industry, and the inspiration of noble aims and motives. We hear much of liberal advantages for the masses, "university extension," etc., but little of moral education, or endeavor to supply what is most needed to-day, that training and culture that will bring into activity the highest faculties of the human mind and render our youth self-controlling, well balanced, manly, womanly, and so fortified by moral habit and the spirit of kindness as to find in circumstances of whatever nature opportunity for action earnest and diligent. No

amount of intellectual or esthetic culture will make a man stanch in integrity, noble in self-devotion to a great purpose, patient amid trials and obstacles. No, the uprightness and integrity that can be trusted always are the fruit of moral training and discipline, and no accident of birth or mere concurrence of circumstance will take the place of such training.

H. S. D.

GOOD WORDS FOR PHRENOLOGY.

IT will doubtless be of interest to many of our readers to know the opinions of phrenology held by that well-known, old-time and appreciative friend of our science, D. H. Chase, LL.D., of Middletown, Conn. We therefore take pleasure in publishing a few characteristic extracts from his friendly letters to Mrs. Charlotte Fowler Wells:

"Please accept my hearty thanks for 'The Value of Phrenology.' I have reason to value Phrenology more highly than most others because it has so blessed me in choosing a wife, training family and pupils and caring for my own mind and heart. I would feel that I was among *the wise men* of earth if I knew all that brain is and does.

"It is about 60 years since I tested Phrenology, found it true and gladly adopted it. It has done me invaluable service in caring for myself and aiding others. On every fit occasion I indorse it and laud it. How many young unmarried people I have urged to study it to enable them to make wiser choice of a life partner! Few indeed have any practical knowledge of it."

After giving (by request) an account of an accident and its resultant suffering, he closes as follows:

"For months I lay with clenched fists fighting agony, suppressing

groans and shrieks. In the organs of firmness, combativeness and destructiveness there was a tangible growth, despite my years (74). Fingers hardly straight yet (80)."

"I chose my wife by the aid of Phrenology, and it told the exact truth. I have never studied any other science of equal worth to me. Before it was taught me in the works of Gall, Spurzheim and Combe in 1833 I studied all the noted philosophers of England and America, to find them worthless; utterly unpractical. For sixty years I have tested and used Phrenology in my life work and social relations.

"Pure, inorganic matter has wondrous powers; for example, gravitation, cohesion, mechanical and chemical forces, combustion, steam, electric and magnetic forces, etc. We utilize these forces in a thousand different ways—in water wheel, windmill, steam engine, dynamo, telegraph, etc. But when we come to brain we find the most wondrous mechanism known to man. It is a complex dynamo, propelled by one-third of all the blood, protected more carefully than any other organ, and honored with the highest place in our bodies. Convolutions in the base of the brain supply power for muscular toil, digestion, secretions, all the vital functions, including heart activity. Nerves are telegraph wires, busy with messages both ways, between brain and body and world. Each brain organ is a special dynamo. One organ propels us to deal justly and gives us the sense of right and wrong; another to deeds of mercy; another to hoard up for future needs or old age; another to worship, etc. A noble brain propelled by a vigorous body is a priceless treasure.

"I know not how your life work could have been more useful and honorable. God has appointed it. The real value of Phrenology has scarcely yet been disclosed to man. God hasten the day when it shall shine as the Kohinoor of all sciences."

THE INSTITUTE.

WE wish to call attention to the thirty-first session of the American Institute of Phrenology, which opens on the fourth day of September. More than five hundred bright men and women have been graduated since the school was incorporated in 1866; and as a result of work in the lecture field, in the professions of divinity, law and journalism, as educators, from the presidency of colleges to numerous popular public schools, and also in commerce, these graduates have made their mark with double their former power in guiding their clients to improved personal culture, the right selection of life pursuits and the choice of proper associates in business and in marriage.

To understand one's own character is the highest attainment of knowl-

edge. To know others correctly is a passport to success, wealth and happiness. A knowledge of human nature augments, ennobles and enriches life. It multiplies individual resources and the power to influence for good all who enter its radiant sphere.

The teachers of this oldest phrenological institute in the world, with the largest experience and the most extended and complete outfit for instruction ever gathered for the purpose, are prepared to impart to students all the assistance they need to equip them for professional duty and the achievement of reputation and success. It is believed that the season of dullness and disturbance in the business world is about to be changed to general prosperity, and that a cordial welcome awaits graduates to a field of effort full of promise.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address.

ALL CONTRIBUTIONS MAY BE SENT TO THE GENERAL editor, Dr. Edgar C. Beall; but matters relating to CHILD CULTURE, SCIENCE OF HEALTH, or of a strictly medical nature, should preferably be sent to Dr. H. S. Drayton, who has special charge of these departments.

WE ALSO EARNESTLY REQUEST OUR CORRESPONDENTS to write as legibly as possible. Wherever practicable use a typewriter. In this way you will lighten labor, avoid misunderstandings, and secure earlier attention.

PHRENOLOGY IN BOSTON.—*Question.*—Kindly explain why phrenology has attracted so little attention in Boston during the last twenty or thirty years. Is it not true that years ago, when Spurzheim and Combe visited that city, there was a great deal of enthusiasm among the best classes for the new science? And what became of

the Phrenological Society of Boston, which was composed of highly cultivated people?

A. J. W.

Answer.—To answer this question satisfactorily would be difficult in the limited space at our disposal in this department, but we may say that phrenology was taken up with enthusiasm by the class of people you mention in the time of Spurzheim and Combe, from the fact that in those days it was a novelty. In this one word novelty may be found the key to the whole matter. As long as phrenology was new, and the subject comparatively without a history behind it, it appealed to the love of variety and change which is inherent in human nature; and so it was attractive; but after a few years the people who had examined it settled down into the belief that it was a useful science, and accepted it with that coolness which to-day characterizes nearly all people in regard to such subjects as astronomy, geology or chemistry. People do not go rushing about the streets to-day grabbing their friends by the coat collar and discussing the truth or value of astronomy, geology or chemistry. The novelty which at one time attached to the discoveries in astronomy has long since ceased to be a quality which we can associate with the thought of that subject. People do not now organize themselves into astronomical societies any more than they do in phrenology; and, to the credit of our work, let it be said that there is, in fact, more active interest in phrenology among the mass of the people than in either of the other sciences above mentioned.

MARRIAGE ADAPTATION.—*Question.*—Do you think that if people understood the principles of adaptation in marriage which are laid down by phrenological writers they would have a regard for science, or follow their instincts and emotional preferences as they do to-day? Mrs. L. R. R.

Answer.—Undoubtedly there will always be a certain number of people incapable of profiting by any amount of wisdom which may be developed and promulgated. But there is no reason why young people, as well as those of mature years, should not be accustomed to mingle judgment

with affection. Much in this matter depends on habit and training. The whole difficulty now is that the people are not trained in this direction at all. Educational systems are absolutely lacking in any provision for instruction in the all-important subject of sex relations. Young people are allowed to blunder along entirely in the dark, and when the world is sufficiently civilized to appreciate this subject, and it becomes a recognized part of education, it will be easy enough for young people to take a pride in showing their skill and judgment in selecting their proper mates. The vanity of young people will be, to a certain extent, diverted from other channels, such as eucher contests, ball playing, etc., into the field of love-making as a fine art.

LITERARY COMPOSITION.—*Question.*—What faculties are necessary to make a good writer?

J. T. S.

Answer.—Different styles of writing require different faculties, but, generally speaking, we may say that a good writer needs, first of all, Constructiveness and the perceptive. The former is necessary to prompt to the attainment of skill in the building of sentences. Locality, Eventuality and Form are also useful. Individuality is the source of clearness and focalized expression. People who are deficient in the sense of "Thingness," as Prof. Fowler once called it, are likely to omit nouns, and when they omit the subject of their discourse or refer to it vaguely, as they often do, the sentence or paragraph is naturally weak and obscure. Language, or verbal memory, of course, is a great aid, but not so important in correct grammatical construction as the other faculties.

NARROW FACE.—M. M.—The significance of a "narrow face" depends upon organization—whether the entire head be narrow or the facial part be narrow *per se*. As a rule the narrow head is flattened at the sides, which intimates that the person is not endowed with much energy, continuous industry and shrewdness, so far as regards his personal interests on the material side are concerned. The head may be high in the forehead and deep in the chin, thus imparting a relative narrowness to the face. If so we must consider the organization

analytically, and take into view the meaning of each feature. One with a narrow looking face may be strong willed, ambitious, overbearing, peevish and fretful, or quite the contrary, with high intellectual capabilities and refinements.



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

ATHLETICS FOR PHYSICAL CULTURE. By THEO. C. KNAUFF. 12mo, pp. 422. New York: J. SELWIN TAIT & SONS.

The author opens his very practical book with a chapter on the "needs of the day," in which he speaks of what is required to be physically and mentally strong, and is led, of course, to compare former times, when people lived at a moderate rate, went to bed early, were much in the open air, etc., with the present time, when things are pushed at a high pressure and steam and electricity appear to pervade every department of life. In those circles for which his book is designed there is great activity, but it is chiefly the restless movement of the nerves, while the muscles have little attention.

To be sure, of late there is a marked awakening of interest in athletic sports among young people, and some observers are apprehensive lest the emulative spirit that so much characterizes American life will carry them to extremes. On our part, while we deprecate the tendency to overdo in certain athletic lines, we are distrustful of the continuance of the interest on account of its excess. Yet after a while the "fad" fever may subside and a healthful moderate feeling remain that will be permanent.

Mr. Knauff has prepared an excellent book—quite covering the field of games and of gymnastic methods generally recog-

nized in athletic circles. Systematic instruction is given for the different exercises of the court and field—for the light as well as heavy forms of physical training. Points that the equestrian, the cyclist, the boatman, the ball player, the tennis fancier, the swimmer, the boxer, the archer, etc., etc., will or should appreciate are presented in clear language. The advice and suggestions to women for their development are noteworthy. The illustrations are many and valuable, especially the half-tone figures from photographic studies. The book as a whole is one of the better class of manuals intended to be read carefully and followed practically.

MEMOIRS OF ISAAC ERRETT, D. D., founder of the Christian Standard. By J. S. LAMAR. 2 vols., 8 vo, pp. 700. Cloth. Price \$3. Standard Publishing Co., Cincinnati, Ohio.

The Rev. Dr. Isaac Errett, who died at his home near Cincinnati, December 19, 1888, was one of the most distinguished leaders in the religious reformatory movement inaugurated in the early part of the present century by Thomas and Alexander Campbell—father and son—and their associates, and which now includes in its communion, in the United States and British dominions, according to the latest statistics, nearly a million members. These volumes will, therefore, be better appreciated by a brief statement of the antecedent influences that have resulted in this rapid increase. Dissatisfied with the condition of Protestant Christendom, and convinced that formulated human creeds, as bonds of union, were not only powerless to remedy the evil but rather tended to encourage it, the early advocates of this movement repudiated all confessions of faith, books of discipline and decisions of councils and synods, and assumed the position occupied by the apostles and primitive Christians, that the heartfelt acceptance of Jesus Christ as the Son of God, with a sincere purpose to live as his faithful disciple, is the only efficient bond of union for the Christian church. The preaching of this faith and the attendance upon its ordinances, as universally recognized in the primitive church, are the principles that

have produced the extensive and rapid success of the people now generally known as the "Disciples."

The family of which Isaac Errett was the fifth son received their earliest training in these principles in the city of New York, the father being an elder in the church. The father died when the son was in his seventh year and the family removed to Pittsburgh, Pa., and there, when but thirteen years of age, Isaac became connected with the "Disciples." From this time forward his was a self-supporting, self-educating career. The straitened circumstances of his youth prevented any advantages of college training, so that, laboring for support at whatever occupation might offer, he went hand in hand with a fixed determination to prepare himself for the usefulness in human affairs to which he aspired. His natural endowments were such as to give him commanding influence from the first. He was over six feet high, with a large, massive head and a superb

physique. At the age of twenty he became pastor of the church in Pittsburg of which he had been a member for seven years.

In the "Memoirs" his biographer has furnished, in the smooth, fluent style of which he is master, the details of this most successful career. It is doubtful whether a more competent writer could have been selected for the work. It is well worth study by young men aspiring to usefulness and distinction for the lessons it inculcates, of self-preparation for a certain career when laboring under great disadvantages. Obtaining a very respectable education while pursuing the callings of farmer, miller, lumberman, bookseller, printer, editor and school teacher in his youth, Dr. Errett reached the place in after life that made him the most prominent man among the "Disciples," and gave him a recognition among the distinguished teachers of the religious world. This work can be ordered from Fowler & Wells Co. M. C. T.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

LEVI HUMMEL, class of '77, is intending to enter the lecture field the last week in August, and for the present will lecture in Northumberland, Schuylkill and Carbon Counties, Pa. He hopes then to be able to work westward into Ohio, Indiana, etc.

GEORGE MORRIS, class of '78, is now in Spring Valley, Minn., and expects to be in that part of the State for a few months. He has until recently been lecturing and examining in St. Paul, where great interest was created in the subject of Phrenology, as stated in the July number.

DR. J. C. BATESON, class of '89, read a paper on the Human Temperaments and their Application in Medicine, before the Medical Society of Scranton, Pa., in April last. This paper received the close attention of the physicians present, and a very full report of it was published in the Scranton papers. Dr. Bateson evidently employs his phrenological knowledge in his practice to good purpose.

GEORGE COZENS, class of '91, purposes spending the whole of October in the city of Winnipeg, Manitoba, where he will give a course of twenty-five lectures in different parts of the city. He is now lecturing

at Fort William, Ontario, and reports that times are rather poor, which, we may add, seems to be not entirely confined to Canada.

E. W. PENNEY, class of '93, is now in Utah, making examinations and giving charts, having examined a goodly number of prominent men, and lecture dearly in the season to a large audience at Collinsville, Ill., and in the place of his residence in Utah, giving much pleasure and satisfaction to the different audiences, and creating considerable interest in Phrenology.

Being called to serve as a juror, he was requested to examine two obstinate jurymen who had kept the jury out all night, and did so with a most happy result, a verdict being soon obtained after the examination had been made. We are pleased to know that Mr. Penney intends taking the course with us again this fall if possible.

W. B. MULLENS, class of '91, writes us from Athensville, Ill., that he has just returned from Dallas City, Ill., where he has been engaged in giving a series of lectures on Phrenology. Owing to the very warm weather the audiences were not large, yet there was a high degree of in-

terest manifested, from which good fruits may be expected in the future. Some of the friends of Phrenology in Dallas contemplate forming a phrenological society in that place this fall.

CHARLES H. NEWMAN, class of '91, writes us from Schenectady, N. Y., as follows:

"I have practiced Phrenology considerably this winter and have awakened much interest. I find that people are not all in opposition to it, but the most of them gladly receive it, as its arguments and principles are so convincing. I examined a man and told him that he was very friendly and benevolent; that he was not stingy enough; that when he got out with the boys he would spend all he had. He told me that it was these faults which had ruined him.

"I examined a young lady one evening and found her very unselfish and very religious. She asked me what position in life she was fitted for. I said a missionary. She replied that it had always been the desire of her life to be one. I examined a man and told him he was a horse jockey. He said he had traded thirteen times last year. I examined another man and told him he was an artist. He showed me two pictures he had painted. I examined a boy and said of him 'This boy cares little for home.' His father told me he had once run away from home. Another boy came under my hands for examination; I found him very coarse in quality, and said of him 'You are unfortunate in your makeup; the fault lies at the door of your parents, or some one before you.' I learned afterward that his father was in the insane asylum. Another boy came under my hands. He was solow in morality and so large in selfishness that I asked to be excused from delineating his character in public. I learned subsequently that he was a brother to the preceding boy."

THE CINCINNATI PHRENOLOGICAL SOCIETY has now a settled place of meeting, at 161 West Seventh street, in the lecture room of a new college. The name by which it is known is "Nature's Healing College;" it is friendly to the science of Phrenology and gives instruction upon the influence of temperament in disease, etc. We have the use of a skeleton, skulls and anatomical models, as well as a blackboard, charts, etc. One of our recent subjects was "The Group of Selfish Faculties." The principal paper was by M. J. Keller, and was followed by a very animated discussion, the business men taking the stand that the exercise of these faculties in the sharp competition of the present day necessarily dulled conscientiousness and benevolence, even if they were large. Several of the ladies argued that strict integrity gave the best results in the long run, even to being more of a help to acquisitiveness than large secretiveness.

All friends of the cause are invited to visit our meetings.

M. J. KELLER, Cor. Sec.,
27 Arcade.

J. J. AXTELL, one of the brightest of our recent graduates (class of '93), is in the field in Michigan. He has given several lectures, with exhibitions of his hypnotic power, which he regards as his drawing card, having had a full house in every instance. The following from the *Benzie Banner*, of July 12, 1894, we take pleasure in copying:

"Last Monday evening Prof. J. J. Axtell gave an exhibition of his mesmeric and hypnotic powers at Dr. Dean's office before a number of our townsmen. One of the Zimmerman boys from Champion Hill was suffering with the toothache, and it was suggested that he be mesmerized and have his tooth extracted without pain. Jay offered to put him to sleep, and so they proceeded to the doctor's office, where the experiment was to take place. Placing the young man in a chair and making a few mysterious passes the hypnotist soon had the young man under his control so that he could make him as strong as a giant or as weak as a babe. At different stages in his work the operator had the physicians present test his subject to see that there was no sham. In a few moments after the performance began a large number of outsiders were admitted to see the rest of the experiment. Mr. Axtell was hindered somewhat by the opposition of his subject, but after a short time he had the young man entirely under his control, and Dr. Dean removed the tooth, which was a large, three-pronged molar. To prove that the subject was not shamming, he was allowed to remain in the cataleptic state until all were satisfied. With a few movements of his hand Jay then brought the young man to his senses and the performance was over. When shown the tooth he could not believe it was his until he felt the cavity in his jaw where it had formerly been. The performance satisfied everyone as to Mr. Axtell's ability as a mesmerist."

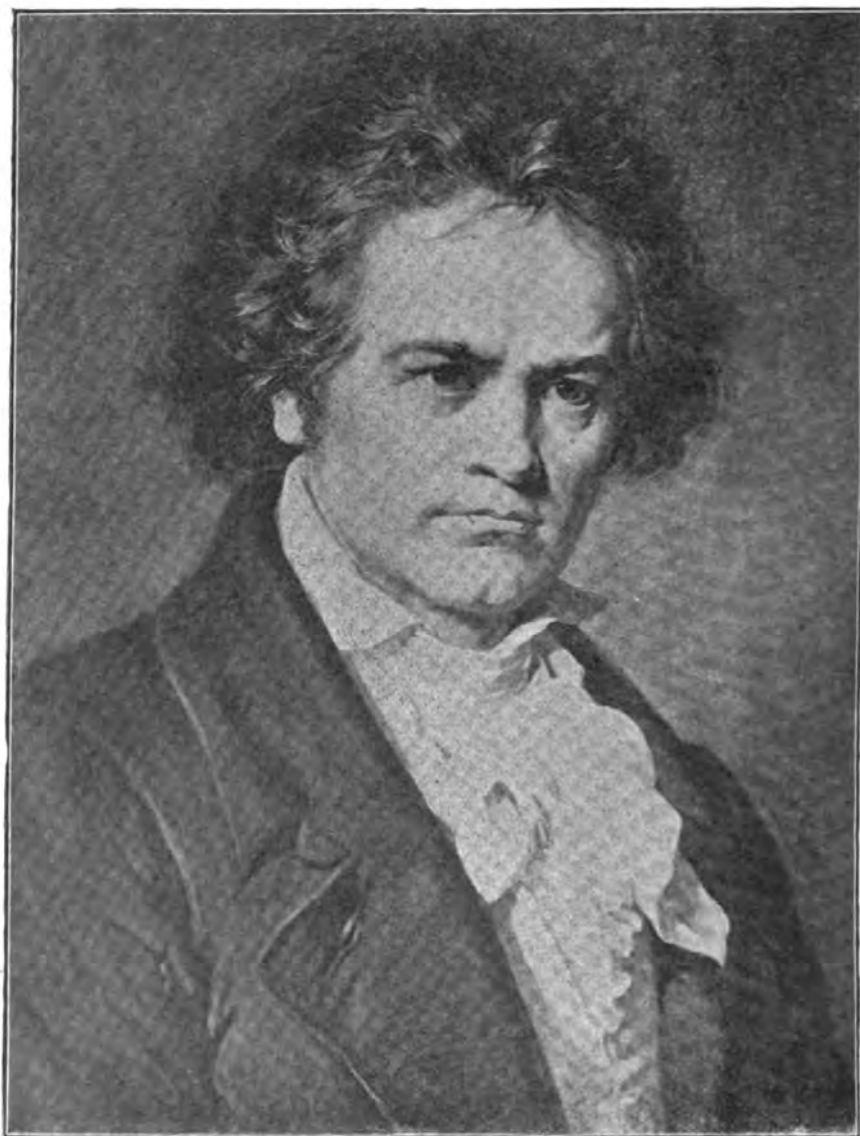
We are pleased to announce that Mr. Axtell is the author of a little book entitled "The Secret Revealed; or, How to Hypnotize Fully Explained," which is now in press.

We are glad to know that business is prospering with Brother Axtell, and that he has such a brilliant career before him.

LECTURES WANTED.—Mr. Thomas Collins, Volant, Pa., writes us as follows:

"I think that it would pay a good phrenologist to visit this place about the middle of September or October. This is a college town and a course of lectures would probably be well attended."

If any of the graduates can take in this field it would be well to communicate with Mr. Collins.



LUDWIG VAN BEETHOVEN.

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[WHOLE No. 670.]

A STUDY OF BEETHOVEN.

BY PROF. JOHN S. VAN CLEVE.

THE close of the eighteenth and beginning of the nineteenth centuries of the Christian era constitute one of the very greatest epochs in human history; it is equaled in interest only by that other cardinal epoch when human affairs were in a mighty transition—when ancient classic culture had reached its “bright consummate flower,” and when, silently as the dew distills out of the bosom of the summer night to hang a fragile pearl on the tip of the grass blade, a new religion, a new spirit, a new humanity, a revolutionizing power even now but dimly apprehended and faintly realized, took shape in the manger at Bethlehem as a new-born infant man.

The period of intellectual awakening known in art as the Renaissance, and in religion as the Protestant Reformation, is another one of these significant nodes in the evolution of man; and that glorious fifth century B.C., signalized by the struggle between Persia and Greece and by the brilliant epoch of Attic literature, is another one of those ganglionic centers which sum up and radiate spiritual influences among men. None of these great ages of the world, however, more fascinate the imagination

than that era of earthquake known as the French Revolution. In politics and society the revolution itself with the gigantic apparition of Napoleon, in literature a battalion of warriors, in science the birth each day of a new learning, conspicuous among them, Phrenology and Egyptology; in music—Beethoven.

Nothing is more distinct to those who bring to the study of Beethoven and his music the requisite breadth of view and keenness of thought than the idea that he, in the impalpable substance of tones, embodied the spirit of advanced humanitarianism which then for the first time began to work with potent ferment in the breasts of men. His life was contemporaneous with that of Napoleon, fitting almost year by year, and the familiar anecdote about his third symphony forms substantiating evidence to the proposition here advanced. The third symphony, E flat, Opus 55, is the one in which his individual style of composition in symphonic form first reaches maturity. It is entitled “Eroica,” the Italian form of the word “heroic,” and the story concerning it is this: He intended to dedicate the work to the young Napoleon, but before it

was finished, Napoleon was crowned as Emperor in 1804, and this was such a shock to Beethoven, who had ardently admired Napoleon as the champion of man against class tyranny, that he felt as if his hero had died; he thereupon wrote and inserted into what he had intended to be a symphony of joy and eager hope, that marvelous and unspeakably tragic funeral march in C minor, which at first hearing strikes one as being so strangely misplaced and illogically related.

Beethoven took great interest in the political agitations and public movements of his time, and used openly and boldly in the coffee houses of Vienna to talk his republicanism at a time when it would have been dangerous but for that profound reverence which Germans and Austrians feel for men of genius. This veneration for intellect is characteristic of all European nations, in especial those of the continent, and it serves the man of genius as the Tarnhelm did the heroes of Teutonic mythology.

Ludwig Van Beethoven was born in the Rhine city of Bonn, December 16, 1770, and he died at Vienna in the midst of a terrible thunder storm, at a quarter before six in the afternoon of March 26, 1827. His boyhood may be said to have terminated with his second visit to Vienna in 1792. At this time he went, not as in 1787 to visit Mozart, but to study composition under Joseph Haydn, and to make that city his permanent residence. By the year 1800 he had produced the works whose opus number carries us into the neighborhood of 40, and his style as a composer was matured. The time of his great achievements therefore may be accurately stated as the first quarter of the nineteenth Christian century.

The beneficent science of Phrenology finds the pillars of its support in those great characters where there is not only emphasis placed upon certain faculties, but where they exist in

extraordinary intensity. Wherever the mental manifestation is so brilliant as to conquer space and time as a modern search-light penetrates the atmosphere, it becomes possible, by what is certainly known abstractly of the mental achievements and what is concretely ascertainable through pictures, busts or descriptions of personal appearance, to look at the man from two points of view and thus obtain a parallax which increases the certainty of our knowledge. It is not commonly realized, but it is an indisputable truth that the two eyes in a human head deal with every object on the principle of parallax—that principle which, applied to the starry heavens by the astronomer, becomes a key to unlock a treasure-house of mysteries. If there ever was a case in point where Phrenology is demonstrated, it is that of Ludwig Van Beethoven. Let any one who has heard enough of his music, and who possesses knowledge and sensibility sufficient to gauge it; who also has read the fascinating story of his life, look at his portrait and examine it feature by feature through the lens which the technique of Phrenology will supply, and then doubt the science if he can.

The character of Beethoven was both strong and angular. The musical critic, Rochlitz, who founded the *Allgemeine Musikalische Zeitung* in 1798 and edited it for twenty years, has left us a famous account of his visit to the great master in 1822, and he says, referring to Beethoven's direct, vigorous expression of his feelings, and total disregard for the conventional disguises of society: "The impression I received from him was that of a very able man reared on a desert island and suddenly brought fresh into the world." His physical appearance was striking in a preëminent degree. Our information on this head is abundant and reliable, coming from many sources. The great piano pedagogue and etude writer, Carl Czerny, lived till 1857.

He was a pupil of Beethoven and was by him delegated to the immortal honor of playing for the first time in public his greatest piano forte concerto, the No. 5 in E flat, commonly known as The Emperor Concerto.

yellow substance, and his clothes were made of a loose, hairy stuff, which gave him the look of Robinson Crusoe. Anecdotes are numerous tending to show that he lived with a degree of disorder almost farcical in



ROCKWOOD PHOTO.

MASK OF BEETHOVEN.

Note the remarkable width of the temples at the seat of the musical faculty.

Czerny says he first saw Beethoven in his own room, and there his beard was nearly half an inch long, his black hair stood up in a thick shock, his ears were filled with wool which had apparently been soaked in some

its exaggeration. Empty wine bottles thrust among his books, scraps of paper scattered on the table, the floor, the window sill—manuscripts in all stages of completeness or incompleteness were jumbled together; his

handwriting which frequently both in the manuscript of notes and of words appeared as if written with a broom and afterward smeared over with his coat sleeve, as has been said of it; the many other anecdotes of his flooding the floor with water while absentmindedly washing his hands, and his standing at the open window in his nightgown, and the like, make evident two things; first, a very moderate supply of that instinct for order so necessary for a scientific man, especially the observing scientist or the fact gatherer, and, secondly, emphasizes what we can read in the superb arches of his top head, namely, the intensity of his life in the unseen world of thought and feeling. There is abundance of testimony to the fact that he was in many things afflicted with an astounding *gaucherie*; he lapsed into clumsiness well nigh incredible. Apropos of his handwriting he himself says: "Yesterday I took a letter myself to the post office, and was asked where it was meant to go, —from which I see that my writing is as often misunderstood as I am myself." It was the same twenty years before, when he says, "this cursed writing that I cannot alter!" He upset the inkstand into the piano, cut himself horribly in shaving, dropped everything that he took into his hands, and could never learn to dance or play cards. When we look into his music we find an absolute counterpart of these qualities. At first we are staggered and inclined to ask, "how is it possible that such a bungling, burly, buzzing, blue-bottle fly of a man, bobbing recklessly about in the glaring window of high aristocratic society, could have been the most renowned piano virtuoso of Vienna, for piano playing is dexterity sublimated?" When we look into his music we discover first that there is an austere abstinence from showy filigree work or anything designed to catch the light of smiling approval upon the tinsel of mechanical dexterity. Like the pianoforte music of

Schumann, that of Beethoven is saturated with significance in every tone. Every sound means something in the emotional effect, and there is absolutely never any weak yielding of the ideal or indulgent condescension toward those frivolous listeners who are happy only when they gape with astonishment.

The habit of writing elaborate passages where the harmonic and melodic significance was slight, and the principal purpose was to draw attention to a sort of sleight-of-hand performance wrought by nimble fingers upon a piano key-board, he stigmatized with all the scorn of his manly nature as "*Notenfressen*," an expression scarcely possible to transfer in all its vehemence of contempt into the English language. The word "*fressen*" in German is the term applied to the act of feeding among animals as distinguished from the more refined eating by human beings; we may therefore translate it as note-gourmandizing, note-gorging, note-devouring, note-gulping, note-cramming, or something like these phrases. The history tallies exactly with this internal evidence latent in the music, for it is recorded that not in showy execution, but in the pathetic delivery of soulful *adagios* and the like, was his glory as a pianist.

A second evidence of this singular inapt quality of the man is found in many a passage of his pianoforte sonatas, where it is evident that he composed with reference to the completeness of his musical thought, and regarded not at all the convenience of the player. There is many a passage which lies with preposterous awkwardness under the hands of the performer, though musically precious. There is a large literature of music where mechanical fitness is studied and where aptness for performance constitutes half, sometimes two-thirds, of all the beauty. Such are the compositions made for their own instruments by professional artists upon the pianoforte, the violin

and the organ; but Beethoven disdained everything of the kind with that extravagance and extreme vehemence which characterized his life and all his personal intercourse with his fellows. Two notable examples are the unreasonable and unnecessary difficulties in the vocal score of the Ninth Symphony and similar passages in the opera of *Fidelio*, which he stubbornly refused to modify in the slightest, although the prima donna showed him how it could be made not only easier but more beautiful.

The general traits of Beethoven's character were to be found in four things amply attested in his biography, constantly exemplified by his music, and shining from his picture. 1. Ethical elevation. 2. Intellectual breadth. 3. Emotional depth. 4. Intensity of will. It matters not whether we take a single page of a piano sonata or one from a string quartette or from a symphony or from his compositions for the voice, choral or solo; without any fantastic straining it is easy to detect the man in his music, and a thorough analysis of all his published writings would continue to reveal and reëmphasize the same thoughts.

"He was below the middle height—not more than five feet five inches; but broad across the shoulders and very firmly built—the image of strength. His hands were much covered with hair, the fingers strong and short (he could barely span a tenth), and the tips broad, as if pressed out with long practicing in early youth. Those who saw him for the first time were often charmed by the eager cordiality of his address and by the absence of the bearishness and gloom which even then were attributed to him. His face may have been ugly, but all admit that it was remarkably expressive. When lost in thought, and abstracted, his look would naturally be gloomy, and at such times it was useless to expect attention from him; but on re-

cognizing a friend his smile was peculiarly genial and winning. He had the breadth of jaw which distinguishes so many men of great intellect; the mouth was firm and determined; the lips protruded with a look almost of fierceness; but his eyes were the special feature of the face, and it was in them that the earnestness and sincerity of his character beamed forth. They were black, not large, but bright, and when under an inspiration—the raptus, as his friend and affectionate patroness, Madame Von Breuning, termed it—they dilated in a peculiar way. His head was large, the forehead both high and broad, and the hair abundant. It was originally black, but in the last years of his life, though thick as ever, became quite white and formed a strong contrast to the red color of his complexion. Beard or mustache he never wore. His teeth were very white and regular, and good up to his death; in laughing he showed them much."

The foregoing pen picture of Beethoven, taken from the admirable account of him in Grove's Dictionary of Music and Musicians, enables us to form a vivid mental picture of the man, vehement, impulsive, arrogant, self-reliant, warm-hearted, romantic, ardent in love, quick in suspicion, hearty in mirth, even sometimes to horse-play, sensitive as the shrinking mimosa which, as Longfellow assures us in one of his exquisite similes in *Evangeline*, curls up its leaves like the human heart even at the sound of the hoof-beats of fate, while on the other hand he was rough-rinded and firm-fibered as an English oak.

Beethoven's mother was a kindly and most sympathetic woman, but ignorant and of humble social position; she had been a professional cook. He lost her at the age of seventeen, and his expressions of sorrow as found in his letters are touching in the extreme. His father was a professional tenor singer, but inordinately given to drink, and Ludwig

was sometimes compelled to bring him home in a state of helpless intoxication. These two bitter sorrows were only the beginning, however, of griefs, and indeed his whole life was a prolonged tragedy. Humiliating disappointments in love, frequent financial embarrassments, much ill-health, and above all, the dullness of hearing which afflicted him through the last thirty years of his life and grew into almost total deafness,—all these and many more annoyances and miseries made his outward life indeed a rough one; but within, what a soul, what a heart, what a brain! No wonder he was able on his death-bed to say, referring to Haendel's sublime glorification of things ethical: "After all, that is the true art." No wonder he says that in his art he felt nearer to God than other men had come; no wonder that he declares that his art had kept him from suicide.

His temperament had in it the energy of the dark fibro-motive constitution, with not a little admixture of coarseness. The latter, however, never took the form of social impurity, for though he lived as a bachelor in the sensual capital of the Austrian empire, there is not a smoky streak athwart the snow-white surface of his reputation. His ultra-virility was sometimes manifested in his disposition to play practical jokes, and to make rough jibes which he was not willing to bear in return. This intensity is also to be discovered in his music, where we find a certain austerity of outline, and almost ascetic abstinence from ornament, and a passionate vehemence of *sforzando*, which remind us of the words of Luther and the hammer of Thor. Yet with all there was a marvelous softness and warmth in the core of this mighty nature. Lava is black and heavy and hard and hot, and long in cooling, but when it crumbles, the resulting rich, volcanic soil feeds and sustains the rarest fruits and flowers.

Beethoven's *adagios* are the greatest things of their kind in all music; his

scherzos, witness the courtly one in the Ninth Symphony, the dainty one in the Eighth, the sinister one in the Fifth, the droll one in the Sixth, the happy one in the Third, are inimitable masterpieces and show what a river of the oil of joy flowed hard by this spouting, irregular, scalding geyser-fountain of a god-like man. His *allegros*, such as the triumphal finale of the Fifth Symphony, march like the tramp of armies, and have all the "pomp and circumstance of glorious war;" or like the opening movement of the Sixth Symphony, glow and palpitate with all the rapture of Nature and her birds, her fragrant breezes, green fields, blue skies; or like the *allegro* of the Seventh Symphony, depict a stately and noble festival of men and women whose natures have been brought to perfect flower by the genial touch of an elastic humanitarian Christianity.

Beethoven's favorite authors were Plato, Shakespeare and Goethe, and he read with constant delight the English poet, James Thomson, whose poem, *The Seasons*, was his constant companion. He composed for the most part in the open air, sketch book in hand, and the summer months he spent always in the beautiful country places in the environs of Vienna, for he loved nature as passionately as Wordsworth. The dominant forces in Beethoven's character were lofty, abstract intellect, which might have made him a great philosopher or reformer had this intellect not been harnessed to an emotional nature which was like the heavenly fire-chariot of the prophet Elijah; also intense musical feeling, altogether of the higher and the inward sort, abiding recluse in the beautiful, and despising worldly show; also a lofty sense of the spiritual and the right which kept him a daily illustration of Mrs. Browning's beautiful expression,

"Feet low and forehead high,
To show us how a man was made to walk."

He had also firmness and self-esteem of giant proportions which caused him when about his proper business

of composing tones, to be sublime, but when occupied with the petty relations of daily life, to be whimsical and absurdly arrogant. There was also a passionate adhesiveness, blent with combativeness which was not merely gunpowder, but nitro-glycerine, whereby he became pathetic in his passionate loyalty, exasperating in his suspiciousness. Beethoven possessed a brain, a heart, a temperament which were intensely virile; he was a Thor wielding the thunder hammer of the orchestra, a Cyclops propping his steps with a pine tree, a Vulcan forging chains not for a tyrannous Zeus to employ in suspending his unruly wife from the battlements of Olympus, but magic chains of inspired sounds whereby the souls of

mankind are drawn toward heaven, "For thus the whole round world is every way,
Bound in gold chains about the feet of God."

When we contemplate the strange mixture of sublimity and comicality in the character of this man, we must never forget that the sad isolation wrought by his deafness, while it deepened the pathos and heightened the grandeur of his music, is responsible also for much of his morbid suspicion of his fellowmen. Let us not fret if the fire which mounted with such vehemence, in its pyramids of burning aspiration to the sky, sometimes scorched with extravagant flames or smirched with smoke those who stood near, when upon it blew the veering gusts of worldly circumstance.

THE DEPTHS AND HEIGHTS OF LOVE.

WHENEVER I see a flower that opens and blooms on the border of a precipice, the same thought ever recurs to my mind: such is love; it always seems to live between two infinities, one of height, and the other of profundity. While it darts its aspirations above, while it seems to seek in the heavens space and light, it deepens its roots into the most subtle mazes of the rocks and into the most obscure secrets of the abyss. Star that shines in the infinity of the ideal; reaches all heights and touches all depths; it is the most human of passions, and was always ranked among the divine; it is the most heartfelt and the most ethereal; it is thought on the summit of the mountain; it is strength down in the valley; it guides the poet when he soars to paradise. * * * * *

No one will ever be able to say where love penetrates, when it excites all the depths of human nature, where together with the mire are to be found pearls and corals. It is a diver that brings to light strange and unknown things, and reveals to the astonished eye of the observer new things never before imagined; it is the most daring and the most fortunate of excavators. How many natures are agitated at the contact of the new god, who seems to evoke from the depths all the silent passions, all the dormant ideas, all the phantoms of heart and thought! The deep simmering of the psychical elements at the contact with love almost always announces the birth of a second moral nature, and, renewing life, marks in it a new era.—*Paola Mantegazza in The Physiology of Love.*



DIFFERENCES IN HUMAN NATURE.

ONE of the most striking things in all nature is the difference that exists between the various individuals of the same class. It is said that if our power of vision were sufficiently acute we should perceive that no two blades of grass, no two grains of sand, no two drops of water, were precisely similar. We know this to be true of everything which comes within the scope of our observation, both in the organic and inorganic world, and it is only reasonable to believe that the same law reigns through the entire universe. These differences become more obvious to us as we become more familiar with the type. We easily recognize the variations in the trees of the forest, in the birds of the air, in the beasts of the fields, in the features and forms of the men and women who surround us, and the oftener we observe them, and the more closely we scrutinize them, the greater is the diversity that we discover between them. When we know a person well it is impossible that we can mistake him for any one else; his peculiar expressions of face and form and manner are stamped upon our memory and excite our instant recognition.

No two minds run in the same channels, or think exactly each other's thoughts. Truth is many-sided, and multitudes of men and women stand still, viewing continually but one of her phases. Did they but move around her, changing their respective attitudes, they would appreciate one another far better. Excellent people sometimes regret that there are so many differences of opinion upon a single subject. If all were agreed, they say, how smoothly and harmoniously might all work together for the general good! They forget that were this possible there would be no consensus of truth, no gathering together of its many features, no comparison of its many aspects. It is just this mingling of sincere convictions that

enables men to correct their fallacies, to retrieve their blunders, to arrive at something like wise judgment and correct conclusions. Yet we chafe and fret at these very differences, and attribute to them many of the evils which really belong to our unwillingness to recognize and accept them. Too often irritation, ill feeling, and even anger arise from this innocent cause. Interchange of opinion, whether in ordinary conversation or in discussions and debate, is among the most instructive and valuable means of forming true opinions, yet often it is poisoned by a dogmatism that will brook no contradiction and a temper which regards all dissent as a personal affront.—*Philadelphia Ledger*.

A PSYCHOLOGICAL IDEA.

THE will to live, which forms the inmost core of every living being, exhibits itself most conspicuously in the higher order of animals, that is, the cleverer ones; and so in them the nature of the will may be seen and examined most clearly. For in the lower orders its activity is not so evident; it has a lower degree of objectivation; whereas, in the class which stands above the higher order of animals, that is, in men, reason enters in; and with reason comes discretion, and with discretion, the capacity for dissimulation, which throws a veil over the operations of the will. And in mankind, consequently, the will appears without its mask only in the affections and the passions. And this is the reason why passion, when it speaks, always wins credence, no matter what the passion may be; and rightly so. For the same reason the passions are the main theme of poets, and the stalking horse of actors. The conspicuousness of the will in the lower order of animals explains the delight we take in dogs, apes, cats, etc.; it is the entirely naive way in which they express themselves that gives us so much pleasure. SCHOPENHAUER.

HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XXII.

TALENT VARIED AND PECULIAR.

FELICIA HEMANS.

THE study of the portrait of this queen of sacred poetry, this renowned and beloved woman, is exceedingly interesting to the student of human nature; and the fact that it is a perfect profile view is the rarest fact in reference to it. Few artists ever make a perfect profile; there are few sitters who are willing to be portrayed that way; there are fewer heads that would successfully bear the ordeal.

The pose of the head is admirable, and ought to be, because it is so well balanced phrenologically and physiologically, that there could be no pose of the head, that is natural and admirable, that such a head would not assume. It is distinctly a masculine face. She was doubtless in physiology and mentality as good a copy of a good father as could be found.

What a firm and masterful chin, and how the face from the chin runs squarely back to the angle of the jaw, showing resoluteness, strength of character, determination, endurance and constitutional vigor. The lips how firm, how prominent and strong, evincing devotedness and ardor of love! Observe the prominence of the cheek bone, the reach of it from the opening of the ear forward, indicating vitality, breathing power and courage. Look at the Roman nose, shapely, dignified, elegant, large, commanding. Look at the prominence and the delicacy of its point and the classic elegance of the nostril, and

the easy sweep of the wing of the nose! The front view of that face must have been enchanting as well as commanding. The brilliancy of the eye, what a definiteness it expresses, and the fullness below the eye indicative of easy grace and affluence of speech. What a beautiful arch to the eyebrow, showing quick and clear perception, and especially a fine taste for colors! The organs in the central line of the forehead, Individuality, Eventuality and Comparison are very prominent, making her facts take a definite form of expression, giving the memory of events and facts, and ability to recall her knowledge at wish and will.

Comparison is large enough to render her mind analytical and analogical. Every stanza of her poetry will illustrate these mental traits, sharpness of definition, clearness of expression, and smoothness of diction. Her knowledge of human character is shown by the length from the ear to the location of the organ in the middle of the upper line of the forehead. Hence she read character well, and had a keen perception of its peculiarities; and with her power of language, she was able to portray nice shades of character in a manner to make them seem natural and effective.

Benevolence was large; the front part of the top head was well expanded and elevated. Veneration and Spirituality were large and distinctly evinced in the elevated and reverential spirit of her poetry.

Firmness was large; that organ being located in the central part of the back of the top head. If we draw a line vertically from the back of the ear, it will cross the organ. Steadfastness and strength of character

face, corresponding with her character, and every feature of the whole make-up evinces dignity and a sense of her own worth.

Approbativeness was large. It is located on either side of Self-esteem,



FIG. 180. FELICIA HEMANS.

and purpose are indicated in the pose of the head, in the features of the face, as well as in the large development of Firmness.

Self-esteem was large; that organ comes in just at the upper part of the coiled braid. The crown of the head was high, and that is a very dignified

giving fullness to the upper backward and outer portions of the crown. The head was long from the opening of the ear backward, which covers Inhabitiveness, Continuity and Parental Love. Friendship was prominent; hence her affections were cordial.

Combativeness was well indicated; hence, she was vigorous and brave. Amativeness was large; hence, her love was strong and influential. The love of life, Vitativeness, seems to have been large, hence her poetry breathes the sentiment of immortality and makes it seem real. Vitativeness leads us to desire to live as long as we can in the life that now is, and tends to span the dark river with the arch of promise for the life everlasting. If we look at the expression of strength and confidence in that face, if we look at the hopeful expression of the eye, it reminds us of Job's immortal expression, "I know that my redeemer liveth, whom I shall see for myself and not another."

The harmony of temperament belonging to this character was such as to give wholesome development to every hope and sentiment and social feeling, and to give to her work an easy grace and vigor inviting confidence and fostering a hearty acceptance. The following stanzas show the poetical, the spiritual and mental type of our subject, and illustrate the interior, the intense and trustful working of her powers.

Answer me, burning stars of night!
Where is the spirit gone,
That, past the reach of human sight,
E'en as a breeze hath flown?

O, many-toned and chainless wind,
Thou art a wanderer free.
Tell me, if thou its place can find,
Far over mount and sea?

Ye clouds, that gorgeously repose
Around the setting sun,
Answer! Have ye a home for those
Whose earthly race is run?

O, speak, thou voice of God within!
Thou of the deep, low tone!
Answer me, through life's restless din,
Where is the spirit flown?

And the voice answers "Be thou still;
Enough to know is given.
Clouds, winds and stars their part fulfill;
Thine is to trust in Heaven."

HEMANS.

ELIPHALET NOTT, D.D., LL.D.,

PRESIDENT OF HAMILTON COLLEGE FOR
SIXTY-TWO YEARS.

This is one of the most manly heads and faces which has figured in American history; and though an eminent scholar and thinker, he was all his life in touch with the times. He was an inventor. He gave much attention to physical science, especially the laws of heat, and obtained thirty patents for valuable inventions, among the most notable of which was the first stove for burning anthracite coal which bore his name and was for many years extensively used.

The study of this portrait is exceedingly interesting. The head is high, long, and fairly broad, especially in the frontal section. He was one of the ablest thinkers of his time, and that is indicated by the massiveness of the upper section of the forehead. He was a fine reasoner; was a great critic; understood mind and character, and had wonderful imitation. The front part of the top head runs out from the center, and without having a curve downward, as usual, runs out level, showing the elevation of the outward section of the top of the forehead and indicating very large Imitation. And he was one of the best elocutionists of his time; he taught some men who became the ablest orators of his day. He was a magnificent orator himself; his own thoughts were piled up in stately style, and so effectively uttered as to make him the model speaker of his age.

The organ of Mirthfulness seems to be large. The outer corner of the forehead is prominent; and he was remarkable for his wit. His Constructiveness is shown in the width of the region of the temples. Ideality and Constructiveness, Wit, Imitation and Causality grouped around that section of the front part of the head exhibited by the temples and by the front and top part of the forehead.

The organs in the lower part of the forehead were large. He had very copious language and the fullness under the eye is an indication that

wonder of the time, and reached, in 1866, the great age of ninety-three years.

Students in Phrenology and physi-



FIG. 181. ELIPHALET NOTT,
PRESIDENT OF HAMILTON COLLEGE.

the eye was pressed forward and downward by the brain, and thus indicating strong language.

In the region of the moral organs, Conscientiousness looms up. He was a man of equity, and he so carried himself with the students of his college that they had the highest reverence for and confidence in him. His word was law, and yet he ruled gently. He was the father of the Institution as well as of the Church over which he presided.

He had a capital constitution, and he enjoyed health, which was the

ology will see that the different sections of the face are amply balanced. We suppose this picture was made of him when he was over eighty years of age. And it was made from a photograph. And he must have been nearly seventy years of age when photography was introduced into this country. See the handsome chin, how it is projected forward, how it is depressed, what a long face! That large, healthy chin, is a physiological indication of a sound, healthy action of the heart. Physiognomically considered, it

means ardor, and strength of social affection.

The length of the nose is evidence of thoughtfulness and criticism. The fullness of the face outward from the nose indicates lung power; and the fullness of the face outward from the mouth evinces a healthy state of the stomach. And where these conditions are all favorable, men look

the admired and masterful president of a college from the age of thirty-one, to that of ninety-three years.

MATTHEW VASSAR,

FOUNDER OF VASSAR COLLEGE.

This face is a strong and a good one. That long, large nose, that broad, strong cheek bone; that full and



FIG. 182. MATTHEW VASSAR,
FOUNDER OF VASSAR COLLEGE.

young when they become old, instead of withering up and having weakness of circulation and weakness of digestion and shortness of breath, they hold these functions till they are well advanced in life.

Dr. Nott belonged to the class of eminent scholars and thinkers who were born in the last half of the 18th century. So sound was his health and so balanced were his social, moral and intellectual developments, that he was the life of the circle in which he moved, and not only the life but the light of it. He was the witty man of his age as well as the eloquent man and as sound a thinker as this country has raised. He was

prominent chin, indicating steadfastness, dignity, integrity and vitality; that rugged brow indicating practical sense, and the honesty of the expression of the face, strike the observer at a glance. He had a great deal of solid common sense. He had eminent business ability, and could have made a success in anything which honorable men follow. He would have made a very fine physician. That face and forehead indicate the ability to acquire and use the knowledge which belong to the medical profession. He had strong constructiveness and would have made a good engineer. His head was wide; hence he had force of character, courage,

thoroughness and executiveness, a desire for gain and the ability to accumulate property. Not having been favored with very much scholastic culture in his youth, he had a feeling similar to that of Peter Cooper and several other eminent business men, to wit, a desire to establish a school for the culture of others. Ezra Cornell has given his name to an institution; Mr. Seney gave his name to a hospital; Peter Cooper to an Institute which will carry his name gratefully down the ages; Cornelius Vanderbilt gave his name to a University in Tennessee; and Vassar, inheriting tact and talent liberally from his mother, had an inspiration in the direction of female education, and has secured for himself a reputation which will never cease to be fragrant.

In studying this head, we perhaps see in him traits that he did not so openly manifest to the world. If the reader will draw a line vertically on the picture from the outer part of the pupil of the eye up to where it touches the hair, he will see that there is a

handsome rounding up of that section of the head. It is shown distinctly on both sides, but on one side, as the picture is taken, a little more than on the other. The hair is put back far enough to show it. That represents the region of Spirituality and Hope; and Vassar College was born of those two faculties. The social, of course, would have its influence; he was naturally a lover, and would think of woman's weal and sphere, and be impressed to do something in that direction. There was less logic than sympathy and spirituality and affection in the direction of his gift; that has a mechanical phase; it has a financial phase and a beneficent phase and a very executive one; and the form of the head sustains these suggestions.

Born April 29, 1792—in 1861 gave 200 acres of land near Poughkeepsie, N. Y., and \$408,000 in cash to build a college for the education of women at moderate cost. At his death in 1868 he gave \$150,000 in the way of endowments.

THE IDEAL.

BY KATHERINE LEE BATES.

By the promise of noon's blue splendor, in the dawn's first silvery gleam;
By the voice of the sea that compelleth the path of the rock-cleaving stream;
I summon thee, recreant dreamer, to rise and follow thy dream.

At the inmost core of thy being I am a burning fire,
By thine own altar flame kindled in the hour when souls aspire;
For know that men's prayers shall be answered, and guard thy spirit's desire.

What thou wouldst be thou must be; what thou shalt be thou art,
As the oak astir in the acorn rends the dull earth apart;
Lo thou, the desire of thy spirit, that breaketh and waketh the heart.

I am the voice of the night wind, rousing thy traitorous sleep.
Moaning I echo thy music, and e'en when thou boastest to reap
Alien harvests, my anger resounds from the vehement deep.

I am the drawn sword barring the lanes thy mutinous feet
Vainly covet for greenness. Loitering pace or fleet,
Thine is the crag path chosen; on the crest shall rest be sweet.

I am thy strong consoler when the desolate human pain
Darkens around thee; the azure outblotted by rush of the rain,
All thou dost cherish may perish; still will thy quest remain.

Call me thy foe in thine anger; claim me in peace for thy friend.
Yet bethink thee, by lowland or upland, wherever thou wiltest to wend,
I am thine angel of judgment. Mine eyes thou must meet in the end.

—(Selected.)

WHAT IS A DREAM ?

By H. N. K. G.

THIS is no learned treatise, no utterance of superstition, nor is it an attempt at explanation. It is only a simple narrative of experience, written in the hope that some mental philosopher will arise and explain, since no book that has fallen into the hands of the writer has done so, or attempted an exposition of any connection between "sensation," "perception," "conception," or even imagination and what I must, for lack of a better word, call the fulfillment.

Born with a fondness for a needle, in mere babyhood I learned to sew. Better than my doll, or romping, I loved to take careful stitches in my "patchwork," and I am ashamed to say, between the ages of two and four years I pieced enough "patches" to make a large bed quilt. So I must have been very young,—I do not know how young,—when I lost that precious treasure, my first thimble. I looked diligently for it, and enlisted the aid of the entire household; but I cried myself to sleep that night for lack of success. I dreamed of being led to the kitchen hearth, where the tiny thing was shown me, resting in a crevice barely large enough to receive it a half inch below the level of the bricks. As instructed, I moistened my "thimble finger," inserted it, and took it up. My joy awoke me. With earliest dawn I sprang from my bed, ran to the spot, and found the treasure, just where and as I had dreamed. Neither I, nor any member of the family, had ever observed that crevice before.

One of my brothers was a member of a regiment that suffered great slaughter in the battle of Fredericksburg, Dec. 13th, 1862. As his name appeared on none of the newspaper lists, and he had always been a fortunate boy, we hoped that he had es-

caped injury, and determined to believe so. I was not feeling anxious about him, but I dreamed that he came to our door in the night, was admitted, and that I went down stairs to greet him, and found him pacing the dining-room restlessly. As I entered, he stopped abruptly, turned suddenly, and extending his left hand with a smile said, "How are you?" The same dream, identical in every particular, came the next night, and in the morning I mentioned it to the family for the first time, for I could no longer suppress the thought of it, or the shudder I felt in my dream when his right arm had swung around in a limp and dangling motion that suggested mangled and grating bones.

The next mail brought news that my brother's right arm had been broken above the elbow. To this point there was nothing strange in the matter, since he well knew the facts, and doubtless often thought of one who had been his nurse in childhood.

About six weeks afterward he did arouse us in the middle of the night, having arrived by a much belated train. A severe cough made his voice so unrecognizable that I went down in response to a call, without the least idea that the stranger could be he who had so recently written us from a Washington hospital, that he might come in a month or two. I found him pacing the dining-room floor as restlessly as I had dreamed, and he stopped, turned suddenly in the very place of which I had dreamed, and extended his left hand with just the expression, smile, and gesture I had twice seen in my dreams, and asked, "How are you?" but the sleeve that dangled at his right side was empty. Though the words, the manner, and the gesture might have been anticipated as characteristic, and his mind might have impressed

mine with the fact and location of his wound, what could have indicated the hour when a belated train would arrive, and the exact spot where he would turn to address me? Will some philosopher rise and explain?

Last summer, while residing in a suburban village, I had a —, shall I call it a dream, or what? I seemed to be walking on our lawn, when I was suddenly overtaken by three lads, between the ages of twelve and seventeen years. They ran up to, and about me, in a very familiar manner, performing many antics, and turning about, stooping, bending, crouching, leaping, or sitting on the ground. One was tall, with long, slender arms, light hair, and tight-fitting garments like a clinging, knitted shirt. I seemed to see his arms extended in front, on a level with his shoulders. His neck was long, and his motions quick. The others were shorter. One was heavier; he carried his head bent down, and had heavy, dark hair. The other was smallest, and most quiet. I recall the tall one most clearly before me; the second at my left, and bent; the small one at my right, and crouched.

Suddenly the lads were dogs, and a slim hound sprang up as if to put his extended paws upon my arm, and I recoiled, and cried, "Get out!" Then the dogs ran away and barked till I awoke sufficiently to know that they were our neighbor's, some rods away, and I wished that they would cease so that I might sleep, which they soon did, and I slept again, though apt to be wakeful or to sleep lightly in the early hours. Before sunrise my maid awoke me by excitedly entering to ask if I or any other member of the family had been down stairs. She reported great confusion there, and in her own room, and discovered the same in mine as she spoke. A box cover, several pairs of gloves, and a Bible were among the things scattered on the floor there; clothes were heaped together, a table had been overhauled, a bureau drawer

stood open, etc. A heavy ornament that had leaned against the wall above the mantel, which was opposite the foot of my bed, had been upset by a hand (following the wall perhaps), and had pushed my Bible from the shelf to the floor, it being a square, thick volume, and made clumsy by marks, cards, etc. The falling of the book may have caused the person to turn around with arms still extended, which I may have mistaken for the paws of the hound; and my "Get out!" may have proved effective; though the depredators carried with them a valueless pin, a pair of trousers from an adjoining room, and a basket of trinkets, with my glove-box. A package of broken eye-glasses in the latter not proving to be coin, and folded bits of ribbon in the basket not found to be bank-bills (which they resembled in size), they were left on the kitchen dresser beside the open window, which undoubtedly admitted sufficient daylight for their examination. It is certain that no artificial light was used by the burglars. The pantaloons were picked up in an adjoining field soon after sunrise and taken to the police station, and reached the owner that day, minus only a pocket knife. The officers were convinced that a company of four boys were the robbers on that occasion, as in many similar cases that were occurring around us. They went two, three, or four together.

Now the question is, how did I see those boys? I was not sufficiently awake to see them normally, as the dawn must have been still very dim; and had it been full moon, little light indeed could have penetrated the closed shutters and closely drawn shades which I found essential to my morning naps. Air was admitted only through a shuttered window in an adjoining closet on one side, and through an open window in an adjoining room on the other, whose door we found, as we left it, open a few inches. No ray of gas light could reach that window.

I have always been a somniloquist, and in early youth was often led about indoors and out, and made to converse, without waking, or without seeing with my wide-open eyes, though never walking in my sleep of my own volition. Now the question is, did I see those boys? If so, how, in the absence of sufficient light? Had I been awake I could not have seen anything in the room, and they evidently only felt their ways about, since things valuable were passed over, or undiscovered, though in plain sight, had there been light.

Apropos of seeing with closed eyes, let me relate an incident I heard from the lips of the wife of a noted statesman of our day,—a lady of superior mind and culture, and known veracity as well as social distinction. Some years ago she lay extremely ill, and her family stood around her bed watching for the last look of recognition which might come with the opening of her long-closed eyes. *She was not asleep*, and had not been, but knew her own condition well, and that dissolution was expected momentarily. Yet she longed for life. A former family physician, who had known her from infancy, had been summoned some days before, at her request, but was reported to be in Europe, and uncertain as to the time of his return. His present home was also remote from the place of her illness.

"Though my eyes were closed," she said, "I seemed perfectly to see all that was in the room, and all that was done. I saw the door open, and the doctor I so much wished for, entered. He had left his hat in the hall, but wore a dark green overcoat and brown gloves. He closed the door softly, drew off his right glove, and put his left hand with the right glove in it against his back. He approached the side of the bed, and my husband laid down my hand, and

made room for him. No one else moved. My father, standing at the foot, exchanged slight bows with the doctor, and both turned their eyes upon my face. The doctor put his fingers on my wrist, and seemed attentive to the pulse. Then he laid his hand above my heart, then on my forehead, and again felt my pulse. Presently he slowly shook his head, and turned away. I knew he meant that I was dying. '*Well, I will not die!*' I thought; and bracing my feet against the foot-board, I struggled with the intensity of my resolve. All thought it the last death-struggle, and watched for the last quivering sigh.

"A few moments after, when I had rested from my struggle, I opened my eyes, and asked for the doctor, and why he had left the room.

"My friends were greatly surprised, and insisted that as I had not opened my eyes while he remained in the house, I could not have seen him. But I certainly saw him as plainly as I see any of you before me this minute!" she said stoutly, "though I too was sure—*conscious*,—that I had not opened my eyes for hours. Yet I described his appearance, his dress, his motions and expression of countenance, perfectly. I seem to see them even now, though neither then nor now could I tell *how* I saw."

The loved doctor, en route from Europe to his home, had first learned of her illness from a neighbor at the railroad station, and that she was probably even then lifeless. Improving the few moment's pause the train made at that place, he dropped in with condolences for friends of former days, and stopped only long enough to save her life by rousing her will, it seemed, and then passed on to his home, to learn afterward, of her marvelous recovery.

Now how did this woman see the physician?



SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

THE REV. THOMAS JEFFERSON SAWYER, D.D.

AMONG the many friends and laborers in the cause of phrenology, none have exerted a more prominent influence in the educational and religious world than has the Rev. Thomas Jefferson Sawyer, D.D., the "Father of Tufts College," Mass., and the great Universalist divine. He was born in Reading, Vermont, January 9, 1804, and is now in his 91st year. The following pen sketch and biographical particulars are quoted from the *Boston Daily Traveler*.

"This occasion (the celebration of his 90th birthday), which comes to but few men, found the venerable old gentleman in excellent health and spirits, and he seemed pleased and appreciative of the congratulations showered upon him by his hosts of friends and admirers.

Time has touched the worthy man with a gentle hand, for he shows but few signs of his ripe old age, either in physical or mental capacity. His figure is yet powerful and imposing and but for a slight stooping of the shoulders, much the same as forty years ago. His step is firm and his bearing more erect and majestic than many several decades younger. He is a frequent and always a welcome caller at many of the houses on Professor's row, and loves nothing better than to go back in memory with his hearers to the early years of the present century, or to talk of the first struggles of Tufts College, in which he always has shown such an active interest. His memory is remarkable for a man who has had so many experiences to remember.

"His white locks, smooth-shaven face and light scarf and cravat are nearly always seen at chapel and special college exercises. He is still interested in athletic sports, and re-

joices at the victories and grieves over the defeats of the boys who uphold 'the brown and olive.'

'They tell me that I am 90 years old, but I can hardly believe it,' he said to a friend.

"He is well informed upon all current topics, and enters into a discussion of them with an interest and a vigor that would put to shame many a man of half his years. In short, his mental faculties he retains intact, and although his life labors have been long and unsparing, he presents to-day the rare and beautiful picture of a cheerful and rational old age. By no class is he more revered than by the students who have been under his tuition in the Divinity School of which he was dean, and with which he has been identified since its incipency.

The parents of the Rev. Mr. Sawyer, Benjamin and Sally (York) Sawyer, were of New England's best blood, while the fact that he enjoyed very good advantages for acquiring a good common school education, would indicate that for those times his parents were in comfortable circumstances. At the age of 18, young Sawyer was qualified to begin the work of a teacher. In 1829 Mr. Sawyer began the study of theology with the Rev. W. S. Balch, at that time pastor of the historic church of Winchester, N. H. In less than a fortnight he received a letter of fellowship, and before another fortnight had elapsed he was ordained. Mr. Sawyer's first pastoral charge was in New York City, where in April, 1830, he was settled over a small congregation that worshipped in a chapel on Grand Street. In the following year he married Miss Caroline M. Fisher,* of Newton, Mass., whose songs

* This estimable lady died a few months ago.

and stories fill a large space in Universalist literature.

In the spring of 1832, the doctor leased for two years a church in Orchard street, which had by some means fallen into the hands of the builders. Four members of his congregation became his security, and they received as their security, the whole income of the church. At this time Universalism was in a feeble condition in the metropolis, and it had to contend with foes within as well as foes without. There can be little doubt that the ministry of Dr. Sawyer not only prevented its overthrow, but established it upon permanent foundations. In 1832, the cholera was scourging the city. Many of the neighboring churches were closed, business was suspended and great numbers of the people left the city. This was a great opportunity for the Orchard Street Church, which was opened regularly morning and evening, and the services of its pastor were frequently in demand.

At the session of the general convention held in Albany, N. Y., in 1834, the Universalist Historical Society was organized at Dr. Sawyer's instance and he was made its secretary and librarian, which offices he has held to the present time. He is a good Hebrew scholar and has given special attention to German theological literature, and the Universalist Church is deeply indebted to him for the development of this most important portion of their doctrine. In addition to his other work, the doctor was a frequent contributor to the *Christian Messenger*, a local denominational paper, and for several years he was its theological editor.

In 1845 he was called to take charge of Clinton Liberal Institute, which was then located in Clinton, N. Y. Here he opened the first theological school of his church, where nearly forty students prepared for the work of the ministry. During his residence in Clinton the doctor was practically pastor of the local church,

as well as principal of the institute and teacher of theology, and yet he found time to do a great deal of general denominational work.

In 1844 he drafted a plan defining the powers and jurisdiction of the general and State Convention, which is substantially the ground upon which the government of his church is now held. In order to make better provisions for the educational interests of his church, he took the initiative in calling a special convention which resulted in the establishment of Tufts College, of which he was one of the original trustees. In recognition of his scholarship, Harvard College conferred upon him the honorary degree of S. T. D. in 1850. Two years later he was called to take the presidency of Tufts College, which was then in the first stages of its growth. At a subsequent time Canton Theological School invited him to become its first president,—all of which offers he declined. In fact there seems to have been no office in the church which he could not have creditably filled. At the opening of Tufts Divinity School in the autumn of 1869 he assumed the duties of Professor of Systematic Theology. Although on account of impaired eyesight, and the infirmities of age he is unable to give class-room instruction, he has held the position of dean until a year ago, when Dr. C. H. Leonard was elected to the position.

During more than sixty years of his professional life he has without doubt performed more work in preaching, writing, and teaching than any other minister of the church.

His last ministerial labor was the preparation of the occasional sermon delivered before the National Universalist Convention at Washington, D. C., in October, 1893. This was pronounced a wonderful discourse, and serves as a crowning triumph for his long, noble life of unremitting labor and devotion to the church and Christianity.

From an early age Dr. Sawyer has

been interested in and assisted and influenced by the science of phrenology, and guided by its principles in their practical application to various phases of life. Some extracts from a paper read before the New York Phrenological Society, Oct. 29, 1840, will show the earnestness of his investigations. It was published in full in one of the early volumes of THE AMERICAN PHRENOLOGICAL JOURNAL AND MISCELLANY, but to publish the whole of his lengthy and interesting paper at this time would encroach too much upon our space. He says: "My subject is, *The influence of cerebral organization on religious opinion and belief*. I begin by saying what almost every philosopher, and certainly every phrenologist, must acknowledge, that *man is a religious being*. 'That he is so, all history conspires to prove, all observation and experience concur to establish. Still it has not always been conceded that he is so by nature. This important fact has been left for phrenology to demonstrate, by showing that his mental organization, or the development of the brain, as naturally and necessarily inclines him to religion more or less, as it does to the Love of Young, the exercise of Conscientiousness, or Benevolence; of Destructiveness or Hope, or indeed to the manifestation of any of his mental or moral powers. Man is as much, and in the same way, a religious, as he is a *rational* or *social* being. He exercises himself in some form of worship, not, as some have imagined, because God has made a revelation of His will, but because the Creator endowed him with the faculties necessary to constitute him a religious and devotional being. Hence we find him everywhere—in all ages and in all countries, and in every stage of moral and intellectual development—breaking away from the visible and temporal by which he has been surrounded, and with which one part of his nature is intimately allied, and fixing his mind on some higher and spiritual power,

existing, it may be, in some outward and material form, but still not less spiritual, and henceforth falling down before that mysterious power and engaging in acts of religious adoration.

It does not militate against the fact that man is a religious being, to say that his homage is frequently stupid and senseless, or that the deities whom he worships are the creatures of his own weak and sickly imagination. This proves not that man is naturally without religion, but that his intellectual and moral faculties are but feebly developed; nay, it rather shows how active the religious organs are in the rudeness and ignorance of savage life. When we contemplate the poor African, bowing down to his fetich, and bearing it about with him, feeling as safe under its magical guardianship as mighty Ilium, or the still mightier Rome, did under the divine protection of their Palladium, we cannot fail, I think, of being impressed with the fact of an original superiority imparted to the religious over perhaps all the other faculties of the human mind.

"Man is a social being, and hence in society he is in a state of nature; but then he is also religious, and in the exercise of his religious faculties, he manifests truly, though in part, his natural state.

"We often see the most ignorant, those who are scarcely able to grapple with the most ordinary process of reasoning, still very religious; by casting an eye over the mass of the world, and calling to mind the characters of the respective people occupying its surface, we shall soon be convinced that religiousness and intellectual power are by no means inseparable; and that mental and moral degradation are not to be taken as even presumptive proof of irreligion. If this be the fact, it must follow as a necessary consequence, that in strict accordance with the doctrine of phrenology, there is an organ or faculty whose peculiar or appro-

prate office is to manifest the religious sentiment; and such an organ do we believe *Veneration* to be. But *Veneration*, like all the other organs of the brain, seldom or never acts alone. Its manifestations will be modified more or less by the simultaneous action of other faculties, exciting, restraining, guiding and controlling this."

"I cannot avoid the conclusion, that we are all stimulated to worship, and perhaps at first even to believe in, a superior power, more by a conscious want of such a being or a feeling of dependence which drives us out of ourselves, than by any deductions of cool and logical reasoning. Indeed, it may generally be observed that man has believed and worshipped first, and afterward attempted, as best he might, to support his faith by argument. Faith has preceded speculation, and *Veneration* has often been fully developed and active while the reflective faculties have slumbered on in the feebleness of infancy. I entertain no doubt that several faculties exercise their influence, and a mighty influence too, over man's religious feelings and opinions. Causality aids us in looking 'through Nature up to Nature's God,' and combined with Individuality perhaps, presents us with a personal Supreme Being. Marvelousness, or Wonder, one of whose functions seems to be to bring within our grasp all that is supernatural, greatly aids us in reconciling our other faculties to faith and religion. Hope also springs up to throw its magic power over the future, and even to gild 'the valley and shadow of death.' Ideality refines the gross objects of adoration and imparts an unseen ideal beauty to the being or beings whom we worship. Conscientiousness tends to invest the recipients of our homage with equity and justice, and to make them morally venerable in our estimation; while Cautiousness awakes the sense of reverence or torturing fear by pointing us to him with whom

we stand thus connected, and to whose mighty power we must submit. Benevolence, too, and Combateness and Destructiveness, and perhaps some or all of our other faculties, sentiments and propensities contribute their portions in forming our religious faith and guiding us in our religious services. The several great families of the human race possess widely different cerebral organizations, and also the various nations of the same family, and the various individuals of the same nation. In the midst of a general sameness there is an almost infinite diversity; and the consequence is as the phrenologist could anticipate; there exists a corresponding diversity of religious opinion and belief.

"It is a doctrine of phrenology that size, other things being equal, is the measure of power. If one organ in the brain be proportionately larger than the others, its manifestations will predominate over all other mental qualities. It is so in matters of religion as well as in every other subject. Whenever an individual comes to contemplate an object of worship as a personal being, he must conceive that being as possessed of a character more or less distinctly marked, which conception is necessarily formed by the action of his various organs, and will be to some extent colored by them. All true religion must be in some measure *anthropomorphic*, that is, modeled after man's own nature, for the simple reason that we cannot conceive of any personal being who is in all respects unlike ourselves, who has no community with human nature.

"It is worthy of observation that the fact that the various religions in the world correspond with the character and culture of the people who embrace them has long been noticed and acknowledged, as is evidenced by an extract from a sermon preached in 1784, before the University of Oxford at the so-called Bampton lecture by Joseph White, B.D., Arabic professor in that university, and one

of his majesty's preachers at Whitehall. He says,—‘Though the existence of a Deity has been admitted, as well in the darkest as the most enlightened ages; and though it is equally supported by the testimony of tradition and the authority of reason, yet the ideas entertained of his attributes have been much diversified by various causes in the constitutions of men's minds or in the circumstances of their situation.’ That is, as phrenologists would speak (of cerebral organization and temperament), as of reason and judgment.

“It has been remarked by Spurzheim that ‘refined ideas are commonly buried under heaps of rubbish and superstition, so that it is extremely difficult to separate the true from the false doctrines. We find,’ he adds, ‘sublime precepts at the bottom of all the great religious systems among the Chinese, Indians, etc.’ The very nature of the subject renders it necessary that there should be something sublime* even in the grossest religion on earth. The ideas of

God and eternity seem almost indispensable to every religion, and nothing can surpass them for grandeur and power.”

The objects of the writer of this sketch of Mr. Sawyer have been various. He dared, like John Pierpont, to brave opposition and contumely, which were rife in those early days of phrenology in America, and was willing to proclaim truth and accept consequences. He had studied the science most thoroughly, and understood well the combined action of different phrenological organs and the influence of the temperaments upon character. One who had never before heard of phrenology could gain much phrenological knowledge from the reading of the whole paper, and it is to be regretted that lack of space prevents the giving of more than these few extracts. There is one more cause for regret, namely, the unsuccessful effort to obtain a likeness of the grand nonogenarian, the survivor of many moral and mental battles.

ADVANTAGES OF MENTAL ACTIVITY.

IF I am right in the fundamental proposition, that harmonious activity of the faculties is synonymous with enjoyment of existence,—it follows that it would have been less wise and less benevolent toward man, constituted as he is, to have communicated to him intuitively perfect knowledge, thereby leaving his mental powers with diminished motives to activity, than to bestow on him faculties endowed with high susceptibility of action, and to surround him with scenes, objects, circumstances, and relations calculated to maintain them in ceaseless excitement; although this latter arrangement necessarily subjects him to suffering while ignorant, and renders his first ascent in the scale of improve-

ment difficult and slow. It is interesting to observe, that, according to this view, although the first pair of the human race had been created with powerful and well-balanced faculties, but of the same nature as at present; if they were not also intuitively inspired with knowledge of the whole creation, and its relations, their first movements as individuals would have been retrograde; that is, as individuals, they would, through pure want of information, have infringed many natural laws, and suffered evil; while, as parts of the race, they would have been decidedly advancing; for every pang they suffered would have led them to a new step in knowledge, and prompted them to advance toward a much higher condition than that which they at first occupied.—GEORGE COMBE in *The Constitution of Man*.

* The Phrenological organ of sublimity lies adjoining the religious organs.

STUDIES FROM PHOTOGRAPHS.

BY EDGAR C. BEALL, M.D.

AS we have already explained in the pages of this magazine, character studies from pictures are necessarily made under disadvantages, which, how-

Again, the angle at which the subject has been posed may be such as to make the head appear very different from what it really is. But the



SENATOR BLODGETT.

ever, are by no means of the same nature in all cases. In one likeness, there will be a difficulty in determining the form of the head. The hair may be very thick or dressed in such a manner as to conceal the cranial contours.

greatest uncertainty is likely to exist with regard to complexion, quality, and color of hair and eyes, all of which are very important in considering the modifications of the faculties. To overcome the last named

difficulty, the Phrenologist must make himself familiar with the colors which are likely to accompany certain forms of the brain. At first thought, this would appear to be impracticable, but there have been many principles

many dissimilarities of character, notwithstanding the identity of their ostensible aims in life.

Senator Blodgett, of New Jersey, with whom we shall begin, would be recognized by any one at a glance, as



SENATOR J. P. JONES.

discovered in relation to this branch of the subject upon which we can rely in the majority of instances.

We have chosen as subjects for brief description, three well-known gentlemen from the political world, in whom we shall endeavor to trace

a man of very striking and unusual characteristics. There are peculiarities in his face, if not in his head, which would arrest attention immediately. His nose and eyes are especially significant. There is certainly nothing feminine about that nose;

- on the contrary, it implies almost an exaggeration of masculinity. There is that elevation of the bridge which suggests aggressive force; and there is the length which indicates far-reaching, penetrating intelligence; also a prudence and guardedness which never slumber. In the wing of the nostril we find the sign of more than prudence; there is the mark of cunning—the ability to conceal, to repress expression. In the eyes we see the same quality in the drooping of the upper lid, which seems to shut off all of the eye ball except the portion necessary to vision. A glance at the contours of the head corroborate these impressions which we derive from the face. Observe the height of the head on a line with the ear opening. This is the unmistakable index of large Firmness, or, as it is often popularly expressed, “power of will.”

This is a quality distinct from the will itself, and, in fact, has no relation to it except to modify the persistence with which it is executed. A person with small firmness may have as many wills as anyone else; we might even go so far as to say that a person who is deficient in “will power” would be likely to manifest a greater number and variety of wills than one in whom stability and strength of purpose were conspicuous traits. Firmness must not be confounded with patience. There is such a thing as stability in purpose with vacillation in method. Many Americans illustrate the last named quality. As a nation, our people show a great deal of pertinacity, and what is popularly called “backbone;” they do not readily “give in” or yield in the matter of opinion, or in the pursuit of a given policy, either in religion, politics, commerce or war. At the same time, the Americans are notorious for discontinuity in their methods. Senator Blodgett seems to have both firmness and application, although more of the former than the latter.

Looking from the opening of the

ear to the rear top head where it begins to slope down to the occiput, or, in other words, if we imagine a line from the ear upward and backward at an angle of forty-five degrees, we shall see a considerable development of dignity, pride, independence, or that quality which is perhaps the most distinctively masculine to be found in the whole mental constitution. This, again, is in keeping with those elements of strength to the signs of which in the nose we have already called attention. This upward and backward extension of the crown, with the keen, penetrating eye, and conspicuous nasal organ, at once stamp this gentleman as a born leader, a commander, a general; a man who could assume grave responsibilities, and execute them without embarrassment; a man who will take hold with confidence where others would shrink and hesitate; one who would find satisfaction and success only in the administration of public affairs. The narrow, petty details of a small business would simply annoy him. Such a man must engage in those larger duties which municipal or national government alone can afford.

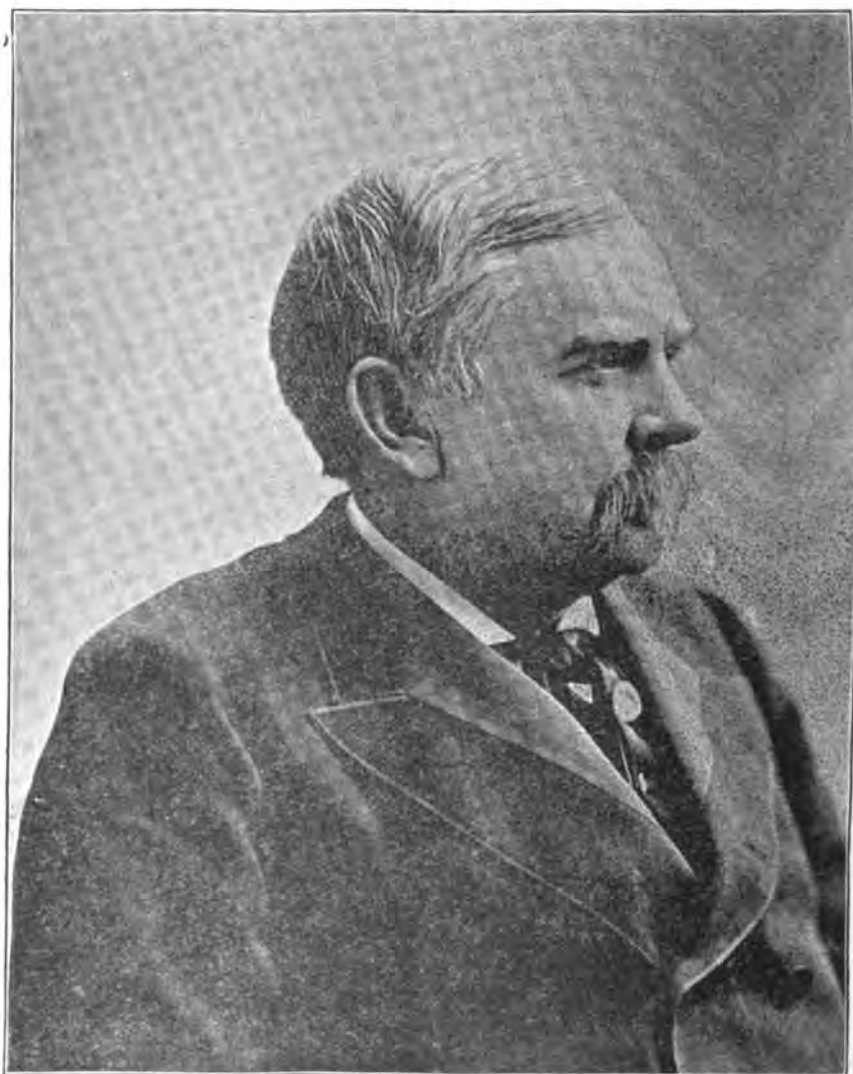
We must not neglect a reference to the length of the brain development backward from the ear. In that region are located the elements of domestic and social attachment, love of the opposite sex, courage, love of life, etc., all of which are very pronounced in this case. The forehead also presents many interesting features. It is the forehead of the thinker and philosopher; one who can grasp abstract relations; one who would preferably concern himself with a study of causes and consequences.

It is this breadth of the upper forehead which insures the breadth of intellect which is adapted to execute the imperious mandates which naturally take their origin in the elevated crown. There are men who evolve purposes or desires which they have not the necessary intelligence to carry

out. This is a man whose judgment seems to fit his ambition.

In Senator J. P. Jones, we have an organization of a much more mellow, responsive and emotional type. We see here strong indications of the

present in the nose and eye. The latter stands out at a great distance beyond the bone of the cheek; and when we consider that the temperament is warm and impulsive, we may be sure that we are in the presence



SENATOR VEST.

maternal influence in the heredity. The rear of the crown is comparatively low. Those qualities of masculine pride which we pointed out in the first subject are here decidedly lacking. It will also be observed that the indications of femininity are

of an orator of uncommon ability. This man will be not only fluent in the use of words, but they will pour out with a warmth and enthusiasm which will win admiration if they do not produce conviction. The right side of the forehead in the engraving

it will be noticed, forms almost a vertical line, extending to the inferior edge of the upper eyelid. This flattened external angle is an almost infallible evidence of deficient order. The eye appears more like a continuation of the forehead than an independent structure; so that if the eyebrows were shaved off, in a dim light one might be inclined to look for them on the line now occupied by the eyelashes.

There is here a fine development of the frontal lobes. The forehead is well filled out in the central region, which shows literary memory in other respects than talent for words. This gentleman will be brilliant in the matter of history. He should be a capital story teller. His upper forehead also shows great suavity—that primary mental quality which prompts to a smooth, persuasive, conciliatory form of address, whether the subject in itself is agreeable or not. In this portrait there seems to be also a fine indication of Benevolence. Altogether, the character is eminently adapted to a diplomatic career in the public service, or to those literary professions which would afford an opportunity for the display of oratorical talent, and the exercise of all the social graces.

Senator Vest, as shown in the accompanying portrait, is evidently a man of very superior endowments. He is one of those strong men who combine in a peculiar degree the temperamental and mental elements of both sexes. We here see a long back head which contains an immense amount of affection for family and friends, and especially for children. This man would be a favorite among his juvenile acquaintances, and he could go into a school or an orphan asylum or in any company where little folks might be present in large numbers, and he would very rapidly en-

list their attention and secure their confidence and love.

He seems to have a great deal of perseverance and courage. He would not be Napoleonic in his aggressiveness. His ambition would not be insatiable or unreasonable, but he would surprise a great many people by his irrepressible spirit when once committed to a particular cause. It might be supposed that he had grown tired of a battle and given it up with the close of the day, but on the following morning his opponents would find him at his post, as vigorous and buoyant as ever. In his temperament he resembles Superintendent Byrnes of New York, and, like the famous chief of the police of this city, he would be a difficult man to deceive, circumvent or overcome.

He does not seem to be very pious. With that interrogatory nasal tip, non-committal eye, and the critical observing talent shown in the forehead, he will scrutinize and examine as long as he lives, and will rarely come to a point where he can shut his eyes and simply say, "I believe." To be sure, he may nominally accept the orthodox creed in which he has probably been brought up, but it will be an assent of his will, rather than his judgment. That is to say, he would probably never combat the idea, and would treat the subject much more gently than a new question arising for the first time in any other department of life. In a political discussion or a legal argument he would exhibit a remarkable degree of skepticism and shrewdness in answering his opponents; and he has singular ability to detect flaws in the statements of his adversaries. He has also a keen sense of human nature, a splendid memory for facts, statistics and details of every sort, so that he must be well qualified for a practical executive sphere.



THE AMERICAN INSTITUTE OF PHRENOLOGY.

OPENING OF THE ANNUAL SESSION.

THE twenty-ninth annual session of the American Institute of Phrenology was opened in the Hall of the Institute Tuesday afternoon, September 4, 1894. In spite of the extraordinary depression in the financial world, the present class shows an increase of half a dozen students over the number in attendance last year. This is a hopeful sign which we are justly proud and happy to record. We give below a synopsis of the addresses by the President and others of the faculty:

PROF. SIZER.

The time has arrived, friends, for the opening of the twenty-ninth annual session of the American Institute of Phrenology. When we close a class, weary and worn with the labor of it, we say to ourselves, "We have ten long blessed months now to rest." But how quickly the year revolves! I have sometimes thought since I was eighteen years of age that the years got slippery; that they had a kind of propeller, as well as side wheels and sails; they slide away; and the longer you live, the shorter the years will seem to be. Until you count up among the eighties, they will seem to grow shorter and shorter. The weary time between fifteen and sixteen, and the hurrying of the years between twenty-six and twenty-seven, show a marked contrast. But no life is long that is not filled with duty; and no life is short that is filled with duty.

When we commenced in 1866, after the incorporation of the American Institute of Phrenology, to deliver lectures, we wondered what would be the outcome. We had six hearty, earnest, zealous souls, and they paid us six hundred honest dollars, and we gave them a tremendous course of lectures amounting to twenty-six. Twelve used to be considered a big course of lectures, and we doubled it and more.

Now, we have been at it for twenty-nine years, with two extra sessions, and here we are with about thirty students, and several on the way; and we feel encouraged that so many have found their way here. And when I consider how much advantage each one of you will derive from this intercourse, how your life will be remodeled and reformed and reloaded for the duties that are before you, I say to myself, "Who is sufficient for these things?" And yet we have only one lesson to give at a time; we have

only one step at a time to take to reach the goal of our efforts; and we shall ripen and grow stronger as time advances.

In 1878, a young man came to us for instruction, who had been lecturing in Canada; he had made Phrenology a success, but he thought he would come down and see if we knew some things that he did not know, some things that might help him. He went through the course, and went right back to his old field of labor in Canada. Six years after that he came back and took another course. I asked him, "How much difference was there in your income after you had taken our course of lectures?" I wanted to know how much good a course of lectures here by us would do to a man who had succeeded on his own account. He said, "It just doubled my income." Four years later, he came again, and brought his wife. I asked him the question again. "How much did the second course do for you?" "It doubled my income." And he has doubled up his income till he is—not a millionaire, at least I am not authorized to say it—but it does not make much difference with him whether he works or raises fruit. But the encouraging part is not done. To-day his sister is with us. She has made a success in the field of lecturing, and she has come here to see if we can do anything that will be beneficial to her. I tell you this, my friends, that those who have the grit to work out success without help, are the very ones who profit by such help as they can find anywhere. They know what it means, and how to use it. And I suppose some time the children and the grandchildren of these members of the class may be here, or somewhere near here, wherever the American Institute of Phrenology shall spread its banner, and seek from these silent messengers on the walls, the lessons of history which they teach.

You never can be to-morrow, or any of the to-morrows, what you were yesterday and the day before. You enter to-day upon a course of instruction and study which is to modify your life, and carry modification and influence down the course of time to generations yet undeveloped. Remember that the good you do, the good seed you sow in this line of truth, will multiply and reproduce itself; and the Christian era is not old enough to tell the good that shall come from your work nineteen hundred years from now. The work you shall do the next ten years will stand on the tablets of history, latent, if not patent; and the world is to be better everywhere by any good work that can be done in connection with human development. Remember, friends, that the errand

of your life henceforth is to aid human life and human nature and human effort to a higher and better standard of living and thinking and working. Remember that the material we have to work on is immortal, and not invisible altogether. A human soul is worth more than Jupiter with his cold, frozen sides, wheeling silently through the universe; and throbbing human life is worth more than a dead planet anywhere.

They say the moon is dead. We like to look at it; it serves our convenience; but I would rather have any good, earnest human soul than a half dozen moons. The proprietor might not think so, but that is the view I take of it. The best thing, brethren, that you ever will find out on this earth, is a human soul, a human being, to develop, to culture, to aid in the work of righteousness and truth. We may look at mountains; we may look at cataracts, we may look at rolling rivers, and what are they as compared with a human, struggling, immortal entity?

But I am not here to make a speech to-day. I am here merely to look you in the face, and to think what work is to be done, and how that work is to be done which lies before us. There is one thing that always has struck me peculiarly, and that is, that when an audience, strangers to each other and strangers to the speaker, are presented, there is a strange lack of unity of thought and feeling. You sit here wondering how you are going to like the people who sit around you, wondering how you are going to like this course of lectures, wondering how the lecturers are going to interest you, wondering whether it will pay you to stay. Well, that is individualism, that is segregating instead of unifying. But I have learned this: At my first lecture always, wherever I have addressed an audience, I had this feeling of a lack of coördination; it was a sweat and a tussle and a trial to go through with it. The next evening I felt a little better, and by the time I had lectured nine or ten times, I looked upon every one as a brother beloved, or a daughter of the Lord Almighty, worth having, worth talking to, worth loving and hoping for. And so, before this course of lectures shall be done, your coördinate mentality will blend together and come pouring up to us here, and feed us, as the light feeds plants, and sunshine warms the vegetation. And you will feel differently yourselves. There is nothing like the unifying of humanity to make a case strong. That is the strength of the church; the people think alike and feel alike and look at their pastor, and take his hopeful words, and their life is broadened and elevated and enriched.

It is my pleasure now, having formally opened the meeting, to introduce our good mother, Mrs. Wells, who taught the first phrenological class in America; and she holds on pretty well. We hope for her—

though perhaps it is hardly gallant to say that any woman can be eighty years old—there are several of our lady friends who may be or will be—but she is too good to lose. We want her to say something to you, and I think she is prepared to do it. We will now listen to her.

MRS. WELLS.

Mr. President, Friends, Members of the Class of the American Institute of Phrenology for 1894. I am happy to greet you, as by your presence here to-day you give evidence that you are interested in the science of the mind.

As you study the brain, you will understand that the portion most closely connected with the body has charge of it, and answers its behests; while other, higher portions relate to the higher mental faculties. The brain is wonderfully created, and you cannot learn too minutely even its construction, which is as interesting as it is wonderful. I will not now attempt to explain the cerebral mass and its appendages and their peculiarities; the ventricles and their uses; the *medulla oblongata* and its important position and functions; the *falx cerebri*, the *corpus callosum*, the *tentorium*, the *cerebellum*, the membranes—the *dura mater* and how it protects the brain from external injuries; the *pia mater* with its innumerable, minute ramifications; the *mesencephale*, or *pons Varolii*, which is said to be "the link which binds us to life;" the olivary bodies, the striated bodies, optic thalami, the commissural structures, and many more,—but it is important that you become familiar with the uses of all these and more of the different parts of the brain, and also of its house—the skull, its sinuses, sutures, its foramina, or holes for the passage of nerves, etc.

Scientists in anatomy declare that if all the convolutions of the cerebrum and the layers of the cerebellum were spread upon an even surface, they would cover a space of nearly seven hundred square inches. And yet it is all packed into the small space contained in the inside of the skull. You know of course that the size of a skull is not always the criterion from which to judge of the space its brain would occupy when spread out to its fullest extent, for a skull that measures less may contain a brain with deep convolutions, while those in the large skull may be more superficial, and of a coarser organization.

Years ago we had for dissection before the class a finely organized brain with very deep convolutions. According to phrenology it was of an intellectual and educated man, but unfortunately he lacked self-control, gained the bad habit of drinking and in one of his spells died without disclosing his identity and was buried in the potter's field.

While this session continues, you may come to a conclusion as to whether the brain is the mind or merely its instrument. Study and think for yourselves. Take the mere assertion of no person, but require facts for evidence; otherwise it will be philosophy without science. All science is founded on facts. Dr. Gall, the founder of phrenology, accepted no theory, but founded our science on observations of nature that were many times and oft repeated. While one endeavors to learn, it is well to take the attitude of learner. Be children. Your teachers in this institute will endeavor to make everything so plain that you can understand all they wish to convey. You will have your note books, in which you may make memoranda of any queries which occur to you, as well as of what you hear. Keep the mind in a clear and receptive condition by keeping the body right, and that will require enough sleep and the right quantity and quality of food. Avoid all kinds of excitement, and keep your attention on the subject or study which brought you to us. Remember that we are your friends. If you require counsel or sympathy, come to us.

Professor Sizer, our patriarch, will give you the philosophy of phrenology, and later make the practical application. He has a method of his own in teaching classes, and as he will probably be your principal teacher here, accept, thankfully, what he presents. All your teachers will be sure to give important thoughts, and if you do not learn as much as you expected, do not let the fault be with yourselves. Keep clean and pure physically, mentally, spiritually. Your object in coming here was to learn—to study brain and mind. If you are teachable and we can teach you, you will not go from us disappointed. Study thoroughly, and thus qualify yourselves to satisfy inquirers, and in such manner as to make friends for phrenology of those who have been its opponents. Lead them to its truths, and you will add to their happiness and to your own.

DR. DRAYTON.

I am very glad to meet you, friends all, and on this occasion we merely seek to know each other, to look into each other's faces, and, as it were, make friends on the spot. If possible we should cultivate that old idea which is more or less phrenological in regard to first impressions; and I pray you that your first impression with regard to me will be favorable.

Prof. Sizer said something about dead planets. He illustrated, for instance, the moon, which, by the way, is a very bright one, but shines, I think, by reflected light; and possibly because of my long continuance here, I have become a kind of subordinate luminary, which is reflecting

the light of the greater planets now near me.

I take it that your presence here indicates a very serious mood; that you have not come in any spirit of fun; it is not the idea that in the city of New York you will enjoy yourselves amazingly, sensuously, but rather that you will find here a source of inspiration in a way; that you will find opportunities to indulge your taste in directions which have not been found anywhere else.

I congratulate the Institute that you have appeared in such force, notwithstanding these depressed times. In fact, I have been serious enough in my meditations with regard to the outlook of the Institute for this fall, to think that we should have scarcely more than a corporal's guard to listen to our "words of wisdom." But as it is, I think that we should feel encouraged, and seek to do our best. This subject of phrenological science is so broad that really, when I consider it at times, and think of the department which I am supposed to fill, a recent utterance by the late Premier of England is in season. He said on one occasion before a university audience in England, that the remarks he had to make did not concern *science* so much as it did *ignorance*; he wanted to talk a good deal about the ignorance of men, and therein, perhaps, I shall fill the larger field. I may say a great many things, matters of which I know very little; but I shall expect your active minds, responsive always, will stop me where I should stop, and, by your appropriate questions, keep me in the track of science, so that I shall be enabled to do my duty fully.

Margaret Fuller said once, that the great need of the world is a spiritually minded man of the world. I feel that the great need of the world to-day in the way of its higher development, education, social growth, is a phrenological man of the world. I think I have a better reason than even Margaret Fuller for my view of the world's needs, for the reason that the phrenologist must know the world well in order to meet its needs. He addresses himself to men and women of every complexion; and he should know something of them from his point of view, certainly from his self study he is enabled so to instruct that all shall get benefit. The phrenologist, in going to the brain and physiology, goes, you might say, to the very bottom facts of human life; and I think the old negro was about right—when he was reading the newspaper upside down, and somebody had said, "What are you doing with that paper? You've got it upside down, don't you see?" He replied, "Dat's de way I git at de bottom facts." It may be important sometimes to reverse men, turn them inside out; that is one of the objects of phrenology, to see what is inside.

turn the man upside down, and get at the bottom facts of organization. We go to the central truths; we believe that most earnestly; the more we look into this matter, the more we are satisfied that we are getting at the very central sources of human being. But the mind is so expansive, mind is so much of a chimera, that notwithstanding all that we can do, all our investigations, there is no end to the work which the philosopher, and especially the phrenological philosopher has at his command. And there is a most encouraging and happy reflection when we think of this boundless field of study in humanity, that it is always intensely interesting; everything is that is human; and with our seriousness in taking hold of some of the grand questions that are looming up in our time, we may learn more and more, and get more earnest ourselves, and more sure of doing good to others. But my intention on rising was simply to make a few general remarks, and to welcome you most cordially.

DR. BEALL.

I suppose I am an enthusiast upon the subject of Phrenology; and if it can be proved that I am, I am certainly willing to admit it. I think the subject is worthy of as much enthusiasm as any one person, or any number of persons can develop. I have been thinking while sitting here, that I am always glad to see any evidence of growth and progress in what we might call the phrenological movement. I say movement, because the teaching and promulgation of phrenology in this country has been largely in the nature of a reform movement. And in this connection I have been led to think of the size of this class, the increased number who are present to-day, as contrasted with the number we had a year ago. When I consider the terrible financial depression through which we have passed for the last twelve months, I think it is a sign of great encouragement that we have so many here to-day.

However, we ought not to judge phrenology by the number of those who represent it, and I might go further and say we should not judge it even by the character of those who represent it. One of the great advantages of our science is that we are taught by it to look beneath the surface, and to see truth in all sorts of disguises. We can look below and behind the most plausible appearances of people; and we should apply that same principle when we judge of higher philosophical truths or questions of reform. It often happens that unworthy people come into the possession of the finest ideas, the most valuable truths, and often from the very circumstance that they are rebels and renegades in a certain sense, to the prevailing ideas, beliefs and principles,—the popular current. When they go out to expound or to defend the new

idea, they are not exactly ornamental to the cause they represent. This was very largely true of the first years of Christianity; it was true in the Protestant Reformation, and it has been true of nearly every great movement. When Christianity was first established, it attracted an immense number of people who were not popular, who were not identified with the high places of the world at that time. The people who were firmly grounded in what might have been called the orthodox or conventional circles of that period, were as a rule, already satisfied with their position. They had no motive or desire to change. And so the new doctrine was taken up very largely by people who had not much to lose if they became unpopular.

There were two classes, I may say, not to divide them up minutely, who embraced Christianity at first; there were a few magnificent souls, and then there were some, as I have said before, who were neither great in numbers nor ability. But none of us to-day would judge of Christianity by its humble and obscure advocates of that period. The same thing was true in regard to the Protestant Reformation. There were some grand leaders. I have noticed that Prof. Sizer likes to talk about them; he likes to draw contrasts between the sturdy, vigorous Luther, and the gentle Melancthon—you remember there were fighting characters, strong, vigorous, aggressive workers, in that great movement, and there were other more ornamental, more conventionally agreeable characters. So in Phrenology we have had the same thing; and I want to say to you that we should not judge Phrenology by the smallness of our Institute in comparison with the great citadels of learning, such as Yale and Harvard in this country. I hope that none of you will gather any false impression from the fact that we have not half a dozen large buildings and a corps of twenty-five or thirty professors. I hope you will not get any idea from the size of our school that our subject is not enormous. For my part, as I said at the outset, I am enthusiastic about our work because I believe Phrenology is the greatest science on this earth. And when I say that, I am not neglecting the idea of religion, because I think that whatever there is of true religion, Phrenology will indorse and will discover and will encourage, and will put upon a basis of fact, about which there can be little if any dispute. The highest doctrine that I have been able to see in Christianity is that beautiful and sublime idea of the supremacy of love, gentleness, charity and forgiveness. Phrenology, in locating the faculty of Benevolence in the very topmost part of the brain—when I say topmost, I mean in that part of the brain which is the farthest removed from the base in the order of the development of the top-head forward,

—Phrenology, I say, in locating Benevolence at that part of the brain, emphasizes that sublime thing in Christianity. Therefore, I say that Phrenology in its teaching implies and includes the highest and best principles, and I think we have reason to be proud of our work. However humbly or lamely we may prosecute it for a while, we ought to feel that we have the sanction of truth and a noble purpose.

As to the part I shall perform in instructing you here, I have only to say that I shall be happy to do all I can to further your interests; and I hope that you will be greatly benefited by your experience among us, and be prepared by what we give you to become useful and happy citizens in every way.

MR. BELL.

Mr. President, I should have thoroughly, peacefully and tranquilly enjoyed this generous intellectual feast if it had not been for a suggestion of your own to me, just before this meeting began—that you proposed to thrust out your fist and grab me and force me to my feet whether I would or no. Therefore I complain, and I fancy justly. When I came into this room and you beckoned me to take one of the forward seats with you and your coadjutors, I thought to myself, "No, I have lost confidence in the professor. I won't have anything to do with him or those ornamental and scholastic doctors about him, but will sit here with the business end of the audience." Thus, it comes to pass that you find me not upon your exalted platform but down on the floor among the rank and file of workers.

I have been soliloquizing, if I may use the word, as to what I should say when it came my turn, and peradventure I should find nothing to say, then as to what would become of me; and, as you have not invited me to make a speech or set address, I am not supposed to begin with the beginning of the world, or with the "*Gnothi seauton*" of the Greeks, or with the later utterance of Pope, "The proper study of mankind is man," and map out a long and exuberant discourse. On the contrary, I am supposed to indulge in no flights of oratory or rhetoric, but to confine myself cheerfully and modestly within the narrow limits of a business proposition. Thus thinking earnestly, half nervously here in my seat, the thought of the bee has arisen in my mind to help me out of my dilemma. You good people there upon the platform represent, if you please, the honey end of the bee; while we good people down on the floor represent the busy wings and the business and sting end of the bee. It is the wing of the bee that gives it its vitality, not in the sense that it could not live—be a worm or a grub without wings, but its wings give it that larger vitality that en-

ables it to fly from field to field, ever in search of new stores and new riches.

These students have come to us from all over the land—from Canada, the South and the far Pacific, to this the central bee hive, to be instructed in honey gathering and honey saving, and they shall hereafter return from us into their different States and countries, and exercise in their respective fields of labor, all their powers like busy bees in the gathering of that measure of success, which we hope will come large and enduring to each of them; so that they may know bye and bye, as you good people there on the platform know now the joy, the happiness and the sweets of illustrious success. The wing thus represents motion, power, activity,—in one word, "hustle."

"Eternal vigilance," says Patrick Henry, "is the price of liberty." Eternal hustle is the price of success say we. Let us remember the lesson the bee conveys—no sweet thing is got but by working hard and delving deep; and when not found at any given spot, or you have exhausted one place, fly off quickly like the bee and start again in a new field. Be constantly active and alert to the opportunities of life. Never sit down or fold your hands and say, "I can't;" this is to be a drone—this is not to use your wings, but to be a mere grub or worm.

The bee reminds me further that there is a music belonging to the hum of industry. The bee and the humming bird are musical, although the sounds come only from their swiftly vibrating wings; and we hope in the labors of these students there shall come a joy, a music, even a pleasure in the carrying out of this chosen work, that each of them has come here to learn more about, at the feet of you, their Gamaliels—that each can say and verily feel, that these their toils are also their pleasures.

On some accounts I am sorry that this simile, however poetical it may seem to some of you, has come to my mind, because I am reminded that there is a sting end to it. I suppose that the sense of the loss of credit, or the misery of insolvency and failure, may be said to be the sting of business; and there are oft-times certain rudenesses and unkindnesses that people indulge in one toward another in business relations, that may also be said to represent the sting end of the bee. Now I shall hope, so far as I may be identified with this honorable and well-known house, ever to be courteous and thoughtful of others, and acting thus toward you all, I think I can readily expect to receive it in return; and after you are through with this radiant galaxy of professors, and you have gone out into your fields of work, then it is with me that you will chiefly deal; it is to me that you will most frequently write. I shall answer your communications. You may make propositions which I shall consider, and I may suggest some new

ideas to you to further the interests of that cause in which we are all engaged.

Having known each other here and now face to face—what manner of men and women we are—it is to be hoped that this personal knowledge will develop into a larger influence and keep us more happily and

successfully engaged in this work that we have all set our minds and hearts and hands to do. Let us ever keep before us the example of the bee, and remember that it is through the untiring efforts of the business end of the bee that honey is laid up for the future years.



SELF-DENIAL FOR CHILDREN.

THERE are very few homes where the virtue of self-denial is not put into daily practice. The exceptions are in those families where great wealth, inherited or acquired, makes it not necessary, and consequently almost impossible. In the generality of homes love and ambition combine with limited means to keep the offering of personal sacrifice ever burning on the domestic altar.

The virtue, however, is mostly confined to the elders of the family, the father and the mother, to whom the rearing of their little ones is at once their duty, their ambition and their highest pleasure. They desire to place their children on a firmer footing, when the time comes for them to go into the world for themselves, than they occupied at a similar period of their lives. They strive to have them better fed, better clothed, better educated, and with a wider knowledge of men and the ways of the world than they had in youth, and in order to do this every day, almost every hour, of their lives is given to the practice of rigid but cheerful self-denial.

In former generations, when every family had from five to nine or twelve children, self-denial was not confined to the parents. The straitened circumstances of farm and village folk made it absolutely necessary that all should help to the common end of gaining a subsistence and an educa-

tion. The first, which are the strongest, impressions of child life were those of helping each other, and each helping the father and the mother bear the mutual burdens. In such families a beautiful spirit prevailed from the eldest to the youngest, which tended to keep out native selfishness, and welded the chain of love which bound all together through all the years of life.

But in the family of to-day, which is so noticeably small, which often and often produces only one child, this beautiful virtue, so necessary for the building of a complete character, has very little chance for life and growth. Parents, even those with only one child, have become so ambitious for social or professional positions for their offspring, as well as to surround them with luxuries to which their own childhood and youth were strangers, the task of rearing and educating even the solitary one child is no small undertaking. In our large towns and cities the delving and scrimping of the parents to send the child to the most expensive schools, to clothe him in the latest style and with the costliest fabrics, is a matter of common observation. Many a mother contents herself with one decent street suit the year round that her daughter may be costumed like a little princess. She washes, irons and scrubs for her family, that the girl's dainty fingers

may be unsoiled and ready for the position of a lady, as her imagination defines ladyhood, for which she has intended her since her birth. The father drudges as laboriously in the tread mill of wage earning that his son may be fitted for a profession, and never be obliged to stoop to ignoble day labor. Although their estimate of values may be false, and is so in the opinion of most of us, the spirit of self-denial is undeniably genuine.

Now, if the girl and boy accept this sacrifice unthinkingly, even ungratefully, where is the responsibility? Self-denial on their own account has never been a part of their training; they are as unconscious of it as a savage. They do not recognize it as such in their parents. It has been so cheerful, so constant, so much a matter of life and fact, as never to be mentioned in words, that the children cannot put it into words either, and much less into character. It is really one of the most unfortunate phases of modern child training, or the lack of it.

In addition to other considerations the advantages which parents labor unceasingly to secure for their children would be appreciated tenfold more by them if they had to strive for them in a measure themselves. Gifts are pleasant and are valued to a certain extent, but desirable things which we have gained by our own efforts are prized in proportion to the strain and the length of the effort required. It is not uncommon that the parent finds, after years of toil and sacrifice to put his child in a position superior to his own, that his child has neither taste nor fitness for it nor happiness therein. And sometimes, indeed too often, the careless child fails in mature years to compensate the self-sacrificing parent by the love and care which are his due in nature even if there were no additional bond of the gift of a life's labor and devotion.

It must be obvious to every observer of our homes and our children

that there is needed an intelligent and a persistent effort by the parents to train the young in the virtue of self-denial. Where there are happily several children the task is made easy by the opportunity for serving each other, for learning to prefer the advancement or the pleasure of the brother or sister to one's own. Where there is only the unfortunate solitary one the work will be greater, but even then it is not impossible. For there are everywhere the little ones of the very poor for whom sacrifices can be made, and, unless the sweet fountain has been too early closed by unpruned selfishness, the child heart will quickly respond to their needs. The parent who is really in earnest can find ways for the cultivation of this virtue.

Above all it seems to be a pressing necessity in many families that the children's attention should be turned to the denial of self for the sake of their parents. They are so careless, so heedless of any obligations further than obedience. Parents, especially mothers, shrink from exacting deference in the shape of the easiest chair, the cheeriest corner by the fire, the most popular book, relief from little house cares, bringing of slippers and the like, all little things, but all with a meaning and an influence. It is an uncommon child who will voluntarily leave a game, or book, or a lounging attitude, to do these things for their elders. It must be required until it becomes a habit, and when the habit is established there is not only a principle fixed in the formation of character but a sweet influence gained in the home like the perfume of rare flowers. The habit of self-denial, moreover, leads to the practice of other virtues, all unconsciously it may be, but all the more valuable and genuine for that. Why should parents alone exercise it when it is so essential in the building of character, the object of all training. The force of example is not sufficient. Line upon line and precept upon precept

are not enough either. Daily drill and persistent enforcement in most cases are imperative.

SARAH E. BURTON.

IN BEHALF OF THE CHILD.

BY CHARLOTTE M. PACKARD.

MANY of us have puzzled ourselves over the peculiar charm of English story books above those of American authorship. The children of the squire or the rector, or of still higher degree, were interesting not alone because of that unknown environment of the English home, and it is clear to me now that the charm consists in their being perfectly normal children. The dear, shabby, old nursery, presided over by a faithful, kind but not learned "nurse;" the schoolroom, quite as destitute of nice furniture or hygienic virtue, where "tasks" were always tasks which the juvenile soul abhorred, stood for genuine child life—sweet, mischievous, naughty, penitent by turns.

Tom or Cecil or Lucy was not a drawing-room figure, discussed and applauded or criticised from the very cradle by a public no less real to the receptive little mind than Mrs. Grundy herself to grown up people. The routine life marked out in those tales seems extremely simple to the American household, where children are usually *en evidence*, where the breakfast may be spoiled by Charlie's refusal to eat oatmeal and the dinner by learning that Mary is far behind in her arithmetic the girl "no brighter" next door. If Tom of the rectory or the manor declares against bread and milk he will go hungry, and as to the neglected arithmetic, have we not shared the duration of Lucy or Cecil in the stuffy schoolroom out of hours till "sums" are correct?

The ingenuity with which the small person of English story invents and shapes his pleasures is a lesson we upon this side the water refuse to learn. Our sturdy cousins are not

credited with excess of imagination and sentiment, but readers of Mrs. Ewing and Annie Keary's delightful memoirs, or of Jean Ingelow's tales, must admit that such resources are only developed by kind necessity. The right of the child to *own himself* a part of the time—to think his "long, long thoughts" that become ladders of delight and mystery, unquestioned and undisturbed by mature wisdom—is forgotten by hosts of anxious and indulgent parents.

It may be urged that domestic conditions among us are so different, the semi-detached estate of the child in the nursery or schoolroom of home is not possible, if desired. This, however, need not interfere with the semblance of freedom which tact assures the boy or girl in presence of older persons.

No æsthetic playroom crowded with ingenious toys can for a moment compare with a good, dusty garret or barn chamber to insure the child's supreme content. The imaginative brain creates whole histories and romances out of what has "lost its utility." Why should these feats of the brain be regarded as useless or mischievous? The desire to assist nature by early forcing the child's mental development is a robbery instead of a partnership. It takes from the young human being not only vital power but the exquisite satisfaction of making his own estimate of things, himself included.

If observers like Dr. Weir Mitchell are heeded the great dangers of our present hothouse system of education will be turned aside. Careful watch and ward will still encompass the child in that happy valley from which we all travel too soon, but the demand for savory sauce to season every hour will cease.

In behalf of the child, then, let the protests now often heard take effect. Give fewer "useful" entertainments, "wonders" of science, of art; drop the parlor theatricals, unless of home manufacture, the dances that

mimic fashionable life; drop even your own theories of what *must* please the healthy child and gently turn him over to himself.—*Congregationalist*.

MIND DEVELOPMENT IN THE CHILD.

THE systematic observation of child development in modern times has shown that this is one of the most interesting and wonderful departments of anthropology. In fact scientists are beginning to discover that this heretofore much neglected garden offers the most fruitful of harvests to the appreciative student. In *Babyhood* a writer cites instances in early child growth that show how much of intelligence exists in the baby of even a few months.

The little child is capable of memories long before he has learned to speak. A little boy, six months old, whose hand had been slightly burned by a hot vase, shrank back at the sight of this article a few days after. Certain faces, too, are recognized by children of this age, showing that they have memory images of them. Strange faces, too, are known as strange, and distinguished from familiar ones; but the latter are not yet missed when absent. Sigismund gives an interesting case of memory in a boy about eight months old. While in the bath he tried repeatedly to raise himself up by the edge of the tub, but in vain. Finally he succeeded by grasping a handle near which he accidentally fell. Next time he was put into the bath he reached out for the aforesaid handle, and raised himself up in triumph. Memory of persons becomes strong by the end of the first year. A child of this age recognized her nurse after six days' absence "with sobs of joy." A boy somewhat younger knew his father after four days' absence, while another, seven months old, did *not* recognize his nurse after four weeks' absence, but when nineteen months

old he knew his father, even at a distance, after two weeks' separation. Another child, four months old, knew his nurse after four weeks, and at ten months he missed his parents, and was troubled by their absence. A boy of twenty-three months manifested keen delight on again seeing his playthings after an interval of eleven weeks; and when a year and a half old was greatly disconcerted one day when sent to carry *one* towel to his mother, where he had been accustomed to carry *two*. Darwin's boy, at a little over three years of age, instantly recognized a portrait of his grandfather, "and mentioned a whole string of incidents which occurred at their last meeting, nearly six months previous," the matter not having been mentioned in his presence in the meantime.

Dr. Tracy considers resemblance, if not the earliest, certainly among the strongest of the child's associations. Darwin's child, in the second half of his first year, would shake his head and say *ah* to the coal-box, to water spilled on the floor, and to such things as bore a resemblance to things which he had been taught to consider dirty. Another boy, nine months old, on hearing the word "papa," would hold out his arms to another gentleman who resembled his father; and a little girl of this age knew the portrait of her grandfather as it hung on the wall. Sigismund says: "I showed my boy—not yet one year old—a stuffed woodcock, and said 'Vogel.' He immediately turned his eyes to another part of the room, and looked at a stuffed owl which stood there." Taine's little girl, at fifteen months, on seeing colored pictures of birds, immediately cried out *koko*, which was her name for chicken. The little boy, C., on seeing the image on a postal card, at once made a peculiar snuffing noise, which his grandfather was in the habit of doing, showing that he observed a resemblance between his grandfather and the picture on the card.

As illustrative of the reasoning process in children, Dr. Tracy mentions the following: When the little boy, R., was four months old, he was playing one day on the floor surrounded by his toys. One toy rolled away beyond his reach. He seized a clothes-pin and used that as a "rake" with which to draw the toy within reach of his hand. Mr. Darwin laid his finger on the palm of a child five months old. The child closed his fingers around it, and carried it to his mouth. When he found he was hindered from sucking it by his own fingers getting in the way, he loosened his grasp and took a new hold farther down, then vigorously sucked the finger. When Preyer's boy, at six months, after considerable experience in nursing, discovered that the flow of milk was less abundant, he used to place his hand hard upon the breast, as if he wanted to force out the milk by pressure." Another child at seven months cried for a share of the food his nurse was eating. A boy of eight months took a watch, which was offered him, and after biting on it with evident satisfaction, tried to break a piece off as he would from a cracker. At thirteen months a child who noticed the resemblance between two men inferred certain acts on the part of one which he had been accustomed to see in the other.

The boy, C., when fourteen months old, was one day feeding the dog with crackers, when the supply ran out. He immediately "crept to the sideboard, opened the left-hand door, pulled himself up by the shelf, and helped himself out of the box in which they were kept." He had seen crackers taken from this box before, but had never done it himself. He was observed to feel his own ears, and then his mother's one day when looking at pictures of rabbits. One

day, when eighteen months old, he came in from playing on the lawn, quite hot and somewhat dirty. He at once ran to his mother, holding up his dirty dress with a gesture of disgust; then ran to the drawer where his clean clothes were kept, and tugged at it with all his might. Another boy of the same age, both of whose hands were filled with toys, wishing to grasp still another, quickly put one of them between his knees. A little girl of this age used to feign sleep until the nurse left the room, when she would immediately resume her interrupted romps. Tiedemann's boy, at two years of age, used to employ cunning to accomplish his purposes.

The baby's cry, analyzed by the modern psychologist, appears as follows: the newborn do not shed tears, no matter how hard they cry. At a later period they cry and weep together, and they can also cry without weeping. But to weep without crying comes much later, and is comparatively rare in childhood. One or two cases are reported of tears being shed by children two weeks old, but most of the observations point to a later date. In one case the first tears were shed at the end of the third week, in another in the fourth week, while in other cases tears were seen to flow down the face in the sixth, ninth, twelfth, fourteenth, fifteenth and sixteenth weeks respectively. Darwin's child shed tears in the twentieth week, but as early as the tenth his eyes were moist in violent crying. He thinks that children do not usually shed tears until the second, third or fourth month. From the second year onward children weep much more easily than at an earlier period, and, later still, the inhibition of tears and crying is a significant mark of the growing power of the will.

SCIENCE OF HEALTH

SANITARY NOTES.—No. 2.

DISEASE BACTERIA.

THIS term in correct diagnosis is a misnomer. It is no more proper to say "disease bacteria," than to say disease poison, disease water, disease air, disease food or any other condition or thing injurious to the vital organism. Disease is the vital action caused by the presence in the system of an injurious agent. Bacteria are plants, some forms of which are innoxious to the living system, while others are virulent poisons. The hay-bacillus is harmless even if myriads of them invade the body, while bacillus-anthraxis is a virulent poison. The only difference between the mineral and higher plant poisons and micro-organisms is the ability of the latter to increase the volume of poison by propagation under favorable conditions.

The question whether bacteria are truly and specifically pathogenetic is not yet fully settled. Because certain forms of bacillus are always found in the excretions, secretions, in the digestive cavities, in the circulation, blood cavities and upon the mucous surfaces is not positive proof that they were specifically the cause of the disease action. All bacterial forms require certain conditions for their reproduction. They must have a soil in which to grow, and a certain amount of heat and moisture.

In laboratory culture microscopic observation shows rapid or slow propagation when the soil and conditions are good or poor for their reproduction. So every form of micro-organisms depends just as certainly on conditions for development as the

higher plant and animal forms. Very slight change in conditions will stop reproduction, and slight chemical change in the culture soil will effectually kill these low forms of life.

It is a universal law in biology that every vital organism possesses a power of resistance to all morbid conditions and things, and therefore as bacterial agents are injurious to the living system, their presence causes vital resistance, a struggle, increased action in some or all of the depurative functions. This increased unusual and preternatural action is disease, a vital effort to depurate the injurious agent out of the body. If this effort is successful convalescence is secured and health will soon be attained. I expect to show first that if this resisting power is in the best state, the body in perfect health, with the best environments and supplied with the most wholesome food, there is no possibility of invasion to such an extent as to cause disease. And second, that just in proportion as this power is weakened, the health deteriorated, bad conditions existing and unwholesome food supplied, the body becomes a culture ground for micro-organisms. I shall show that every culture point, either on or in the vital organism, where injurious bacterial invasion starts, has been very seriously deteriorated from the best vital relations, or yielded by the vital control to the laws of decomposition in relation to dead organic bodies. Notwithstanding we have used the term disease bacteria, yet it is fully demonstrated that bacterial

forms are infinitely more the cause of life and health than they are the cause of disease and death. They are the direct cause of all decomposition, which reduces matter to a soil constituting the very foundation of the vegetable kingdom. Without vegetation man could not exist.

I have shown that these forms exist in the air, in water and in food, so every person who breathes, drinks water, or eats food, takes bacterial forms into his body. Thousands of persons inhale tubercle bacillus and yet never have consumption. Most persons acting as nurse in this disease escape it. Prof. Birge says, in this and other bacterial diseases there is needed besides the presence of a germ a predisposition on the part of the person. He said too that this predisposition was mostly unknown or obscure. I shall show a little further on that it is well known and as easily accounted for as anything in medical science. Prof. Birge also said, we do not know on what the resisting power to disease depends. I assert that both in a scientific and medical sense we do know just what this power that resists bacterial invasion is. It is the wonderful power or force of vitality that protects the body from every injurious agent.

When this force is strong and vigorous the body cannot be sick from any cause of functional derangement. The molecular arrangement of organic bodies is such that they cannot resist any great structural injury. So also the vital relation is such that the most virulent poisons cannot be resisted. But all ordinary causes of disease can be and are successfully resisted by the millions of earth's inhabitants. I have seen persons sixty years old who have never had an ache or a pain in their whole life. Many persons live their three-score-and-ten years and rarely lose a day's work.

It is dogmatically asserted both in scientific and medical circles that many bacterial forms cause disease,

and yet, as I have quoted from Prof. Birge, it is admitted that there must be a predisposition before bacterial invasion can produce disease.

I now proceed to show that the culture point in the vital organism where injurious bacterial invasion starts has been very seriously deteriorated from the best vital relations.

Henry M. Lyman, A.M., M.D., author of a very recent work on the principles and practice of medicine, says: "Among the influence of predisposing causes the constitutional condition of the patient is preëminent. Anæmic, weakly and unhealthy persons are particularly liable to the invasion of tuberculosis. Their tissues possess little power of resistance to the entrance of the parasite. Such weakness may be either inherited from feeble parents, suffering from cancer or other chronic disease, or it may be acquired. The offspring of elderly people are also more liable than others to become the victims of pulmonary disease. An originally healthy organism may become undermined by starvation, or by exposure to bodily and mental causes of exhaustion and disease. In this way consumption may successfully invade a patient who has been exhausted by dissipation, poverty, anæmic and defective nutrition or wasting discharges."

These causes of consumption were well known long before the bacillus, now claimed to be the cause, was discovered. And it is in proof that injurious bacterial invasion takes place only when the vitality is weakened, the body obstructed by unwholesome ingesta, the secretions vitiated, the blood loaded with impurities, health gone and disease action the only remaining phenomena of life. It follows that the power of resistance to bacterial poison or any other injurious agent depends upon the constitution, the fund of life, the vital force that not only resists but expels all morbid matter out of the body. The culture ground then, exists only

when vitality has yielded or has but slight control.

All food matter before its reception into the body is subject to the forces of chemistry and decomposition ; but the operation of these forces is arrested in the alimentary canal and entirely overcome in the tissues, vitality having supreme control and holding this control until such bad conditions and relations accumulate as to seriously vitiate the organism, or destroy the necessary life environments, and so give it back to the action of the lower forces in nature.

The conclusion I wish to make from this argument is that there is no such phenomenon in nature as an attack by these micro-organisms. They do not victimize any one. They only affect by their incidental presence, and not then in an injurious way except when the body is already in an unhealthy state, that which could have been avoided. Perfect health gives perfect immunity from injury by bacterial forms.

A. G. HUMPHREV, M.D.

THE USES OF THE DOUCHE SPRAY AND SHOWER BATHS.

THESE relate to forms of applying water externally, whereby effects are obtained by the impact of the fluid upon the skin, are briefly and clearly described by Dr. Kate Lindsay in *Good Health*. It should be noted by way of introduction that these are among the most powerful hydropathic means, and in severe forms of illness their application requires for safety the direction of a physician experienced in the use of water.—*Editor Science of Health*.

A douche is a volume of water thrown upon the body with more or less force, either from a height by atmospheric pressure or by a force pump. In a spray or a shower bath the volume of water is broken up into small streams by passing through a perforated diaphragm of metal, hard rubber, or like material. The douche

combines the usual remedial effects of the tonic bath with the stimulation resulting from the force with which the water strikes the body. All who have experienced the old-fashioned discipline administered by the slipper will remember it as an excellent warming appliance. So the force of the water on the surface assists in bringing about a reaction. A greater volume of blood is thus called to the surface, and by this method a marked tonic effect is secured. Water of either a low or a very high temperature may be used. In either case the effect of the bath is more powerful if given intermittently and of different temperatures, as, for instance, changing from 65° or 70° to 110° or 112°, or even higher. When used locally it has somewhat the effect of massage, in exercising the skin and deeper tissue.

The appliances required for a douche are a reservoir for the water, placed at a suitable height, which is regulated by the amount of force desired. The force of the ordinary water faucet will usually be found sufficient and may be utilized for this purpose by properly regulating the temperature of the water. Connecting both the hot and cold water pipes with a single pipe enables us to regulate the supply from each into the common pipe until the water running from the douche pipe is of the desired temperature. Or a large pail or tub may be filled with water and placed at a suitable height to give sufficient force to render the bath stimulating. In some cases a small force pump has been fitted into a tub, and the water projected against the body by this means. Attached to the vessel containing the water must be a rubber hose for convenient manipulations. In the case of a full douche to the whole body this will need to be from six to eight feet long and from one to one and a half inches in diameter; but for a local douche the ordinary half or quarter-inch pipe will answer. To convert either into a spray it is

only necessary to screw a perforated funnel of metal or hard rubber into the end of the pipe. Or by placing the finger over the end of the tube the operator may so regulate the action of the water as to produce a fine or coarse spray, as is desired.

THE SHOWER BATH is not used as often now as formerly. It is an artificial rain produced by allowing water to fall from a perforated vessel placed above the body. A colander and a pitcher will make an efficient showering apparatus for family use; and a douching apparatus may be gotten up with six feet of half-inch rubber pipe and a twelve or sixteen quart tin pail, near the bottom of which is inserted a short spout as a place of attachment for the rubber tubing. If the spine is to be treated the patient may sit in an ordinary full-bath tub or on a low wooden stool in a washtub. The end of the tube should be held near the spine, and water of suitable temperature allowed to play constantly up and down the spine. Thus a stream of water may be directed upon whatever portion of the body is to be treated. To give hot and cold alternating, two pails and two tubes will be required, containing water of widely contrasting temperature, as 60° or 70° for the cold and 110° or 115° for the hot.

THE SPRAY BATH may be given in the same way. A spray as fine as mist may be given by lowering the can and allowing the water to pass through a very finely perforated funnel. By raising the vessel containing the water to a greater height the force may be increased so as to give a tingling sensation, and thus produce the stinging effect of the *needle bath*, in which water is projected in the form of a spray with such force as to disguise the sensation of cold by the active stimulation of the skin.

The uses of the douche and spray are many. They are valuable measures for irrigating and cleansing all wounds, abscesses, burns, etc. The

water may contain any disinfectant prescribed. When employed to arrest hemorrhage it should be 120° to 130° in temperature, and may hold in solution alum, tannin, or other astringents. This treatment may be used to stimulate torpid internal organs, as the liver, stomach, and bowels. Alternate volumes of hot and cold water should be allowed to play for five or ten minutes daily over the organ to be treated. The treatment is also very useful in relieving chronic stiffness and soreness of the joints arising from rheumatism, sprains, and other injuries. In case of varicose veins, muscular weakness, and feeble circulation, it is a useful tonic measure, improving nutrition and increasing the blood supply, and thus assisting greatly in warming habitually cold extremities. The spine may often be greatly relieved by a cool douche or spray, and a swollen, inflamed joint may be reduced by heat used in the same way. A very fine hot spray given with a little force is very soothing in inflammation of the eyes. A coarser spray, given with greater force and medicated with soda, is useful in acne and other eruptive diseases of the face. The ordinary fountain syringe will answer in these cases by using the spray funnel which comes with the other apparatus. The treatment may be given on an oilcloth cot when the patient is too weak to sit or stand.

The douche or spray is very beneficial in reducing the temperature in all fevers, in relieving hypostatic congestion of the spine, in preventing bed sores, and in all cases where, from weakness, wasting, and long-continued pressure, the tissues over the bony projection of the spine are in danger of dying. The internal douche may be added to relieve constipation, diarrhœa, pain, etc., and to cleanse and disinfect mucous surfaces is a very important remedial appliance of modern times. The douche and spray are also useful for rinsing the body after a soap and

water shampoo, and also as a cooling bath after a pack, vapor, Turkish, Russian, or other hot bath, the cool water and force of the flow toning up the skin and preventing the patient from taking cold or feeling exhausted afterward.

KEEP THE SKIN CLEAN.

THE importance of cleanliness for the healthy performance of the functions of life is the subject of a lecture delivered at the London Institute, by Prof. Vivian Lewes, and published in *Nature*. We may, says Prof. Lewes, live for days without giving our stomach any work to do, the liver may cease action for several days before death ensues, but it is impossible to survive for the same length of time if the functions of the skin are entirely stopped. Indeed, the professor cites the case of the child which, being gilded all over to pose as a statue, died in a few hours. The sudoriferous ducts, of which there are about 3,500 to the square inch of skin, perform the important function of throwing off the moisture produced during the combustion of waste tissue by the oxygen of the blood, and secrete about 23 ounces of perspiration in the twenty-four hours, which evaporates without producing any sensible moisture of the skin. This throwing off the perspiration and its evaporation is a beautiful natural contrivance for regulating the temperature of the body, as the conversion of the perspiration into vapor renders latent an enormous amount of heat, which, being principally derived from the body, keeps it in a state of comparative coolness. A bath heated to 120° Fah. is almost unbearable, but one may be exposed for some time to a temperature of 325° Fah. in an oven. The perspiration keeps the body cool. The 23 ounces of perspiration secreted daily contains about one ounce of solid matter, which is left behind on evaporation. Apart from this there are sebaceous glands which secrete oily and resinous mat-

ters, of which the wax in the ear is a type; these, mixing with the solid matter and dirt adhering to the skin, form a compound which tends to clog the pores of the skin; and it is the removal of this, by the morning tub and rough towels, which is responsible for the refreshing influence of the bath. — *The Scientific American*.

FOOD FOR YOUNG CHILDREN.

NO greater problem forces itself upon the attention of hygienists, professional and other, than the feeding of infants that must be brought up by hand. Our modern civilization seems to be marked by an increasing degree of maternal incapacity to nourish the human infant in the natural way, and humane science has for some time been seeking for a method or a material that will so closely approximate the natural that it may be substituted for it. The milk of that gentle barnyard, animal, the cow, has been the most common substitute, and perhaps for the average child, or the child born to a good heritage of constitutional vigor, it serves a good end. But in very many cases the raw product of the cow is a cause of irritation and even of disease. Some appear to thrive for a time upon condensed milk or that quasi "food" in its way, sterilized milk, but later exhibit decided intestinal disturbances, with accompanying emaciation and weakness.

Good milk is a very sensitive, unsteady thing, easily affected by surrounding conditions and readily converted from a highly nutritious fluid into an irritating and even poisonous one. In the healthy stomach it may prove most benign; in a stomach that has lost tone it may be turned into a sour or bitter mass that is injurious in a high degree to the whole animal economy. It is, therefore, obvious that what is needed by the public is a food for infants that will not alter in composition readily, even when in a stomach that is excessively acid or

otherwise abnormal, and may even prove a sedative, while it is nutritious.

Certain manufacturers claim to have produced such a food, and among them is the company that offers the preparation known as "Ridge's food." This food, to be sure, has been before the public long enough to have established a reputation in one direction or another, and the weight of evidence from the professional as well as the lay side is in its favor. Containing

the essential principles of nutrition for the maintenance and growth of body tissue it holds them in such an assimilable form that appears to be well adapted to the need of the very young child. To the mother it is commendable also on account of moderate cost and easy preparation for use. Probably these latter qualities would take rank in the mother's esteem next to her desire to see her child sturdy and plump in body.

NOTES IN ANTHROPOLOGY.

The Silver Vessel from Gundestrup.—Dr. Sophus Müller, Director of the Store Nordiske Museum, Copenhagen, in *Nordiske Fortidsminder*, gives a full description of the great silver vessel found in Gundestrup bog in Jutland, May 28, 1891. The vessel has been placed on exhibition in the Store Nordiske Museum, Copenhagen.

No archæological find has created more interest since the discovery of the famous



VESSEL FROM GUNDESTRUP.

Golden Horns in 1639 and 1734. A laborer working in the bog found this vessel about three feet below the surface. Danish archæologists agree that originally it was not buried, but that the bog grew up around it and gradually covered it. Its various parts were separated. Most of the

upper edge, with the rings to carry the vessel, were not found. The main point of interest centers on the question of origin. Is it of Gallic origin or was it made in Denmark? Dr. Müller considers it possible that it was made in Denmark by Danish workmen, who had learned their art in Gaul. French archæologists claim a Gallo-Roman origin for it and have lately been allowed to make an exact copy for the Paris collection of Gallic antiquities. To a French *savant* the vessel represents a link in his studies of the development of early art in France. The animals of the vessel point decidedly to a southern climate. Elephants, lions, hyenas, leopards, etc., are all foreign to Denmark.

Of the inner plates only two are partially visible in the illustration. On the one to the right we see four armed knights; below them, some foot soldiers, among whom are three blowers of the Lure. Above them is a serpent with a goat head, a religious symbol well known among Gallic antiquities. Back of the knights and the foot soldiers is a giant figure, who holds a human figure in his extended arms head downward over a vessel. Here we have a suggestion of human sacrifice, which was common among the Gallic and Germanic peoples, even at the time of the birth of Christ. On the bottom plate is a hunting scene; a man killing an uroch, which seems to prove an early date for the vessel. On the outer plates a hunter holds

two stags by the hind legs, a pictorial representation common in the olden times. The nude bust on the next plate is evidently a female goddess, and the two small figures next to her are her priestesses.—*The Literary Digest*.

Education in China.—In no country is education more highly esteemed than in China. The child of the workingman, as a rule, cannot hope to get more than a mere smattering. But scattered through the country are numberless families, the members of which, for generation after generation, are always students, and from whom, as a rule, the officials come. They have no knowledge of any business or trade. They correspond very closely to what are, or used to be, called gentlemen in England, and preserve their position with great tenacity, even when hard pressed by poverty.

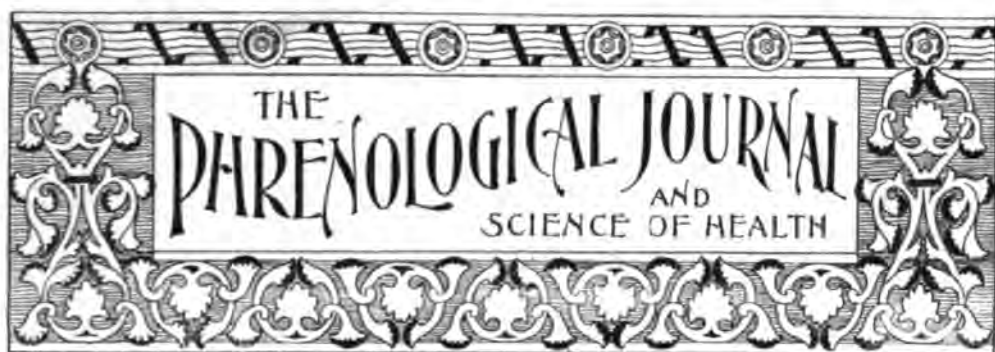
Rich parvenus, as a matter of course, engage tutors for their children, and in the humblest ranks of life occasionally parents will stint themselves to give an opportunity to some son who has shown marked intelligence at the village school. But neither of these classes compete on an equality with those to whom learning is a hereditary profession. The cultivation and intellectual discipline prevailing in such families give their members a marked advantage over those who get no help of the kind at home, and who must, therefore, depend entirely on what they learn from their paid teachers.

The orthodox scheme of education is entirely concerned with the ancient literature of China. The original works which occupy the student's attention were for the most part written before the literature of either Greece or Rome had reached its prime. But there are commentators belonging to later periods who must also be perused with diligence. China has not seen an influx of new races, such as have overrun Europe since the days of our classical authors; but still, from mere lapse of time, the language of the country has greatly changed, and the child beginning his stud-

ies cannot without explanation understand a single sentence, even if he has learned to read the words of the lesson which he has before him. The student makes himself acquainted as thoroughly as possible with the classical works. The more he can quote of them the better, but he must master the matter contained in them as well. He must get to know the different readings and different interpretations of disputed passages, and, finally, he practices himself in prose and verse composition. In prose he carefully preserves the ancient phraseology, never admitting modern words, though there are certain technicalities of style which will prevent his productions from being an exact imitation of the ancient literature. His verses must be in close imitation of the old time poets. They must follow elaborate rules as to rhythm, and the words must rhyme according to the classical sounds, which are very different from those of to-day.—*Nineteenth Century*.

Professor Mahaffy describes in *The Athenæum*, London, a papyrus-roll forty-four feet long, covered with Greek text, which has just been acquired by Mr. Flinders Petrie. It is a document of the third century B. C. Much of the papyrus has been injured, but sufficient remains to make it readable. It is a series of ordinances regarding the control of State monopolies. There are regulations for the growing of vines and winemaking, which were under State supervision. There were wholesale vintners, apparently, who obtained certain privileges from the State. There were regulations of a similar character in regard to oil. There is no mention of olive oil, but of oil made from "sesame, from the croton plant, from some sort of poppy, and from gourds." The date of the papyrus, Professor Mahaffy writes, presents no difficulty. It was issued in "the twenty-seventh year of Ptolemy, the son of Ptolemy, and his son Ptolemy." The names fix the date either in the year 260 or 264 B. C. This papyrus will be known in future as the "Monopoly Papyrus."





Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M. D., EDITOR.

NEW YORK, OCTOBER, 1894.

"WHAT'S IN A NAME?"

THE question as to the value or advantage of peculiar names is an old one, and with each new generation it comes up for discussion, and always finds both advocates and opponents. As the real solution of the problem lies in a knowledge of the mental constitution, of course the world will continue to dispute about it until the facts of phrenology are generally accepted.

Without knowing why they do so, many people instinctively change their names. They have an impression that something else would "sound better," and so they dub themselves accordingly. That there is a relation between names and commercial or professional success, no one who has looked into the matter can possibly doubt. For example, it is a little singular that so many women who become distinguished in literature have done so under names that were either masculine or had no suggestion of sex. Nobody could tell whether or not Currer Bell was man or woman. In fact, there is reason

to believe that Charlotte Brontë on the title page would have handicapped "Jane Eyre." George Sand, too, won an audience that would have been impossible to Aurore Dudevant, as did George Eliot one that would have whistled Marian Evans quite down the wind. Coming nearer our own time, there is John Strange Winter—who in private life is Mrs. Stannard—and John Oliver Hobbs, the sensation of at least a London week, who is really Mrs. Perry Cragie. Then, in the United States, there is Octave Thanet, known to her friends as Miss Alice French, and Charles Egbert Craddock, of whom all the world has heard, though only about half would recognize her as Miss Murfree.

The celebrated men of letters have also often adopted *noms de plume* which were unquestionably of advantage from a business point of view, as instance Mark Twain, who could scarcely have been talked about so much if known only as Samuel Clemens. Bayard Taylor was

James B. Taylor in early life, but later wisely dropped the unpoetic James. And it is said that Theodore Thomas in his native place in Germany was known only as T. T. Klein. It is needless to say that "Thomas's Orchestra" would have attracted much less attention if the leader had been called by an appellation so small as Klein.

The fact is that all the laws of literary style have a bearing upon proper names as well as upon the more complex arrangements of vocables which we call sentences and paragraphs.

There is an appropriateness in certain personal titles which even the dullest minds usually perceive. Nobody is so awkward as to say Mrs. De Stael, John Goethe, George Byron, Mr. Shakespeare, or Miss Bernhardt, and yet there is only one objection to speaking of those persons in that way, and that is because it would not be "good taste." To one who has a sense of fitness in language it is natural to say Mr. Pickwick or Mr. Smith, but Mr. Metastasio or Mr. Tagliapietra would be ludicrous.

These are illustrations of incongruity which every one can understand, but just to the extent that we recognize the individuality of the people around us, we shall appreciate the need of observing the laws of suggestion and association of ideas in the selection of the commonest names. It is wrong to bestow an epithet upon an infant which it shall be compelled to carry through life, unless the child's character can be determined in advance. If a boy manifests a violent temper, a head-strong ambition, and an utter indifference to all the gentler things of life, surely some name more appro-

priate than Orlando, Willie or Charlie might be found. Dickens evidently understood this idea when he named the burglar Bill Sikes and the timid boy Oliver Twist. There is nothing but oil in the sound of Oliver, while Bill Sikes makes one think of bull and spikes.

As we do not wish to neglect any opportunity to say a word for phrenology, we will add in conclusion that an intelligent phrenologist should understand the significance of names, and their adaptation to special types of character, so that his advice should be sought by all parents who are about to confer upon their children a verbal badge which may prove a mark of honor and distinction, or become an advertisement of weakness and failure.

MATTER FOR THE JOURNAL.

AS the following letter is very similar to a number of others we have received, and which we have been very glad to receive, we are pleased to publish it :

NANAIMO, B. C., July 27, 1894.

To the Editor of the PHRENOLOGICAL JOURNAL.

SIR: Considering the great interest taken in the "Single Tax" movement, I think that a phrenograph and short biographical sketch of Henry George would be of much interest and benefit to your subscribers, if you have not published one in your journal heretofore.

Yours sincerely,

THOS. W. MORDEN.

In reply we would say that we personally examined Mr. George some time ago, and expect to publish

a phrenograph of him within a few months. It may interest our readers to know that we have also examined and preserved records of the developments of Gen. Lew Wallace, Mark Twain, Signor Tommaso Salvini, Sarah Bernhardt, Lillian Langtry, Mary A. Livermore, Robert G. Ingersoll, Henry Ward Beecher, Joseph Jefferson, Annie Besant, Vice-President Adlai Stevenson, and many other celebrities, of whom we can promise phrenographs in the *JOURNAL* in the near future. It is also our intention in the coming months to devote considerable space to various applications of phrenology, such as adaptation in marriage, training of children, choice of pursuits, etc.

We are anxious to secure new contributors who can furnish valuable ideas relating to any of these topics, and we should be glad to correspond with persons of education and experience in this field in regard to new methods of presenting our doctrines. It is our purpose to build up *THE PHRENOLOGICAL JOURNAL* and increase its scope and usefulness in every possible way; but it will require effort on the part of our readers as well as the writers. In the meantime we would urge our friends to circulate the *JOURNAL* as much as they can among those of their acquaintance who are likely to become interested in the subject.

A NEW SOCIOLOGICAL COLLEGE.

THE Society for Education Extension, of Hartford, Conn., has recently determined to found a professional "School of Sociology." The purpose of this school is briefly summed up in the interesting pros-

pectus which the society has just placed in circulation. After canvassing the general field of social problems in all their bewildering complexities, pointing out the general lack of systematic training among those now endeavoring to grapple with these problems, the circular ends with an urgent plea for a professional institution where systematic training of this kind may be obtained, where indeed students may be educated for the express purpose of studying and dealing with the great social questions and social maladies which are now left largely to the tender mercies of the fanatics, the theorists and the ignorant.

If this plan is carried out the institution will become a veritable training school for social reformers.

The plan of the course is commensurate with the general conception of the undertaking. It will cover three years of study which in any of our universities would belong strictly to the department of post-graduate work. Indeed the school is post-graduate in the sense that a college diploma or its equivalent is a necessary condition of matriculation.

The first two years of this course will be devoted entirely to a consideration of the forces which develop the social structure, and it will not be until the final year that the various deteriorative and remedial forces, involving directly the various social problems, will be taken up. In the announcement for the first year, we find among the names of distinguished lecturers the following: Dr. C. D. Hartranft, President of the School, on the "Encyclopædia and Methodology of Sociology"; Prof. John

Bascom, LL.D., of Williams College, on the "Philosophy of Sociology"; Prof. Austin Abbott, LL.D., Dean of the New York University Law School, on "The Family, Legally Considered"; Prof. Otis T. Mason, Ph.D., Curator of the Ethnological Department in the National Museum, on "Ethnology"; Prof. William M. Sloane, LL.D., of Princeton College, on "The Nation"; Prof. W. O. Atwater, Ph. D., of Wesleyan, on "Food, Historically and Scientifically Considered," and Prof. Dwight Porter,

Ph. B., of the Massachusetts Institute of Technology, on "Sanitary Engineering."

The advent of a professional school of this kind may be regarded as an event of no small importance in the history of education, and the large and ever increasing body of social scientists will watch its progress with the deepest interest.

Full information concerning the "school" may be obtained by addressing the Registrar, at 625 Asylum street, Hartford, Conn.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address.

ALL CONTRIBUTIONS MAY BE SENT TO THE GENERAL editor, Dr. Edgar C. Beall; but matters relating to CHILD CULTURE, SCIENCE OF HEALTH, or of a strictly medical nature, should preferably be sent to Dr. H. S. Drayton, who has special charge of these departments.

WE ALSO EARNESTLY REQUEST OUR CORRESPONDENTS to write as legibly as possible. Wherever practicable use a typewriter. In this way you will lighten labor, avoid misunderstandings, and secure earlier attention.

BAD CIRCULATION IN LEGS AND FEET—A. D.—The cause of this condition should be looked into and removed. The diet may have something to do with it. The liver or hepatic vessels may be at fault, with accompanying disturbance of digestion. Dress the extremities warmly; wear comfortable shoes with good thick soles. Massage of the limbs and feet may promote the blood movement.

In warm weather it does not hurt a healthy child to run barefoot, at least a part of the day; but one who is new to it should not run in wet grass or water.

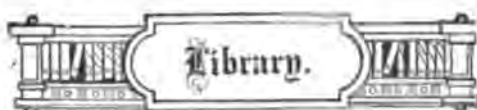
BRAIN REMOVAL AND RESULTS.—Question.—Where there is an overbalance or excessive development of any of the organs of the brain is it possible to reduce to normal size by any surgical operation, trepanning, etc.? Is it possible to remove a certain portion of the brain without injury to the patient?
A. J. G.

Answer.—Accidents have occurred that caused injury to and loss of brain with consequent alterations of the intellect or disposition of the persons. In some of

these cases the change was very marked. This fact would make it appear that a surgical operation might effect modification in the function of a given organic center. The difficulty in such operations would consist not so much in determining the place of operation as the quantity of brain to be removed. The loss of a seemingly minute portion might result in the loss of function or paralysis of the center. According to Goeltz and others the removal of one-eighth of an inch in depth involves very important consequences. You may have heard of some newspaper accounts of wonderful operations on the brain for the correction of peculiar excesses of disposition. Such accounts have found currency, but are without the evidences of fact.

SENSATION IN BRAIN.—J. B.—Yes, it is claimed by some of the physiologists that sensation is located in the posterior or occipital region of the brain. But what particular kind of sensation is referred to? The common senses—vision, smell, hearing, taste—appear to have places aside from that. Visual memory—the impression made by sight—appears to have some relation to the lower posterior margin of the parietal lobe, while smell and hearing are placed in the temporal lobe. Some authors incline to place taste in the temporal lobe also. If by "sensation" is meant certain instincts—social, protective, reproductive—that belong to the physical being of man we may offer no objection to the view, as it is but a general confirmation of the phrenological theory. "Mind," as placed in the anterior lobes, may simply involve intellect, to which no strong objection may be raised. Ferrier and others refer to the reasoning faculties as being located in the forehead. We should like a clearer definition of the term "sensation" as employed by the physiologists in their discussion of occipital function. They appear to us to be rather obscure.

SWELLING VS. VACCINATION.—D.—There is probably a septic element at the bottom of the trouble, and it must be counteracted speedily. You should consult a good physician and not trust to the somewhat uncertain treatment that is necessarily related to an epistolary consultation.



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

STRING'S EXHAUSTIVE CONCORDANCE OF THE BIBLE, in the authorized and revised versions. 1 vol., 4to, pp. 1800. Cloth, \$6. Half Am. russia, \$8. Half turkey, \$10. Hunt & Eaton, publishers, New York.

This new scriptural aid is arranged in accordance with a method that includes several fresh features. The older concordances were apparently very full and comprehensive, but Dr. James String, the editor of this new publication, was authorized, it would appear, to spare no pains toward the production of a work that would be practically complete in all the characters that a Bible concordance should possess. This completeness is exhibited well in one way, viz.: every passage is given that relates to each word occurring in the passage, an essential in a truly exhaustive concordance. The work, too, has been done *de novo* so far as compiling the data directly from the Scriptural text itself is concerned, this to secure both accuracy and thoroughness.

A feature that is expressly original is the addition of the dictionaries of Hebrew and Greek, which supply all the lexical information the ordinary Bible reader may have occasion to seek. These dictionaries are so arranged that the consultant who is not learned in the classical and oriental tongue can derive useful instruction from them. The different renderings of words from the Hebrew or Greek are given in a compact conspectus.

A note is deserved by the concordance on its application to the recent version as well as to the old, by which a signal service is rendered to the religious community.

The magnitude of the work is gathered from a few statistics that may be given here, viz.: that the volume contains about 4,500,000 words; the letter S in the manuscript of the main concordance occupied 1,600 pages. The editor spent \$10,000 on it besides his own labor, the publishers \$30,000 before printing. A single page is equivalent to four pages of a 12mo in type of similar size, so that estimated on the somewhat material line of quantity the book is a very cheap one at the price given.

D.

SYSTEM OF DISEASES OF THE EAR, NOSE AND THROAT. Edited by CHARLES H. BURNETT, A.M., M.D., Emeritus Professor of Otology in Philadelphia Polyclinic etc. 2 vols., imp. 8vo., pp. 789 and 800. Illustrated. Published by J. B. Lippincott Company, Philadelphia.

These finely made volumes cover the field of three related specialties that are of comparatively recent development, yet in a few years have grown to proportions sufficient to command the respect of the medical and surgical profession. Under Dr. Burnett's judicious superintendence the contributions of surgeons eminent abroad and in America in the treatment of the ear, nose and throat have been obtained and adapted to their several uses in the course of the work. The aim has been to make the volumes complete and practical, so that the physicians who would acquire a competent knowledge of the opinions and methods of the most experienced aurists, rhinologists and laryngologists may find in these volumes the data and instruction. Great pains have been taken to compile from every source whatever has a bearing of importance upon the treatment of given maladies of the organs of hearing and of the upper respiratory tract; the wealth of cases illustrating the various diseases of these organs is certainly remarkable. Not only are such authors as Mackenzie, Gottstein, Politzer, Lenox, Browne, Sexton, Hutchinson, Gruber, Knapp, Bosworth, Sajoux quoted liberally, but a long list of less known authorities in acknowledgment of suggestions of value. The illustrations of normal and diseased organism are very numerous and valuable in rendering the descriptive matter clear to the reader, and

there is a high value in the many drawings of instruments and apparatus that have been introduced to facilitate treatment.

While in these specialties there is a tendency to the constant increase of literature both in periodical and treatise form this work is of such a character and from such high sources that it must have a permanence and value that may be attributed to very few similar publications. D.

THIRTEENTH ANNUAL ANNOUNCEMENT OF THE NEW YORK POLYCLINIC AND HOSPITAL FOR THE SESSION OF 1894-95. New York City.

This clinical school for graduates in medicine and surgery has an established reputation, and needs no special recommendation from us. Being in New York City its facilities are unsurpassed by those of any similar school. L. Emmett Holt, M.D., Secretary Faculty.

NEW YORK MEDICAL COLLEGE AND HOSPITAL FOR WOMEN. ANNUAL ANNOUNCEMENT FOR THE THIRTY-SECOND SESSION.

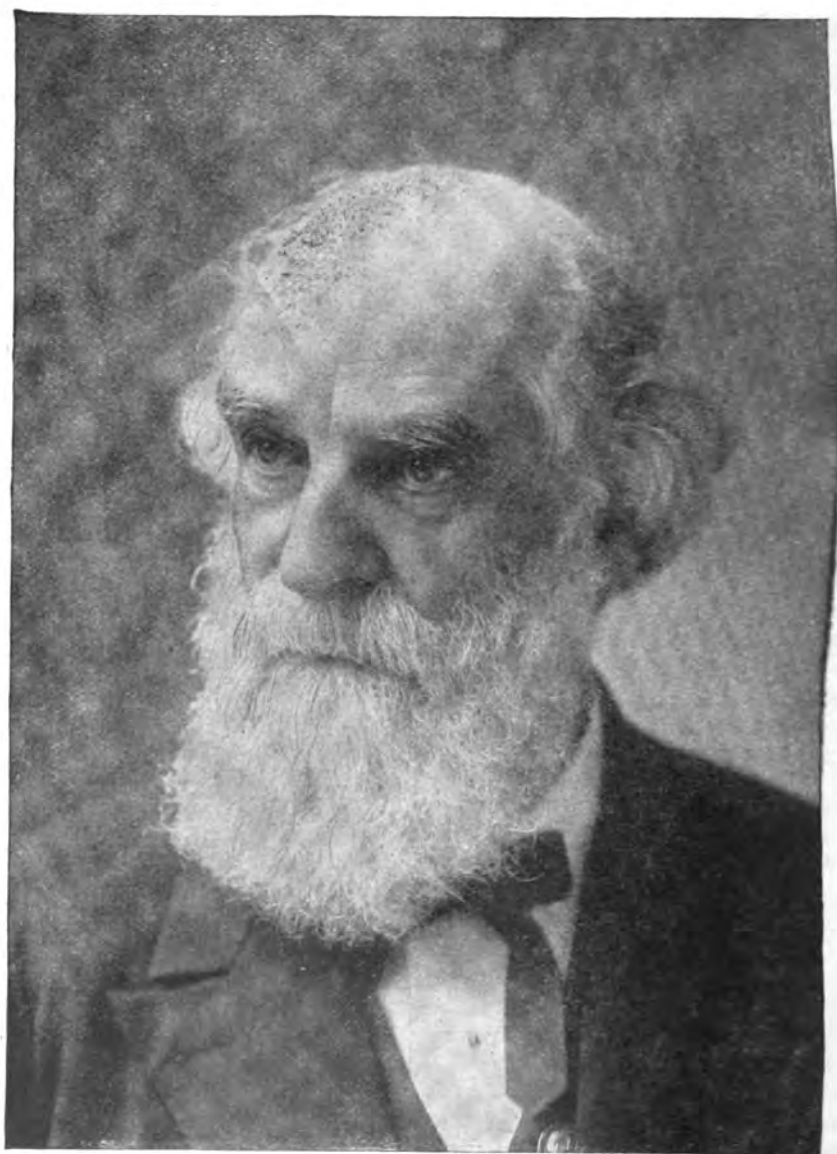
The course as arranged is comprehensive, offering to those women desiring a medical education excellent facilities in every department. For special information address the Dean, Phoebe J. B. Wait, M.D., 213 W. 54th Street, New York.

A CASE OF CHRONIC PERITONITIS, WITH INTESTINAL AND ABDOMINAL FISTULÆ—ENTERORRHAPHY—RECOVERY. By FREDERICK HOLME WIGGIN, M.D., New York. Reprint.

An interesting account.

THE CORRUPTIONS OF THE NEW TESTAMENT. By H. S. HASTINGS, Editor of the *Christian*, Boston, 47 Cornhill.

In this compact little book of less than a hundred pages we find the essential facts and arguments that bear upon the authenticity of the writings that form the New Testament Canon. There is a manifest endeavor on the part of the compiler to treat objections with justice, and candidly view the subject from both sides. The book is a convenient aid to the ordinary reader, as it shows the material that critics and skeptics employ in their iconoclastic attacks.



PROF. NELSON SIZER AT 82.

THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

VOL 98. No. 5.]

NOVEMBER, 1894.

[WHOLE NO. 671.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

BY CHARLOTTE FOWLER WELLS.

PROF. NELSON SIZER.

WE cannot think of a more appropriate introductory to our sketch of Prof. Sizer than the following words which were spoken of him forty years ago by Mr. P. L. Buell, who knew him well: "Sizer is a genius and needs no praise from me. He owes his present elevation in the scientific and literary world to Phrenology, and he will ever have reason to bless the day that he first heard its sublime truths proclaimed."

We feel certain that many thousands will be pleased to see this sketch with the handsome portrait of Prof. Sizer. He has been a very active, industrious man, and his name is known far and near as one of the best practical phrenologists living, or that have lived. He has had but few equals in his profession, as many will be ready to testify. His heart and soul have always been in the work. As evidence of this, the following quotation is given from a letter of his written in September, 1861, in replying to a letter from Mr. Wells, from England, containing a proposal for him to go to London to open a branch establishment. He says: "When I returned to the Fowler &

Wells establishment at 308 Broadway, in 1856, I resolved to 'go in for the war,' offensive and defensive, to support science, and as far as I might to strengthen your hands and sustain the labors of Fowler & Wells. I have had no antagonistic, no special personal interest to serve. Whatever will build up the cause I regard as common cause with us, and therefore whatever shall seem fit under the light of our best wisdom should decide the question." These few words attest the deep interest which Prof. Sizer has ever felt since he first adopted Phrenology as his life work.

The following sketch has been made up partly from information obtained from Prof. Sizer, and partly from quotations from notices of him that have been published heretofore, so that we know it to be authentic, though we should like to make it longer did space permit. When my brother, O. S. Fowler, took charge of the JOURNAL as editor and publisher, in 1841, he stated in his first number the wants of the JOURNAL; that it must fail unless sustained by efforts outside of his own; that he would do all he could, and if aided,

the JOURNAL should go on, otherwise it must die then, and if that were to be the case it could not be resuscitated. Prof. Sizer was one of those who stepped in to fill the breach. He and his partner, P. L. Buell, said they would obtain one hundred subscribers for that year's volume, which promise was more than realized, for they continued to obtain subscribers, writing for it, and speaking of it in their lectures. They did all they could for its maintenance, and as an evidence that they as well as others, were successful in their efforts, the JOURNAL still lives. Had it not been sustained at that time we should have no PHRENOLOGICAL JOURNAL now.

It was started in October, 1838, and is now 56 years old.

As Prof. Nelson Sizer has been more than half a century in the field as an author and practitioner of Phrenology, the mention of his name is sufficient to awaken a lively interest in thousands who have profited by his professional counsels.

His portrait indicates strength of character sustained by a vigorous physical constitution. His head measures about twenty-three inches in circumference, and his weight is almost two hundred pounds. His nervous system is therefore fully supplied with nutrition. Having been thoroughly temperate and methodical in his habits, he has confirmed in its integrity a robust body which enables him, even past his eighty-second year, to accomplish a large amount of work. His head is also relatively high, showing fullness in the moral region, while his perceptive intellect acquires knowledge rapidly and his capital memory makes his life rich in experiences. With his large Comparison he is able in conversation, in lecturing or describing character, to draw vivid illustrations from every side of nature and experience which are at once rich and pictorial.

He was born in Chester, Mass., May 21, 1812. His great-grand-

father was of Portugese nationality, having emigrated to America from the Island of Terceira, one of the Azores, in 1726, settled in Middletown, Conn., and married a woman of Scotch descent. His neighbors, desiring to make the colony seem to be English, persuaded those having a foreign prefix to their names to drop it. His name being Antonio de Sousa, or Souza, when quickly spoken sounded like de Sizer, so the kindly town clerk "Englished" his name and entered it on the town record as Anthony Sizer. All who bear the name in America trace their origin to this man.

The eleventh child and eighth son of this marriage was William, the grandfather of our subject. He entered the Revolutionary Army at 22, in 1777, as a lieutenant, became captain and served through the war. Four of his brothers also served in the army. His father, Fletcher Sizer, the second son and fourth child in William's family of sixteen, married Lydia Bassett of Westfield, Mass., daughter of an Englishman. In this way, Nelson, the fourth son of a family of ten, in which three were daughters, derives sprightliness and sociability from the Portuguese, prudence, integrity and studiousness from the Scotch, and stability, industry and vitality from the English.

Born and bred on the "Berkshire Hills," among a moral, orderly, ingenious and hardy race, he became familiar with farming and mechanical pursuits. He was an eager student and reader, and before his twentieth year he became a contributor to the county papers. The visit of Dr. Spurzheim to the United States, his published lectures and death in Boston in 1832, brought Phrenology to his attention, and having studied everything on the subject which was available, he entered the field as a lecturer in 1839. For ten years he traveled and lectured summer and winter, giving extended courses in New Jer-

sey, Pennsylvania, Washington, D. C., Virginia, New York, and New England. He early became an occasional contributor to, and agent for the *AMERICAN PHRENOLOGICAL JOURNAL*, and in 1849, was invited to take the position of Phrenological examiner in the office of Fowler & Wells, New York, and from that day to the present time, 1894, he has remained in the same work. He at once became a regular contributor to the *JOURNAL*, and from 1859 to 1863, inclusive, he had sole editorial charge of it, besides doing a large volume of professional work; the proprietors, Messrs. Fowler & Wells, being absent in America and Europe on professional tours.

He has been not only the chief phrenological examiner in the office and associate editor, but vice-president and president of the American Institute of Phrenology incorporated in 1866, and also its principal teacher. During the twenty-eight years of its work, more than six hundred students, coming from every English speaking nation, have been graduated. He has made more than three hundred thousand professional examinations. The power of his constitution and ability to work were not confined to his early life, but at the age of eighty-two years he daily performs a volume of professional work, which few men at forty have ever been able to do, and also, during two months in the year, giving to the institute class two lectures daily of an hour each, and filling the intervening time with phrenological examinations in the office. And this is no holiday work. The gifted, distinguished and learned have come under his hands professionally, often with the name concealed or disguised, generally with loving and respectful confidence, but often with skeptical criticism. The students of the Institute also are brainy people, containing in a single class two lawyers, three physicians, five ministers and twenty teachers, and other sharp thinkers.

In the midst of all these duties he has

dictated to a stenographer, and published several books, among which are: "Choice of Pursuits," "How to Teach," "Forty Years in Phrenology," "Heads and Faces," "Right Selection in Wedlock," "Resemblance to Parents," and for the last twenty months has been contributing to the columns of *THE JOURNAL* the pages of a new book, entitled, "How to Study



PROF. SIZER AT 50.

Strangers by Temperament, Face and Head," to be a sequel to "Heads and Faces."

In 1884 the business of Fowler & Wells was transferred to a joint stock association and incorporated under the title of Fowler & Wells Company, in which Professor Sizer was a corporate member, and was chosen vice-president and trustee.

His great vigor of body and brain, his ready perception and memory of minute and varied knowledge, especially of what men do and how

they do it, in so many of the trades and occupations, are a marvel to many who have profited by his analyses and advice. His facility of illustration renders his descriptions of character vivid and picturesque,

and his freedom of language makes them exhaustive. His youngest son, Nelson B. Sizer, M. D., is an alumnus of the University of the City of New York and a physician, settled in Brooklyn, New York.

WOMAN.

NO SEX DISTINCTION IN GOVERNMENT.

BY ELLEN BATTELLE DIETRICK.

THAT citizens should disagree about the principle of government, that some should honestly believe in one form, and some in another, is a perfectly comprehensible and excusable thing. The heredity, environment and mental limitations of each affect the views of each, inclining one to firm faith in pure democracy and inclining another to equal faith in absolute despotism. We think according to what we know and are, and this fact should beget in us infinite charity even for views that seem to us bigoted, foolish and wicked. Doubtless, upon some points our own opinions may appear equally bigoted, foolish and wicked to others. The realm of thought is an arena where opinions meet and prove their right to live, or to be deprived of life, in friendly contest by the use of the light rapier of reason. All that should be demanded of the combatants is that each shall appear in his or her true colors, that the combat be open, above board. No masquerading in misleading disguises. No ambushes. No hypocrisy. To this rule every fair-minded and intelligent person will doubtless agree.

Now the intellectual duel regarding woman's rightful share in and relation to government is naturally waged upon different grounds in different parts of the world. Yet this is a point which most Americans fail to appreciate. They compare the political position of women in the United States with the political position of women in Germany, or China, or in

India, and, observing that some few of the energetic, progressive and self-developing women of the United States have now obtained for themselves a greater measure of personal freedom than the feminine aristocrats of those countries possess, the average male or female American complacently boasts of the superior blessings which the men of the United States have bestowed upon the women of this land!

The fallacy in this boast lies in the oversight which neglects to notice that in every country woman's position must be judged by the principles professed in that country, and her place gauged by the place arrogated to himself by man. Thus, if we turn to China, we find a nation founded on the assumption that obedience is the cardinal human virtue and that subjection to authority is the divine law for all political, intellectual and domestic relation between old and new, youth and age. Ignorant, foolish, or even wicked, such doctrine may be pronounced, but there is no doubt that the people holding it honestly believe and consistently practice it. Subjection is the universal rule, the corner-stone, and everybody is, in turn, subjected to somebody, or something else. Women, it is true, are subjected to men in China, but it is equally true that men in China are most despotically held in life-long subjection to women. From the emperor on the throne to the lowest peasant in the meanest hut, every man in China, to this day, is legally

subject to the rule of his mother. Within the home, over the children, the mother is supreme despot from the beginning of her reign until her death. Whatever literary honors and degrees her sons acquire are formally and publicly bestowed upon the mother by virtue of motherhood. And, by virtue of motherhood, she may marry them to whom she pleases, may exact of them what measure of respect she deems fitting so long as they live, and, if they are lacking, she has the right, by virtue of motherhood, of uttering a form of solemn malediction which has power to deprive them of their dignities and titles—professional, literary or political. But while man, as a son, is thus subjected to woman, as a mother, woman, as a wife, is subjected to man, as a husband, to a certain degree. Not such a degrading subjection as that of the wife under the common law of England, to be sure. The Chinese wife is, and always has been, the free and independent ruler of the household. She can buy and sell, make contracts and manage her affairs without masculine interference, though subject, in some respects, to the rule of her mother or her mother-in-law until their death and her own succession place her as oldest wife of the often compound family. The wife of Christendom, it will be remembered, had no legal rights of any description. Her husband could decide her place of residence, could regulate every action of her life, and, under certain circumstances, could gain absolution if he took her life. She could neither legally buy nor sell, make a contract or a will, control or act as guardian to her own children, or order her household as she pleased, and while her husband could practically divorce her upon suspicion of adultery, through his superior facilities as a recognized power among law-makers, the wife could not obtain divorce for the most open, shameful and outrageous adultery of her husband, unless to this adultery he added physical

violence to herself before witnesses! The laws of France compelled a wife to remain under her husband's roof beside her husband's mistress if her lord so commanded. England still maintains the double code for divorce, allowing the husband divorce for adultery alone, but refusing the wife's plea for divorce from an adulterous husband, unless it be accompanied by personal abuse of herself.

In China, as marriage is supposed to be an institution for the sole purpose of founding a family, marriage may be nullified if it fail in that purpose; but if a husband and wife are personally attached to each other, and wish to remain together, two courses are open to them, either to adopt some of the too numerous children of other couples, or else, to follow precisely the method practiced by Rachel and Jacob as described in the thirtieth chapter of Genesis. Just as among the forefathers of Jesus of Nazareth, so among the Chinese the children of the hand-maid are accepted as the sole and legitimate children of the Chinese wife, and the real mother makes no claim even to relationship to them, nor to any sort of equality with the original wife. She remains a hand-maid subject to the authority of the legal wife and *legal* mother of the children of whom she is the *natural* mother.

But, while China unquestioningly accepts subjection as the divine order for all human relation, subjecting the mind to the infallible authority of the classics, subjecting the Emperor to the traditions of his ancestors, subjecting the son to the mother, the wife to the husband, the daughter-in-law to the mother-in-law, etc., etc., what principles do we profess?

As Protestants we affirm the right of absolutely free thought, as Americans we affirm the right of perfect freedom in self government, and declare ourselves free to alter or abolish any form of government which we believe to be destructive of our liberty.

American men, therefore, arrogate to themselves a degree of freedom of which China has not yet even the faintest conception, but what of American women? For the past nineteen years an able Chinese woman has wielded almost absolute political power over that vast empire of 400,000,000 subjects. On the other hand the absolute male sovereigns of women in the United States refuse to grant one jot or tittle of their sovereignty to American women! Representative American men on the floor of Congress sneered and jeered at the bare mention of the possibility that American women might be able to help govern themselves politically. China is about to hold a great celebration and to expend money like water in order to do honor to the great woman whom it reveres for her political service to the nation. The United States refused to recognize or to reward that great military genius who devised the plan which brought our civil war to a speedy conclusion—Anna Ella Carroll of Maryland—merely because she was a woman. China sees no reason why a mother should not guide the ship of state, if she has the ability. The United States makes sex a disability. The greatest scholars and statesmen of China accept the political guidance of a woman. The President of the United States refuses to allow his wife's name to be used by a society of women who only claim to use "womanly influence" of a private character on political affairs! And the "scholars and statesmen" of the New York constitutional convention continue to pour contempt on the American women who ask for the privilege of self-government.

In the light of the above-mentioned facts, is it not about time for America to drop its hypocrisy if it does not want to abandon its male tyranny? I use the word "tyranny" merely in its original sense of an arbitrary exercise of power, not in its latter day meaning of cruelty, etc. Our tyrants are, pos-

sibly, well-meaning, kind, noble, gentle, magnanimous tyrants, but that is not the point. Being tyrants, they have no right to masquerade as democrats. Maintaining a male despotism, they have no right to parade the United States before the world as a democracy. Holding half the people in subjection they have no right to boast that "We, the people of the United States," are a self-governing people.

In my opinion, the most contemptible creature that moves upon earth is a hypocrite, and the only unpardonable sin is a hypocrite's lie. For the liar who lies through fear, or through ignorance, it is easy to have charity and pity. But the liar who lies in order to seem what he is not is past forgiveness. For superstition-bound China, which knows no better than to practice despotism—political and social—and which makes no pretense of holding republican or democratic views, we may feel a measure of respect, even while wishing China better doctrines. But for the United States, professing democracy and practicing despotism, it is impossible to cherish an atom of respect. It is because of United States pretensions, because of the freedom of its men and the inexcusable subjection of its women, that I pronounce the position of women in this country more degraded, *relative to that of men*, than the position of women in China.

Every man and woman who despises hypocrisy and who wishes to be able to respect the United States should labor to restore harmony between our national precepts and practices. Every man who loves truth should refuse to perpetuate, or to countenance the perpetuation, of the subjection of women to men in this pretended democracy. Every woman who wishes to train her children to honesty should denounce the dishonesty of an oligarchy disguised as democracy.

Woman suffrage in the United States is simply and solely a question

of regard for common honesty, decency and truth. When a robber is found with his pockets stuffed full of stolen goods, honest judges and lawyers do not pause long in debating the "expediency" of making the robber restore the goods to the rightful owners, on the plea that no one can predict, positively, what the owners may do with their own. Nor will *honest* men in this land, which makes government the rightful property of all the people, hesitate long about restoring to half the people the share stolen from them by the other half.

The constitutional convention in New York, which has lately refused to restore the right of self-government to women, thereby proved itself either dishonest or incapable of reasoning. Whichever it may be, its recent action stamps it as unfit to decide any sort of question for the people. From this one action in regard to the female people of New York we might confidently expect to find all the decisions of the convention weak, maudlin, illogical. Such is exactly what we do find in reading an account of its proceedings. It has no more conception of self-government than is possessed by a council of the representatives of the Czar of Russia. In fact, the New York Constitutional Convention

may justly be pronounced as undemocratic as the worst reactionary school of present-day Russia. It not only refuses to countenance the request of women to govern themselves, but it undertakes to tell every department of New York State exactly how and to what extent it may govern itself. A despotic old grandmother at the head of a Chinese family is a liberal in comparison, for she is generally content with ruling some forty adults and infants. The Constitutional Convention wants to regulate the details of life for some millions of adults, not to speak of infants.

The very American Americans who desire to discern the cause of the rise of a spirit of anarchy, that is, of contempt for government, in America, are requested to turn their attention—not to the few foreigners—but to such foolish and undemocratic and expensive performance of nothing as that which has been going on for several months past in the Constitutional Convention of New York. If self-government be but sounding brass and tinkling cymbal, then Hail. No government at all! A male oligarchy? or, anarchy?—of these two evils let us choose the least.—*Twentieth Century*.

A BRAIN THEORY.

ACCORDING to the former view of physiologists the cerebellum (the hind, or little brain) was supposed to control combined muscular action and to adjust the voluntary movements in an organized manner. But its similarity in anatomical construction and its close connection with the cerebrum (the anterior or larger division of the brain), as well as its relations to the cords which conduct the sensations to the spinal marrow, have led the French naturalist, Courmont, to suppose that not only the organized workings of the voluntary motions are governed by the cerebellum, but that there also distinct spiritual

occurrences have their seat. As is known mental motions, such as thinking, reasoning, comparing, willing, etc., are performed in the cerebrum. Through a great number of observations Courmont has reached the conclusion that the emotions, such as love, hate, anger, fear, joy, sorrow, etc., have their origin in the cerebellum, an opinion which was certainly expressed by Jessen as far back as 1869, but remained unnoticed on account of the want of proof. Its great similarity to the cerebrum in its finer anatomical relations is proved by physiological experiments, but still more by clinical observations,

several of which we will communicate. A lady who for some reason had lost her mental balance answered all questions respecting the exterior world quite rationally, but became delirious as soon as her emotions were in the least disturbed. After her death the cerebellum was found altered. If the cerebrum is considered as the only support of the mental occurrences there must certainly be two different kinds of cells, one of which supplies the intellectual actions, the other the emotional, and any occurrence, such as a disturbance in the circulation, will influence one and not the other. On the contrary, occasional changes in the cerebellum, its diseased state or entire absence, as is often found out after death, are indicated during the entire lifetime by decided diseases of the feelings. This was shown in the case of a woman in whom the left half of the cerebellum was wanting, while the cerebrum and the spinal column were found to be entirely sound.

From her earliest childhood she was subjected to a certain timidity which, on the slightest occasion, manifested itself through weeping, wailing and trembling, while her other feelings were entirely normal. In another case a disease of the cerebellum was observed in an 11-year-old girl; although she was mentally well developed she had never in her life experienced either pleasure or pain, and to all questions replied with "yes" or "no." A third case was met in a man about 40 years old. All his life he had been a great liar, thief and idler and immoral in the highest degree, and never had a friend, knew neither love, affection nor gratitude. While the cerebrum was entirely normal the cerebellum

appeared to be extraordinarily shrunken. In all these cases changes of the cerebellum or a great defect thereof were accompanied by great peculiarities of the emotions. But Courmont has further succeeded in supporting his opinion through an experiment. Ravens, which are extraordinarily timid, remain perfectly fearless after the destruction of the cerebellum. A study of comparative anatomy leads greatly to strengthen this opinion. The higher one mounts in the zoological scale the greater the development of the cerebellum, which reaches its highest perfection in man. If it were only a means of muscular action then the cerebellum should be extraordinarily developed in animals whose muscular strength and endurance are most remarkable, as in deer, horses, hares, squirrels, etc., but squirrels have proportionally the smallest cerebellum. On the other hand seals, whales, dolphins and the ocean mammals generally have a large cerebellum, and according to the unanimous opinion of eminent naturalists these animals are exceedingly social, live in large families, protect each other in danger, and show great love and tenderness for their offspring. Among reptiles, on the contrary, the cerebellum is but slightly developed, and these are seldom social, are mutually aggressive and devour their young. Next to mammals birds possess a proportionately large cerebellum, and these, as is well known, are very tender toward their young. In further proof of the theory the nerves, which are supposed to express extremes of emotion, as the nerve of the tears and the great facial nerves, arise from the cerebellum.—*Science Siftings.*



HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XXIII.

PECULIAR ORGANIZATIONS.

AMBROSE DUDLEY,

EARL OF WARWICK, BORN 1590.

THIS is a peculiar head and face. There is an enormous development of the knowing faculties lo-

of this head is that it is so very high. The organs in the top head, especially Veneration, Firmness and Self-esteem, are enormous. There is such a thing as hereditary dignity and stability and hereditary reverence for



FIG. 183. AMBROSE DUDLEY,
EARL OF WARWICK. BORN 1590.

cated across the lower half of the forehead. The Perceptive organs are all very large. The temperament is favorable to intellectuality and mental vigor. The peculiarity

greatness and titles, and what the world styles elevation of character. One can readily imagine the sense of authority; the love of power; the feeling that he stands head and

shoulders over mankind generally, and, although he had a mild countenance, he was doubtless very rigid in his ideas of truth, duty, and especially the duty that subordinated people owe to government and to authority. Such a head as that would readily recognize the divine right of kings and the spirit of governmental

knowledge and practical wisdom. The faculty which reads character, the organ of Human Nature, is enormously developed in that head, and so is Imitation. That would be the kind of a head to exercise governmental and diplomatic power; it would also excel in science and in literature. He seems not to have



FIG. 184. JUDGE HUGH L. WHITE.

authority as held by landed lords. That high top-head evinces hundreds of years of successful distinction and authority. If such a man were inspired by high and holy motives, his intelligence and his sense of law and subordination by those subjected to law, would seem sublime. Then his intellect ought to place him high in the rank of intelligence, scholarship,

very large Caution, but more force of character than prudence and guardedness; and the center of the top-head is so enormously high that he must have had great religious enthusiasm and have inclined to promote religious sentiments by legal control. He was doubtless exceedingly conservative if not tyrannical. His large Language gave him the power

of utterance; the fullness of the eye is very manifest.

There was more Spirituality, Veneration and Benevolence than there was of constructive talent, Ideality and prudence. The head seems to run up in the central region and the sides are comparatively flattened.

HUGH LAWSON WHITE.

This is a remarkable specimen of the mental temperament and is a high order of development. There is fineness of quality, sensitiveness and susceptibility, and there is a wiry endurance and toughness connected with such a constitution. He was remarkable for his scholarship and for his judicial talent. He was a judge in a Southern State about 1850, was a United States Senator, and was a strong candidate for the Presidency; was considered a formidable rival in the field during the latter part of the career of Henry Clay. The face is long, and the features light and delicate. The eye was sharp and clear, and the superior faculties of reason, dignity, ambition, thoroughness, steadfastness, morality and imagination were remarkable. As a lawyer and a judge he was a critic and clear-cut; as a thinker he was broad and sound, and as a man of mental caliber rarely equaled.

Like John C. Calhoun, his body was slight, though wiry, and he seems not to have been very liberally nourished. His digestive power seems to be poor; the hollowness of the cheek outward from the mouth indicates it, but he was a kind of intellectual lightning-rod in his time, masterful in spirit, and high-toned in his sense of duty and honor.

He had the organ of Hope largely indicated. He had large caution and very large Firmness and Self-esteem. Such a head indicates scholarship; desire for knowledge; ability to gather information and make himself

master of his surroundings, and a natural leader among men.

Such a face and head with education and opportunity always takes rank among men of a commanding spirit, and the world is not slow to recognize the right of such men to lead and to rule.

FRANCIS EGERTON.

DUKE OF BRIDGEWATER.

This is a head, face and body constituting a remarkable contrast with the two former portraits, Figs. 183 and 184. The date of the picture is 1788. His head and face have something of the outline of King George the Third, and they were contemporaneous, though this is a stronger face, and we think a stronger head, than that of George the Third. This is an interesting physiology and physiognomy. There is a stout, deep-chested body; a very high development of the Vital temperament with a considerable degree of the Lymphatic. He was probably a very large, heavy man. The neck was large; the fullness under the broad, fleshy cheek shows bodily health and vitality, and the rotundity of the body and the largeness of the chest and the abdomen evince a noble lord who lived high in his day. His large Roman nose would indicate a considerable degree of the Motive temperament and a desire to exercise power. The fullness of the eye, and especially the fullness beneath the eye, represents the power of language and the ability to utter his thoughts freely and fully, and, with his ample development of the perceptive organs, he would be full of facts and fond of relating stories. His reasoning intellect is not very largely represented; the upper part of his forehead tapers off and retreats. The mouth and chin and the form of the body indicate the voluptuary, and the breadth and fullness of the base of the brain show that he was of the "earth earthy"

and that his thoughts were not as exalted, as clear-cut, intense and elevated as they should have been. The back of the head indicates strong social and animal power. Such an organization lives well if it can afford to, and gathers around him if he do not inherit wealth as a source of

my early boyhood, when I heard it sung by Englishmen in America, was like this :

"While England yields pork, beef
and beer,
John Bull will keep *his* hand on't."

We think the pork, beef and beer would come natural to this man, and



FIG. 185. FRANCIS EGERTON,
DUKE OF BRIDGEWATER.

physical comfort and happiness. He would enjoy the convivial table. He was the type represented by the song which used to be sung in England, in reference to Napoleon's effort to conquer England. It was a kind of bantering challenge against Napoleon, who wanted to gobble up the "snug little island," and the refrain of the song, as I remember it from

if there was enough of it, it would be the acme of the present hour, the joy of his daily life. And still, he might have been a scholar if he had been willing to study. He had perception and language; he could have been a good linguist and a versatile writer, and with his sociability and marvelous memory a masterful storyteller.

TWENTIETH CENTURY HUMANITY.

A FEW PHRENOLOGICAL REFLECTIONS.

ONE of the brightest and most enterprising journalists of New York is Mr. Edward Marshall, the Sunday editor of *The Press*. For several weeks during the past summer he published the opinions of many prominent men and women concerning the future of the human race, and as the articles were syndicated they reached millions of readers and provoked a great deal of discussion. Conspicuous among the topics treated were the problems of heredity, rational medicine, hygiene, hypnotism, progress in surgery, temperance reform, and last, but far from least, the relations of temperament and brain organization to character and talent. As Mr. Marshall consulted the editor of the PHRENOLOGICAL JOURNAL for information regarding the last named subject, we venture to republish some extracts from the report of that interview which we hope will prove acceptable to our readers:

"The bump idea," said Dr. Beall, "has done more to hurt phrenology than any other one thing. It has been taken up by quacks and incompetents because of the very fascination of the study, and has to some extent brought the whole science into ridicule with many people. Of course, it is not possible that such nonsense should stop the progress of a truth as wonderful as phrenology, but it unquestionably has retarded it. Gall discovered the location of the brain centers which are the seats of the radical or primary faculties, by a study of such excessive developments or deficiencies as came under his observation. An extraordinary development may produce a protuberance on the skull, as instance the benevolence in the cast of Abraham Lincoln. But in ordinary heads, that is, in 99 out of 100, phrenology becomes a

study of form; and the little protuberances mean nothing more than peculiarities of the skull itself. In ordinary heads we do not look for bumps, but study diameters and length from the ear.

One reason why Americans fail to catch this idea is because, as a nation, they are weak in the sense of form; that faculty is located between the eyes. The French are a race of artists and are broadly developed there. The Americans are not, and the space between their eyes is narrow. This is shown by the curious fact that opera glasses made in Paris are too wide for the average American eyes. If we were built so that we fitted the Parisian opera glasses we would be less likely to depend for confirmation of phrenology upon the existence of bumps on our heads like pyramids in a desert, and would more easily catch delicacies of contour."

NEW TALENTS TO COME.

After this brief discourse on phrenology as a whole, Dr. Beall told some of the things which twenty-five years' study of it make it possible for him to predict of mental development. He said:

"The whole tendency is upward. The mental development of the next century will be complex and will bring versatility on a higher plane than we have yet known. We shan't have so much talent for drinking beer and playing base ball, but we shall have a much higher talent for real progress and real happiness. As the race learns to eliminate those things which retard its upward passage, new and more valuable tendencies will come to take their place. This is the age of practical progress. In addition to the improvements which make life more comfortable—better lighting, better heating, better clothing, better

furniture, better railroads, better steamboats, type-writers, phonographs and the like—there is a counterline no less real in a higher sphere. Parents are beginning to ask what to do with their children. When the maturity of a son or daughter approaches, the question is now, How can they marry best? One hundred years ago it was, How can I get my son to go to church and prevent my daughter from dancing or playing cards? The result is larger mental development and larger happiness, and the higher tendency is gaining momentum with every day. Happiness is the activity of all our faculties. People didn't use to know that. They didn't know what faculties were.

"The world has since its beginning been ignorant of the brain and so of everything that emanates from it. If you don't know the contents of a post box you can't tell where the letters in it are going or what effect they will have when they are delivered. It is precisely so with the 'pigeon-holes' in the brain. Each has a message. One goes to art; here's a box in another part that sends to caution; here to the faculty of acquirement; here's one back here that fights for marriage and the sacredness of the fireside; it is constantly trying to control this box down here in the basement of the brain.

"The tendency to develop the faculties in the upper brain is increasing; the faculties in the base of the brain about the ear are growing weaker. The higher our faculties are the greater will be our happiness. The man who depends on mere animal pleasure, although he may fancy himself in possession of the highest enjoyment, will be cheated. Those persons who seek happiness on the selfish or lower plane will be mistaken. Religion's greatest idea is the supremacy of love. Benevolence, or the faculty of the highest love, is farthest removed from the low faculties until you get to the intellect; therefore we should consider that function

the highest. It is the highest in phrenology, and it is the highest in Christianity. The low browed villain is traditional.

A RACE OF SPECIALISTS.

"The future race will be one of specialists. So much knowledge is being evolved that this will be necessary, but I believe that the whole volume of human knowledge will be gradually rewritten and condensed, so that it will be infinitely more accessible than it is now. The sciences themselves will be scientifically systematized, and by the aid of that system it will be possible for the future specialist to be better versed in all departments than the specialist of to-day is in his own. Knowledge is very largely a matter of facility. We all know thousands of things that we have no consciousness of having learned. They are matters of habit. In the future, science will become a matter of habit. With each newstep forward along the main road of knowledge, new bypaths will be discovered, and each will be explored. This will bring a higher physical culture and not only greater knowledge, but the ability to apply that knowledge well."

RIGHT MARRIAGE IS PARAMOUNT.

I called Dr. Beall's attention to the opinions of the English authorities concerning the drink habit. To some extent he agreed with them.

"They have put the cart before the horse, however," he said. "They speak of drink first and marriage afterward. They should speak of marriage first, and everything else afterward. When the public conscience is awakened thoroughly on the subject of marriage—and that awakening has already begun, unquestionably—a great stride will have been made toward better physique and better mentality. When the public vanity is awakened on the subject of marriage—vanity is infinitely more potent than conscience—then the battle will have

been won. When people know enough about this subject to realize that parents of incompetent and undeveloped children deserve severe censure, the awakening will be complete. Men and women then will be ashamed to be recognized as the fathers and mothers of anything but fine children. Widely extended knowledge will leave no excuse for ignorance and will bring condemnation and ridicule upon those who disregard the laws of parental influence or heredity.

ESSENTIALS OF HAPPY MARRIAGE.

"The most common mistake in marriage is failure to secure comradeship on the moral and intellectual planes. Nature exerts herself first of all to maintain the physical type, and neglects morality and intellect. Physical strength is, of course, the foundation for everything that is good in the human race, though not necessarily the accompaniment. You can't have a house without a foundation, but it's a mighty easy thing to have a foundation without a house. In the majority of marriages husband and wife are physically compatible. Mental compatibility, however, is much less frequent. This is caused, first, by the fact that brain contours are usually concealed by bonnets or hair and are not made the objects of inspection and consideration; second, by the fact that vanity, to say nothing of anything else, makes most of us hide our worst points from our best friends, and, third, by the fact that if the brain contours were examined and the worst points were not hidden, most people are so ignorant that it wouldn't make any difference.

"In the United States especially careful marriage is necessary. We have a number of national diseases, such as dyspepsia and catarrh; and sectional temperaments such as the New England, the Southern, the Western, etc., are much more universal than is ordinarily the case in other countries. Our most common type is the lank, lean, motive tempera-

ment. In men and women of this sort there is almost certain to be a deficiency of culture and polish, although there may be none of intellect. Abraham Lincoln is a striking instance of this, with which we are all familiar. His was an extreme case. If Abraham Lincoln had married a woman of like temperament, the result to the children of the union would have been disastrous. Lincoln was a man of fine intellectual development. The faculties of the intellect were all strong, although the forehead was not high. This was due to the fact that the wreath of faculties which tops the intellect—music, suavity, love of beauty, etc., were almost entirely missing. And then his brain was of remarkably close texture.

"Lincoln was not a witty man, but he was a humorous man. His fun came from behind his ears instead of from his forehead. He was not polished. As Ingersoll said: 'He would use any common word that wit could disinfect.' A man of this temperament should marry a woman rotund in figure and of rather yielding physical fiber. One of the simplest indications is the hand. Lincoln's was hard, bony and big jointed. The fingers could not be bent back. Had he married a woman with a hand like his their children would have been inclined to coarseness. The hand of the wife of a man like Lincoln should have tapering, conic fingers, small jointed and easily bent back.

NATIONAL EXAMPLES.

"The Germans as a nation are typically of the vital temperament, and from intermarriage with the same temperament they have developed excesses of appetite, as instance their beer drinking. Almost the same disadvantage exists among the Irish, where the sanguine phase of the vital temperament predominates. The result is shown in the proportion noted for high tempers. The lower de-

velopment of this temperament gives us the Irish prize fighter; the higher development is plainly shown in this country by the great number of able Irish lawyers, fighters all. The purely brain temperament is one that is only too common in America. Intermarriage with it brings predominating brains and weak bodies, which are likely to end in an insane asylum. This is one of the classes that build up millions for the American patent medicine manufacturer.

"A safe rule on this matter of marriage is to marry your opposite in all things that will antagonize, but marry your like in all things that sympathize, like artistic tendencies or moral purposes. There again the sympathy should be with the purpose rather than the methods. For instance, it would be well if husband and wife both loved music, to have one devoted to the piano and the other to the violin. If both parents lack courage, force, economy—the faculties around the ears—the offspring will be still more deficient. If the heads of both parents extend very greatly in the upper back region the children are likely to be egotistical. If the foreheads are full across the eyebrows and retreating in the upper part, the children are likely to be bright in memory, but not in abstract reasoning. If both are broad in the upper part, theorists, and in extreme cases, cranks are likely to develop. Where the eyes of both parents are very prominent, the home life will not only be made up of mutual clamorings for the right of speech, but the children will be chatter-boxes. If the head is too wide in front of the ears, the children will probably ruin themselves by excesses of eating and drinking.

A RACE OF WONDERS.

"Summing it all up, I can only say, however," remarked Dr. Beall, "that the upward and better tendency is astonishingly large. Regard for the

unquestioned truths of pre-natal influence, for the laws of heredity and a wider study of the science of rational choice in marriage will bring a race of physical and mental wonders in the future. All these things are coming. People are thinking, writing and talking about these extraordinary problems, and the result will be felt. I saw that Mrs. Eliza Archard Conner announced in one of your recent interviews that if the breeding of the human race were as carefully considered as is the breeding of live stock, the perfect physical man and woman would result in five generations. I think I can, with as great confidence, say that if the already discovered laws of rational marriage were observed, the perfect mental man and woman would result in no greater time."

HABIT AND CHARACTER.

COULD the young but realize how soon they will become mere walking bundles of habits, they would give more heed to their conduct while in the plastic state. We are spinning our own fates, good or evil, and never to be undone. Every smallest stroke of virtue or vice leaves its never so little scar. The drunken Rip Van Winkle, in Jefferson's play, excuses himself for every fresh dereliction by saying, "I won't count this time." Well, he may not count it and a kind heaven may not count it, but it is being counted none the less. Down among his nerve cells and fibers the molecules are counting it, registering and storing it up, to be used against him when the next temptation comes. Nothing we ever do is, in strict scientific literalness, wiped out. Of course, this has its good side as well as its bad one. As we become permanent drunkards by so many separate drinks, so we become saints in the moral, and authorities and experts in the practical and scientific spheres by so many separate acts and hours of work.—James' "Psychology."

THE RELATION BETWEEN PHRENOLOGY AND INSANITY.

BY H. A. BUTTOLPH, M.D.

FOR the purposes of this inquiry it will be assumed that phrenology is the true science of mind, and, therefore, that it bears a direct and important relation to insanity. This science teaches that the mind is a perfect whole, but made up of many parts or faculties; that these faculties are primitive, peculiar powers; that they differ in strength, relative and absolute, in different persons, and finally, that they depend upon the brain for their manifestation. Phrenology, then, is the science of the healthy functions of the brain, or the physiology of that organ.

Insanity and Mental Derangement are the terms used to signify the perverted or deranged state of the mental faculties, and are embraced in the pathology of that organ. Phrenology, then, bears the same relation to insanity that physiology does to pathology. To give a brief outline of the relations between this science and insanity, and to point out, in a general way, its practical bearings upon the subject, is all that is now intended. For a full discussion of the subject, a volume would be required; also enlarged powers of mental analysis and discrimination, with minute knowledge of the structure and functions of the brain and nervous system generally. The truth of Phrenology being admitted, no proof or argument is required to establish the importance of a correct knowledge and application of its principles, by those engaged in conducting the medical, mental and moral treatment of the insane; and it may be added, with equal propriety, by all those concerned in the guidance and training of the human faculties, whether acting in the capacity of parents, guardians, or religious instructors. Indeed, the knowledge of the true science of mind is indispensable to the attainment of the

greatest success and highest enjoyment in all departments of life.

That persons have succeeded to a certain extent in many of the stations alluded to, without a knowledge of its principles and, perhaps, while even opposing and ridiculing its claims to attention, is true, and yet these facts form no real objection to the ground here taken, for if without such knowledge good has resulted, how much greater success would have been attained and how much further advanced would have been the race of man, in science, literature and art, in civil government and in moral and religious sentiment, if the different classes of faculties had always received the training best adapted for their full development and harmonious exercise. But to proceed in stating directly, the relations of the science to the subject in question.

In defining or describing what is meant by the terms used, I would say that Insanity, or Mental Derangement—the latter term being preferred—consists of a changed, unbalanced and uncontrollable state (by the will and ordinary motives), of one, of many or of all the faculties of the mind, from disease of the brain; which may be functional or structural, acute or chronic in character, partial or general in extent, continuous, intermittent, impulsive or recurrent in its manifestation and progress. For convenience of description, its bearings will be considered in reference to the Prevention, Diagnosis, Prognosis and Treatment of the disease.

PREVENTION OF INSANITY.

To this branch, alone, of the inquiry, might be given the space allotted to the entire paper, so numerous, varied and important are the methods suggested by phrenology for preventing

the occurrence of mental disorder. The first and indispensable condition for mental soundness, is the possession of a well-proportioned, healthy brain; and to secure it, phrenology suggests that due attention be paid to the laws of hereditary descent, and to those of health generally. For practical directions for securing the desired results, through the application of phrenological and physiological laws, reference is made to the various systematic treatises that relate to these sciences.

Next in importance to the possession of a well-formed and healthy brain, is the education and training of the faculties into habits of harmonious action. In this is embraced, not only such instruction as is necessary in the acquisition of knowledge of the various sciences and arts, and the relation of the faculties to them, but such prolonged and systematic application as will tend to excite and strengthen the weak, repress the excitable and overstrong and confirm all classes and the individuals of each in the habit of exerting their own proper influence over others at all times.

By this it will be seen that a knowledge of the science gives every reflecting man an intimate knowledge of his own faculties, by which means he is forewarned of danger and avoids the circumstances likely to disturb the equilibrium of his powers; or if, perchance, he is occasionally surrounded by adverse influences from which there can be no escape, he is thereby better prepared to submit to their effects, showing his ability alike to exhibit the calmness of the philosopher while he maintains the faith and patience of the Christian. Can anything be conceived, better adapted to prevent and control insanity, than the habitual exercise of faculties thus trained for action or for Christian submission under trial?

DIAGNOSIS OF INSANITY.

The correct diagnosis of this, as of other diseases, is often a matter of

equal difficulty and importance. Whether the acts of a man are considered in reference to his social, moral or legal responsibilities, as connected with others, or simply in reference to his necessity for medical and moral treatment for his own welfare and safety, the question of diagnosis is important. Here, again, phrenology comes to our aid, and by revealing a correct system of mental philosophy, greatly assists us in forming correct views of the conduct and motives of others, both in health and disease. When mental derangement results from obvious and well-known causes, and is exhibited by a sudden and striking change in the character and conduct of the individual, little difficulty is experienced in its diagnosis. At times, however, it arises from very slight disease of the brain, quite partial in extent, and whether induced by physical, mental or moral causes, separately or combined. The departure from the healthy mental standard of the individual consists, in these cases, in a slightly increased or lessened acuteness of the intellect, perversion of the feelings or occasional faint delusions in regard to external objects and relations, coupled with a disturbed state of the moral, social or animal feelings, inducing timidity, suspicion, jealousy, revenge, etc., according to the predominant feelings of the individual.

The true diagnosis is often difficult, and if, as frequently occurs, the question of the responsibility of the subject for the commission of crime is raised, its correct settlement becomes a matter of great importance, involving, as it may, the liberty, civil rights or even the life of the individual. Masked or obscure disease of this kind often exists for months and years unsuspected by friends of the parties, or by other persons, until some sudden though perhaps long meditated act of suicide or of homicide, reveals the true state. In other instances, disease may primarily af-

fect the organs of the feelings, religious, social or animal, poisoning their fountains, exciting, depressing or perverting them from their proper office and ministry in the mental group, and, in the end, resulting, as in the former instance, in some sad and unlooked for calamity.

I need not cite examples in illustration of the class of cases here referred to, as the records of hospitals, and asylums for the insane, also of courts of justice and of injustice too, are filled with them, and, it may be added, with shame to the jurisprudence of every country that these subjects of disease are often made the victims of their misfortunes, by the character and extent of the punishments inflicted upon them. But why these mistakes in jurisprudence—why these immolations of individual cases of insanity, which are only examples of well-known classes in large public establishments for their care and cure? The answer undeniably is, that in many such cases, judges, jurors and lawyers, persist in shutting their eyes, stopping their ears, and hardening their hearts against the obvious teachings and the oft-repeated demonstrations in regard to them of phrenology. The bare mention of the fundamental principles of the science that the mind is composed of a plurality of faculties, dependent upon the brain for their manifestation, that through disease of the several organs and groups of organs of the feelings, no less than those of the intellect, it is liable to occur, and that morbid perversions of the former are no less indicative of general derangement than deluded states of the latter. With these facts in view, the faulty distinctions of the courts, when finding tests of mental soundness in the state of the memory, the reason or the conscience, vanishes like darkness before the light of day; leading us devoutly to wish that the dogmas of obsolete systems of mental science which still mystify and mislead judi-

cial authorities in regard to the diagnosis of insanity, could be consigned to oblivion, as summarily and as perfectly in the practice of the courts as they have been elsewhere.

PROGNOSIS OF INSANITY.

The relations between phrenology and the prognosis of insanity are also worthy of attention, for although the result of disease in the brain cannot always be foretold by any and all means within our reach, yet a full understanding of the nature and office of the faculties acting singly and in combination, enables the physician more fully to understand the mental and moral constitution of the subject, also with increased certainty to anticipate the final result.

TREATMENT OF INSANITY.

The treatment of insanity is properly divided into physical, mental and moral. To the former belong the use of all physical remedial agents, such as medicine, diet, and baths at various temperatures, etc., which should be used or applied according to the indications of each case separately considered. To the mental and moral treatment of the disorder, belong the use of mental and moral agencies, and that the insane may derive the full benefit of their influence, they should be applied as nearly in accordance with the principles of correct mental and moral science as the existing state of the mental disorder will permit. That there exists an intimate and important relation between phrenology and the mental and moral treatment of the insane, is most obvious from the theory of the faculties and the comparative results of ancient and modern practice. Under the ancient systems of mental philosophy, the mind was regarded as a unit and as ethereal in essence. It was believed to exist in each person as a direct emanation from the Creator, not subject to physiological laws, though mysteriously, to some extent, connected with the body, brain and nerves.

During the prevalence of these views, all changes in the mental and moral state of individuals were accounted for by supposing that the mind was determined in its volition by the influence of good and bad spirits, the character of the agent being inferred from the conduct of the subject. At that period the insane were considered as being possessed by evil spirits or devils, and exorcism was, of course, resorted to for their relief. After the days of wonder and intense superstition passed by, improved views of physical science, and with them of mental philosophy, gradually arose, each era being marked by progressive advancement in the treatment of physical disease and mental disorders.

The insane, for centuries, however, were treated with neglect, with ridicule, and with violent abuse, pursued often to the death of the hapless victims. The early attempts at medical treatment consisted mainly in the "prescription of injurious or useless drugs, given without reference to peculiarities of the physical and mental symptoms." Finally, asylums for the insane, or rather, "medical prisons," were provided for their safe custody, in which they were often immured for life, subject to the mockery, stripes and other abuse of inhuman keepers, without any attempt at rational treatment, without employment or amusement, and with only gloomy walls and galling chains for companions. In this state of wretchedness, degradation and despair they were abandoned by friends who desired to have the evidence of their connection with them effaced and destroyed.

In modern times more enlightened views have been taken of the causes and nature of mental derangement; also more improved and humane systems of medical, mental and moral treatment have been adopted, keeping pace with the advancing state of physical and mental science. Although great ameliorations in the

condition and management of this class had been effected prior to the introduction of the phrenological philosophy of mind, by the enlightened and benevolent Pinel and others, yet to the prevalence of the latter system are the insane mainly indebted for the well-defined principles of treatment now in vogue. That some have adopted the maxims of the new science, without admitting, or, perchance, even knowing their obligation to it, is quite certain. While this may be true of physicians in treating insanity, it is equally or more true of professors and divines in teaching mental philosophy and theology, neither of which can be intelligently and adequately discussed without frequent reference to phrenology as the true science of the mind.

"By revealing the nature, number and origin of the human faculties, the conditions of their operations, their mutual influence, their modes of acting, and the natural laws by which their manifestations are regulated," phrenology has assisted to elucidate and establish the correct system of mental and moral treatment of the insane, more than any and all former systems of so called mental science. In the treatment of insanity it teaches that the disordered faculty or faculties, when depending upon recent and acute disease of the brain, should remain at rest, or as nearly as possible in that condition. With this end in view, seclusion or residence in a hospital or asylum is usually preferable to private care, the deranged faculties being less subject to agitation from outward circumstances when thus situated, and more amenable to restraint and guidance by strangers in a public institution than by friends in their own dwellings or when at large. When, however, the faculties become torpid and weak in a late stage of the case, from an impaired and weakened state of the brain cells, it often becomes an object of attention to arouse them to greater activity by change of

place and by supplying such physical and mental exercise and amusements as are adapted to secure these effects. In this last particular, *i.e.*, in the variety of means brought to bear in interesting and improving the sound faculties or those capable of being exercised with advantage to the unsound, does the superiority of modern treatment mainly consist.

In carrying out these views in hospital practice in such a manner as to secure the best attainable results, discriminating and well disciplined faculties on the part of the physician are required, aided by well adapted architectural arrangements for classification and other purposes.

Such is a general outline of the relations of phrenology to insanity. As before stated, much space would be required to describe in detail its highly interesting theoretical, and important practical, relations to the prevention, diagnosis, prognosis and treatment of brain disease attended by mental disorder. In conclusion, I assume that phrenology, by supplying a correct basis for a system of mental philosophy, has achieved important results in jurisprudence and in insanity, and still further, I express the hope and belief, that it is yet destined to accomplish the intellectual, social, political, moral and religious renovation of the race of man.

THE EQUATIONAL PROBLEM SOLVED.

BY DR. CHARLES DE MEDICI.

FOR twenty-five hundred years and more, "circle squaring" and the search for the true "pi" value occupied the minds of the best mathematicians. As late as the year 1761, standing premiums were offered by the European academies of sciences for a solution of either of these polemic problems. But since then, about one hundred and thirty-three years, nothing but ridicule has been the reward of mathematicians who gave their time and labor to solve these questions. Why this opposition to scientific research while sophistical learning drags what is misnamed science, deeper and deeper into the mire of confusion? The story which gives the reasons is this:

In the year 1761 a quartet of learned men—Lambert, La Grange, La Place and Legendre—got it into their heads, that because neither of them had succeeded in finding a way to square the circle geometrically, which could be substantiated by arithmetical computation and by mechanical contrivances, it would be useless for anyone else to try. On this ground, three of these wise men constituted themselves a "triumvirate" and had the temerity to announce a discovered truth and

force it on the people, which truth (?) now, one hundred and thirty-three years later, is proven utterly false. This bogus truth was expressed in the following language: "The exact ratio of diameter and circumference of circles cannot be expressed by any numbers." The consequent adoption of this fallacious theory resulted in differential calculus and infinitesimal algebra, terminating in transcendentalism instead of terminating in scientific demonstrations.

SQUARING THE CIRCLE.

Proving the squaring of the circle requires, 1st: Geometric construction which produces a mean proportional square between the square on diameter and a square of equal perimeter to the circle's circumference; 2d: A "pi" value or ratio between diameter and circumference of circles which will arithmetically prove an equation between the three given squares obtained by construction; 3d: Mechanical contrivances which show that two planes represented by plates of similar metal and of exactly equal thickness, one in the form of the circle, the other in the form of the square, are exactly balanced

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This exhibit is called the "pi" equation. It has never been expressed before, although in all ages mathematicians believed that sooner or later such an equation would be found.

The foregoing exposition demonstrates the falsity of the incommensurable theory on which modern mathematics and astronomy are based. But it does more; it exposes the libel reflecting on the incapacity of the omnipotent architect who planned the universe and designed the scale which balances in divine harmony all the parts of the cosmic total.

This discovery with many others, as natural sequences, revolutionizes current methods of teaching geometry, and will make the study interesting and easily understood, instead of what the study is now—uninteresting and hypothetical. In its ultimate influence on future generations, when applied to education, the discovery is of inestimable value as regards its possible moral effect founded on development of the reasoning faculty among the people. The ancient Greeks recognized the fact that early study of geometry among youths, not yet affected by conventional notions, developed in their minds capacity for reasoning justly, in conformity to laws of equity. They found, and our knowledge of classics verifies it, that geometry as taught by the Greeks laid a sound foundation to logical eloquence and æsthetic taste for art representing nature in its most perfect form. Sadly we compare the present intensely "practical" period, in which no geometry is taught other than that which can neither be explained nor understood. Modern ambition, neither guided by reason nor founded on equity, has so warped the sense of right and wrong, that sophistry is often tolerated in preference to logic, and reason is made subservient to expediency, which accounts for much of modern criminality.

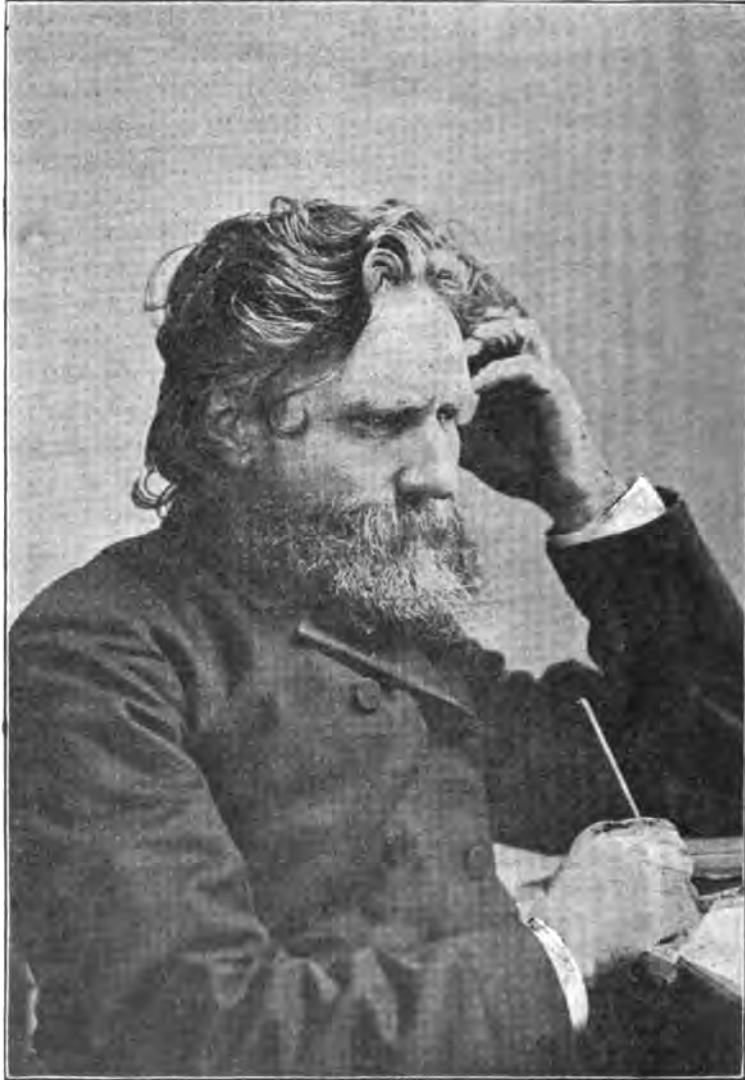
DR. CHARLES DE MEDICI.

The Editor of the JOURNAL, having learned of some very unique discoveries made by this gentleman, formed his acquaintance and obtained from him the foregoing article for our columns. And as the Doctor is a remarkable character in many ways, we have also thought it advisable to present his portrait in connection with his demonstration of the equational problem. Probably his views on the subject in question will prove dry and uninteresting, if not unintelligible, to many of our readers, but there is something so novel in the idea of squaring the circle—something so bold and startling even in this age of marvelous discoveries, that we have thought it would at least prove acceptable as a stimulus to the study of mathematics. But even if the Doctor's solution of this old mathematical enigma should interest only a few, we feel sure that his head and face will afford good material for the exercise of the character reader's art.

Dr. De Medici is a lineal descendant of Lorenzo De Medici, the Prince of Florence, who was surnamed "The Magnificent," a philosopher, philanthropist and poet of the fifteenth century, so that he illustrates a phase of heredity which is unfortunately encountered too rarely for the good of the world. Although the Doctor was for many years engaged in the practice of medicine, he has of late preferred to devote the greatest portion of his time to the development of his philosophical ideas. He was born in Copenhagen and is now over sixty years of age. He was educated at the University of his native city,

and in his time has traveled over nearly all the important regions of our globe. He is a delightful companion, generous, happy, winsome, healthy, buoyant and enthusiastic. He is very modest, and though frank

ears. The frontal lobes are exceedingly symmetrical as well as capacious. His expression in conversation is benign, genial and radiant with kindness and good humor. He is the author of a great geometrical



DR. CHARLES DE MEDICI.

and open in communicating his opinions to appreciative listeners, he is remarkably free from obtrusiveness.

The portrait shows a remarkable length of brain forward from the

system called "Commensuration," and has several other works in manuscript which, it is asserted, will revolutionize the study of mathematics.

MUSICIANS AND POETS.*

BY JOHN S. VAN CLEVE, PH.D.

LADIES AND GENTLEMEN: I am at first embarrassed in my attempt to interest you at this time by the feeling which comes to a sailor who is well afloat, but who has lost his compass; he knows the water and all its freaks; he is perfectly familiar with every style, shape and color of wave; perhaps he knows the oceans of the earth so well that if you could blindfold him or carry him in a trance, or put him upon that magic carpet of which we read in the old Oriental fables, and drop him suddenly into any ocean, he would know the Yellow Sea, the Red Sea, the blue Mediterranean, or any part of any ocean, and yet, having that extreme familiarity with the whole field of water, the world of waters, as Byron calls it, without a compass and without a sufficiently definite course charted out, he runs the risk of wandering.

I have had a good deal of experience in a certain kind of public lecturing, and I have learned that there is nothing so fatal to a good impression as what may be called, in the beautiful vernacular of the West, "hunting grass;" that is, getting tumbled over and having to scramble around to find out where you are. My friend, Dr. Beall, has given you, I fear, a rather alarming and threatening impression that I am going to ramble over the whole creation. Though I am in the condition of that sailor I spoke of, I think I can make a pretty straight line toward what I want to say.

The doctrines of Phrenology which you are studying with interest and technical exactness, are something

like, though they are exactly opposite, the doctrines of the Swedenborgians. Now, what do I mean by that startling paradox? You say that Phrenology, which deals with the body as a cryptogram, is just the extreme opposite of that almost ethereal and impalpable religious theory which was started by the great Swedenborgian thinker, or, as some say, dreamer. But what I mean is this: the doctrines of the Swedenborgians and the doctrines of the Phrenologists, though they study man's nature from diametrically opposite poles, are universally pervading the thought of the world without being so recognized. The Swedenborgians are a small religious sect; and the Phrenologists, as a body, are open still to some of the unnecessary scorn and the stupid and foolish resistance of the world, sometimes quite as stupid when it comes from high places as from low; and still all men, more or less consciously or unconsciously, are using its principles. It would not be necessary, perhaps, to stop to illustrate that in our every-day lives, more or less effectually, we are always talking about people's heads and complexions and their faces, their noses, their mouths, their having a bad eye or a good eye, having a coarse chin or a refined chin; and that is all of it Phrenology. But somehow the word Phrenology has obtained an unpleasant odor in the minds of many persons because of a foolish notion that certain protuberances on the head are the be-all and the end-all of the subject; and, furthermore, because certain persons have rather made the subject repulsive to the world at large by being themselves shallow and disagreeable personalities, and sometimes representing it with a good deal of bravado and rodomontade and

* A stenographic report of a lecture delivered before the class of the American Institute of Phrenology on the evening of Oct. 8th.

bluster of various sorts, instead of scientific exactitude and elevation in style. I am happy to say that that state of things is passing away, for the subject has interested me in a secondary way for many years. I say secondary, simply because I have had so many irons in the fire, what with literary and artistic labors of various kinds, that it has been impossible for me to study it with the thoroughness I should have liked.

Now, I want to make a few remarks to-night on the great poets and musicians, who are my most familiar friends, and, if possible, to indicate to you wherein we can look at them with two eyes; that is, look at them with the abstract eye which comes to us by reading what we call in Biblical criticism the internal evidence; and then, on the other hand, looking at them with the concrete eye, that is, at their pictures or busts, and reading, as you do, living human beings.

Man is a cryptogram, and why should the science which teaches us to decipher the great cryptogram, the human body (the head and the face are only a part of it, of course)—why should that science which teaches us to decipher the most marvelous of all marvelous products of this great, long, mysterious series of changes called evolution—why should that science be considered a piece of quackery, or even looked upon as kance? It ought to be considered the grand consummation of sciences, as it really is. (Applause.)

What is chemistry except an explanation of the relations of particles which belong to our bodies or to the substances with which we come in contact? What do we care or know about the possible conditions of matter out in the central space where they conjecture that the temperature is fifty thousand degrees below zero Fahrenheit? Be sure it is Fahrenheit; if it were Reaumur, it would be dreadful. The changes produced in water are samples within a very nar-

row range. Take water at 212 Fahrenheit or 100 Centigrade, and you get a what? A hissing, a disturbance, and presently your water all disappears; you cannot see it at all. But just let it touch you, and then you will have a realizing sense, as the good country Christians say, you will feel to know that something hot has touched you; now it becomes visible only when it cools.

Let that same invisible vapor, steam, come down, and it becomes a liquid, a liquid that you want to keep away from, unless you have plenty of isolating materials between you and it. Now let it continue to cool, and there arises a point presently when it suddenly changes into an exquisite form of crystalization, and marvelous are the effects that we find in the snowflake; and still further cool it, or cool it under different conditions, and the snowflake is, of course, below thirty-two degrees Fahrenheit, or it could not freeze. But cool a solid mass of water, and presently we find that it becomes a kind of stone, a crystal stone, a piece of natural glass under certain conditions. Now, what the water would be at 100 degrees below zero it is difficult to say. There are theories, however, about what the conditions of various substances would be in those extremes of heat and cold.

Now, has it ever occurred to you that in this great study of physics, from which I am now borrowing an illustration, our range of facts is extremely small? Despite this puzzling multiplicity, we never see matter under conditions of heat—that is, in nature we never see it under conditions over two hundred degrees of temperature; and, though under certain conditions we can produce artificial heat to four thousand degrees, and we have learned how to vaporize aluminum, or rather the silicate of aluminum (the substance out of which it is made), and can possibly after a while liquefy and vaporize every known substance, still, what in nature

is most suggestive, most conjectural, the extremes of cold and heat, reasoning by analogy, the earth has ascended from a condition in which the degrees of heat are conjectured to have reached twenty thousand degrees above zero, if that gives you any idea as to what heat is. Now, some of these facts are matters of ordinary investigation; part of them are ascertainable only by that most God-like of faculties (you expect me to say reason), that God-like faculty is imagination. The imagination makes the poet, the musician, the inventor, and the scientist. No man can make an invention without imagination. Reason makes subjects co-ordinate; but it is only by the faculty which leaps forward and sees, comprehends a thing that does not exist, that would make progress.

I think the fault that most thinkers and students fall into is in becoming so absorbed in a particular line of fascinating facts that they lose sight of the total effect; in seeing the microcosm, they lose the macrocosm; they see too much of one special line. A dietarian, for instance, after getting himself warmed up to a particular theory, will make you think that it is quite easy to publish a cook-book, a prescription book by which we could evolve the play of Hamlet, or the ninth symphony of Beethoven or Wagner's Parsifal, by arranging the times and quantities of food to a human being; but we know that is absurd. Still it is hardly more absurd than some of the teaching of our devout Christian friends who would make you think that by entertaining certain ideas which perhaps at first are very noble, very grand ideas of self-sacrifice, that they could so modify and purify man that he would be able to fly and be able to be sublimated, and be able to do a thousand things that are utterly impossible, and would not be of any value if he could do them. But I do not think we need to vilify the Christians merely with such remarks,

because we shall find the same thing wherever enthusiasm and one-sided observation have carried a human mind far away from ordinary life. In the case of the founder of Buddhism, for instance,—now so fashionable—there is a sort of Buddhistic sect springing up in America,—there is a teaching, a tradition, how authentic I cannot say, but it is one of the traditions, that Buddha in his great sympathy for animal life and pity for the suffering, having discovered a famishing tigress with her two cubs, offered his body as her food. Now, if Buddha did that, he was a good deal more of a fool than any founder of an average religion ought to have been, because he was offering the higher to the lower, which is a contradiction of nature. If nature teaches anything at all in what we see in the ground below us, in the great mystical volume of the rocks, it is that there is a gradual process of forms rising from the simple to the more complex, from the lower to the higher. Whether man is the last point to be reached may be questioned. Certainly the ordinary man as we now see him is hardly worth so much trouble; it seems to me that it was not worth a hundred millions of years to get him up to such a level as that; it ought to have been done in five minutes. But let us be hopeful. A chain, it is true, is no stronger than its weakest link; but there is some encouragement if we imagine the world being much better than it now is. As it is now better than it was in the days of the trilobite, there is reason for encouragement.

The illustrations of man's nature which I wish to select are from some of the great poets and musicians. I suppose you would be surprised if one should say that musicians are worth talking about as men; it is a curious phenomenon that while we spend such quantities of money to cultivate music, whenever a list of great men is selected, it is scientists, discoverers, preachers, teachers, statesmen,

warriors, and never musicians, and I don't know that great painters either are selected among the great men to be chosen. I understand that to illustrate the Capitol in Washington there was not one single musician; at least, there was not at the last report that reached Cincinnati. We incline to think that men like Bach and Palestrina and Wagner and Beethoven are just as important in summing up human interests, and just as great as expressions of what mankind in all this infinitude of life is meant to do, just as the highest forms of poetry are better than a cookery book, even though we would not by any means substitute it when we are hungry.

The first man I wish to speak to you about is Beethoven. Beethoven was a singularly virile character; he was a man whose character was like a chestnut—I certainly do not mean that in the American sense; he was by no means an American chestnut, old or new. He was a man whose exterior appearance and whole manner were very brusque. There are many comic stories told of his excessively brusque and even coarse ill-breeding at times when he was provoked, and yet, like a chestnut, within he was the quintessence of sweetness and delicacy, and just as silky and soft as a man could be.

He had, like other great men of genius, the blending of the male and female elements of human nature; that is to say, one predominates always; and in Beethoven, it is the man strongly, decidedly, and yet those qualities which are usually called feminine, and which predominate in the typical woman, existed in him, just as it has been said they always exist in all great poets. That is a mistake, by the way. The feminine element does not predominate in great people; it predominates in great people of the second rank, but not in great men of the first rank, although they do at times manifest a degree of those feminine qualities that is far

ahead of even a refined, fine-grained woman.

Beethoven's femininity is found in his exquisite tenderness. There is not a man since Beethoven who can show an adagio with such soul; we musicians and amateurs who can feel music, not merely to hunt out some notes; that is to music what a type-setter is to Shakespeare;—those musicians, I say, who know what music means to the inmost being, when they are listening to such a sublime work as the adagio of the ninth symphony, feel as if they were afloat on a sea whose depth is unknown, tranquil as glass, over-arched by a sky without a cloud or suggestion of an angry wind, where only the touch of the most caressing zephyr comes to grasp the surface, and over all is shed the golden and glowing light of a serene and perfect sunset.

And so I may say that his adagios were more characteristic of him than anything else. They express more a feminine than a masculine state of mind, that is, a feeling or state of deep, intense peace of a very loving heart and a serene soul. And yet Beethoven was at times intensely dramatic, rough, stormy, struggling, full of self-assertion, and his whole life consisted of a mighty battle with untoward circumstances.

However, Beethoven was not a perfect man; I am not sure that I would want to live as his next-door neighbor, and I am glad that I was not his landlord, and I am certainly very glad that I was not born to be his wife. He never had one, but if he had ever had a wife, the woman would have deserved not only canonizing, but should have been preserved as a mummy for the world to see. He was very high-tempered, very suspicious, a quality which was extremely aggravated by his chronic deafness. He was never absolutely deaf, but he thought he could hear even at his worst when he had to use an ear trumpet, but he was practically stone deaf so far as social intercourse

with the world of an intellectual character was concerned; and he was extremely generous, but if he suspected anybody working against him, there was not anything so bitter that he could not say, or anything so whimsically perverse that he could not do.

On one occasion one of his rich friends, a neighbor, had angered him and aroused his suspicion by some trifling little opposition, and Beethoven, going home after a rehearsal at the theater, ran up to the gate of this man's palace and shouted (just imagine the extremely undignified conduct of the man!) "*O Du Ludgowitz! Esel!*" "You unspeakable blockhead of a Ludgowitz!" That is not the word, but I won't translate it; you look in your German grammar and find out what it means. Now, imagine a great man doing such a silly thing as that!

He did very many funny things, but the last incident in his life is very characteristic; it shows both the weakness and eccentricity and the greatness of the man. When he was dying on the 26th day of March, 1827, a loud thunder storm accompanied with snow was raging over Vienna, a very singular phenomenon. He had suffered from dropsy; he had fallen into a state of stupor, and yet at a quarter before six he had roused up for a moment as a flash of lightning came, and at an unusually loud peal of thunder, he raised his hand, shook his fist violently at the sky, and fell over dead. The very last act of the man was resistance; he had resisted his fate; though twice driven to the verge of suicide, he had persisted in living, and became one of the heroes of the human race, a man whom men will learn more and more to venerate and to love, as they appreciate that which is most spiritual, most pure, and most eternal in human experience.

Over against Beethoven we find a man who was the very opposite, who was exceedingly feminine, Frederick

Chopin. He was not always effeminate; his effeminacy was what we in America would expect of a dude; he was the dude of the dudes, a man who was excessively fastidious in all his tastes, easily offended, easily nauseated, rather conventional and aristocratic in all his associations, and he had some very funny habits of the ultra girlish type; he not only had books upon his piano, but upon his mantel, which is a thing that would improve a good many men, I think, if they had a taste for it otherwise; but he had the odd habit of taking a little ball of perfume and putting his finger tips against it so as to keep the tips of his fingers nicely scented. Now, I don't know why he did that, but I was told that by a man who took lessons from him. I mention that as one very minute point which would show the man's nature. The idea that he would think of such a thing as that! But he was not always so excessively refined and gentle. His great works have a certain dignity and manliness, a certain force, self-assertion and a certain freedom from excessive ornament that we do not find in his smaller works. Now here his critics differ as to what was more characteristic of the man. He was so very feminine in his appearance that he looked like a woman; he never wore any beard; some say he had blue eyes. Liszt said blue eyes, but modern authorities say he had beautiful brown eyes. And yet do not think that this man was not a great man; for he left to us the most original, the most unique, and, in some very important respects, the most fascinating musical literature to be found. The body of his music cut out of the world would leave us poor to a degree that could be exceeded only by the loss of one or two other great men; because, while his music was lyric, and was to other great music what the poetry of Heine and Burns was to the poetry of Dante and Shakespeare, nevertheless the music of the pianoforte comes to

thousands and tens of thousands, goes to learners, where the symphonies of Beethoven seldom go or do not go at all; what a steel engraving or a photogravure is to an original oil painting—so then, Chopin was also a great factor.

Mendelssohn, perhaps, is the typical man of culture. Mendelssohn in music was perfection. He was not a very deep, grand, or very virile man, but a very elegant and perfect man. Everything about him was balanced, staid and successful. I do not think he ever made a failure, or a very prodigious success. I am one of the most enthusiastic Mendelssohn lovers in the United States; but to love a man does not mean that you must be blinded to the limitations of his park; if he has only a ten acre park, he may get a great deal out of that ten acre park.

Mendelssohn stands out as the extreme of perfectly united culture and talent,—perhaps we may say genius, though not genius of the highest gradation of creative or original type; it was somewhat imitative, assimilative genius, taking up forms that other men had perfected and putting new life into them. He could not kindle the coal, but if they got any ashes on it, he could remove the ashes and make the coal glow again like a rose. He invented absolutely nothing new, but he built music in every known form of the art, especially in its highest form, and the music he constructed was always respectable; you could always enjoy it, and feel that you had a noble enjoyment; and sometimes it is dramatic, but it lacks that one spring of humanizing power which sets all other minds going; he had not what Lowell says existed in Emerson, the power to work as yeast on other minds, so that it was not so much what he said as what he made other men think. That was not Mendelssohn's power.

Now I will leave musicians and talk to you a few minutes on poets. Men betray by every word they utter and

by every word they write what manner of men they are. I want to speak of two pairs of poets; first Whittier, and then Cowper. Here are two men eminently feminine; they possess the qualities that are particularly,—I was going to say womanish—all our words that end in *ish* have a slight twang of contempt about them—womanlike, perhaps. In the first place, Whittier was very pious. Now some men are pious—I would not have you understand that all men are impious, nor would I have it believed that all the ladies are as religious as they might be. But he was of that sort of quietistic, trusting piety which is peculiar to the ladies' temperament. What a blessed thing it is, the disposition to look up to something and trust; to look up to a hero is characteristically feminine; and this power, this quality, existed in Whittier to a high degree. His religion was humanitarian in a way, and yet it contained a very positive current, a warm gulf stream of pietistic feeling. He would satisfy the most ardent and spiritually minded Methodist; in fact, many of his poems in an easy form, cut down to a length which makes them practical for singing in a modern church, where people are always in a hurry, are found in our hymn-books. He had the love of woman in a very feeble form, or rather, it was not virile, passionate, burning love, but only a gentle friendliness. The story that is told of his sweetheart is very pretty, but it has been contradicted. Another story is that she is still alive. He spent his life as a bachelor, as did also Beethoven and also Cowper; and such expressions of love as we find remind us of Lowell's wicked lines about Bryant:

"It is just, on my soul,
Like being stirred up with the very
North Pole.
He is very nice reading in summer, but
inter
Nos, we don't want *extra* freezing in
winter."

(To be Continued.)

CHILD CULTURE

MORAL EDUCATION.

WHEN education can not be improved educators may well weep, as did the sculptor when he could no longer add a beautifying stroke to the creation of his art. Intellectual acumen is no greater now than it was thousands of years ago, but modern intellectual training has never been surpassed. Can we so boast of moral education? Until we can, let us walk with humble mien ere continued discords, which are the fruitage of immorality, check and nullify the achievements of the New World.

This commencement day is but a type of that which is seen every year through the length and breadth of the land. From the halls of education flows a constant fountain of mental life that directs the stream of civilization and rules for weal or woe the destinies of the world.

If this fountain be unmingled and clear all the world might be filled with smiles and joy; but if poisoned with vials of bitterness or of unsuspected error, all manner of confusion must continue until our institutions shall go down in the degradation of internecine strife. 'Tis not the machinery of law, serried troops or Gatling guns that preserve peace among men; nor are they destined to quell a conflict that seems even now to have begun. The problems of this political commonwealth are moral problems. They have their only successful solution in education. Need it be said that the education which alone can solve them must be sought in the moral and social environments of college life?

There was a time in the history of modern learning when, to obtain its advantages, confession and support of definite religion was necessary. Then it was that practical religious philosophy was made the highest aim of pedagogy. That period, though burdened with intolerance, produced a generation of men who rescued the natural course of human thought, gave birth to a new philosophy, and changed the maps of continents. Against that era of moral education came a reaction, until now the highest aim of the modern school is to train the intellect to the greatest activity that it will bear without breaking. This kind of education, aided by the fierce energy of territorial conquest, has perverted and deadened the moral faculty of the nation; has become the evil genius of the New World, over the victories of which thousands to-day are mourning in poverty and strife—and more will weep with them to-morrow.

The times are pressing, the duty can not be avoided for education again to undertake, with unfaltering hand, the training of the moral, the eternal part of the human mind. It is well to avoid doctrinal teaching; it is well to govern by moral suasion; but is it well to allow the moral and social nature of the human mind to develop amid the thorns and brambles of nature's wildwood? Social integrity requires of education a full, rounded, self-reliant, wholly Christian manhood and womanhood. Present society demands of its popular institutions that they give its sons ability to get more money than the

uneducated, or a superior shrewdness in manipulating political machinery; and the daughters of our land, no matter what other qualifications they may have, must be guaranteed to shine as lights in a society that is too often self-created and superficial.

This is all wrong. Parents are at fault in relieving themselves mentally of responsibility when they have placed their children in some institution with a great reputation. Society is at fault for its imperfect ideals and for its lack of interest in or sympathy with the life of students; and educators are at fault for not standing against popular fallacies and more carefully directing the energies of youth toward a higher, more noble development of the race. Education is a mighty instrument for the recipient; it may be a blessing or it may be a curse to the world.

Harmonious education, with the moral nature always predominant and active, means success, happiness, honor, and a blessed memory. Inharmonious education, the present education, means a life of successful money-getting, of fashionable pleasures, perhaps of purchased fame; but the harvest will have among its sheaves ever contentions, deceits, and miserable failures to attain the ideals or to live the life that man was born to live. Can the fountain that is embittered fill a life with holiness or fill a world with pleasure? Herein are the vials of wrath poured out upon this wondrous land. Strife, murderous conflicts and the mutterings of anarchy are already with us. When these have entered revolution is knocking at the door, and it may scourge this land as other lands with hopes as fair have often been scourged.

The problems of to-day are more serious than they were yesterday, and they will be more difficult to solve to-morrow than they are to-day. Are the conflicts of labor and capital, of religious intolerance *versus* religious greed, of divisions everywhere, but

the beginning of the end; or will education come to the rescue in time? This age is one of confusion and uncertainty. It is a self-seeking age, but it is still seeking for the truth, and the truth it will have though the nation be overturned.

Here then our safety lies. The press, the platform and the leaders of thought have long been calling for the supremacy of a practical moral education. Liberal educators, though some are lagging and some are leading, all are becoming more faithful and more fearless servants of liberal religion, and the people want a system of moral education, a practical religious philosophy that does not rise and fall inside the class room, but of a nature that will surround the student upon the playground, and in the other relations of society, and go out with him from college halls to bless and to uplift all the world.

HENRY GILLESPIE.

A FRENCH MOTHER'S INFLUENCE.

M. CASIMIR-PERIER, the new president of the French Republic, had shown himself, in his public career, very little covetous of official honors. More than once he had sought to avoid public employment; but his character, his ability, his discretion and the moderation of his opinions marked him out for the succession to M. Carnot in the emergency in which the late president's assassination left the republic.

But the friends of several other men were pressing them for the great place, and were, to forward their chances, making personal attacks upon M. Casimir-Perier. He declared, therefore, when the chiefs of the various Republican groups waited upon him and asked him to accept the presidency at the hands of the National Assembly, that he was not a candidate, and could not accept the honor.

He was pressed to change his determination, but remained steadfast.

The leaders of the party did not know what to do. They were unable to unite upon any other man, and they believed that Casimir-Perier was emphatically the man for the emergency. .

In this case they did what perhaps none but Frenchmen, among the best of whom filial obedience is one of the strongest motives, would have done. They went to Casimir-Perier's mother, induced her to come in, and begged her to intercede with her son to change his determination.

She listened patiently to their arguments, and also to her son's objections. Then she turned to him and said:

"History is in my mind, and inspired by my affection for you, I declare that your grandfather, if he were here, would tell you that, in the circumstances, it was your duty to stand and to accept the mission which may be confided to you by the Congress."

Then M. Casimir-Perier gave way, and was chosen to the presidency. One cannot but admire the spirit of the mother; for although the presidency of France is a great honor, it involves at the present epoch of dynamite bombs a great personal risk, which the new president deems it beneath his dignity to regard.

PARENT AND TEACHER.

OUR people as fathers and mothers do not consider sufficiently the relation of the school teacher to them. They would not deny the great importance of school work. Of course not; but they nevertheless intimate a surprising indifference to what is being done in the schoolroom. On this point the *Advocate and Guardian* has some very pertinent remarks:

Do mothers and fathers, as a rule, coöperate with their children's teachers as they might in the work of training these young people? Or do the boys and girls feel that their parents are a court of appeal to which they

can carry fancies and complaints about a teacher and find themselves sustained? It is quite too common for children to look at teachers, good, bad, and indifferent, as their natural enemies, and to find ready cause for bitterness and complaint concerning them. But if the home people will be unprejudiced in their views of the relations between the two, will sift all complaints brought to them, and try to bring about a better mutual understanding and forbearance, there will be smoother working and more satisfactory results in the schoolroom before long. It is not always easy for a parent to be just when the aggrieved parties are his own children, but this should be his aim. One way to help the teacher in her work, which is often very trying, is to make her acquaintance, to show your genuine interest in her and your desire to lighten her cares as far as your own children are concerned. Another thing that we may all do—though how seldom is it thought of in homes or in churches!—is to remember our teachers and their scholars in prayer. The *Advance* brings out this thought very forcibly:

"The public schools of the country are just now beginning again their new year. Though the newspapers make little account of it, yet how significant the event. What if one had the power of vision to overlook the whole land, watch all these thousands, these millions of boys and girls, as leaving their homes they make the daily pilgrimage to the school, and could read in their countenances their thoughts and aims, as one reads a book, how impressive the sight. By the last census there were in our schools 564,922 teachers. Of this number 238,397 were women. Whether women vote or not, here is a very great factor in the shaping of the national destiny. Once in a while a minister in the public prayer, Sunday morning, remembers the public school, its pupils and its teachers. Maybe it were well if he did this oftener."

MABEL'S COMPLAINT.

Mamma's sick and I'm so sorry;
She must stay in bed they say.
Oh, I feel so very lonely
Not to see her every day.

If they'd let me I'd stay with her,
All the time with mamma dear;
Don't you think she'd like to have me?
But I mayent—ain't it queer?

Gran'ma says I must be quiet,—
When I'm trvin' hard to be;
Ev'rybody goes on tiptoe;
Oh, how sick mamma must be.

Ain't I sorry for my mamma?
Ain't I her own darling Belle?
Oh, I'd love her, hug her, kiss her,
All the time to make her well!



MAMMA'S SICK.

O, mamma, Mabel's so lonesome,
Downstairs, upstairs, ev'rywhere;
When I want you I can't have you,
Gran'ma says "You mus'nt dare!"

Only one mean little minute
I could see her all to-day,
But she whispered "Bless you, sweetest,"
When they took me right away.

Please, dear God, look down on mamma
Make her well, oh, soon again—
For I'm sure I'd great deal rather
Be in bed and have her pain.

D.

SCIENCE OF HEALTH

SANITARY NOTES.—NO. 3.

HEALTH AND DISEASE.

WHAT is health? To answer this question in a medical and scientific sense we must study all the phenomena of life. The vital processes of every animal organism are nutrition, assimilation and depuration. By nutrition and assimilation, elements of food, water and air are converted by the vital force into all the different structures of the body, and the organism is built up and sustained. Depuration is the carrying out through the emunctories, as the skin, bowels, kidneys and lungs, all matter that has been used, and, if longer retained, would prove injurious to the vital domain. When these processes play harmoniously, supply and waste being equal, we have physiological action or health; while, if these processes become unbalanced and obstructed, the action becomes pathological, which is disease. Medical science should decide the cause, the nature and the degree of pathological action, and aim to make such therapeutic appliances as to enable the vital force to remove obstruction, regain its equilibrium of action, resulting in the restoration of health.

The vital action of an organism under proper physical conditions, supplied with the best usable material necessary for all the uses of the vital economy, is a condition of health; while disease is vital action in relation to improper physical conditions, and substances introduced into the organism incompatible with vital relation, as unwholesome food, impure water, vitiated air or poisons.

In order to obtain a clear and correct knowledge of what disease *per se* is, we should carefully inquire what are the causes that give rise to diseased action. The most common and most easily observed are many forms of obstruction in the alimentary canal, arising from unwholesome ingestion, bacterian parasites, miasmatic inhalation, breathing vitiated air in ill-ventilated apartments, inattention to cleanliness, thus closing the pores of the skin, preventing its depurative function; all forms of specific virus and all other bad habits loading the system with impurities and poisons. So all these forms of matter, taken into or existing in the system, that are not good for the uses of the body, must be depurated from the body through the emunctories.

When there is nothing in the system, except what can be used to build up and sustain the body, the action of the vital force under this normal state and condition is health. But when the body becomes obstructed with the foreign material, morbid matter of any kind, the vital instincts recognize these agents as injurious to the organism, and to protect the vital domain an unusual vital action occurs to expel the offending matter. This peculiar action or effort of the system in relation to abnormal conditions and things is the phenomena we call disease. This increased vital action, disease, is instinctively, not intelligently, in the direction of health, because its tendency is to restore conditions for the normal play of the vital force. Disease then is a vital

effort to remove obstructions and overcome impediments, so is remedial in its results.

By this theory we can philosophically account for the various forms of disease to which humanity is subject. The vital effort to remove obstruction or impediment of any kind is nearly always through some emunctory; so we have disease of the stomach, bowels, liver, kidneys, lungs, skin, etc. The natural action of depurating function is health, while the preternatural action is disease. It also furnishes a key to the knowledge of the *modus operandi* of medical appliances. On this point the medical profession is largely in error. It is supposed by most physicians that inert, inorganic substances possess a peculiar semi-intelligent action which directs them to the morbid part to supply the conditions of health. But instead of there being an action of a drug upon the system, the action is on the part of the vital organism resisting the drug as a morbid agent, and depurating it along with the remote causes of disease through some emunctory. Prof. Paine says, "Remedial agents operate upon the same principle as the remote causes of disease."

It is generally conceded both in scientific and medical circles that health is a vital process, while disease is considered a tangible something attacking the body, destroying health and often resulting in death. Disease is spoken of as traveling over the earth and pouncing down on its helpless victims. This conception of disease is confounded with its cause and has no foundation in correct medicine or in science. I now continue my argument that disease is just as distinctly a vital process as health. First in relation to drugs used as remedial appliances, their direct effort is the same or very similar to the remote causes of disease. Prof. Martyn Paine says in his *Materia Medica and Therapeutics*: "All remedies operate upon

the same principle as morbid agents, and all become morbid when injudiciously applied. Applied to the healthy system, they alter the vital properties and actions so as to constitute disease. If improperly employed under circumstances of disease, they develop new morbid conditions, and exasperate such as already exist." "Medicines," says Linnæus, "differ from poisons not in their nature but in their dose," and so Pliny "*ubi virus, ibi vitus*."

Different drugs have different effects. This fact seems at first to indicate a property of action inherent in the drug; but a careful analysis will show that the drug is inert, affecting only by its presence, all action being on the part of the vital organism. Drugs, as we have shown, are poisons, some forms being but slightly injurious, while others cause death. Those being slightly injurious are easily depurated out of the system, while the virulent poisons are absolutely incompatible with its relations, hence, when present, death ensues. The obvious inference is that the variety of effects of different drugs is not owing to any specific action of the drug, but its presence calls out vital resistance on the part of the system to expel it through some emunctory. This fact gives a philosophical basis for the classification of medicines. One class of drugs is depurated through the bowels and are called cathartics; another through the skin and are called diaphoretics; another class through the kidneys and are called diuretic; another sickens, causing vomiting, and are called emetic; another causes expectoration from the lungs and are called expectorants, etc.

Dr. Paine says, "Institutes of Medicine": "It is astonishing with what rapidity many substances appear in the urine after their admission into the stomach, often not more than five or ten minutes intervening. This rapidity of excretion is particularly true of all

matter which is offensive to the organism."

The remedial effort, disease, unloads the system of morbid material, resulting in a condition we call convalescence, a sure promise of returning health. Dr. Paine truly says remedial agents can never transmute the morbid into healthy conditions. This alone is the work of nature.

My argument in proof of disease being a vital process offers an easy solution of the problem of death. Disease is health-tending and death-tending at the same time, as war is at the same moment a destructive and a remedial process. Disease wastes the sum of the vital force precisely in the ratio of its duration and intensity, as war exhausts the resources of the nation. If the remedial effort succeeds in purifying the system before the fund of life is exhausted health will be restored, but the vigor of life will be more or less impaired.

In a state of war a nation in conflict manifests, not deficiency of force, but extraordinary activity. The energies of the nation are preternaturally, remedially, wastefully and destructively exercised. So in disease, the living system manifests uncommon energy; not because it has gained or lost vital power, but because it has something unusual to do. The indication of cure in any form of disease is to regulate, balance and direct the remedial effort, so as to distribute the work of purification among the various organs to the end that no part or organ shall be exhausted by excess of labor, and to supply the living system with such conditions and materials as shall enable it to be successful in the process of restoration to health.

A. G. HUMPHREY, M. D.

WATER, AS A DRINK.

WATER as a drink or as an ingredient or constituent element of food is essential to the health and life of both man and beast. About

seventy-five per cent. of the matter which constitutes the globe is water. About the same proportion of this material enters into the composition of the human body. It is conceded by advanced physiologists that the most important use of water in the living system is as a vehicle by which nutrient materials are conveyed to and the worn out and unusable substances are carried from the tissues. It is also an important factor in the regulation of the temperature of the body. There is water in all organic bodies, but the exact relation in which it exists in the tissues has not as yet been definitely determined. It is known, however, that water is one of the constituent elements of all food materials, and that the living organism can be supplied in part if not altogether with the water essential to health and life from such. Persons have lived in good health and preserved vigor and strength by the liberal use of fruits in their natural state and abstained from every form of drinks, not even water, for weeks and months at a time. The water supplied in this way to the system is pure and much more wholesome than the water that is obtained from the ordinary sources.

This fact is worthy of note and can be applied in practice to advantage in case there is a deficient water supply or the supply may be suspected of being contaminated with some impurity either of a mineral or organic nature. Its use may be largely avoided, or in other words not needed, through a liberal use of fruits. If the general or public method of sanitation cannot or will not correct the evil of a bad water supply the individual can do much for himself or herself by applying this knowledge of personal hygiene. In the November number of the PHRENOLOGICAL JOURNAL of 1892 Mr. T. Wheeler, then seventy-one years old, stated that he had lived without any drink two hundred and ten days and suffered no inconvenience ;

that during this time his breakfast and dinner consisted mostly of apples and that he remained strong, vigorous and healthy on this regime. Dr. J. G. Kellogg, of Battle Creek, Mich., says that he has relinquished the drinking of water or liquids of any sort frequently for months at a time, the only fluids taken being that which was in fruits, and this without any loss of mental and physical vigor.

The writer has several times abstained from drinking water or any drink for several weeks at a time and suffered no inconvenience in any way. True at such times fruit constituted one of the principal articles of diet, and there seemed to be no need of any additional water as a drink. In the November number of *Food, Home and Garden*, 1893, a case is reported of a "bus" driver being cured of rum drinking by eating apples instead of taking his usual liquor. His wife filled his pockets with apples each morning before starting on his journey. The use of this fruit in this way repressed all desire for rum and all alcoholic drinks.

It is said that in the dry regions of France a breed of animals has been raised which do not drink. It is said the sheep in that region feeding upon the herbs have no occasion to drink, and the cows seldom take water. The famous Roquefort cheese, it is claimed, is made from the milk of these non-drinking cows.

A knowledge of these facts has led some persons to believe that man was not by nature a drinking animal. Whether this be true or not it is evident that mankind may by appropriate dietetic habits reduce the necessity of drinking fluids to a minimum.

In instances where thirst demands large quantities of water there is no doubt that the dietetic habits of the individual are in error. Ferret out the cause of excessive thirst and remove it and this strong desire for water or any kind of a drink will cease to exist. The use of condiments, highly seasoned foods and stimulating

drinks are the dietetic materials which occasion an excessive thirst which demands much water or some other liquid to satisfy it. The liberal employment of fruits as food limits the use of all forms of condiments and mild stimulating drinks as tea and coffee.

The temperance reform cannot, we think, make much further progress on present lines and methods. It is difficult for this reform to hold the vantage already gained. Without any reinforcement from dietetic and vegetarian reformers this cause would retrograde and sink into insignificance, because its present status does not embrace the cause of the use of intoxicating beverages. We believe that the more general employment of fruit as food and vegetarian diet generally will do more to counteract the use of intoxicating liquors than any statutory law or any agitation of this subject which deals with the effects of the drink habit without any reference to the physical cause of intemperance in drinks of all sorts and kinds. The dietetic cure for drunkenness or the drink habit will find more favor as time goes on among intelligent and thinking people. We think that after the Keely cure and all other forms of drug cure have long been relegated to the past and almost forgotten as great delusions the dietetic cure will still be an ever-present truth moving forward in popular favor and resting on the all-conquering principles of science and knowledge.

The use of hot water as a drink has become a common custom with many persons. This practice is not to be commended to those in ordinary health to promote and preserve the same. In many cases of disease and slight ailments the use of hot water taken before meals and in moderate quantities is no doubt beneficial. In home treatment this method of drinking water may be resorted to with good results. In disorders of the stomach and bowels

and in chronic ailments as rheumatism and neuralgia this is an excellent means to aid nature to remove impurities and effect a cure.

Pure water and the unfermented juices of fruits are the only drinks which are wholesome and in accord with the science of health. These may be used mixed with water or several kinds together to suit the taste as beverages and as luxuries. Their employment should be limited to drinking between meals as a rule, as drinking at meals is not altogether in accord with the science of physiology and laws of hygiene.

J. G. STAIR, M. D.

THE HYGIENIC COLLEGE.

WE had supposed that in the progressive West, where liberal medicine has made the most decided advance, that the Hygeio-therapeutic College, founded by Dr. S. W. Dodds and associates, would gradually work its way to that eminence of which such an effort is most worthy. It seems, however, that the college has not received that support which is absolutely necessary for the establishment of a medical school upon a basis of permanence and success. We regret this exceedingly, and the more so because we had expected so much of the friends of hygiene in America. The St. Louis school had received the recognition of the American Medical Association, and so far as its claims to the respect of the public are concerned for high purpose and teaching capacity there appeared to be little wanting besides sufficient money to carry into full effect the plans of its directors. The failure to revive this financial sup-

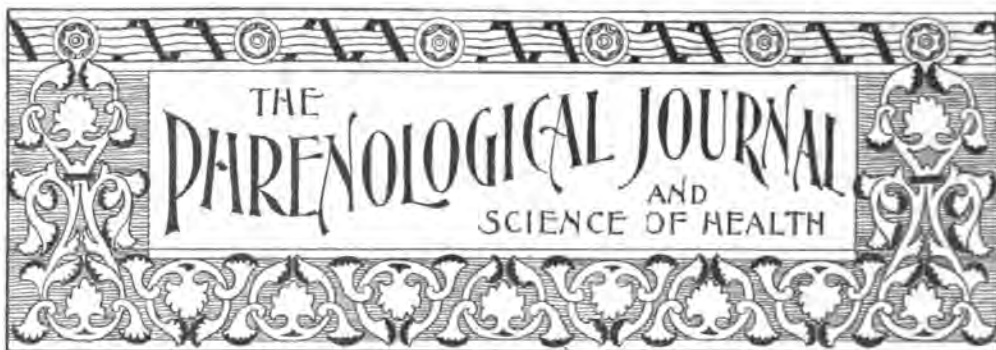
port is a matter of much chagrin and disappointment to the organizers of the school, and naturally enough inclines them to think that the hygienists of the country are indifferent to the cause they have been presumed to favor.

We hope that the circular that has been issued with regard to the needs of the St. Louis institution will receive attention and the substantial response it merits. Friends of hygiene and true medication—which is preventive and in accordance with nature's teaching—rally to the support of the only hygienic college in America. D.

SMALLEST BABY IN THE WORLD.—An exchange says Geo. From, an employee of the Crescent City Railroad Company, New Orleans, La., is the father of perhaps the smallest living baby in the world. The child is a boy, perfect in form, with regular features. Its weight is about nine ounces. From the crown of its tiny head to the soles of its feet is about ten inches. Its arms are not larger than a man's thumb and its legs in proportion. The child is in the best of health, and its mother says it can cry as vigorously as other babies.

Mr. From, the father, is forty-five years of age, weighing 175 pounds, and is hale and hearty. The mother is forty-four and weighs 125. The couple have had seventeen children, two of whom, beside this baby, are Lilliputians. One of them is Frank, sixteen years of age, weight forty pounds, who is with a circus company. The other is a youngster of twelve, who is with his parents here, and weighs a little over fifteen pounds.





Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M.D., EDITOR.

NEW YORK, NOVEMBER, 1894.

MORE CRITICISM.

THE literature of the anti-phrenologists affords an instructive illustration of the wide diversity of human knowledge, and helps us to appreciate the veritable chasms which separate the representatives of scholarship in high circles. To those of us who from childhood have been familiar with such a common thing in our country as ice, it is difficult to realize that there are regions where frozen water has never been seen by the majority of the natives. It is equally hard to understand how so many people can be totally oblivious to certain moral truths which we have imbibed, as it were, with our mother's milk, and the same may be said of many scientific facts.

We who have been accustomed throughout the greater portion of our lives to the observation of great variations of form in the human head, find it difficult to comprehend the aggressive, pertinacious, and fatuous blindness with which many highly

educated persons continue to speak of phrenology as if it were a science of tubercles on the skull. We wonder that any educated man who has not been brought up in a monastery or a prison should be able to look at all the people he must see in the church, the theater, the boardinghouse, or at the dinner table wherever he may live, without observing that some heads are almost round, others almost square, some very wide, some very narrow, others very high above the forehead, still others low in front and high behind, with eye-brows depressed, or extending uninterruptedly across the forehead, or else beautifully arched, and widely separated, to say nothing of numerous other peculiarities which are simple enough to those who make a study of the subject. To read the objections to Phrenology, one would suppose that the writers had no conception of such a quality in nature as shape. It would seem that such a word as configuration could have no

place in their vocabulary. One might suppose they had never seen a load of watermelons or potatoes or any other familiar objects which present great varieties of form, yet without superficial knots or protuberances. How would these people try to describe the form of an egg, a pear, a turnip or a papaw, the surfaces of which are perfectly smooth?

We are sorry that so brilliant a magazine as *The Literary Digest*, whose business is to give correct summaries of valuable opinions in all departments, should find space for the publication of misstatements regarding phrenology which no one could entertain for a moment unless absurdly ignorant, not only of the science *per se*, but of a principle which is applied in mechanics to a thousand things with which we all have to deal every day of our lives. At the same time, we have no word of blame for those who err in this matter. We may blame the educational methods by which so many people are encouraged to dip into all sorts of controversies without due preparation; and we certainly must condemn the prevalent habit of presuming to teach the public in a professional way without diplomas from accredited institutions, and without other knowledge than may be picked up as accurately from the enemies of a science as from its friends. Editors are perhaps more easily led into this kind of blundering than many other people from the fact that they are largely engaged in the labor of collecting the opinions of others, and do not have time to subject each one to a test as to technical accuracy. We are willing to apolo-

gize for our excellent contemporary to this extent, but we hope we may never again see in its columns a repetition of such unfairness and superficiality. We copy verbatim from *The Literary Digest* of September 22:

“PHRENOLOGY A HUMBUG.

“Physiologists looked askance at phrenology from the beginning. It is not disputed that the brain is the seat of the intellect, the will and the emotions, and that their manifestation in any given subject is determined by the volume, conformation and texture of the brain substance; but the method of Gall and Spurzheim, which assigns to every human characteristic its specific locality, has been generally rejected; and now comes a writer in *The Pall Mall Magazine*, who pronounces it a “humbug” and pokes fun at it. He says:

“There is something fascinating in the thought of those precise bumps represented upon phrenological charts, each one a chamber for some busy occupant—some genius of color or song, some tiny cupid of love, some tireless calculator, some gentle sprite of benevolence or parental affection. It is so interesting to imagine all knowledge exactly filed and docketed and pigeonholed, like precious papers stored in the sections of an antique cabinet full of ingenious subdivisions and hidden springs and secret doors.

“We, too, in our youthful days, were fired with enthusiasm for this bewitching science, and read phrenological books, and studied plaster casts, and marveled at many a speculative flight. But, to our dismay, at the first touch of precise investigation the soaring fabric tumbled to the Earth.

“Phrenology places the perceptive organs immediately above the eyebrows, and points to the frontal projections, so marked in many heads, as indications of development. It is, however, painfully disheartening to the phrenological student to discover, as he may do by dividing a skull, that there is no brain, but only mucus, against these suggestive bumps, and that the brain lies more than half an inch back, behind a second and inner formation of bone. So much for the perceptive bumps.

“In the second place, Phrenology takes cognizance only of the top, front, rear and sides of the head, but wholly ignores the organs which rest upon the base of the cranium. Let the reader imagine a skull

severed by a horizontal circular line drawn from the brow, above the opening of the ears, to the back of the head; if the upper portion be removed, it will be seen that in the cup thus exposed, above the roof of the mouth, are some of the largest and most important of all the 'bumps.' Phrenology, being unable to reach these (excepting after death) simply passes them by in silence, which is often an easy way of getting over an otherwise insuperable difficulty.

"We do not dispute the fact that there are subdivisions of the brain, nor that, within recent years, the precise position of two or three mental organs has been determined. But these discoveries have been made not only without the aid of the bumps, but in contradiction to the whole theory of Phrenology. Probably the general conformation of a head indicates somewhat of the nature of the brain within, just as a physiognomist reads much of a man's character by his expression. The awkward facts remain, however, that men of the highest order of intelligence sometimes have their phrenological bumps all wrong, and that physiognomy will fail to detect that yonder meditative youth, with the calm, intellectual brow, and poetic eyes and benevolent expression, is none other than 'Jim, the penman.' Were Phrenology an exact science, and were the 'bumps' an unfailing guide, any one might qualify him or herself to become a phrenologist; this, however, its professors admit is not the case. They claim for themselves peculiar and exceptional aptitudes, which common people, and even mere men of science, do not possess. It must, indeed, be hard to say, as the phrenologist is constantly called upon to do, whether an apparent bump is actually a projection, or whether it only seems to be so from the depression of adjacent organs."

In the first sentence we have quoted there is a very truthful statement of a well-known fact; but when we consider that the discoveries of Gall and Spurzheim were flatly contradictory of the prevailing views held by other physiologists, or if not contradictory, at least far in advance of what was then currently accepted, it is easy to see that the great founder of phrenology was regarded as a very dangerous rival, and consequently a fitting subject for the envy and malice of the great authorities who had been

less fortunate in their studies of the brain. It is to be regretted that co-workers in a particular field do not always feel kindly toward those who outstrip them in a difficult race; but such has always been the rule, and as Gall's discovery was one of the greatest, if not the most important ever made, it has been only natural that the opposition to his teachings should have been peculiarly long and bitter.

It is hardly accurate to say that "the method of Gall and Spurzheim . . . has been generally rejected," unless we refer to that class of scholars and their immediate disciples whose vanity would be disturbed by an admission of phrenological facts. Among the mass of the people in England and the United States in particular, there is certainly a very wide interest in the subject, as is well known to those who have traveled extensively and mingled freely with the middle classes who are not always disposed to consult a college president before accepting a new idea. To the glory of the American people be it said that we do not suffer ourselves to be led in matters of opinion from a feeling of blind reverence for antiquity and long names. We demand that our leaders shall have brains beneath their crowns and that their words shall contain true wisdom as well as sound. We demand facts upon which to build our scientific faith. The consequence is that advanced ideas regarding the great problems of heredity, hygiene and human nature are probably more widely disseminated and accepted in the United States than in any other country on the globe. To be sure the Germans, the French and the English have in some

departments indulged in more extensive speculations on these lines than we have done, but we have attained by far the greatest practical knowledge of ourselves and how to judge our fellow men. As an illustration of the popularity of phrenology, we beg to call attention to the enormous sales of literature upon the subject. Between four and five hundred thousand copies of Combe's *Constitution of Man* have been circulated, and of another more recent book, the publishers of the *PHRENOLOGICAL JOURNAL* have sold within nine years more than one hundred and twenty-five thousand copies. We should like to know what other scientific treatise has had an equally rapid, wide and appreciative acceptance.

As to the writer in *The Pall Mall Magazine*, we should like to know at whose "first touch of precise investigation the soaring fabric tumbled to the Earth." The fact is, Gall and Spurzheim established phrenology by the most precise investigation which could be applied to the subject, because they were profound anatomists, and were not only the first to dissect the brain by unfolding the convolutions from the base, and to demonstrate the fibrous structure of the cerebral mass, but in addition to all the aid afforded by original anatomical investigations, they possessed the supreme advantage of a method of comparison of external forms of the cranium with well-known mental manifestations in special cases which enabled them to establish for the first time the number and nature of the radical or elementary faculties of the mind. This method of observation and comparison of thousands

and hundreds of thousands of cranial forms was the distinctive feature in the procedure of Dr. Gall. Other investigators had merely speculated and theorized. Gall and Spurzheim appealed directly to nature.

As to what this writer in his third paragraph vulgarly and ignorantly calls the "perceptive bumps," we beg to say, to make the explanation as brief as possible, that the brain centers called the percepts, which occupy the lower forehead, have been demonstrated by an overwhelming number of facts. They were discovered and are now estimated not only by variations in the bony structure, but by the form of the eyebrows, distance between the eyebrows and eyeballs, space between the eyeballs and the superciliary ridge, the diameter of the forehead at the temples, also by the relative length of the forehead forward from the opening of the ear. For example, the sense of color, when highly developed, is manifested by a perfect arch at the center of the eyebrow, not by a protuberance, while a great deficiency in this faculty is accompanied by a horizontal, flattened or depressed appearance of the eyebrow. Large order causes the eyebrow to arch symmetrically at the outer angle. The perception of form, so essential to artists, may be known by width between the eyeballs, etc. However, long practice together with a knowledge of the temperaments is necessary to accuracy in judging the percepts.

As to the functions of the basilar portions of the brain, reasoning by analogy, and by having already discovered functions of the other con-

volutions which account for nearly everything we know of human nature in the abstract, together with pathological and other kinds of evidence, we know that the lowest convolutions are devoted to offices which are almost as far removed from the needs of a practical science of the mind, as the individual stars in the Milky Way are removed from the needs of a practical astronomy. Why does not the objector denounce mechanics as a humbug because perpetual motion has never been invented? We do not pretend that phrenology is a perfect system of psychology, but it affords infinitely more valuable information than any other metaphysical doctrine ever taught.

We also deny the statement "that men of the highest order of intelligence" have heads which are wrong according to phrenology. We challenge this writer to produce an instance. If he attempts to find one, it will be discovered that his own knowledge of the subject is all wrong. He is also wrong in stating that phrenologists "claim for themselves peculiar and exceptional aptitudes." This is true only in the sense that particular endowments are needed for great success in music, politics, literature, or commerce. We do admit that special talents are necessary to rapid and skillful character reading, but we fail to discover anything in that fact which should arouse the hostility of this gentleman of *The Pall Mall Magazine*.

In conclusion we will say that this old "bump" idea is always brought forward by people who are ignorant of the subject. No man will use such an expression who knows the

real teachings of Phrenologists. Spurzheim explained more than half a century ago the principle of measuring the brain centers by the diameters of the head at different points, and by expansion from the opening of the ear. People have taken up the misconception which was formed during the first years of Gall's labors before the public, and it has been transmitted from generation to generation among those who have scarcely even seen a standard phrenological book.

CRIMINAL EARS.

THERE is a great deal to be learned from a study of the human ear, although this portion of the physical organization has been too much neglected by the majority of phrenological authors. Ordinarily, of course, the professional character reader is chiefly occupied with the consideration of the more important features of the face and head, and it is easy to form a habit of making up an opinion without looking further.

As the external ear is intended to facilitate the perception of sound, its form, texture, color and development are naturally significant of the degree and quality of the mental development which has been attained by the individual. In those persons whose mental life is complex and elevated, the recognition of sound becomes a remarkably important factor. In addition to those numerous sounds with which we are familiar in human speech, there are infinite tones in nature which convey to the receptive brain a wide world of ideas by suggestion. Few people ever stop to

think that the forms and qualities of nearly all objects have their analogies in sound. Here we have a key to the philosophy of music; we are pleased, or in some way moved, by hearing certain combinations of musical tones, simply because there is an analogy between those sounds and certain situations or experiences in life which are thereby awakened

are very ill defined, the whole organ being gross, shapeless and thick; there is an especial expansion of the helix, or upper rim, while the anti-helix, or inner rim, is scarcely perceptible. Such an organ is obviously very poorly adapted for any fine work. This is copied from the portrait of a burglar.

In Fig. 2 the top of the ear forms



FIG. 1.

in imagination. Those persons who have well disciplined and cultivated minds will naturally influence their organic structures in a manner favorable to the development and maintenance of the normal type. Hence abnormality in the configuration of the external ear presupposes some departure from the natural course in the history of the individual's progenitors.

We present three characteristic specimens of criminal ears which we have selected from a large collection in our possession. In Fig. 1 it will be observed that the convolutions



FIG. 2.

almost an acute angle, in contradistinction to the graceful curve which is characteristic of the normal ear. This form is very common in those who are tainted with criminal proclivities or who incline to abnormality of some sort. This ear is from a veteran all-around crook who is said to have had few equals for daring and ferocity.

We have still another variation in Fig. 3. This ear belonged to a professional burglar, and is suggestive of a very primitive aural organization. Such a coarse, unlovely appendage to the human head bespeaks

a perverted or undeveloped mind. It is a mark of arrested or distorted development. When we think of the inharmonious souls which dwell behind such hideous tenements shall we not pity rather than blame these unfortunate creatures? Such ears as



FIG. 3.

these are a badge of inherited poverty of moral instinct. Why should we not study these placards which nature has erected and thus prepare ourselves intelligently to labor for the development of our race?

THE LATE PROF. BOTTA.

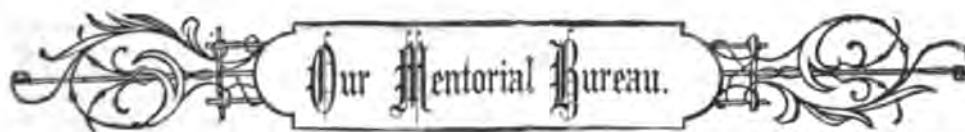
IN the death of Prof. Vincenzo Botta, which occurred at his residence in this city on the 5th of October, the scientific world has lost a distinguished member whose name recalls many points of interest to the phrenological profession. Prof. Botta was a particular friend of the late Prof. S. R. Wells, and so far as we have been able to learn, he was the last resident of New York, if not

the last citizen of the United States, who had witnessed the method of dissecting the brain which was practiced by Drs. Gall and Spurzheim. He was a very modest man in regard to matters with which he had not become familiar by special study, and consequently he was never willing to undertake a dissection of the brain before a class of phrenological students, though frequently urged to do so by Prof. Wells.

It is very much to be regretted that some one had not communicated with Prof. Botta in regard to this subject and learned what he knew about it. However, we might say the same as to the teachings of Spurzheim himself. With a few exceptions, American phrenologists, in their familiarity with the applications of our art to the affairs of practical life, and in their enthusiasm in the labor of lecturing and making delineations of character in a business way, have had neither much time nor interest in developing a knowledge of the anatomical questions which so largely occupied the attention of the great German masters. And probably not one of us of the present generation ever fully realized his personal responsibility in allowing the Gallian method of dissection to become buried among the traditions of our science. We wish in this connection, to invite correspondence with any person who may know of anyone yet living of those who were privileged to receive instructions from the lamented Dr. Spurzheim, or who is able to explain in a satisfactory manner the exact procedure of Dr. Spurzheim in unfolding the structure of the brain from the *medulla oblongata*.

Prof. Botta was in many respects a very remarkable man. He weighed nearly two hundred and fifty pounds, and was more than six feet in height. He was born in Piedmont, Italy, Nov. 11, 1818. He was educated at the University of Turin, in which institution he afterward became a professor of philosophy. In 1849 he was elected to the Sardinian Parliament. His object in coming to New York, which he did in 1853, was to study the public-school system. He was so much pleased with this country that he became naturalized and was elected to fill the chair of languages in the University of the City of New York. In 1855 he was married to Anna Charlotte Lynch, who was well known in the world of authors, so that their home became a center in this

city where the most famous litterateurs, painters and musicians of Europe and America were accustomed to meet. His best known works are "An Account of the System of Education in Piedmont," "Discourse on the Life, Character and Policy of Cavour," "Dante as a Philosopher, Patriot and Poet," "An Historical Account of Modern Philosophy in Italy," and "An Introduction to Dante." The degree of Doctor of Philosophy was given to him by the University of Berlin in recognition of his services to literature and science. Mrs. Botta was also a particular friend of Mrs. Wells, and as they were both trustees in the New York Medical College for Women, they worked together in that capacity for many years.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address.

ALL CONTRIBUTIONS MAY BE SENT TO THE GENERAL editor, Dr. Edgar C. Beall; but matters relating to

CHILD CULTURE, SCIENCE OF HEALTH, or of a strictly medical nature, should preferably be sent to Dr. H. S. Drayton, who has special charge of these departments.

WE ALSO EARNESTLY REQUEST OUR CORRESPONDENTS to write as legibly as possible. Wherever practicable use a typewriter. In this way you will lighten labor, avoid misunderstandings, and secure earlier attention.

FORCE AND ENERGY.—M. M.—A reference to any good dictionary would give you the significance of these terms. They are used often as synonyms, but scarcely are so. Force applies to power in operation, while energy refers rather to inherent, latent power—capacity for the exertion of force. If we may so characterize, energy is the power behind inducing the manifestation of force.

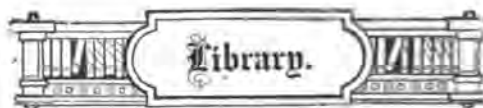
RINGS AROUND THE EYES.—R. B.—The

dark circles around the eyes of which you speak, due to an infiltration of pigmented fluid or venous congestion, may have their origin in more than one disturbance of function. There is an evident lack of freedom in the capillary circulation of the skin; the digestion may be feeble, the liver torpid. A vigorous toning up of the general system would probably improve the condition. Good food, active bathing, massage of the skin, out-of-door exercise are advised.

CHARACTER IN HORSES.—S. A. C.—There are numerous horse books that will probably furnish you information with regards to the leading traits indicated by equine physiognomy. Youatt is a famous English writer, and Daniel Wagner (?) is well-known among American horsemen for a valuable book on horse-training. A good, docile horse has usually an amiable expression, large eyes, a head broad above the eyes and well rounded above the ears, the skull being not conical or cramped, but wide and even in its contours. It should be said that most horses with vicious, tricky natures have been made so by bad treatment and injudicious training. In our childhood and youth we were much among horses, and believed then that kindness would make any occupant of the stable gentle and harmless.

MAGNETIC AND ELECTRIC.—M. M. G.—As we can not scientifically define a difference between magnetism and electricity so we are unable to point out the difference temperamentally. It is customary, however, to speak of a certain power or quality inherent in the human organism as "magnetic." For many generations the idea has been entertained that a peculiar property or force of vital or nervous origin is shown by persons in varying degrees, and to this the term magnetism was given. Its exhibition has been thought to be specially seen in mesmeric or hypnotic phenomena. Some to-day distinguish magnetism from electricity as a vital or animal electricity, while others make no distinction, and look upon the old views of magnetism as fallacious, claiming that the power or influence exerted by one person upon another is explicable by physiological or psychological principles.

SIMPLICITY IN TERMS.—L. H.—We thank our esteemed and reverend friend for his suggestions. They are appropriate to a degree, but it should be understood that in discussing modern questions of science it is often necessary to use technical terms, because there are no common substitutes of equal meaning. In the newer departments of physical science the terminology is specially adapted to both theory and methods, and they who wish to know something of these departments are expected to acquaint themselves with the technical names and primary principles involved. There is a class of readers among those who take the PHRENOLOGICAL JOURNAL, who like to see some account taken of scientific progress by the editor, and he can scarcely be too technical for them, but in the main it is deemed the better course to make our statements clear to the general reader by employing language readily intelligible to people of average education.



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

KORADINE LETTERS, A GIRLS' OWN BOOK.

By ALICE B. STOCKHAM, M.D., author of "Tokology," and Lida Hood Talbot. Also "Creative Life." A special letter to young girls. 12mo, pp. 424. Chicago: Alice B. Stockham & Co.

In this book the author of "Tokology" essays a fresh field of authorship. Although reinforced by an associated pen that appears to have trailed the vine of esthetic grace in and over the trellis of useful admonition, Dr. Stockham has departed but little from that topic of instruction which forms the chief motive of her customary writing. The letters are char-

acterized by sprightliness and variety as well as the beautiful hopefulness and enthusiasm of the young girl as yet unchanged and unperverted by the social follies of life. This mingling of the conceits and rhapsodies of youthful spirit with mature reflection and practical counsel may do much good. The brace of authors have certainly made a valuable book.

STRONG'S EXHAUSTIVE CONCORDANCE OF THE BIBLE, in the authorized and revised versions. 1 vol., 4to, pp. 1800. Cloth, \$6. Half Am. russia, \$8. Half turkey, \$10. Hunt & Eaton, publishers, New York.

For review of this recent publication see October number of *THE PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH*, page 213.

"AS NATURAL AS LIFE." Studies of the Inner Kingdom. By CHARLES G. AMES, Minister of the Church of the Disciples, Boston. 109 pages. Cloth, 50 cents. James H. West, publisher, Boston.

Under four heads—"As Natural as Life," "Self Preservation," "Heartache and Heart's-ease," "Numbering Our Days"—the author discusses in an earnest yet vivacious style the expediency of conformity to our better views and ideals of happy, successful living. The good life is found, the author claims, "in striving toward conformity with nature as the expression of the perfect mind, and in endeavoring to correct whatever is amiss." A hopeful, comforting little book.

THE SCIENCE OF VITAL FORCE. Its Plan, Division of Function and Operative Methods on Health and Disease. By W. R. DUNHAM, M.D., author of *HIGHER MEDICAL CULTURE*. 16 mo., pp. 198 Boston. Damrell & Upham.

A discussion in terms largely psychological of principles inherent in the living organism which have an essential relation to health and disease, and which must be understood by him who would serve the community in the office of the physician. Vital force, says the author, is an "involuntary agency of nature that can be harnessed and utilized." While we agree in great part with this statement, we incline to the belief that volition or will consciously or subconsciously has much to do with the di-

rection of vital force. In the development of his views the author shows no marked subserviency to the ordinary teachings and practices of the medical faculty, in general imputing to them the recognition or application of fundamental principles "as unreal as was the Ptolemaic system of astronomy." Such propositions that drugs possess certain active properties in disease; that a growth of micro-organisms causes disease, receive no favor at his hand. In fact he is an iconoclast in the medical workshop, assailing the theories of both "regulars" and "irregulars," but dropping here and there a thought that is worthy of consideration.

A MEMORIAL OF THE LIVES OF THE REV. EDWARD PAYSON THWING, M.D., PH.D., AND HIS WIFE, SUSAN MARIA (WAITE) THWING.

The children of the earnest and devoted husband and wife have done honor to their name in the publication of this memorial. The large acquaintance of Dr. Thwing will be glad to have this souvenir of a man notable for culture, capacity and unremitting activity in lines of usefulness to religion and science. The death of both while engaged in missionary work in China is a great loss to the cause they represented for few are found among even the missionaries of the East that exhibit so earnest an enthusiasm as was theirs. The writer of this brief note can testify from a personal acquaintance of many years to the active and thorough-going spirit that characterized everything that Dr. Thwing undertook.

RAILWAYS AND RAILWAY SURGEONS. A paper read before the National Association of Railway Surgeons, at Galveston, May 11, 1893. By CLARK BELL, Esq., of New York, Secretary of the Medico-Legal Society.

TREATMENT OF PURULENT RHINITIS, SYCOSES AND ECZEMA OF THE ALÆ-NASI. By WALTER F. CHAPPELL, M.D., M.R.C.S.

TREATMENT OF NASO-PHARYNGEAL CATARRH. By the same author.

The above brief monographs, founded upon the experience of a clinical practice, contain suggestions of value to the physician.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

NEW YORK, Sept. 4, 1894.

Editor PHRENOLOGICAL JOURNAL:

Having just concluded a lecture tour through the States of the Pacific slope, British Columbia and the Northwest Territories, I thought that a little news as to the attitude of the West toward our beloved science might be of interest to your Eastern readers.

When I first entered the phrenological lecture field I was solemnly informed that I had two battles to fight, namely, the prejudice against the science I advocated, and the prejudice against women.

But in this case ignorance was bliss; and as I could see no crime in being a woman, I determined to continue. To my joy, the terrors proved to be like the morning mist, which vanishes when approached, and in all my work I have met with nothing but kindness and appreciation far beyond my most sanguine expectations.

I find in the West a feeling most decidedly in favor of phrenology, especially among the most intelligent classes, such as are found in college towns, universities, etc. This is true also of the Canadian side where Phrenology is steadily gaining ground.

In Vancouver, B. C., there is a splendid phrenological society. Its president, T. G. Stark, is a man of fine character, intense, earnest and honest in his convictions of right and duty; in fact, the whole class, gentlemen and ladies, are remarkably intelligent, progressive and alive to the grandeur of the science they are investigating. A prominent Canadian divine, who attended a course of my lectures in British Columbia, told me that he had never before realized the possibilities of phrenology, and the opportunities it affords for teaching morality, purity, and the elevation of the human race. And he declared that if he were starting out again in life, desirous of adopting a profession which would enable him to do the largest amount of good in the world, he should become a phrenological lecturer. If all our phrenologists could only realize this, and would never lower their standard to cater to a depraved public opinion, the world of noble, honest thought would soon be won to our side.

Let us all strive for a broader, deeper and more thorough education in everything that can make us more efficient in our chosen work.

There is quite a large class here at the Phrenological Institute. I had not written to the Institute before coming, so my husband and myself walked into the

office of the Fowler & Wells Co., and announced ourselves as visitors who desired to look over the collection and be examined. We were then ushered into the presence of Prof. Sizer, who carries the weight of his eighty-two years so gracefully that you would never imagine them to be more than sixty.

The moment I sat down in his chair he knew me better than my nearest friend; little peculiarities that have caused my friends much mirth, were brought out perfectly. In fact I could not have delineated my own character half so well; and my doubts as to my fitness for the phrenological field were entirely dispelled by the hearty recommendation, given, as it was, to a perfect stranger, for I did not make known my identity until after the examination. With best wishes for phrenology, I am yours sincerely,
MRS. J. M. ELLIS.

THE BROOKLYN HUMAN NATURE CLUB reports as follows:

The first meeting for the season of the Human Nature Club was held on Friday evening, Sept. 28th. The hall was more than filled; many stood, and more were turned away. Mrs. Ellis spoke on "The Importance of a Knowledge of Phrenology in Selecting an Occupation." Mrs. Henry followed in a lecture on "Love, Courtship and Marriage." Both speakers were enthusiastically received, and were often interrupted by applause. The audience called for some test examinations, which were satisfactorily given by Mrs. Ellis.

The next meeting will be held on Friday, Oct. 26th, on which occasion two good speakers are promised. The Club is negotiating for a larger hall, to accommodate the many who have been unable to get in at the last three meetings. The society is also preparing to issue a paper to be edited by the President, Rev. C. A. Brown. A class has been formed for a series of twenty weekly lessons under the direction of Albert Bausch, 363 Bedford Ave., Brooklyn.

Further particulars and tickets of admission to the next lecture can be obtained of the Secretary, Miss Julia R. Floyd, 214 Rodney St., Brooklyn, N. Y.

PROF. W. S. BELL, of Chicago, delivered lectures on phrenology at the school house Tuesday, Wednesday and Thursday evenings. He has the science of phrenology at his tongue's end, and gave very interesting lectures.—*Morganville (Kan.) Enterprise.*

Topeka, Kan., is Mr. Bell's present address.



Rockwood, Photo.

THE AMERICAN INSTITUTE OF PHRENOLOGY CLASS OF '94.

THE
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AND
SCIENCE OF HEALTH.

VOL. 98. NO. 6.]

DECEMBER, 1894.

[WHOLE NO. 672.]

STUDIES FROM PHOTOGRAPHS.

A PRIEST AND A POET.

BY EDGAR C. BEALL, M.D.

SINCE the exciting period a few years ago when Dr. McGlynn became conspicuous by his advocacy of the doctrines of Henry George, with perhaps the sole exception of Monsignor Satolli, no ecclesiastical dignitary in this country has been more frequently mentioned in the public press than Archbishop Corrigan of the Diocese of New York. As his name implies, this gentleman is of Irish extraction, and it may be added that, as in the case of so many other men of distinction, his family were comparatively obscure. His mother is said to have been very devout, and to have possessed an intense ambition to educate her children for the church.

In reading character either from a study of a living subject or from portraits, the philosophical phrenologist needs to be equipped with an extensive knowledge of various types of people as regards sex, temperament, nationality, etc., if he expects to work with facility. At the same time he must not confine himself to any fixed rules or standards to the exclusion of the ever-varying peculiarities or modifications which are constantly presented. On the contrary, he must

read what he finds, whether he has ever seen the same combination before or not, just as the intelligent physician will treat the symptoms in any given case, whether he is able definitely to associate them with a well-known or distinctly classified malady or not.

A glance at the face of Archbishop Corrigan would suffice to indicate his Celtic lineage, and knowing this fact alone we should be prepared to infer a great many qualities, both mental and temperamental. That is to say, we should expect certain qualities to be present, and in the absence of observable signs, we should give to those qualities the benefit of all doubts. Such is our rule, which, however, is only a rule, and must be practiced with caution and discretion.

What then are the elements of character which we associate with the Irish people? What are the salient peculiarities which may be said to constitute the Irish type? Without answering these questions in detail, which would swell the volume of our analysis to an undue extent, we may say that the Irish are distinguished for femininity rather than masculin-

ity; art rather than science; oratory rather than thought; adaptiveness rather than originality; affection and diplomacy rather than aggressive force; poetry, imagination and religious faith rather than interest in the practical, material, mechanical or commercial spheres of life. Accordingly, we find in the Irish physical organization a tendency to roundness or softness of outline with comparatively yielding tissues. These are marks of the feminine nature as opposed to the dominant squareness of the male type, and in the present subject may be found an interesting illustration of the rule. In this face and form there are no sharp angles. The shoulders slope; the cheeks are rounded; the lips are full and the head is expanded so as to present a singular appearance of smoothness. These facts are in perfect harmony with the general leaning to religious life. In this head there is a remarkable predominance of brain forward and upward from the ear. The back head is very short, however, in which respect it is a marked exception to the Irish type. This signifies a lack of personal attachment or friendship and love of the opposite sex, with comparative indifference to children and domestic ties. In still another important particular the Archbishop is exceptional, for his head rises in the rear of the crown to an extraordinary height at Firmness and Dignity. These two latter qualities are well-known characteristics of the English, and are found among the Irish only in rare cases. However, in consideration of the femininity in this temperament, we infer that there would be a phase of manifestation of these two faculties quite different from the color they would exhibit in a more virile individual. Thus in this instance we should expect Firmness to be manifested in acts of opposition and perhaps contrariness; and the self-esteem or dignity, in a peculiar sensitiveness to all encroachments upon personal rights. A more

distinctively masculine temperament would evince a species of egotism which would be almost unconscious and independent of immediate surroundings—a sublime indifference to petty annoyances and trivial interferences. Such a man would seldom condescend to notice a small act of insubordination or contradiction. He would not be on the alert to say black the instant somebody else said white, or north because somebody else said south. In other words, the strongly masculine man is less sensitive, less responsive, less likely to be interested in details, and with a supreme consciousness of his great power, he is without fear and without interest in the buzzing and barking of diminutive foes.

In every feature of the Archbishop's face, especially in the eye, there is a suggestion of responsiveness to every form or phase of invasion upon his personal domain, whether great or small. Such a man receives impressions from the very atmosphere in which he happens to be placed, although there may not be a tangible object in sight, an audible sound, or any other channel of communication open to the ordinary senses. His skin is ruddy and clear, and of that texture which shows a high degree of nervous susceptibility.

He also loves approval, and having an almost equal desire for independence, he will display ambition to be recognized for his authority and personal merit. He would hardly be vain of riches or notoriety. He craves appreciation for his superior moral and intellectual qualities. It will please him to be reminded of his influence and the extent of his learning. He cannot be indifferent in the presence of a rival. He is quick to make comparisons between his achievements and those of others, and to resent the slightest usurpation of prerogatives that belong exclusively to him. He is very touchy, and though often hurt, he will not change his route to escape a storm of

arrows. He must have his own way first, and after that is accomplished, a word of commendation fills him with delight.

The signs of conscientiousness are less pronounced than those of religious idealism. The governing motive in such a character is not so much a love

fection as a picture to be painted without economy in the use of color. It is to be made with a view to the final effect. If some of the brushes wear out and have to be thrown away—no matter. If the tints in certain places have to be rubbed out and painted over again several times—



Rockwood, Photo.

ARCHBISHOP CORRIGAN.

of equity in the abstract as it is a desire for a moral paradise whose beauty he may enjoy without anxiety as to its construction or cost. With the eye of an artist, he views moral per-

very well. And then he is quite willing to wait for the paint to dry.

He is also satisfied to try some experiments. He believes in certain rules, but he is not inflexible in a

matter of method. He will be persistent in purpose, but not in the mode of execution. He feels that the whole course of nature is in a certain sense a system of favoritism. He knows that millions of seeds perish on the cold, barren rocks, where but one is welcomed to the bosom of the earth and warmed by the kisses of the sun into all the fullness and richness of life and love.

Does he pity the poor outcasts? Yes, he soon turns from the stern rocks of Sinai, and, in a newer, more optimistic faith, a gospel of mercy, finds hope and consolation. And still he is not wholly generous. We simply mean that he leans to mercy rather than to justice, but his poetization of morality is stronger than either. He has not the squareness of the rear top head that shows the love of right in a dominant degree. And his eye has the drooping lid which bespeaks the diplomat. Such a man may always tell the truth, perhaps, but from a large assortment of truths he will make a judicious and expedient selection. He may never deceive, but he will not always enlighten. Nor is the chin as square as is usual in the most uncompromising lovers of justice. The same may also be said of his hand, which is small and of the tapering form usually found among poets, singers and others whose tastes are above the plane of the real, fixed and measured conditions of every-day practicality.

The lack of order as shown by the flattened outer corner of the eyebrow is another peculiarity often present in the combination just described. Order implies precision, and precision implies stiffness, which in turn suggests straightness, and thus by analogy, the sense of rectitude. However, where intellect, æsthetic and religious sentiment are as strong as in the present instance, the want of conscientiousness will rarely be apparent.

Veneration, faith and charity

produce a noticeable elevation of the frontal top head. Ideality expands the upper temples and proclaims a high order of love for the beautiful. And as the head is narrow in the region near the ears at the sense of property, mechanical impulse, etc., this idealism will be expressed in the direction of the metaphysical or supra-material. Thus he will enjoy the exquisite in religion, literature, vocal music, etc., rather than perfection in landscapes or human mechanical art.

His intellect is many sided, but not remarkable for accuracy. He could comprehend a vast deal of general learning, and is better adapted to the domain of religious history or philosophy than any department of physical science. The upper portions of the forehead predominate, and such a mind naturally finds gratification only in the contemplation of elevated themes.

DR. OLIVER WENDELL HOLMES.

In the distinguished poet and physician who has recently passed away, there was a remarkable illustration of the value of quality in the organization. Dr. Holmes was a small figure physically, and though his head was rather large in proportion, it was the exceeding fineness of his fiber as much as the developments of his brain, to which we must look for an explanation of his singular talents. Here we have again a peculiar blending of the masculine and feminine natures, with a predominance of the latter.

The literary labors of this brilliant man are so well known, and his character has shown out in his writings so vividly, that our readers will doubtless expect little from us further than an explanation of the agreement between his physical developments and his work. Dr. Holmes had delicacy of affection. That is shown in the eye, the short nose, the compressed lips, to say nothing of the drooping shoulders and other marks

of feminine instinct. He was pre-eminently hopeful, buoyant, cheerful, sprightly, gay and optimistic. He was also sensitive to praise, and had the relative superior development of Approbativeness over Self-

out any of their heaviness. He was as wide awake and as active, if not as nervous, as the most typical product of the last generation in this country. Indeed, the grosser elements of body and mind seemed to



DR. OLIVER WENDELL HOLMES.

esteem, or dignity, which is very characteristic of vivacious and witty people as a class, and of the Americans, the French and the Irish as nations. He represented in many ways the higher culture of New England. He had the intelligence of the

mother-nation—the English—with have been almost entirely eliminated from him while he was yet young.

Conscientiousness was doubtless less influential than benevolence. Sympathy was the key to his moral nature. And though endowed with

considerable reverence, he was not restrained from free criticism of all old ideas. In this respect he was much like Emerson; and though his name has not been associated very largely in the minds of the people with religious heresy, he belonged practically to that school of reformers of whom Wendell Phillips, Theodore Parker, Lloyd Garrison, and Henry Ward Beecher were aggressive representatives. His famous poem, the "One-Horse Shay," was really a satire upon the crumbling Calvinism of his day.

Coming to the intellect, the perceptions are not remarkably strong. There is the deficient Order, which is almost the invariable rule in people of genius, especially literary, but the sack-like fullness under the eyes betokens extraordinary fluency of speech. In the upper forehead we see the expansion of large Ideality, Causality and Mirthfulness. Then, taking into account the feminine nose, the expressive eye and the fineness of the texture, it is easy to understand why his writings were brilliant, pungent, piquant and humorous, rather than dryly profound and original. He had ingenuity, skill, fertility, and an effervescent quality of mind which, together with a remarkable quaintness, led people to call him original. But his work was not done in the heaviest vein. He was a long way from being original as were Dr. Gall, Herbert Spencer and Charles Darwin. As an illustration of the tendency in second and third rate minds to indulge in wit at the expense of truth, Dr. Holmes, in his early life, committed the mistake of criticising Phrenology in a

way which a temperate, careful and accurate man in his position as professor of anatomy in Harvard College ought not to have done. He said that "to attempt to read character by Phrenology was as absurd as to judge the contents of a money safe by the size of its rivet-knobs." This would have been a bright bit of comparison, if the "bump" delusion in regard to Phrenology were true, but it is to be regretted that the brilliant professor was the author of this sarcasm which has been repeated by thousands and thousands of people to the great detriment of our cause. However, we are glad to say that in his later utterances the genial doctor modified his opinions of the subject very much. And while he did a good deal of harm by a thoughtless word in the instance we have given, he was a man of rare purity of soul, to whom all friends of humanity are greatly indebted.

If his middle face had been longer, and he had had more caution and sagacity in matters of human nature, which might have made him a phrenologist, of course, he might not then have enriched our literature with the numerous gems which now bear his name. We must not expect universal perfection in this life. Constituted as we are, we must commit some blunders to know the value of success. Perfection implies stagnation. There can be no happiness except in action, and, on the whole, the author of the "Autocrat" was not only phenomenally active himself in a useful sphere, but accomplished a wonderful work in stimulating others to a life of industry in the pursuit of noble aims.



HOW TO STUDY STRANGERS

BY

TEMPERAMENT, FACE AND HEAD.

BY NELSON SIZER.

CHAPTER XXIV.

GREAT HISTORIC CHARACTERS.

JONATHAN TRUMBULL,
GOVERNOR OF CONNECTICUT.

IN the religious world deceased saints are not canonized until a hundred years have elapsed since they left their earthly sphere. In the patriotic world it is perhaps appropriate and quite natural, in looking at the great characters that have figured in national history, to look back for a century and view the lives and doings of eminent patriots, when nothing but the masterful phases of their character, which are imperishable, remain to be considered. The little, private enmities and selfish rivalries which give friction while strong men are struggling for place, power and opportunity, die out and are forgotten as the generations of men succeed and see only the incandescent characteristics which, like the pure light of the lamp in the distant lighthouse, have distinguished their predecessors.

So, in our day, we look back to the Revolution; we study its heroes and statesmen with reverence and admiration, and learn their acts of self-sacrifice and lessons of wisdom and patriotic devotion to the public good.

We present here one of the best historical characters and one of the best friends of Washington, in the portrait of Jonathan Trumbull, called by Washington, "Brother Jonathan."

In this portrait the physiologist observes a harmonious constitution.

From head to foot he was not only well organized and well proportioned, but there was a fineness of quality that attracts attention, and a handsome face which well befits so fine a physical form. The Phrenologist sees in such a head and face an amplitude of intellectual and moral power. That large forehead shows sharpness of perception and clearness of observation. It evinces also an excellent memory and power to retain the knowledge which the percepts acquire. In the upper part of the forehead we observe the very strong Causality and Comparison, which rendered him a philosophical man of comprehensive judgment and solid understanding. In the top-head there was elevation, indicating determination, integrity and the higher moral faculties. The side-head is not broad and therefore does not indicate selfish propensity, but permits the exercise of unselfish patriotic public spirit. We notice also large Order, and the style of the dress in which the portrait was painted shows method, taste and refinement; and the refinement of the features, the brightness of the eye and the expansiveness of the forehead are indications that Ideality and artistic taste are prominently shown. Such a face and head and such a bodily form would command respect in any country or in any age. He looks to be a peer of the best, and therefore capable of being a patron and protector of the ignorant and the poor. It was to men such as he, with their

wisdom, courage and patriotic devotion, that the United States owe the
 membrande, and their characters will
 adorn the pages of history as long as



FIG. 186. JONATHAN TRUMBULL.

achievement of American liberty. The wisdom, the self-denial, the sagacity and the moral power which animated the leaders of the Revolution are worthy of regret and re-

virtue, talent and patriotism are respected among men.

He belonged to the class in which the Adamases, the Hancocks, the Pinckneys, the Henrys, the Law-

rences, the Masons, the Rutledges, the Morrisses, the Hamiltons and the Washingtons belonged, who conceived and achieved the revolution and gave us the Declaration of Independence and the Constitution of the United States.

Jonathan Trumbull was born at Lebanon, Connecticut, October 12th, 1710, and died there August 17th, 1785. He was graduated at Harvard College in the year 1727; he studied theology and was licensed to preach, but in 1731 he took the place of an elder brother, who was lost at sea, in his father's mercantile business. In 1738 he was elected to the General Assembly of Connecticut, of which, in 1739, he became speaker. He became Judge of the County Court, Assistant Judge of the Superior Court, and from 1766 to 1769 he was Chief Judge of the Superior Court. In 1767 and 1768 he was elected Deputy Governor and in 1769 Governor of the Colony, which office he held until 1783, when he resigned. He was one of the first to espouse the popular cause in the troubles preceding the Revolution, and in 1765 refused to take the oath required of all officials to support the provisions of the stamp act; and he coöperated with vigor in securing the independence of the colonies. Washington relied on him, says Sparks, "as one of his main pillars of support," and was accustomed to consult him in emergencies. The personification humorously applied to the United States is said to have had its origin in a phrase sometimes used by Washington: "Let us hear what brother Jonathan says."

Washington kept up an intimate correspondence with Governor Trumbull throughout the Revolution, and to his sharp sagacity, his courage, prudence and wisdom in a day which tried men's souls, may be attributed much of the success which Washington and his army secured in those gloomy times; and when we think of the achievements which the Americans attained against so powerful a

nation as England, having but a handful of inhabitants and very little of wealth, it is an astonishment that independence was secured. Americans should be thankful to the quarrelsome spirit of the European nations which gave England something to do nearer home, otherwise we would to-day have been a colony, and largely crippled in our enterprise. England has the best colonies in the world, but none of her colonies have the elbow-room and the opportunity for the achievements which have been wrought out under the American flag.

ALBERT GALLATIN.

This interesting figure; this masterful thinker; this natural financier and comprehensive business manager; this patriot of America and one of its best servants during a long and useful life, was a native of Geneva, Switzerland, where he was born the 29th of January, 1761, and died in Astoria, N. Y., Aug. 12, 1849. His father was a counselor of state and intimately connected with public affairs in his country. The son, Albert, graduated at the University of Geneva, 1779, and the next year embarked for America, and from that time on became one of the foremost men in the land. He met General Washington in 1784, who became his friend and patron. In that year he had purchased a large tract of land in Virginia, for the purpose of forming a settlement, but the hostilities of the Indians led him to refrain from it. While surveying these lands he first met Washington, who also owned large estates in that region.

As Washington was seated in his land agent's log cabin, surrounded by a number of squatters and hunters, whom he was examining with a view to ascertain the best route across the Alleghanies, Gallatin stood in the crowd looking on for some time, while Washington put his questions with slowness and deliberation, and carefully noted down the answers. It was soon evident to the quick-minded Swiss that

there was but one practicable pass. Washington, laying down his pen, He grew impatient at Washington's looked at him in evident displeasure,



FIG. 187. ALBERT GALLATIN.

slowness in coming to a conclusion, and suddenly cried out: "Oh, it's plain enough that (naming the place) is the most practicable." The bystanders stared with astonishment, and

but did not speak. Presently he resumed his pen, put a few more questions, then suddenly threw down his pen, and, turning to Gallatin, said: "You are right, sir." After Gallatin

went out Washington inquired about him, made his acquaintance, and urged him to become his land agent. Gallatin declined the offer, and by the advice of Patrick Henry he purchased land on the banks of the Monongahela, in Fayette County, Pa., settled there, became naturalized, and devoted himself to agricultural pursuits.

In 1789 he was a member of the convention to revise the constitution of the State of Pennsylvania, and in the two succeeding years was a member of the legislature. In 1793 the legislature elected him United States Senator, but there was question as to his eligibility, not having been a citizen during nine years required by the constitution, as he did not take the oath of allegiance until 1785. He was, however, elected to Congress, and continued a member of that body from 1795 until 1801.

He directed his attention particularly to financial questions, made important speeches on "Foreign Inter-course" and on the "Navy Establishment." On May 15, 1801, he was appointed by President Jefferson, Secretary of the Treasury, which office he held under him and under Madison until 1813. He was eminently successful in his management of the Treasury Department, and soon attained a reputation as one of the first financiers of the age. He systematized the mode of disposing of the public lands, and was a zealous advocate of internal improvements. In 1809 President Madison offered him the State Department, which he declined. In 1813 President Madison nominated as ministers to negotiate a treaty of peace with England, Gallatin, James A. Bayard and John Quincy Adams, and his name is attached to the treaty of peace. In 1826 he was appointed by President Adams Envoy Extraordinary to Great Britain, and in 1827 he took up his residence in the city of New York.

In 1830 he was chosen president of the council of the University of New York, and from 1831 to 1839 he

was president of the National Bank of the City of New York, and on resigning that office he was succeeded by his son, James Gallatin.

In 1846, during the Oregon difficulties, he published letters on the "Oregon Question," distinguished by impartiality, moderation and power of reasoning. He was strongly opposed to war, and during the war with Mexico he wrote a pamphlet of which 150,000 copies were printed, and which had a marked influence on public opinion.

Few men have done more for the prosperity of the United States than this adopted citizen. We have given this biographical sketch so that the readers can follow the description and estimate which we make of his character and talents, which are so vividly presented in his face and head.

In the first place he had a compact constitution; vigor, fiber, endurance and power belonged to him. He had a definite development of the physiognomy; his features were marked and sharp, indicating intelligence and especially financial ability. He had a fine development of Language; the eye is prominent, well-opened and well-protruded. He was able to present his thoughts in a clear, convincing manner, and that is one essential element of the leader. Moses was slow of speech, but he had in his mind the logical elements of the leader, although he needed language, and Aaron, his brother, was a good speaker. He was attached to the work of Moses and communicated his thoughts successfully to the people. Gallatin has the language of Aaron and the law-giving power of Moses; they are combined in one and the same person. The reader will observe the very great prominence of the upper part of the forehead; there is massiveness of the reasoning faculties, and the sharpness of the features and the definiteness of the expression of the face indicate that his mind was exceedingly active. That

his constitution was well sustained, carrying him to the remarkable age of eighty-eight years, would show also that his brain, by such a body, was amply nourished and vivified, hence his early talent, sagacity and power to win place, position and command respect of such men as Washington and his confrères, Madison and the rest, are all evidences that his phrenology was not only amply and excellently, but also admirably sustained by a good physiology.

The reader will notice how broad the head is in the region of the temples; how wide and swollen it is just forward of where the hair commences on the region of the temples. In that wide development of front side head large Constructiveness is preëminent and also large Acquisitiveness, which gives a sense of property and renders a man an adept in financial conditions. He had large Calculation and Order; hence his tendency to systematize and organize financial affairs; and having been for many years president of a bank, which position he held until quite advanced in age, resigning it to his son, shows that his power lay in organization, in finance and in general management.

Then the moral developments are good; his head is high; Conscientiousness and Hope were large; Veneration was well developed, and Ideality, Caution and Mirthfulness

were all amply developed. In fact, Albert Gallatin was a great character. That he made such a favorable impression in a new country upon its ablest men, and sustained himself through all the struggles and clashes of opinion and talent, and that he had to do with the formation and reformation of the United States government and its financial affairs, are evidences that he had a great deal of the right material in him and used it to excellent advantage; and, as an evidence of his morality and righteousness, in splendid contrast to some men of our present time, it may be mentioned as a fact in his biography that in 1815 he was appointed Minister to France, where he remained until 1823. During this period he was twice deputed on special missions of importance—to the Netherlands in 1817 and to England in 1818. While in this office he rendered some essential service to Mr. Alexander Baring in the negotiation of a loan for the French government. This, of course, was private service, and Mr. Baring in return pressed him to take a part of the loan, offering him such advantages in it that, without advancing any funds, he could have realized a fortune. "I thank you," was Gallatin's reply; "I will not accept your obliging offer, because a man who has had the direction of the finances of his country as long as I have should not die rich."

WHAT IS MIND?

BEING is constructed on the biune or sexual principle. First, Spirit and Matter, or active and passive; next, positive and negative, or male and female. The Ego, then, has only two great attributes, Sense and Love, or Perception and Desire, which may be *manifested* as any number of "faculties" in harmony with its needs and environments. Phrenology classifies

the manifestations of the ego *as developed at this time and place*. In other words we may say that Substantial Energy (an all-inclusive term) has two fundamental powers, Life and Law, Law being the definitive methods of Life. Perception implies limitation, limitation is law; while Life is the *eternal potency*, a magazine of infinite possibilities.

EDGAR GREENLEAF BRADFORD.

MUSICIANS AND POETS.*

BY JOHN S. VAN CLEVE, PH.D.

(Concluded.)

THERE is no fervor except of the religious kind in Whittier, and then, with the hatred of wrong, which is only another phase of the same thing, we find the most innocent trust in this man, or rather, we find the same feeling existing in two opposite forms, just as we find in chemistry a diamond and a piece of charcoal, which certainly look very unlike, yet are really the same substance; so it is the same gentle Whittier who dreamed about the eternal goodness, and said he did not care where he was, he knew God would always take care of him. This same man could talk about the slave holders with the most vindictive fury. In speaking of those war poems of his, Lowell says:

"Not his best, though, for those are struck
off at white heats,
When the heart in his breast like a trip-
hammer beats,
And can ne'er be repeated again any
more
Than they could have been carefully
plotted before."

Cowper was in many respects the English analogue of Whittier. People call Whittier the American Burns, and historically, of course, Burns was his poetic father, since it was the torch of Burns which dropped the living Promethean spark on the already prepared field of his poetic mind. He did not in any striking respect resemble Burns except in his dealing with homely domestic scenes; in other respects he was anti-Burnsian in character; he lacked the things which make Burns most pronounced and most immortal.

Cowper, on the other hand, who has never been compared to Whittier, was the English analogue of Whit-

tier; he lived just such a life; he had the same intense sense of spiritual things, and the same indignation against wrong; and yet in Cowper's case there was an important difference again. His feeble, sensitive nerves, combined with the stern teachings of the Calvinistic sect, of which he took very much (on the ground story), made him crazy; he was three times an insane man, and in fact died when under a cloud of insanity. This same man whose last poem was called "A Castaway," who believed he was going straight to hell, and who had never done wickedness enough to make him deserve even a day in Sing Sing,—this man who believed he was going to eternal suffering, was one of the strongest and yet one of the weakest of our poets. What he has produced is intensely genuine, and that is its great value. He did not write poetry till he was about fifty years old. Just think of that—a man in whom genius would slumber till he was very near through the ordinary lifetime! But if you want to read the perfection of filial tenderness, read that unspeakably beautiful poem called "Lines on the Receipt of my Mother's Picture." It is so simple and direct in its form of phraseology; every expression of emotion is so intense, so sincere, so ineffably beautiful, that if the English language had not another poem in it, this would deserve to be studied as a classic by children for thousands of years to come. If the man had never written another poem than this, he would have deserved a place among the immortals; and yet he did write much else. So that you see sometimes a man may not have a whole torrent of elements in him, and yet may have certain elements that make him immortal. Now, of course, we

* A stenographic report of a lecture delivered before the class of the American Institute of Phrenology on the evening of October 8th.

do not pretend to say that Cowper never had a love affair, but he had a love affair in early life which was thwarted, and perhaps he was too ultra feminine to have another one. He was disappointed in settling in life at the right time, and so he lived a very quiet life as an old bachelor till he was seventy; and during his last years he produced many poems of great value.

In his characteristics I see intense devoutness of the gentle sort, but with trust so all pervading, so phenomenal. There is in Cowper very little expression of confidence; in fact, it is very curious. He has written one of the most beautiful hymns expressing confidence in God, and yet it came to him under very singular circumstances. The hymn is one I know you are acquainted with. It is impossible that any one could have gone to church a dozen times in a life, and not have heard this hymn:

"God moves in a mysterious way
His wonders to perform" (and so on).

Now he wrote that hymn, it is said, after he had been, as he thought, miraculously saved from suicide. In one of those fits of desperation, he hired a hackman, intending to go down to the Thames and throw himself in the water; but the hackman, through some accident which was not explained, either being too tipsy or thinking about his sweetheart, got mixed up in the tangle of streets, and lost his way; he could not find the Thames from that point, and Cowper looked upon that as a miraculous or providential intervention, as much as if the hand of God had reached out from the sky; and he wrote that wonderful poem. He seemed never to reach a point of ecstasy; it was never anything more than a somber, sober confidence that, after all, things would be all right. Contrast with that the wonderfully tender and sweet phrases of Whittier:

"I know not where His islands lift
Their fronded palms in air,

I only know I cannot drift
Beyond His love and care.
And so beside the silent sea
I wait the muffled oar;
No harm from Him can come to me
On ocean or on shore."

These were two men who possessed some of the noblest qualities possible to mankind, and yet who were in a certain sense very one-sided.

Now, I will call your attention to two other men, Byron and Burns. I don't know that the alliteration has anything to do with it, but it is a curious fact that these "rascal poets" were the two men whose names attracted the largest audiences I ever had in Cincinnati. I gave them for several seasons under the auspices of the colleges of music in their halls of art or music, a series of lectures on English and American authors; and the largest audience in one season was in response to the name of Byron, and the largest the next season was Burns.

These two men are studies of a totally different character—men in whom the ultra virile quality becomes abnormally energetic, insomuch that no sensible lover of mankind, no philanthropist, whatever his shade of belief in religion, could possibly approve of all that they did; and yet I will qualify that immediately, for I do not think either Burns or Byron was half as bad as they were painted. I think they made a good deal out of their badness; and there are people, you know, who, especially if they become religious, or if they are attacked for not being religious, vaunt all their misdeeds and their small sins and put them under a magnifying glass.

There was a good man whose religious zeal was a good deal more fervent than it was wise, who was put to occupy the same room, a single room, with a stranger at a hotel, on account of its being very crowded.

Now this man believed that St. Paul's expression or St. Paul's custom of being instant in season and out

of season with his teachings and admonitions, that he might by some means save some, meant that he should parade his religion. So, the other man having gotten into bed, he kneeled down, and piously closing his eyes began to pray, hoping that it would do the other man some good; and he went through a very elaborate and unnecessarily circumstantial account of all his wrong-doings, inasmuch that he might make one think of the little girl who asked her ma if God really heard her prayers and everybody else's prayers, and she said yes, and the little girl replied, "Poor old God!" This man was going through all his evil deeds, when as he finished he got up, and, to his astonishment, saw his neighbor dressed and about to go out the door, and he said, "Excuse me, sir; what's the matter, sir? Weren't you to occupy this room with me?" "Do you suppose I am such a fool as to sleep in the same room with such a rascal as you have just confessed yourself to be?"

I think that sometimes the misdeeds of great men are of that character; and I have not the slightest doubt that Bunyan was an instance in point when he told us how bad he was. Most of the ordinary forms of badness are so unspeakably commonplace there is nothing in them; there is nothing at all worth talking about. If a bad man turns from being a bad man to a good man, of course all the wickedness he has done is like a writing upon a chemical sheet of paper; he sees it in a different way; it has the same strong appearance that a thing would have under the brilliant sunlight or an intense electric light, so that they may be sincere enough, and yet we must not take all they say without several grains of salt. I think that may be said even of Jean Jacques Rousseau, and certainly of St. Augustine.

Now in reference to the moral character of Burns and Byron, it is not necessary to say anything further

than that perhaps enough has been made of it. We have all heard of the terrible drunkenness of Edgar Allan Poe; and yet I know a man who was well acquainted with Edgar Allan Poe, and he told me that one glass of wine would make him as raving, crazy drunk as a dozen glasses would an average man, so fine was the poise of his nervous sensibilities.

Burns and Byron, though one writes in a dialect, and the other in the conventional classic English, stand out before the masses as the intense representation and the complete incarnation of passionate feeling, passionate emotion rather than lofty imagination or profound thought.

I will defy you to go through the whole set of Burns' poems, and find an original thought—that seems rather a strong statement I suppose—to find an original thought. Now bear in mind what I say, a thought that would put him at all on the level of a new thinker, of a man who had probed into any great new problem of life, and had discovered a new kingdom. Now who are the men who have discovered those new kingdoms? Darwin is one, Haeckel, Kant, Plato, Abelard, and a long list of others that I could easily mention (certainly Luther among them)—I could mention without stopping to take my breath, twenty men who have discovered new thoughts, or at least new ways of putting old thoughts. All that Burns ever did was to express the feelings and thoughts that come to an average man whose feelings are very intense. What do you think of when you look into him? You find pity for a little mouse, which is very characteristic of him, and of all poets; the love of the lower animals, not through any degraded coarseness of taste, but the reverse, the ultra refinement of taste, and through the imagination. That is exactly the way that dramatic genius with any poet or musician works. We find the same expression

toward the daisy; we find remorse when he feels that he has done that which has injured others. We find the expression of tender, youthful love, and never were there poems expressive of that phase of love that were more glowing, in which were more perfectly united the fervor of youthful, innocent feeling in its purity than Burns has given us. Where in the world will you find anything more exquisite than where he speaks of Mary in heaven; where more truly religious than in that general sense of trust in the unseen and love for what is good and noble in the universe, so far as we are able to perceive it? Where will you find any more perfect expression of religion than in his *Cotter's Saturday Night*? He bends to the stern, strict burdens of life with all its roughness, poverty and privation and narrowness, and yet there is the touch of the supernatural or the superhuman; and yet this man did not give us a new idea. He speaks with enthusiasm of that strange, bleak, wild, romantic country of his, and yet he only voiced the feelings of every Scotchman. It was an exact illustration of what Horace said, that poetry was that which would make a man say he always thought that and believed he could write poetry too, and finds he cannot. This was what Burns was to the Scotch people, and, indeed, to the English speaking people of the world. He was the perfection of a lyric poet, whereas he had no deep thoughts; he did not bother us with complicated and learned illustrations; he had no superabundance of rich imagery, no elaboration of profound or carefully elaborated description; but he did have heart, heart, heart. If he had a feeling, it was intense feeling; and he had enough sense of rhythm, enough imagination, enough power to suggest truth that is found originally by others, inasmuch that he has become the lyric poet of the world.

Now Byron is a different type. He

had in him what Matthew Arnold calls the greatest elemental force since Shakespeare, and yet it was elemental force which ran in one narrow channel. It was like a stream of molten lava rolling down through a canyon; it was confined in a narrow but very deep channel. It was irresistible in its volume and intense. When Byron hated anybody, it was ineffable. And yet Byron was capable of great tenderness. I think there are no sweeter lines in the world expressive of domestic feeling, the love of home, not so much the love of wife and children, but just the sense of inhabitiveness, the sense of being home. Is there anything in the language sweeter than this:

" 'Tis sweet to hear the watchdog's honest bark
 Bay deep-mouthed welcome as we draw near home,
 'Tis sweet to know there is an eye will mark
 Our coming, and look brighter when we come;
 'Tis sweet to be awakened by the lark,
 Or lulled by falling waters; sweet the hum
 Of bees, the voice of girls, the song of birds,
 The lisp of children, and their earliest words."

Now, it seems impossible that the man who wrote the bitter, scathing things that Byron did, and poured contempt like boiling oil of vitriol over human shams, and the affectations of refinement and purity which existed in the world, and particularly in the English world, for he knew the English world from life—it seems impossible to us that a man who could feel so much, was capable of so much tenderness; and yet I could recite illustrations for an hour. He seemed to have a whimsical delight in morbidly protruding his wrong-doings, in order to have people make a fuss about him. In fact, it is an excellent study of the nature of Approbativeness. I think sometimes we get an idea that Approbativeness always loves praise. I think Approbativeness loves attention. I believe a

man with gigantic Approbativeness would rather be abused than not spoken to at all. People tell me they would rather I would write against them than to say nothing about them. Those are people with large Approbativeness. Byron seemed actually to enjoy his sufferings. He was always telling the world that he was not caring anything about it; he told them that for three months; it was very consistent, of course, like the story of the ostrich with his head in the sand.

Now a few words about some of the American poets. We have some great men in this country. The last one of the great galaxy just passed away yesterday, Dr. Oliver Wendell Holmes. He came last, as he always prophesied, the last leaf on the tree.

"And if I should live to be the last leaf of the tree in the spring,

Let them laugh as I do now at the old bough where I cling."

In that same poem you have a stanza which President Lincoln told him was the most pathetic in the language. I will quote it to you because Dr. Holmes had in him that which makes smiles and tears, which constitutes the humorist and the pathetic writer. He says, speaking of an old man whose friends were all dead:

"The mossy marbles rest
On the lips that he has pressed
In their bloom;
And the names he loved to hear
Have been carved for many a year
On the tomb."

Lowell is, to my thinking, the best of all the poets, though he is not the most popular; and there are good reasons for that. The reasons are because he was too preachy. He is always trying to hammer a doctrine. He is either preaching religion or ethics or æsthetics all the time. In the second place, his style utterly lacks simplicity. It is too bookish; it is so stiff with learning that it is like one of those magnificent, royal

robes that were positively uncomfortable. And then again, with the single exception of the Biglow Papers, he dealt with subjects that interest only cultivated people. But by scholars I think he will always be regarded or ranked as our best poet of that cluster.

Longfellow is just the opposite. He is simple, transparent, tender; never witty, always gentle, sad, slightly melancholy or at least pensive, and is the complete, perfect artistic embodiment of ordinary feelings of refined people in comfortable life; and it is fortunate for us that there is this very large clientele in America; consequently, it is easy to see why Longfellow is so loved. He had also a strain of quiet pathos, as witness *Evangeline*, which has hardly a superior in the language, especially in gentle, spiritual pathos.

Bryant was a narrow poet, but a very lofty one. He wrote some poems having great feeling of a certain kind, like Whittier, and there is a classical purity in his diction, and simplicity and clearness in his images, and a direct sincerity in his love of nature which make him classic; but neither in bulk nor range was he a great poet.

Perhaps it may be well to touch for a moment upon one of our last great censors, a Western man, one who comes from a short distance from where I live. He has imitated Lowell in taking up the patois or country talk and making poetry of it. Of course you know I mean James Whitcomb Riley. He has selected language that people actually use, not book language; it was that language that Lowell was always expressing with such enthusiasm. But Whitcomb Riley, like Burns, has taken the words that all people understand, the thoughts, the sentiments, and put them into very musical phrases. He has a wonderful sense of rhythm. Open his book anywhere, and you will find the most perfect examples that any rhetorici

cian would be delighted with; most perfect examples of rhyme and meter.

"The goblins will get you if you don't watch out."

But I want to quote another passage which struck me as exceedingly clever. He is representing a boy as talking of his grandfather, and he says:

"So remarkably deaf was grandfather Squeers,
That he had to wear lightning rods over
his ears
To hear even thunder, and frequently
then
He had to request it to thunder again."

Now, can you imagine a man any deafer than that? I have met Mr. Riley on a number of occasions, and I am a great admirer of his elocution as well as of his poetry. His elocution is the perfection of art because it is not art. When he begins to talk, you say, "what a funny, little, thin, husky, nasal voice! How is he going to elocute with that?" He does not begin with "I come not here to talk." There is nothing of that. He comes as if he were a countryman, but before you know it, there are tears in your eyes, or else you are convulsed with laughter. And he is a marvelous artist. I asked him about it, and he said, "I just go where every man ought to go, to the school of nature." He had seen the river and the skies and the frogs and the tree-toads, and the flies and the mosquitoes. He has made a poem about a tree-toad, in which he represents the Father who sends down the rain as saying, "Well, shut up hollering and I will come down and rain," just like an impatient old father, an impatient man. He is a thoroughly delightful poet, and yet I am afraid he is going to do as Burns did, and just as they all do, get out of his element, trying

to write straightforward English, and that won't work. And he is very touchy about it I am afraid. He did not tell me that, but he said he was very much disappointed that they did not like his ambitious poems so well. He thinks those little rhymes are nothing, because they come naturally. They come as naturally as the chords from an Æolian harp. Suppose the Æolian should insist upon making some harmonic semi-tones? All the complicated relations and harmonies exist in the piano-forte but not in the Æolian harp. And what would you say of an Æolian harp that had a voice like an angel filled with envy and annoyance because it was not a Steinway grand piano? This is just what such poets are when they strive to be Shakespeares or Dantes. They were not made to be Shakespeares or Dantes, and we do not want them as we do Shakespeares or Dantes or Miltons or Homers.

My opinion has been asked as to Goethe and Schiller. They are the two names which stand as the pillars which sustain the temple of German classic poetry. My own preference is a little, I won't say very much—a little for Goethe; he was a broader man, a more universal man, but the great charm about Schiller was his marvelous, idealistic enthusiasm, and it is hard to say which was greater. Goethe's lyrics are more simple, and come a little nearer to certain facts of everyday life perhaps, and when he does become philosophic, he goes into the heights that Schiller never touches; but in the region where Schiller goes, he is marvelous, so that upon the whole, I should say that the beam would swing most of the time. The two planes would be about on a level.



SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

JOURNAL REMINISCENCES—THE REV. E. A. SMITH.

BY CHARLOTTE FOWLER WELLS.

IT will doubtless be interesting to the many readers of THE PHRENOLOGICAL JOURNAL of to-day, to become acquainted with some of its early struggles for existence, and with some of the noble workers in its behalf. Among the latter was the Rev. E. A. Smith, who rendered such substantial aid to THE JOURNAL that the writer of these sketches deems him worthy of special mention.

In Volume IV. of THE PHRENOLOGICAL JOURNAL, my brother, O. S. Fowler (who then became its editor), made an appeal, from which we make a few quotations. He said: "In founding this journal we hope to be able to publish a much greater number and variety of cuts than heretofore, accompanied with a brief statement of the characters of those represented. * * * The science requires, and the student needs, an exact representation of their originals. This can be done only by making cuts the size of life. But such cuts will be expensive. This expense should, of right, be borne by those who are benefited by them. We therefore make an appeal to subscribers. Do you wish each number to contain cuts, or portraits, accurately drawn, and the size of life? And will you pay for this improvement, not by increasing the price of single subscriptions, but by augmenting our number? * * * Our means for furnishing the originals for these drawings are not equaled in this country, if in any other; and the advantages of *our cabinet, in collecting which we have expended several thousand dollars, and the value of which is yet little known*, will then be transferred to the pages of THE JOURNAL, and to the libraries of sub-

scribers, and spread over the Union. Phrenological biographies of Clay, Webster, Adams, Preston, of eminent lawyers, jurists, divines, and others, accompanied with their phrenological developments accurately represented by portraits the size of life, cannot fail to be preëminently interesting and instructive; and we hope subscribers will enable us to bring them before the public."

This and other appeals called forth many responses, and among them the following extract from a letter to the editor from E. A. Smith, of Erwin-ton, S. C.:

"I received your notice that unless some greater efforts were made by the friends of THE JOURNAL, it must cease with the present volume (Volume IV). If you resolve to continue THE JOURNAL for another year, upon reaching Augusta, I will purchase a draft for \$50, and forward it to the publishers in support of the next volume, and will then seek to procure as many subscribers as I can. I am willing to try and continue the above amount for three years, provided it is needed, and THE JOURNAL sustains its character. I would regret exceedingly to see the work cease."

The following extract from Vol. VI. shows how this promise was kept:

"Nobly did this whole-hearted patron promise to raise \$50 per year, for three years, in behalf of THE JOURNAL; and nobly has he now redeemed that philanthropic promise by having forwarded us \$150 in three years. His proffered support was one means of saving THE JOURNAL from dissolution. To him, in part, is every reader indebted for whatever of pleasure and profit he may derive from the perusal of this and subsequent volumes, as well as of the

three preceding ones. That such a supporter of a publication so useful, should have been raised up in such a crisis, is a subject of devout gratitude. May THE JOURNAL always deserve, and always find collaborators to extend its circulation and augment its usefulness. Of one thing I am certain, that it is not possible to have another in America, if this journal dies; for no other person can be

deserves the warm and hearty thanks of every lover of this great science."

In 1847 Mr. Smith, personally unknown to the editor, O. S. Fowler, applied for a phrenological description of character, which was given without the least intimation as to who he was. The statements then given are so in accord with the accompanying likeness that we think they will



THE REV. E. A. SMITH.

found, ready to stand in the gap, as I have done for five full years, sinking thousands of money in it for the first three years and losing all my labors for the last. Let this journal die, and no other will rise to fill its place, and phrenology will lose one of its great props—its great center of action and influence—and by contributing thus efficiently to sustain it through this crisis of its affairs Mr. E. A. Smith has done a great work, for which he

be of interest to our readers. Mr. Fowler said:

"You have great strength of constitution and power of mind and body. You are from a long-lived ancestry, and are capable of living to a great age. You are also rather slow to mature, yet, like the winter apple, improve with age. You have great flexibility of constitution, and can go through what would break down most men. Nor is it possible for you to

keep still. Action is as constitutional with you as breath. You do rapidly, and keep doing all the time. You overdo, and would long ago have worked yourself into your grave unless endowed with a strong constitution. You must give yourself more time to enjoy life and society. Rest more and recreate. Enjoy yourself as you go.

"You are also endowed with great energy of character. All you do, you drive—nor allow obstacles to stop you. Especially when opposed, do you become determined. Your resistance is powerful, and fortitude great, yet you have no revenge. You are severe on evil doers, yet would not hurt a hair of your worst enemy's head. You make many friends and few enemies. Your brotherly and cordial feelings are strong. Your personal attachments are very many and powerful, and by this means you win many over to your cause.

"You also love children, and they you, and you desire their moral improvement with great earnestness. You also value woman highly, and are every way adapted to enjoy domestic life. You make many warm female friends. They are your best co-workers, and you keep their esteem and attachment. You regard the improvement of the female character as a paramount matter.

"You are exceedingly cautious—not as to what you say, but do; and are wise and safe, yet speak out your real mind, irrespective of consequences. In fact, you are too plain-spoken and open-hearted. Nor are you duly wise or politic. You appreciate property, cannot endure waste, and are industrious and economical; yet your Acquisitiveness desires books, and the means of intellectual and moral advancement. *Your appetite is good, but you are somewhat dyspeptic.

"You lack continuity, come directly to the point, yet do not dwell long enough to say all you would, and hence partially repeat. Your first

thoughts are always your best—follow them.

"You are quite ambitious and aspiring. Sense of honor is exceedingly high. You are unduly disturbed by being censured, and have a very strong desire to rise in the world. You love public life, and are well adapted to support its dignities and command respect. You are naturally polite. You respect others, and are naturally diffident, yet never forget to respect yourself, nor let yourself down. You are especially firm and persevering. No obstacles turn you from your purposes. You are most indefatigable, especially in any moral cause, and have great boldness for the truth.

"Your head is high, hence you love the moral and religious. Desire to do good is your governing motive. You are a true philanthropist, and will sacrifice much to benefit mankind, especially to elevate their morals. You also love religion, and therefore strive to make men better, and develop their moral characters. You are a disbeliever without proof, but adore as far as you do believe. You despond. Cultivate expecta-

*Inferred from his having full Acquisitiveness and large Intellectuals. And this deduction is in perfect keeping with his whole character. All the money he ever attempts to make is by selling books, and these his moral faculties require should be of a high moral character. When a youth the day he left home he found a quarter of a dollar in his path. After revolving a long time in his mind what he should do with it he finally resolved to buy a Testament with it, to sell it, and with both capital and profits to buy others, and so to continue to invest all its proceeds in this way. He finally acquired capital enough to stock a one-horse wagon, and to this day continues to travel, preach and circulate Good Books; and hence his support of our JOURNAL, thinking it calculated to do good. He has published some books of a highly moral and religious tendency, has made several donations to benevolent societies; and though his Acquisitiveness renders him industrious to acquire property, yet Benevolence gives it all away, except what capital is indispensable to carry on his labors of love.

tion. Look more to the bright side of things. Never indulge in gloom. You enjoy beauty much, but the vast and sublime more. Your mind takes a wide range, and your views admit of much amplification. You have also a strong desire to perfect all you touch, and are for improving everything.

"You have great strength of intellect and clearness of mind. You have knowledge, and also thought. You reason clearly and to the purpose, yet mainly from the facts. You love to travel and see men, and then apply all you see and know to practical life. You never forget faces or places, nor remember names or dates. You speak freely, yet have more ideas than words. You express yourself more forcibly than elegantly, and are careful mainly to communicate the

idea, without studying the manner so much. You are remarkably clear and appropriate in your discriminations and comparisons, and are easily followed. You discern character readily, and reason mainly by induction. You are full of thought, and leave a strong and distinct impression on those minds with which you come in contact. Nature has done much for you, and capacitated you to do much for men. You should be a moral and intellectual leader, and are every way adapted for a clergyman. You are not selfish, but live for others instead of yourself."

Every particular above given was verified by Mr. Smith at the time of the examination, and we think our readers will agree with the description when they compare it with the portrait.

THE AMERICAN INSTITUTE OF PHRENOLOGY.

GRADUATING EXERCISES AND ANNUAL ALUMNI DINNER.

THE closing exercises of the Institute, on the occasion of the graduation of the thirty-first class, took place in the Institute Hall on the afternoon of Oct. 27th, 1894. The company then repaired to Zangheri's banquet hall, where the annual dinner of the Alumni Association was held, and proved to be an exceptionally enjoyable affair, both from a gastronomic and intellectual point of view. The following is a list of the faculty and members of the class of '94:

FACULTY.

MRS. C. F. WELLS,
PROF. NELSON SIZER,
DR. H. S. DRAYTON,
DR. N. B. SIZER,
REV. THOS. A. HYDE,
DR. EDGAR C. BEALL.

STUDENTS.

H. A. LITTMANN,
JASON HAMILTON DAVIS,
WALTER G. TOMLINSON,
BURR FRANK BARNES,
KIRBY S. FOSGATE,
JENNIE IRWIN,

WILLIAM MAITLAND ABELL,
RICHARD TREMBACH,
WINTHROP TURNEY,
WILLIAM ALBERT BARRETT,
JAMES MOORE,
GEORGE BRUCKSHAW JONES,
HENRY MYERS WILLIAMS,
WILLIAM JOHN BARRY DALY,
FORREST HILL,
HENRY MARTIN ELLIOTT,
RUFUS W. SPENCE,
LAYULA WILROY PITMAN HALL,
JENNIE MORRIS ELLIS,
ORRIN FREEMONT HALL,
THOMAS W. WHEATLEY,
GEORGE DODDRIDGE ROWAN,
ROBERT ARNOLD ROWAN,
FREDERICH SCHAEFFER ROWAN,
EARLE BRUCE ROWAN,
OWEN HUGH WILLIAMS,
EDNA IRENE SEELEY,
CHARLES TODD PARKS,
CELIA MORRIS HENRY,
LEROY JEFFERSON BARTLETT,
JOSEPH W. CROOK,
DELANIEL LEE YOST, M.D.,
MICHAEL SHERMAN DALY,
EDWARD MARTIN,
WILLIAM BOYD WILSON, JR.,
FRED BABCOCK.

In addition to these and the officers of the Institute there were many

other Alumni and several visitors present, who gave evidence of being highly entertained. We are sure that our distant friends who are interested in our Phrenological work would have been pleased to join our company, or if possible to have peeped in at the windows upon the animated scene, or even listened at the key-hole to some of the eloquent and encouraging words. If the scoffers and skeptics with regard to our noble science could have looked in upon that company of bright and happy faces they would certainly have been amazed, and would have found it difficult to reconcile their indifferent opinions of Phrenology with the intelligence suggested by the appearance of the participants. We should be glad to give full reports of all the speeches, but must limit ourselves to the following synopsis of the remarks made by the members of the faculty and two of the graduating class:

PROF. NELSON SIZER.

Friends, Fellow Students:

I have been talking so long to this class that I hardly know what I may properly talk about; however, I have concluded to talk about dinner. After-dinner speaking in this country has become a fine art. Some men are so expert in it that the national societies can hardly relish a dinner unless they have it spiced with Chauncey M. Depew or some other post dining orator, and no matter where he speaks or before what society he may be called to utter his sentiments, he is always supposed to make the best speech, the most fitting, the most witty speech and the most satisfactory one.

But why is dinner the occasion of good speaking? Why is it the occasion of good feeling? Why is it "a feast of reason and a flow of soul," as well as a feast of feeding and a flowing bowl? I have been thinking that the faculty of Alimentiveness is the first one of all the faculties that becomes voluntarily active. In all the animals and in all mankind, food is the first want of young life, and somehow, instinct, the voice of God, acting through these young and inexperienced candidates for wisdom and knowledge, leads them to know what they want first, and to know where to find it; and sometimes they use a napkin and sometimes they do not. If feeding then, or if dinner is the first want of human life, what does dinner do for the eater? If

it be the first need of life, and if it be the first feeling that comes into voluntary activity, it must be all-important. With every breath we draw and with every pulsation of the heart, we exhaust something of vitality, and that exhaustion of vitality has to be replenished by food; and so dinner means manhood, it means talent, it means longevity; dinner means hope, happiness, joy, power, skill and everything that is worth anything in human life. But dinner does not do all this for everything that eats. It fills the bill, however, of the ant, the elephant and the mosquito, and especially of the mosquito. It fills the bill of their life; it ekes out the existence which they came here to manifest; but now let us make a contrast. For instance, take a large brain of a human being, which, in fact, measures and weighs four times as much as that of the mighty horse; while the bone and muscle of the horse are ten times more abundant than those of man. I will imagine a bard of Ayrshire, a farmer as well as a singer. He takes his own breakfast of oatmeal and gives the same to his horse.

When Johnson made his dictionary you remember he hated the Scotch because the Scotch had done some things that disturbed the harmony of England when she was trying to get her hands on both sections. This great man of letters could not help venting a mean spite on his old enemy, Scotland, and so in his dictionary he said: "OATS, a kind of grain which in England is fed to horses and in Scotland to men." When a clever Scotch editor was revising the dictionary, he made this answer: "Yes, Dr. Johnson, that is true; but where will you find such horses as they have in England, and such men as they have in Scotland?" And I think he got square with him.

The farmer bard divides his breakfast of oatmeal with his horse, the horse probably taking the larger share because he is larger in body. Then they go into the field together to work, having been nourished by exactly the same food. The horse pulls the plow and turns the unwilling furrow in the fallow field, getting it ready for the crop, and the man works also at the same task. He steadies the plow, walks between the plow handles and uses his extra intellect to guide the horse where the horse needs guiding; and at night they both go home wearied, and the horse sleeps; his day's work has ceased, except in so far as the coming harvest may yield something for other dinners. The horse has worked simply for the dinner for himself and his master, and the master works for the same thing, but in the evening, instead of sleeping like the horse, he composes "Highland Mary," which is handed down through the ages long after the bard himself is dead. That work is not forgotten as is the work which the horse does.

In what language and in what age are embodied more beautiful, tender and pathetic sentiments of love, trust and elevated sadness than in the following lines:

"Wi' many a vow and locked embrace,
Our parting was fu' tender;
And pledging oft to meet again,
We tore ourselves asunder:
But, oh! fell death's untimely frost,
That nipt my flower so early!
Now green's the sod, and cold's the clay,
That wraps my Highland Mary!

Oh pale, pale now, those rosy lips,
I oft have kissed so fondly!
And closed for aye the sparkling glance,
That dwelt on me so kindly;
And mould'ring now in silent dust,
That heart that loved me dearly!
But still within my bosom's core,
Shall live my Highland Mary."

Another day this bard plows with the same horse; they feed themselves with the same nourishment, and at night the horse sleeps again, and perhaps dreams of his next day's dinner, while Burns gives to the ages, "The Cotter's Saturday Night," too lengthy now to quote, but too pious and precious ever to be forgotten.

At another time, after carousing with a lot of jolly friends, he gives us "Tam O'Shanter," and so "Highland Mary," "The Cotter's Saturday Night," "John Anderson My Jo," and "Tam O'Shanter" will live as long as men shall live, hope and rejoice; long after the horse and his labor have been forgotten. The horse filled the plan of God in his organic constitution, but dinner for him was simply to enable him to perform drudgery and provide for more dinner for himself and others in the harvest field. Burns worked just as hard as the horse did, but when he got through with his work there was something left of him besides the plowed fields, the crop and the harvest.

Near to him there lived another Scotsman who was nourished and amply, by the same simple, nutritious food; and he gave us "Ivanhoe" and "Waverly," and they will live long after Abbotsford will be crumbled in ruins. The memory of these marvelous works will not perish.

That is the higher phase of eating, nutrition, digestion and vitality. Food crystallizes into ideas and immortalizes them, so that they do not perish with us or die with the body. Alexander Pope, across the Tweed, gave us his immortal "Essay on Man," and Milton sang the "Paradise Lost," and tried to give us "Paradise Regained," but the task of "Paradise Lost" was enough for him, and we must try to reclaim it for ourselves.

Byron, a man of marvelous talent, and

the best versifier in the English language, gave us the "Battle of Waterloo," "English Bards and Scottish Reviewers," and lots of other things; but his work of life was below the Seven Stars. He never had that inspiration of soul that lifted him above the mist of the morning, or the fragrance of the flowers by day; but he was a man of wonderful talent, although other men had better moral sentiments and more seraphic imaginations that lifted them above the things of this secular life.

Then we come to Thackeray, the inimitable humorist, who has given us "Vanity Fair" among his contributions to the world's literature and the world's joy. Dickens, the great story-teller, has given us "David Copperfield," "Dombey & Son," "Bleak House," and other good things too numerous to mention.

Coming across the water we have Francis Scott Key, who, while a prisoner of the English near Baltimore, in the late war with England, immortalized his memory by writing the "Star Spangled Banner," and wherever that floats, "O'er the land of the free, and the home of the brave," his name is imperishable. Man's best work does not perish with him, for it comes from that larger moral and intellectual brain. A horse has a comparatively small brain, and his work is solely of earth and dies and perishes, while man has a larger and higher type of brain; he can work with the horse and he can also produce "Highland Mary," "Waverly Novels," and the rest of them.

John Howard Paine, who never had a home, wrote that marvelous poem, "Home, Sweet Home," which is sung wherever homes are prized and honored.

William Cullen Bryant, the farmer boy of Massachusetts, at eighteen years of age, after his daily toil was finished, wrote "Thanatopsis," the greatest poem on human nature ever produced. He struggled all his life to write something which would surpass that, but he did not, and the poem has never, perhaps, been surpassed by anybody.

Dr. Oliver Wendell Holmes, who has just passed to the brighter and better land, as we call it, made this land bright while he lived here. He was the "Autocrat of the Breakfast Table." He knew what eating meant; he knew that the dinner table furnished a feast of reason and a flow of soul, as well as a feeding of the body for the support of the brain; and the queer conceit of the "Wonderful One-Horse Shay" shows him a brilliant wit as well as a philosopher.

Harriet Beecher Stowe gave us "Uncle Tom's Cabin," which has been more widely published than any other book, except Bunyan's "Pilgrim's Progress." Harriet Beecher Stowe's work was written as a contribution to *The National Era*, a Washington paper, for a hundred dollars, and when

it had advanced to a certain point and developed a dramatic richness unexpected, the man for whose paper it was being written thought he had paid too little for it, and he sent another hundred. When it had apparently fulfilled its mission, and was about to perish in the files of a newspaper, a woman, the wife of Mr. Jewett, a publisher of Boston, persuaded her husband to listen to the reading of some of "Uncle Tom's Cabin" from the file of *The National Era* she had laid up. But he treated her request lightly, though they sat down one Saturday night and she read to him until one o'clock in the morning, and he eagerly listened, like a child who was hearing fairy tales for the first time. The next morning, having finished their breakfast, he said: "Now, Mary, let us have a little more of 'Uncle Tom's Cabin.'" So she read until nine o'clock at night, and finished the story. The next morning he wrote to Mrs. Stowe, asking her if he might publish the articles in a book, and she wrote back saying he might publish on such terms as are usual. So the book was published, making both author and publisher rich; and I think the great war, with its outcome resulting in the freedom of the slaves, was the direct effect of that great book, "Uncle Tom's Cabin." Mrs. Stowe lives now at Hartford, Conn., but I am sorry to say that she is merely vegetating. Her father died at the top, and for years was imbecile, but Henry Ward Beecher was fortunate enough to be called away in the full glory of his strength and mental power, as he often expressed the wish to be.

Another marvelous manifestation of mental power derived from the eating of proper food which was converted into manhood, power and talent, was shown in Abraham Lincoln, when he made his speech at Gettysburg. It was a simple, pathetic speech, and Mr. Seward and Judge Chase, both great orators, who listened to its delivery, felt a little afraid that it was not quite up to the mark, but when the speech came to Boston, and was read by Edward Everett, the most polished orator we had for a generation, he said that he would give all the orations that he had ever made for the authorship of that single speech of Lincoln at Gettysburg. It is a classic, and it will be handed down the stream of time and remembered longer than Lincoln's name, if that were possible. The sentiments that he expressed are immortal.

Talent does not merely make speeches, but the mastery of mind over matter is marvelous, as is shown in the work that is done in the realm of science and mechanics. Franklin with his kite and key dallied with the lightning and learned its secrets, while Prof. Morse harnessed the lightning and sent his messages around the world. What would life and society amount to

to-day if the work of Franklin and Morse had never been done?

Ericson worked in iron and timber. He revolutionized the commercial world by putting the propeller, instead of side-wheels, into sea-going vessels, and when war came he gave us the Monitor, which brought us victories and revolutionized the modern warfare in the naval world; and to-day in China and Japan they are using the inventions which Ericson made and are fighting each other like maniacs.

Now, look at Edison; consider what he has done. It takes my breath away when I think of it, that we can vocally talk as friend to friend across the continent, under the sea, which latter will happen pretty soon, and that with his phonograph he treasures up an oration or a concert to be repeated in every tone a thousand years hence. Think of listening to St. Paul reasoning "of righteousness, temperance and judgment to come," before a trembling Felix, in his natural voice! And then the kinetoscope of Edison! That takes a man's breath not only, but amazes the sight; and it is said that the Kinetoscope Company has just offered \$50,000 for the privilege of immortalizing their great work by depicting every motion of those men who are invited to fight their promised battle in Mexico (I need not mention their names) and thus have the match or battle spread out like a panorama, so that every blow, every knock-down and every show of blood that is made in that scientific and highly refined effort between a couple of immortal souls, can be shown for ages to the eager gaze of those who wish to see it. Think of an evening party, a school, a workshop of artisans or a dancing party photographed by an apparatus acting a thousand times a second, and thus have every motion depicted.

But, going from the gay to the grave, there is Webster, with his great orations at Bunker Hill and his reply to Hayne in the United States Senate, more than sixty years ago, speeches which have never been surpassed in their line and probably never will be. And then there is Jefferson, who manifested his talent in a different direction, but which was all derived from the same fount of nutritive power. He gave us the Declaration of Independence. Washington gave us his Farewell Address; John Edward Newman gave us "Lead, Kindly Light," and Christ gave us the "Sermon on the Mount."

MRS. WELLS.

My words will be very few. I merely wish to say to the class that I wish them to consider themselves as members of the Phrenological Family, and to help it on all they can. Let us hear from you all frequently. Let us know what you are doing and where you are. (Applause.)

DR. BEALL.

After having lectured for so many weeks without the least restraint before the class, with a feeling that we were simply in a home circle, as it were, it requires a little effort on so short notice, to adopt a different method. Not that we are under any restraint so far as the present company is concerned. But, with the sharp-eared, nimble-fingered stenographer before us, we are reminded that every word we say is to be copied *verbatim et literatim*, and probably published and sent out to all parts of the world. Therefore it is perhaps fitting that in some measure at least, we consider the larger audience to whom we now unconsciously speak.

It is difficult for me to forget the fact that we Phrenologists occupy the position of reformers. The antagonism that I have personally encountered has kept this idea before my mind, and I do not wish to forget it. On the contrary, to my thinking, it is important that we should all remember our relations to the world as promoters of civilization, not only in order that we may work more effectively as to the quality of our labor, but in order the more certainly to bring the public mind into a condition of receptivity. In other words, it is to our interest that the public should understand the dignity of our work, as well as for us to perform that work as we ought to do it.

I wish to do all I can to uproot the idea that the mission of phrenologists is merely to entertain people after the fashion of fortune-tellers, by describing a few salient points of character which perhaps are already known to themselves. I will go further; even the most complete analysis of character which we give those who consult us, priceless in value though it is, does not represent the whole or even the greatest feature of our work. Let us announce, and continue to announce to the world, that the science of Phrenology discloses for the first time in the history of our race, the true standard of human nature to which all the complex institutions of our legislative and social fabric should be made to conform. This is the central idea which the distinguished phrenological philanthropist, George Combe, promulgated with such eloquence and force. Let us not lose sight of this; for however imperfect we may be as character readers in the consultation room, or on the public rostrum, the great principles of our science remain as solid as the eternal rocks. These principles are of inestimable advantage to the world whether we succeed as individuals in our profession or not. There is a radical difference between the philosophical and the practical aspects of our science. Please understand me. I do not for a moment underrate or disparage the importance of Phrenology considered as the art of reading

character. Indeed I have the most exalted ideas of our professional skill and usefulness. I only mean to call attention to this other thought, which it is so easy for most of us to forget, and of which the world at large is almost totally unconscious.

To make the idea clearer I will give one or two brief illustrations. Phrenology, in the sense of a model or standard of human nature, establishes the fact that the mind is made up of sentiments which require education just as much as the intellectual powers. Phrenology shows that there are certain elements of impulse and feeling, the correct development and guidance of which are just as essential in the building of a well-rounded character as the acquisition of knowledge. Now, it is customary in our educational systems, in our schools and colleges, to regard the mind simply as an intellectual hopper into which there should constantly be poured a grist of mere scientific facts. That is to say, our schools pay attention almost exclusively to the labor of imparting knowledge, and when they do make a pretense of training the moral faculties or social feelings, their efforts are so lame and blind as to be practically of little or no value. The point is this: educators must know the exact number and nature of the primary elements of the mind in order to cultivate them, in the same sense that the pharmacist must understand the nature of his drugs in order correctly to compound a liniment or a pill. Surely no one would be willing to swallow the contents of a bottle taken at random from the shelves of an apothecary, and yet this is an absurdity precisely analogous to certain laws, educational methods, and many ideas of government which we are expected to accept from many of the world's leaders to-day, who are confessedly unacquainted with the constitution of the mind. Law makers frame statutes intended to regulate elements of human nature of which they possess only the most vague and indistinct notions.

Many clergymen endeavor to stimulate moral faculties which they are unable to define. For want of a specific mental science, superintendents of insane asylums blunder along in their efforts to treat the mentally diseased. Authors of books make appeals to human nature without understanding the material they wish to influence, and the same is true of the vast army of editors who control the newspapers of our land. And thus we might continue throughout the whole maze of human life.

It is thus demonstrable that Phrenology is of the utmost dignity and importance when considered apart from its application in individual character reading. Let us perfect ourselves as practical Phrenologists as far as we can, and in the exercise of our art let us accomplish all the good that we can. But in defining our position before

the world, to use a homely phrase, let us put the best foot foremost, and compel the public to admit that whatever we areas individuals,—that whatever faults or shortcomings may be charged to us as practitioners of our science, the subject of Phrenology itself is and must be entitled to the most profound and respectful consideration.

In conclusion, allow me to say that I have not made these remarks in a spirit of apology for practical Phrenology or Phrenologists. I am not discouraged about the people who are representing the science. I want to say that I am sincerely proud of this present class. I have been delighted with the intelligence, politeness and extraordinary orderliness and attentiveness which they have uniformly displayed. When I compare their deportment and average culture with that of any class which I remember to have seen in any medical college, I am pleased to say that the superiority is on the side of our Phrenological class of 1894. I am confident that these graduates will be a credit to the science, to themselves, and to the Institute, and from the bottom of my heart I wish them splendid success.

DR. DRAYTON.

I have been greatly pleased with the progress of the present session of the Institute. From the beginning to the end I have been extremely interested in the class individually, and I certainly found this afternoon that all my expectations were realized. If I had a prepared speech to offer you to-night, you would find that all my sentiments had been pretty thoroughly voiced; and that you, by that peculiar psychological inter-relation which is said to exist among kindred souls, had absorbed my ideas and so, as it were, "stolen my thunder."

I might attempt to enter into the domain of poetry and endeavor to outdo the poet of the class, but I shall forbear in that line, especially as my extemporaneous verse may not jingle harmoniously. I heartily congratulate you for this very happy termination of so interesting a course, and I wish you all the utmost success. If I had not known it before, I should certainly know it now by reason of the great thoughts advanced by the great minds to the right and the left and in front of me, and by the inspiration which prevails among us all at this time, that we have one of the greatest truths that the Divine Father has committed to man for our advocacy. They say that Phrenology is a recent affair, but I think that you have learned, or gotten a hint or two from me that practical mental science is in some respects a very old thing, and that its study takes us back to the past, where there was some wise father, philosopher or some teacher who

had at least three of his brain cells set especially apart for a subject like this, and that he did not allow them to atrophy or go to seed.

Truth is eternal, and being so is always progressive. It tends upward, and though some of its principles may appear minute they at last assume a shape that is definite and valuable to man.

Last summer I dropped two or three times down to the seashore. I was walking along the beach one morning—a magnificent morning. I had gone out early to enjoy the splendors of the rising sun, and as I was walking along I noticed the ripple marks on the shore, caused by the receding tide, and I noticed that these marks were arranged like so many minute terraces; one above the other—up—up—up higher—higher—higher; and I thought at the time that the work of the mighty ocean there represented a figure of the eternal truth, always advancing upward, teaching a happy lesson, inspiring to action, promising results of elevation and advancement. This subject of ours may be said to be one of the steps in the great terrace fabric of truth, and one of the most important steps. Now this subject is yours, and I feel assured that with your earnestness you will succeed in its application among your friends and your audiences. Again I congratulate you and wish you abundant success wherever you may be.

PROF. HYDE.

You know it is a dogma that belongs to remote antiquity, that if a man happens to teach elocution he ought to be a speaker, but that is not true. A man who teaches elocution is not expected to talk well; his business is only to teach others how to speak, and they have all been doing it so well that I am afraid I should lose some of my reputation if I tried to outdo Brother Abell—if that is his name. (There are so many Bells here that I get utterly confused, and they all have a tongue, too.)

However, I suppose I must try to say something, but, while I have eaten and enjoyed my dinner, there is not yet time for it to have become assimilated so as to give me the ability to make an off-hand speech. Furthermore, Professor Sizer, in his address, I think, somewhat encroached upon my domain. He gave us to understand that food produces intellect. He dwelt more upon the fact that food produces intellect than that it produces other things, and he did not give us the reason why the horse, eating the same food that the man did, got simply strength and intelligence, while the man got the power to produce a poem. He did not explain this, and no doubt it is for me to do so, because the reason belongs more properly to my subject. The difference between the man and the horse eating the food is that

the man can express himself and the horse cannot; and if the horse did have the power to express himself, he might have as grand thoughts as the man. So then, in speaking of intellect, we must remember how much expression has to do with it; for, when the food is converted and produces intellect, it is the power that a man has of expressing himself in a poem or an oration that makes it immortal. If a man did not have the power to express himself, no matter how grand, beautiful and elevated his thoughts were, they would never become immortal because they never would become known. So then, if a man has this power of expression, he must seek to cultivate it and make it polished and harmonious, so as to be better able to reach the hearts of the people.

We have been told that food, by conversion, produces thoughts, feelings, emotions and ideas, all of which the horse may have without the human power of expression; but the ideas that are produced in men are sometimes strikingly contradictory, as is shown by two great men of our day, both representing grandeur of style in literature; viz., Carlyle and Ruskin. Carlyle was a vigorous and striking writer, but on account of his morbid and gloomy feelings he sometimes expressed morbid sentiments, as for instance when he said, "Eternal silence is the duty of man;" while Ruskin, an equally great writer, says just the opposite. He says: "The grandest and best thing a man can do is to see a truth and then tell it impressively to his fellowmen." Now, to see and to tell are the two great elements in knowledge; they are the two great elements in manhood, and the two great elements in success. Phrenology has unfolded to you the grand vision of the human moral and intellectual constitution. She has placed it before you as if it were a great organ with many keys. That organ can produce music, but it will only produce music when the tuning master comes and touches each key to bring the notes into harmony. The note of Veneration, the note of Benevolence, the note of Faith, the note of Combativeness, the note of Destructiveness, the note of Imitation, the note of Philoprogenitiveness, and the note of Conjugal Love must all be blended together in one harmonious whole, so that a man's soul is in harmony with his Maker and with the Universe, and then he will rise upward as a complete and harmonious being.

Perhaps the most startling picture in regard to harmony that I ever had in my life was a good many years ago, when I entered a Congregational church in my native town. It was a large church and I was but a little child, and the floor of the church was littered and cluttered with the pipes of the church organ. There were the soft pipes, there were the large pipes, the small

pipes, the long pipes, and the short pipes. They were all lying there in complete disorder, and yet to my childish eyes they seemed beautiful. I looked at the painted and ornamented pipes, and the poetic elements in me were stirred at the sight, and yet all was confusion and disorder. By and by the carpenter came and he set up the pipes, but still there was disorder and confusion as far as sound was concerned. Then one pipe after another was tuned, and there was harsh music, grating music; but by and by the master musician came and tuned every pipe, the bass and the alto, the high and the low notes, the soft and the loud tones, and then he played on the organ, and a burst of glorious music came forth, swelling upward to the arches, and then the congregation lifted up their voices at the sound of the music, and all in perfect harmony they offered to the Almighty Being their songs of praise and devotion. Now, if you take human nature as a grand organ—if you are a master musician and can play the keys rightly—you can produce grand results. Through Phrenology you have learned to know men, and its teachings will help you to touch the right keys in the human constitution.

Finally, if it is possible that animal life can be converted into intellect, and that intellect into emotions and ideas and expression, is it not possible that this intellect can be converted into spirituality, immortality and into a new life, to the praise and glory of our Maker? I wish you God-speed in your chosen profession. There is a grand opportunity for you all in this field to speak the great truths which Phrenology has given to the world, and to evoke splendid harmony from this wonderful organ of the human constitution.

MR. BELL.

I find myself enthused with the ideas and thoughts suggested by those who have preceded me, and as I now look upon this class about to start out from this college of Phrenology, to become valued teachers among the people, to announce and illustrate this new science of the mind, I catch the faith and enthusiasm that stir their blood, and I envy them that they are so surcharged with this grand subject that lifts them out of the ordinary, humdrum labors of life, and places them upon a large and exalted plane of human usefulness.

To change the metaphor, that line comes to me, "Behold the Sower Went Forth to Sow;" and I look upon these students—these men and women—as sowers of phrenological seed throughout the length and breadth of the land. These truths like good seed shall be sown wisely by them upon good ground to spring up and bear fruit, some thirty, some sixty and some an hundred fold. Think for a moment of what this seed consists—the works of Gall, Spurz-

heim and Combe, and we may add here, although in the presence of some of the authors, such books as *Brain and Mind*, *Choice of Pursuits*, and *New Physiognomy*—all great works, representing the grandest mental science known to-day among mankind, and which will enlarge, enlighten and ennoble the minds of men to the remotest generations.

We remember reading how Gall, lecturing in Vienna with great success and acceptance, and unto whom came the great, the learned and the rich, to listen and be taught of him in his new philosophy; we remember reading how there came one pupil into whose heart fell this new learning, whose nature like good ground received the good seed, and it sprang up and bore fruit an hundred-fold—and Spurzheim, in his turn, went to Edinburgh, and there of all those who came to hear him, history makes mention by name of only one; and it happened to Combe in his connection with Spurzheim, as it had happened to Spurzheim in his connection with Gall, that Combe's mind was awakened, and he became converted to the new science, and afterward wrote that book, "*The Constitution of Man*," which is one of the great books of all time, and which marks an epoch in human thought and human civilization. Then Spurzheim and Combe came to America and lectured in different parts of our country, and it was largely through their direct personal influence and lectures that O. S. Fowler, L. N. Fowler, Mrs. Wells, S. R. Wells and Nelson Sizer received the phrenological seed into their natures, and you know how that seed like the grain of mustard seed has grown, until now it spreads not only over the whole of our land, but has been carried by them across the continents and planted in the far islands of the sea.

Thus come we to this day and to this hour, and you in your turn start out as sowers of the seed. I do not know why, but when I see the brethren of this science assembled solemn and earnest, as they are now and were eight weeks ago at the beginning of this course, there is forced upon me the thought of the time when the disciples of the Lord were assembled in the upper chamber at Jerusalem waiting for His appearance after His crucifixion, and when I think of that silent, intent group of disciples and apostles, I can understand how the air was surcharged with affection and inspiration; and somehow when we are gathered together I feel that "there's a divinity that shapes our ends, rough hew them how we will," that is calling us forth to a special work in this world; and I believe that I may venture the assertion that you have been called from the East and the South, and from the far West and limitless North, and have been impelled to come up to this Institute

of Phrenology, as if to your Jerusalem, and here to receive your education and inspiration and credentials, and to go forth among the nations and sow the seed of this new teaching and its new doctrines. You shall be like John the Baptist—like the voice crying in the wilderness, "Make straight the paths of learning." Behold! we come with a new science that shall render men superior and give the character reading of God's writing in the face and on the minds of men. Be not discouraged because you are not in numbers like the sands of the seashore, and that your numbers are more like those that can be held on the palm of God's hand. Do not be discouraged at this. In the old days when the Lord chose certain warriors out of the great hordes of Israel. He selected only the few that lapped the water like dogs, and when Israel exclaimed in alarm, that these could not hope to be successful in the battle, it was found that they were more than sufficient for the purpose; so when the three hundred Greeks in the Pass of Thermopylæ, representing the truth and the civilization of their time, and through them all subsequent civilization down to this day, successfully held back the invading and overwhelming barbarism of the millions of the Persian Empire, they could not have been thought equal to that vast and far-reaching emergency, but they were; and in that terrible crisis, with the fate of civilization hanging in the balance, that mere handful of three hundred Greeks forced back a whole nation. Thus, let us take courage. It is not in numbers, but in faith and in enthusiasm that we conquer ignorance, prejudice, contumely and contempt. We put down untruth, not by the power of numbers, but by the convincing logic of overwhelming facts, thus compelling submission to the truth. And I say to each of you, go forth with undaunted hearts and be of good courage, for the truth is with you, and the truth is mighty and shall prevail.

Let us examine this for a moment. Aristotle found, as he thought, that the soul resided in the heart; Van Helmont declared it was in the stomach; Descartes proclaimed that it was in the pineal gland, while Drelincourt held it to be in the cerebellum. But these philosophical propositions have died out of men's minds. On the other hand, Gall was the first to perceive and declare the true structure of the brain, and that the soul of man found its natural home and residence there. And this fact, though proclaimed by but one man, is now accepted by the world. You observe it needs not numbers, for sooner or later truth compels assent. Notwithstanding he was the discoverer of this wonderful fact, which had been concealed from the eyes of the wise for so many generations, nevertheless he lectured in London, in 1823, to

an audience not numerous enough to pay the expenses he incurred. I say this not so much with fear that in your lectures you may find the same fact often to be true, but if you should, then for you to remember that your great predecessor, Gall himself, went through a like experience.

I might add here, speaking with some playfulness, possibly, that it has not always been thought that "cheek" was an especially desirable quality, or that brass in one's composition was a metal highly to be prized, and yet with enthusiasm and earnestness, expecting not to be contradicted, I beg each of these students to take all the "Gall" into their nature that they can.

I think I shall not detain you longer except to express this parting word, that as we said at the beginning, so now we say at the close of your eight weeks' course, that we have come in contact with each other, and have come to know each other personally, and you are now about to start for those different places that you have selected for your labors; and we want you to carry away this thought, that as we remain here in New York at our appointed tasks, we will follow you in your interests; we will foster the remembrance of your personalities, of your studiousness and of your regular, constant and devoted attention to your duties, and we feel certain that many of you, in fact most of you, will make your mark in this line of human effort sooner or later. We have in mind some of you who, we think, cannot fail to develop largely and grandly and to perform splendid and lasting work. In fact, we do not see how you can possibly disappoint this hope of ours, unless you are utterly false to all those signs of character which we believe we have found and read in you; and we give you our word of cheer, of courage, of hope and faith, and we implore you ever to remember the nobleness and the grandeur of your calling; ever to keep in mind that you are chosen vessels, set apart for a chosen work, and by the dignity of your deportment and the sincerity of your lives to add convincing argument to your teachings. We trust that you will write us and keep in constant communication with us, and if in any way we can do anything to assist you by any efforts or suggestions of ours, feel sure that you can command our affectionate interest and helpful action.

MR. ALBERT TURNER.

In behalf of the Alumni Association I give you greeting and wish you Godspeed in the work you have undertaken to do. We, who have gone through the Institute, all know the benefit of the work, and we know that it is a matter you will never regret. Whatever you may do, whether you take up phrenological work, or whether you take up work in different phases of

learning or any other activity, this will always be a help to you.

I think that I may safely say that if there is anyone who knows of the craving there is on the part of the people to know about Phrenology, I am in a position to know about it. My long connection with the business department here brought me in contact with that element and with that desire. The people want to know what you have to say, and you have only to take it to them in good form and in a proper manner to get a hearing. This is demonstrated by those who are successful, and it is certainly the case on account of the great value of the subject which you have in hand.

I am sorry that the president of the Alumni, or the vice-president, is not here to speak for the Association, rather than that I should have been called upon to do it. We would have been glad if the Alumni Association had been organized at the start of the Institute and that it had enrolled among its members all the graduates. We believe that a bond of fellowship and a bond of working strength would be a development in that way; but the membership of the Alumni Association is not large; it is only three or four years since we enrolled members in this way. We need this bond of fellowship, and so we would be glad to have any of the members of the present class who have not left the city, be present with us at the Alumni meeting. We invite as many of you as can, to be present with us, and now, personally and on behalf of the Alumni Association, I wish you all Godspeed.

MR. WM. M. ABELL, FOR THE CLASS.

While sitting here I have been endeavoring to find a reason for being called upon a second time to-day to represent the class, and the only satisfactory one that occurs to me is the fact that it has been demonstrated that you have no conscience.

When the dinner committee asked me to respond for the class, I tried the advice that Mr. Einstein gave his son, who was a prominent player in the Young Jerusalem ball nine. Mr. Einstein was on the bleaching boards watching the decisive game of the season. "Jakie Einstein to the bat," yelled the scorer, and Jakie stepped to the plate; twice he fanned the air, and then lined the ball out over the second baseman's head and ran to first. "Run, Jakie, run!" yelled the old gentleman from the bleaching boards, and he started for second; but the center fielder had fielded the ball to second and Jakie was caught between the two fires. Gradually they narrowed him down to close quarters, and Jakie's hole was getting smaller and smaller, when the old gentleman excitedly shouted out, "Jakie, Jakie, vy don't you combromise, vy don't you combromise?"

Well, I tried to compromise with the committee by agreeing to say a few words, if they would get some one else to respond for the class, but they would not compromise. After hearing me speak this afternoon they concluded that I needed practice and were determined to give it to me. But now after having digested the lectures for you by reporting them, if you think I am going to get up here and help you digest your dinners by amusing you, and furnishing you, as a last dainty morsel, tongue garnished with brain, you are mistaken. My tongue is dry, and my brain is nearly exhausted; there are only a few gray cells left, and I want them for seed.

I thought when I made the valedictory address that I had gotten rid of the class, committee and all, but it seems not; and now that I have the floor it is a good time for me to get even with the committee. There is Mr. Park. We had a man in college who weighed about three hundred and fifty pounds, and we used to liken him to a city block, but I never saw a man before so large that he was a whole park. (Laughter.) Prof. Sizer: His name is Parks; there are two of them. (Laughter.)

As we came over here he suggested that I should have more vitality, and I have been wondering where he got all his. I have had him right in line at this dinner and have seen him clear the table right and left. He reminds me of the Scotch minister of whom it was said, he kept the Sabbath and everything else that he could lay his hands on; so I do not wonder any longer where he gets his vitality. He lacks one thing, however, and that is, he does not ask questions enough to get all the facts. (Laughter.)

And there is another member of the committee, Mr. Barnes; he does not say much, or ask questions, but he keeps his ears open and seems to get it all. He reminds me of two Irishmen who were talking with each other about the remarkable power of their senses, and Mike, wanting to outdo the other, pointed to a church spire about a mile away and said: "I say, Pat, kin ye see that fly waulking on yonder church staple?" "No, Mike," answered Pat, "I can't see him, but I hear him stip." (Laughter.)

The class of 1894 is built of good timber, and the course of instruction should make the class a success as individuals. The marvelous amount of information given in the course is a revelation to me; and when I think of the scientific research, the philosophical method and the marshaling of practical facts so vital to our every day life, and the orderly manner in which they have been presented to us, I wonder that more do not avail themselves of the ad-

vantages of the course. It seems to me that it cannot be generally understood what is given here; and it is for us as members of the Phrenological Family, as Mrs. Wells now calls us, to aid in letting the world know what the American Institute of Phrenology has for them. Before coming here I had no idea that the course was so comprehensive.

We have had special advantages and gained a great deal of good from being here. And I know that you all appreciate it, and as we have listened to these lectures there have fallen, as it were, scales from our eyes, and let in new light upon character and mind. And the character of friend and stranger, as read in the light of phrenological science, will gain in brightness and interest, especially to those who, like myself, knew nothing about it before they came here. (Applause.)

MR. PARKS.

I am only too glad to have an opportunity to express my love and gratitude to this faculty. I think they have taught us during the last two months the grandest science of the age. Money could not buy what I have learned here in the last two months.

I want to thank Dr. Drayton for his metaphysical demonstrations in explaining to me that Phrenology is a truth. He proved it to me positively, and I am thankful to him for it, and I shall always remember him. I want to thank Dr. Beall for his fine, æsthetical distinctions in the different temperaments and faculties, and I shall always remember him; and then when I think of that good old lady up there who has gone through so much, and who has sacrificed so much in order that Phrenology should stand with its head up in this country, and be free from all fakirism and charlatanism, I feel like bowing my head in reverence to her. When I think of Professor Sizer, who has gathered together so many facts for our benefit, and has given them to us so bountifully, so patiently, and so lovingly, words cannot express my feelings.

I read the other day in a Swedish newspaper that in the sixteenth century there were a great many people who lived to be from 100 to 125 years of age and upward, and also that there had been a gathering of savants to study into the cause of this longevity, this remarkable longevity, as there is not much of it at present, and I want to give a toast right here, and we can all drink it in water, as we are temperance people: May Mrs. Wells and Professor Sizer live to be as old as the very oldest of those Swedish people, and may they live in health, strength, and all their present usefulness. (Applause.)

CHILD CULTURE

CONCERNING BOYS.

By S. ROSALIE SILL.

THERE has been a great deal said about boys, some people even going so far as to term them "a nuisance." But if the world is to have men, boys must be tolerated. Tolerated, did I say? We should do much more than this. We should strive to have the most perfect boys possible. In order to have good men, we must first have good boys. If we desire to have our boys grow up in an orderly, acceptable manner, what should we do in order to accomplish our wish?

Could it possibly be by continually thwarting them in their natural inclinations? Always telling them in tones which are anything but pleasant: "Don't do that," while we never trouble ourselves to tell them what they could or should do, is one very sure way to spoil them.

One rainy day a dear old lady taught us a beautiful lesson, by going out and bringing in her apron full of blocks which she poured down by a restive little boy. She said: "If you want good boys you must keep them busy."

It is more difficult to keep some boys busy than others, because the Creator evidently intended them for the doing of something peculiar. Such boys should be carefully studied, in order that they may be helped to grow rightly. Should a boy take special pleasure in getting bugs and beetles, or flowers and plants, do not throw them out of doors, with a threat of what you will do should he dare to bring more of them. Or should your boy be ever fashioning wheels and showing a love for the

whir of machinery, do not reprimand him for causing a litter on the kitchen floor, but rather encourage him.

We have often thought that one serious trouble with the boy is that he is something like Noah's dove—*sent out*—having failed to find his rights fully recognized within the home ark. If possible let a boy have some room or corner he can call his very own, where he can follow the line of work he best loves.

If your boy is inclined to be social, as most boys are, let him have the privilege of a young friend to dinner occasionally, the same as your daughters.

Is it not well to study your boy's associates? It may save you much future trouble.

Should you be puzzled over what would interest your boy, so as to keep him off the streets and away from questionable places, there are those who can tell you what your boy is peculiarly adapted for the doing well.

You do not care to take the trouble? Pray, tell us which would trouble you most, the consulting of some one who knows, or having him become as those you oftentimes see staggering down the street?

One comes across a large number of aimless men in life—men who scarcely count save when wanted to cast a ballot for some political party—who, had they been started early in life, along some line of congenial employment, would have been an honor not only to themselves and family, but to the nation as well.

PRENATAL INFLUENCE.

A COMMUNICATION recently published in the *Arena* runs as follows:

I am the happy mother of one child, a daughter, born of love, not lust, who is now twenty-five years old. I believe in reincarnation. I make this statement that I may be understood in declaring that the ego about to take upon itself the human form does unmistakably affect the mother in very many instances; sometimes during the entire period of nine months, again only for a few days, weeks or months, according to the mother's physical strength, mutual peace, and, above all, her material circumstances. If she is free from care and anxiety, surrounded with all that may tend to help the love nature, she will overcome unpleasant traits of the soul that has been attracted to herself.

In my own case I was for the first six weeks overcome by an inexpressible loneliness, feeling sad and full of grief; after that period my surroundings were more to my liking, and I very soon became joyous, hopeful and ambitious. I had a desire to become a great musician; I was filled with regret that I had not a musical education. At that time I had never known of prenatal influence or "reincarnation;" only had been warned by an elder sister (my mother dying when I was very young) that I must be very careful not to "mark" the unborn child by "any unpleasant sight—that I must always think of my condition and never put my hands to my face in fright or grief." This was to me a revelation, and I thought, if a child could be "marked" for evil, why not for good?

I would often sit alone in my room, overlooking scenes that were pleasant, and, in a peaceful attitude of mind, perfectly passive, desire that my child should be a girl; that she should have a slight figure, chestnut

hair and beautiful eyes; that she should be a musician, a singer, and that she should be proficient in everything she undertook; that she should be superior to all those I had ever known. Here is the result: A beautiful woman in mind and body, with chestnut hair, slight physique and a phenomenal voice—contralto; she is a philosopher, a student in Delsarte, astronomy, astrology, and masters every study; is eloquent, and has one of the most amiable dispositions.

Her father desired a boy, and my sympathizing with him for a short time in this wish, about the fifth month, has given her the desire for outdoor sports. She skates, rides, rows, shoots, and has many of those little gallantries which we see often in the refined man.

My six weeks' period of depression and grief was lived out by the child in the first six years of her life, when tears and unhappiness seemed to be the greater portion of her existence. After that came a joyous and ambitious life, every day happier than the preceding one.

My love for the unborn was so intense that it has created invisible lines, which have grown with the years, and we have communicated our thought by telepathy, three hundred miles separating us. She has returned that love a thousandfold. She is all I desired and more; and I am confident that with mothers educated in the law of prenatal influence, and properly surrounded, we could have gods upon the earth in the forms of men, created by the highest and purest thought. It should not be an intense longing on the part of the mother, but a quiet, passive thought given, that her child should become whatever her heart yearns for; then she should rest in the belief until the thought is forced upon her again.

M. LOUISE MASON.

SCHOOL DAYS IN ANCIENT GREECE.

THINK of Aristotle recommending a rattle! says the *Literary Digest*. He wrote: "It is also very necessary that children should have some amusing employment; for which purpose the rattle of Archytas seems well contrived, which they give children to play with to prevent their breaking those things which are about the house, for owing to their youthfulness they cannot sit still." This Archytas was a Pythagorean, and the rattle was a vessel of metal or wood with small stones in it. Here we have a "touch of nature" which shows the boy of Athens kin to the boy of the nineteenth century. Prof. Laurie, of Edinburgh, contributes a series of papers to *The School Review* on "The History of Early Education." The article in the September number is devoted to school days in old Athens, from which we learn that the common amusements were very much the same as those our children are given to now:

"The ball was a universal plaything. As the children grew older there came the hobby-horse, the game with dice (made of the knuckle-bones of animals cut into square pieces), and spinning tops both in the house and in the open air. Toys and go-carts and 'mud-pies' engaged the interest of Athenian children as of the children of all European nations. Then followed at a somewhat more advanced age a game which consisted in throwing slantingly into the water small smooth stones and counting how many leaps they made before sinking (which we call 'skimming' or 'ducks and drakes'), blindman's buff, trundling hoops, and all kinds of games with the ball, walking on stilts, leap-frog, kite-flying, see-sawing on logs, and swinging, etc., etc. Girls had dolls made of wax or clay and painted. Blindman's buff was played thus: The boy with his eyes

bandaged moved about calling out, 'I will catch a brazen fly.' The others answered it, 'You will hunt it, but you won't catch it'—all the while striking him with whips till he managed to catch one of them.

"The mother's influence practically ceased from the day the boy went to school. The want of education among the Athenian women precluded their exercising much influence over the boys. But during the first seven years the mother and the nurse really laid the foundation of the child's education. Nursery rhymes, traditionary stories in which animals played a part, thereafter the rich legendary, heroic and mythical lore of the Hellenic races, were imparted to the child. A poetic and dramatic cast of mind was thus given, to be nourished in future years by the school teaching and by the public drama and civic festivals.

"The play time ended with the seventh year. . . . The place of the female attendant was now taken by the *Pedagogue*, who did not impart instruction, but had only a moral oversight of his young charge, both in and out of the house, and whose task, accordingly, it was always to accompany him to the schoolmaster (*Grammatist*) and gymnastic master (*Pedotribe*). . . . The pedagogue had charge of the boy at all times. His business was to train him in morality and good manners, and he was granted the power of beating him, if necessary. The rules as to the external bearing of boys in the street and at table were extremely strict in Athens no less than in Sparta. Doubtless the view the pedagogue took of his duties could not always be very lofty. The answer of a pedagogue, who had a high conception of his function and was asked what he did, is worth recording: 'My duty is to make the good (beautiful) pleasant to boys.'"

SCIENCE OF HEALTH

OF SOME PHASES OF HYPNOTISM.

BY HENRY CLARK.

THE science of Hypnotism is now required to show what it is good for. Can anything definite be said of the general phenomena called hypnotic, which may prove satisfactory to whoever asks about its uses? Besides answering these questions, it is desired to set right the use of two words familiar to such as know something of the phenomena called mesmeric.

Hypnotism has already been unfortunate in the names it has borne. Through ignorance, doubtless, unsuitable terms have everywhere been prevalent, and little or no reformation been made of these terms by the substitution of new ones. Demonstrators of mesmeric science have sometimes been men whose knowledge has not been commensurate with their enthusiasm. Interesting as their experiments have been, they have been more entertaining than instructive. Now may be the time, then, for a cool survey of such things as appear to be well known.

The two words referred to above are "touch" and "suggestion," and these have done the round of the schools until their true significance is almost lost. They have become a foil to the rather more indefinite and recondite terms *en rapport*, "magnetism," which it is not my purpose to try a definition of in this paper. Nor can this well be done without confusing the mind of the reader who wants to know what he can see clearly.

First of "touch," which is a term of like meaning with "tact," "contact," and quite interchangeable with them. But does "touch" heal disease? Some people think so; and they believe that "touch" moves men to act; that "touch" clears the mind so that a not extraordinary man becomes clear-headed, so that he then sees how a thing can be, plainer than he usually does; that, in brief, "touch" causes some to understand things occult and difficult. We must have, however, for such phenomena as are evoked by "touch," a subject who is amenable to "touch." Given the appreciative "subject," then the person whose organization is such that an expected result occurs, we find phenomena varied and instructive along the lines followed out.

It may now be illustrated how contact affects a subject. How common is that manipulation which may seem on reflection to go under the name of "touch." A man playing ball has been disabled by an unforeseen accident. The nearest members of his team run up to him and at once began to "rub him." That something is to be done at once for his relief is evidently understood. "Touch" of some kind is immediately resorted to, and seems to help the man. While there may not be an intelligent notion that the effort will heal, that something is to be done seems to be felt, and that such help is to be given as can be given by the hand. By moving the hand gently over a sprained

ankle, it has been so relieved that anxiety was removed and the pain abated.

These incidents illustrate our general knowledge of these things. We naturally incline to welcome the touch of a sympathetic hand. Pain, we think, yields to some hands and not to others. We have even learned that obnoxious people offend by their presence, as agreeable friends encourage when they approach. We like one; we dislike another (I like the late fashion boys have of lifting the hand as a salute when a chum approaches). There is a kind of joy in a cheery voice, a hand uplifted, a glance quick and kindly.

But of "touch" yet further. One evening when the "magnetizer" known as "Professor Cadwell" lectured in my native town, he demonstrated the possibility of inducing the mesmeric state without approaching his subject closely; and was understood to say that unless he could "magnetize" without manipulating a subject he should not consider the experiment a good one. It will be seen, therefore, that very slight contact of himself, whether by hand, finger or person, was requisite to induce the state referred to. "Contact," "touch," "tact," can indeed be established with a good subject with but very limited approach. Not to seem too sentimental, I may make reference to so high an authority as the celebrated "Wizard of the North," Walter Scott—whose poetic genius may illustrate this fascinating theme in a new light. Turn to his *Marmion*. Read over the animated description of "Dame Heron's" in the fifth canto of that immortal song "*Lochinvar*." "One touch to her hand, and one word in her ear."

A simple comment attempted upon this passage may lead to a better knowledge of this word than a long explanation. Late on the day of her projected wedding, to a bridegroom preferred by her father, the guests

having assembled, *Lochinvar*, an accepted lover, arrives. He drinks the wine she proffers; he dances with her, and at last he gives her the significant "touch," the suggestive "word." Off they go on *Lochinvar's* fleet steed. I wonder what became of them. Did they live a "cat-and-dog" life together afterward? I should like to have heard Madame L. at the ingleside, when they were "old married folks," tell the story over—wouldn't you? And I should, good reader, also like to hear some of the "suggestions" this reference brings up to you.

Here were tokens of love; touch and word; successful flight. It requires but a touch and a word, we may say—then, to speak and be well understood.

A year or more ago, as a scientific experiment, the writer of this article set himself to learn by an easy test how far contact might go, as well as what results upon the susceptibility to suggestion are induced by as complete contact as may be gained. The queries were sufficiently answered. It is believed that in close contact any welcome suggestion may be liable to be acted upon—where the parties trust each other—vigorously and efficiently. The case quoted showed that it might be rather embarrassing for either to suggest anything emphatically to the other. A sufficiently easy example found quite recently may do as well as any to explain what I mean.

A man with whom I had recent "contact" happened to overhear the word "spirit," in connection with "Swedenborg." Though warned at the time not to suspect harm from what he heard, he could not rest till at the earliest opportunity he had asked and received a full explanation of what we were talking about. The word awoke a train of conjecture that might have confused his mind. An explanation was of course freely given and the subject dropped.

Suggestion—what is "suggestion"?

It has been illustrated, by the way, in this paper, but may be clearer defined by saying that suggestion may be made in a multitude of ways, if not a word be uttered. Words form the easiest mode, however, for communicating thoughts to others, as words are conventionally understood to be used for that end. Yet a most efficient suggestion could be imparted by a motion; by the general aspect; by expression of countenance; by intelligible speech; in shouting; by inhibitive or preventive violence.

When a subject is *en rapport* how easily a "suggestion" to look up can be made by yourself looking up. A movement toward an object might prove a still more emphatic suggestion for him to go in that direction. Look as though interested in a thing; see him turn his face thitherward. Speak to him, tell him almost anything—however absurd and unreasonable; see him wholly possessed for a while with your idea. If he be at some distance from you, shout to him; you forcibly impress him with what you tell him. All absorbed in what you say restrain him with your hand and see him refrain from the movement he would have made.

Every one of these ways of conveying to your subject an impression is a suggestion.

Is a further example desired? One day, while seated with a friend and a little distance apart, a proposal was made for each to make a picture on a bit of paper he held in his hand, to experiment in what is sometimes known as "mind-reading." This was our first trial. We agreed to see whether we could both make the same picture. Of course, we were so seated that we could not see each other's hand.

The experiment resulted whimsically. His picture outline was similar to my own, but, as developed, showed a pair of scales; mine was a house of the same general dimensions; his scales were my house-sides. Other experiments were total failures. Was this "transference of thought?"

Would "transference of thought" be the same in meaning and scope as "suggestion"? Did my presence (technical "touch") and the disposition I had to do the same thing he did cause what I did to be made known to him ("suggestion")?

Audiences *en rapport* with a fluent, aggressive speaker have been known to laugh or cry at the speaker's "suggestion"—in the way of stories and witty speeches. So Gough's happy lectures evoked alternate laughter or tears from most stolid auditors. Did Mr. Gough's eloquence or did his "magnetism" move his audiences? Or did his presence mean "contact"; his flow of words, "suggestion"?

AN INCIDENT EASIER COMPREHENDED.—A boy walking over Exchange street bridge in Pawtucket one day tugged at a string to which was tied an unwilling cur, which the boy was anxious to take home. "Do you want him to go with you?" was asked. "I do." "Do you know how to make him go with you?" "I don't." The boy did as he was told. Presently the dog was seen cheerfully following the boy. Touch, suggestion, were both efficiently used. The boy simply stroked the dog and talked to him.

If the terminology of hypnotism has been inaccurate, if demonstrators of animal magnetism have been ignorant of what they were doing, can we learn something so definite now that what we know may be clearly set forth? And in stating what we think we know, if we find it not easy to master all the terminology, can we select, from many words used, the two words touch, suggestion, and illustrate the meaning of these words so that light may shine on a dimly-lighted region? Touch, a most subtle approach of one of us to another in such a way that our presence may be felt; an approach by sign, word, motion, intelligible speech. Suggestion, best conveyed after contact—a force, possibly, prevalent when emphatic.

THE FUNCTION OF THE LIVER.

THE discussions relative to the function of the liver are not ended by any means, although we think that the physiologists are gradually learning its essential character. Dr. F. W. Pavy, of London, is regarded one of the highest authorities in the chemistry of digestion, and what he may say is received with respectful attention. With regard to the office of the liver in sugar production, he has recently taken a stand that is specially interesting, and in sympathy, we might remark, with our own views. In stating his opinion lately before the Royal College of Physicians, he showed why he did not accept Bernard's conclusions.

That eminent observer teaches that glycogen, as a carbohydrate material, is stored within the liver, being produced by the vital action of the liver cells, and that it becomes glucose as the result of diastatic or starchy fermentation, and this glucose is given to the blood of the liver veins, and so passed on through the circulation. Dr. Pavy, however, claims that the liver, instead of manufacturing sugar, checks the progress of sugar formation by abstracting it from the portal system. He says: "If the liver does not perform this office the result is diabetes mellitus, and if sugar really originated in the liver we ought all to be diabetic. Glycogen is a store of carbohydrate (oil or fat) in the liver, but is not subsequently reconverted into sugar. The liver, if removed fresh from the body, yields no more sugar than any other organ; the venous blood is not poorer in sugar than arterial blood, as it should be if sugar left the circulation at the systemic capillaries, as is implied in the ordinary glyco-genic doctrine, and the portal blood during feeding is always richest in sugar. What, then, is the future of the hepatic glycogen if it does not lead to the formation of sugar? It is applied to the construction of proteid, of fat, or of both. The power

of the animal body to form fat from carbohydrates is certainly undoubted, and some very striking new facts are brought out by the experiments on the intestinal villi and chyle. On a diet of oats the intestinal epithelium cells and the chyle in rabbits become loaded with fat, just as though the diet had been itself rich in fat. The formation of fat from starch is thus not limited to liver cells, but is accomplished also by those little masses of protoplasm that cover the villi, the synthetic power of which has recently come so prominently before physiologists. In the formation of fats from carbohydrates the proteids are regarded as intermediaries. The carbon goes in as carbohydrate and comes out as fat. The application of all this to explain many of the phenomena of diabetes is obvious. Given a moderate degree of that disease, the diet on which the amount of carbohydrate is restricted is followed at once by a disappearance of the glycosuria. This is explained by supposing that the power which the living protoplasm of the villi and of the liver have to stop soluble carbohydrates and to make them up into proteid, to transmute them to fat and to dehydrate them into glycogen is impaired but not destroyed. In the milder types of the disease the failure to deal with the carbohydrates is to be attributed to hyper-oxygenation of the blood due to dilatation of the arterioles permitting the blood to pass with undue speed from the arterioles through the systemic capillaries to the venous side. This dilatation must be attributed to a derangement of the controlling power of the vasomotor nervous system."

OVER-PHYSICAL CULTURE.

THE stand has been taken in this magazine that the trend of the times was toward excessive culture of the muscles. It has become fashionable to adopt some form of muscle training. In the school or

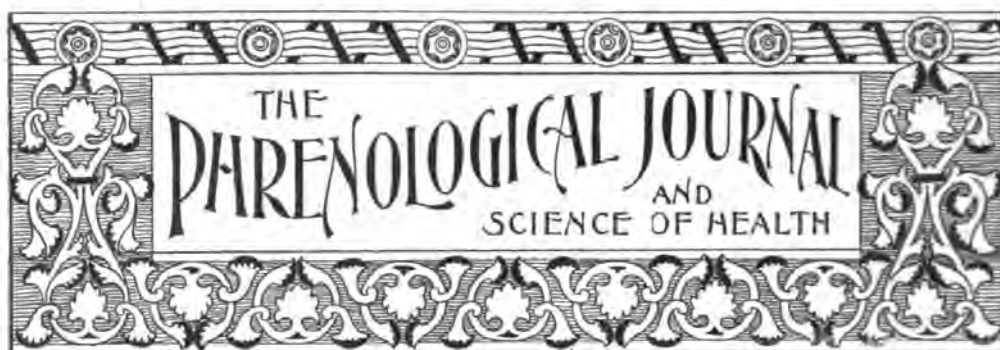
college it is boating or football. In general society, fencing, bicycling, tennis, bowls, gymnastics, etc., etc., are pursued earnestly in this or that circle—some young people becoming so absorbed in their prosecution as to spend most of their time at the sport, to the detriment of their mental and physical health. Physical exercise to some extent is necessary for the maintenance of a healthful equilibrium, but too much is more likely to produce organic disorder than not enough.

In the French Association for the Advancement of Science, at its meeting in Caen last August, a warm discussion occurred on the physical education practiced at schools. The tendency in France on this line seems to be much like what it is in America, since professors and physicians attest that these exercises have become too violent and have degenerated into professional competitions or sport instead of retaining their character of a recreation. Dr. LeGendre pointed out the disastrous effects upon boys who abuse the bicycle and take part in violent football contests—their blood undergoes alteration, their stomach becomes disorganized from the excessive transpiration of the body, and enlargement of the heart sets in. At Christiania, the capital city of Norway, these effects were marked in the case of school-girls aged between six and ten years, who indulged in sledging and skating contests.

In France running, jumping, paper hunts, etc., produce the same results. In these cases Dr. Tissie states it is nervous, not muscular, fatigue which is the evil, and that there is a rupture between the formation of intelligence and that of will, which ordinarily ought to be maintained in a state of equilibrium. On the other hand, Dr. Begonie examined Stephens, the cyclist, after his 376 miles of consecutive wheeling, and

could detect no abnormal fatigue; his muscles, in the electric point of view, needed no change. Messrs. Coubertin and Sales saw nothing objectionable in physical emulation; it made good students better, and improved the bad by making them obedient and less idle. In emulation there must be some excess, but not necessarily dangerous. M. Coubertin finds teaching students, between fourteen and sixteen years of age, to box the most effective means to develop their self-reliance and manliness. Dr. Bouchard objects only to physical exercise in excess, and to bear in mind that in athletic sports a common programme may not suit all competitors. Some individuals can sustain the struggles with impunity, but others may have hereditary maladies that the sports will only aggravate. In the Russian schools all pupils are examined by the school physician, and classed to join only such exercises as their constitution will permit. Difficulty of respiration, rapidity in the movements of the lungs, and in the circulation of the blood, due to an increase of temperature in the nerve centers, are the principal accidents resulting from the abuse of manly games. Chemically, immoderate physical exercise interferes with the nutrition of the system, hence debility. This, following Dr. Bouchard, explains why armies, after long marches, become the chosen victims of typhus. Cerebral is not remedied by corporeal fatigue; one is only added to the other. On a division being taken, the congress condemned school sports as now practiced in France.

At those schools where systematic exercises in the playground or in a gymnasium are a part of the curriculum there should be a physician or one versed in physiology to supervise the exercises and keep them within reasonable limits.



Ex fronte, ex capite, ex vultu, etiam in ipso oris silentio natura loquitur.—PLATO.

EDGAR C. BEALL, M.D., EDITOR.

NEW YORK, DECEMBER, 1894.

CLAIRVOYANCE.

FROM the fact that the phrenologist is supposed to be well versed in matters pertaining to the normal expressions of mind, he is naturally expected also to know a good deal about exceptional or occult phenomena within the same sphere. Of late years there has been such a growing interest in the subject of telepathy, thought transference, etc., that we feel called upon at the present time to say a word in explanation of some of our views at least, if not of the problems themselves. A friend of ours who has given considerable attention to psychical studies, took us to task some time ago in a letter to the JOURNAL, from which we quote the concluding paragraphs:

"The picture of Miss Lancaster, the thought-reader, in a late number of the JOURNAL, and description of what she can do, is quite interesting—but the explanation that does *not* explain is tiresome. We all know there is no effect without a cause, and for all mental operations, there are faculties especially adapted to do

the work; so if there is clairvoyant sight, as Dr. Beall admits, there is also a faculty located somewhere by which it is done. If he will turn to the February number of THE JOURNAL for 1890, he will find the location given in an article on the Psychic Senses, and, in the March number of the same year, an excellent article on Thought Reading.

The lady mentioned, to judge from her picture, is evidently a good psychometer, and there is no *mystery* about how she does the *great feat*. The law of vibration explains it fully, as certain sounds or notes in music give forth certain vibrations, and anyone capable of taking up those vibrations can repeat the sounds; so different thoughts give forth vibrations peculiar to themselves alone, and anyone sensitive enough, and trained in that direction, can take up the vibration and know for a certainty the exact thought. The mental telegraph and the electric are on exactly the same fundamental principle.

MARTHA J. KELLER.

In reply to this letter we beg to remind our friend that we did not publish the sketch of Miss Lancaster

with the idea of explaining or attempting to explain the phenomenon of clairvoyance. Our purpose was to make an application of phrenology in the matter of determining individual honesty. The sincerity of Miss Lancaster had been seriously questioned by a prominent New York newspaper in which several columns were devoted to an alleged exposé of her thought-reading performances. We read the attacks upon Miss Lancaster with a great deal of interest, and to vindicate the lady's character, if possible, and indirectly in this manner to contribute a proof of the truth of clairvoyance, we obtained an interview with her, examined her head, and published the description of her to which Miss Keller refers, and in which we asserted that the lady was undoubtedly honest and trustworthy. We were not ignorant at that time of the explanation of clairvoyance which writers on psychometry have given, but we were not disposed to undertake the discussion of that part of the subject while the idea of a phrenological demonstration chiefly occupied our attention. Besides, we would have admitted at that time, as we are willing to admit to-day, that Phrenology does not, in our judgment, afford an absolute explanation of clairvoyance. We doubt the correctness of the theory that clairvoyance is a function of a special brain-center located at the inner margin of the frontal lobes, or in more popular parlance, in the center of the forehead. We understand that Dr. Buchanan teaches this, but we do not regard him as an accurate man, and it will require a good deal more than his statement to

satisfy us in regard to it. However, we do not deny that his view of it may be correct, and we have no word of criticism to make except that the advocates of this idea have not yet furnished us with satisfactory proof. If Miss Keller or anyone else will communicate to us something more definite than mere assertions, we shall be glad to give attention to the matter; but we must repeat that we have not as yet seen reason to believe that a marked development of the central forehead is a sign of clairvoyant talent. It certainly does not hold good in Miss Lancaster, because her forehead is especially developed at Ideality and Causality, and is by no means prominent in the middle region. At the same time there may be such a center located on the median line behind the phrenological organs which we recognize in the forehead.

But still it will hardly do to say that clairvoyance is a faculty analogous to the primary mental elements included in the phrenological system. It should be described rather as a mode of action peculiar to the whole intellect than as a distinct, radical mental power. To call clairvoyance a faculty requiring a special seat in the brain, similar to the organs of Causality, Ideality or Benevolence, suggests the confusing and incoherent teachings of the old metaphysicians in regard to such general activities of the mind as perception, conception, attention, memory and will.

We presume it is hardly necessary to assure our readers that we are strongly in favor of progress in Phrenology, but our science teaches us above all things to be analytical, and careful in our investigations to draw

the line sharply between mere speculation and demonstrated facts. Of course we frequently complain that many scholars do not accept the facts of Phrenology, and we do this because the facts have been abundantly published, and yet the objectors refuse to examine the facts; but we do not think that the facts supporting Dr. Buchanan's location of the clairvoyant faculty in the center of the forehead, are sufficiently clear to warrant him or his pupils in blaming us for a failure to advocate his doctrine in connection with our discussion of Miss Lancaster's character. If there is anything wrong in our position we are quite willing to be corrected, and we are not now writing with any desire to antagonize the views of the Buchanan school.

Miss Keller says of Miss Lancaster, "To judge from her picture she is evidently a good psychometer, and there is no *mystery* about how she does the *great feat*."

We repeat that we seriously doubt that any phrenologist could judge from this young Englishwoman's picture that she is a psychometer. And we still think that there yet remains a good deal in connection with clairvoyance which it would be desirable to have explained. We agree with Miss Keller that the theory of vibrations is very plausible, and in a measure satisfactory; and this has been our view of the matter for many years, but it can hardly be called more than a conception of an analogue, when we say that the mental and electric telegraph are similar in principle, although this seems to be as close as anyone has approached to an explanation thus far.

It may interest our readers to hear a word or two more concerning the remarkable performances of Mrs. Baldwin of whom we published an account in the September number of THE JOURNAL. Since that time we have had opportunities to witness two public exhibitions given in Brooklyn by that lady, which we can unhesitatingly pronounce the most remarkable, by far, that we have ever seen. Several hundred people in the audience wrote questions upon sheets of paper which they immediately afterward folded and placed in their pockets. Then Mrs. Baldwin proceeded to answer the questions, which she did on each occasion to the number of at least fifty, giving full names in all cases, and in many instances adding information which could not be inferred from the questions, thus proving conclusively that there could have been no trick of communicating to the lady the nature of the questions, and the names signed, by which she could invent plausible answers. On such a theory it would be necessary for her to commit to memory at least fifty names together with the nature of the questions in a very short space of time, which, if it were possible, would still leave unexplained the numerous details which she mentioned beyond the information contained in the questions. The only other explanation would be that at least fifty people in the audience were confederates, which is supremely absurd. Surely no one who will reflect for a moment can believe that a professional entertainer could afford to buy up fifty well-known people from his

audience every evening during a three weeks' engagement in a city like Brooklyn without being detected and exposed before forty-eight hours. It would be necessary to approach a great number of people on the subject who would refuse to be bribed, so that by the time the troupe of fifty confederates could be engaged at a salary within his means, he would have betrayed his scheme to at least fifty others who, we may be sure, would report the whole story to the newspapers in a jiffy. Ridiculous as this would appear, there are many intelligent people who accept it as the only explanation.

We have dwelt a little upon this point because it is interesting and important to study the line of demarcation between the illusions of the professional necromancer and the still greater mysteries of nature. People are prone to be skeptical in the presence of a great fact like Phrenology or clairvoyance, and then to be absurdly credulous with reference to some palpable fraud. We are here reminded of a peculiar illustration of this idea. In former years we often witnessed the so-called trick of swallowing a sword, which is a genuine performance as usually done, there being no explanation of it except that a smooth blade, twenty or thirty inches long, is simply passed down the magician's gullet into his stomach. It is to the expert performer no more difficult than swallowing a bit of beef-steak, and yet people often stand within arm's reach of the sword-swallower and ever afterward vehemently assert that the blade must have been swallowed by the handle of the sword, or else adroitly smuggled into the

performer's sleeve. The fact is, few people are capable of judging the limitations of the conjuror's art, and it would be well to give more attention to the subject as a matter of mental discipline. For by learning to detect illusions in one department, we may be the better prepared to recognize them in another domain, and to appreciate a new truth even though it may come to us in an outlandish garb.

ARE THEY IMPROVED?

THROUGH the kindness of the Superintendent of the Elmira Reformatory we are enabled to show to our readers photographs of some of the "graduates" of that institution, side by side with photographs of the same persons at the time of entering. The idea is to show the improvement produced by a "course" at the Reformatory.

Unfortunately the comparison is much handicapped by the fact that the photographs taken on entering all represent the boys in prison clothes and with hair cropped close, while those taken at departure possess the advantages which clean linen and well-brushed hair always lend to a portrait. In spite of this difficulty, however, there are some things which are well indicated. There can be no doubt that there is great improvement in the physical condition of each of the four subjects which we present, so that they have undoubtedly been benefited by the regular life and discipline of the "College on the Hill." The better moral tone which always prevails to some extent with improved physique is also apparent. There is a more

agreeable expression in the mouths. The outer corners have less of that sullen, cruel and despondent droop. The eyes are less fierce and cunning—

ological and physiognomical study would be possible if a complete set of large and uniform "before and after" photographs were available. They



NO. 1A.



NO. 1B.

with the exception, perhaps, of No. 4.—and the faces suggest more repose. This is about all that can be said. The photographs are not definite enough to warrant a statement as to whether any one of these boys shows

would be especially valuable if accompanied by careful craniometrical data.

But while we do not offer these pictures as an argument against the officers of the Elmira Institution,



NO. 2A.



NO. 2B.

facial or cranial changes indicative of very radical improvement. We had hoped that we might be able to point out something more, and it will readily be seen what an interesting phren-

we do not hesitate to say that their work would be infinitely more effective if the principles of Phrenology were applied in the management of the inmates. Many of the incorrigi-

ble boys who are sent to such places are by no means wholly depraved, and, indeed, are seriously defective in only one or two particulars.

at the back of his neck. To be sure his blood might in this way be cooled and thinned, and some other advantages might follow; but the foot would



NO. 3A.



NO. 3B.

Their weak spots, however, are not easy to determine by a superficial observation of their actions, and unless a specific diagnosis is made of their faults, the general treatment given them might prove comparatively

continue to be painfully useless. It is precisely so with moral disease. There is often a vicious barb sticking somewhere in the character which a phrenologist could definitely point out and remove, but which the general



NO. 4A.



NO. 4B.

valueless. If a barefoot boy steps on a rusty nail and the iron is not removed from his flesh, it will hardly suffice to put him to bed on a diet of toast and tea, with a mustard plaster

educator would never locate. For example, one man is a liar, as the result of Acquisitiveness and Secretiveness, with deficient Conscientiousness; while another is equally

mendacious, perhaps, because of an overpowering vanity which cannot bear the search-light of truth. One man is obtrusive from a desire to secure attention and applause; while another is equally self-assertive from indifference to the opinions of others, arising from a sense of his inherent right to assume control. On the surface, the acts of the two men may appear the same; but a phrenologist can detect the difference in the motives and predict the final outcome of each man's course.

Let us continue to urge the necessity of recognizing and applying phrenology in all educational and penal institutions. Let every reader of the JOURNAL at least mention the subject to some one who has not thought of it before. By the ceaseless dropping of words of wisdom, the rocks of ignorance may be worn away, and in their stead we shall see rising and moving in the sunshine the golden grain of truth, which shall gladden and ennoble the race of man.

Go Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address.

ALL CONTRIBUTIONS MAY BE SENT TO THE GENERAL editor, Dr. Edgar C. Beall; but matters relating to CHILD CULTURE, SCIENCE OF HEALTH, or of a strictly medical nature, should preferably be sent to Dr. H. S. Drayton, who has special charge of these departments.

WE ALSO HARNESTLY REQUEST OUR CORRESPONDENTS to write as legibly as possible. Wherever practicable use a typewriter. In this way you will lighten labor, avoid misunderstandings, and secure earlier attention

bordering on the posterior part of the eye sockets. We have known artists engaged in work that deeply absorbed them to experience peculiar or painful sensations in the upper temporal region. Not long ago a friend who was much worried about a matter, and apprehensive of serious misfortune, complained of severe neuralgic-like pains in the brain contiguous to the parietal eminence. His faculties of Caution and of Approbation were highly excited, and the unusual activity of the brain areas, related by function to those faculties, was evidently productive of the discomfort and pain felt therein. The late Dr. Seguin, of New York, showed by delicate thermometers that certain emotions, when aroused, produced higher temperatures at the surface of the head in certain parts than was indicated at other parts.

SUGAR, CANDY AND CHOCOLATE.—F. H. L. C.—It would be better for you to get such hydrocarbon material from food stuff rather than from candies. The saccharine element in these is unwholesome, interfering with the digestion, especially of such a person as you. We do not regard candy as a brain food, but the carbonaceous part of such grains as oats, barley, corn and wheat meet the nerve demand of nature. But no form of food merely will compensate for overstrain of the brain and nervous system.

COLD HANDS AND FEET.—R. C. S.—Look into the condition of your general physique

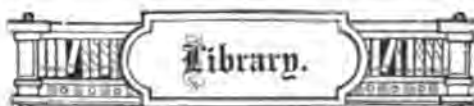
PAIN OR SENSATION IN ORGANIC CENTERS.—S. T.—It is not uncommon for one to experience special sensations in certain parts of the head that may be referred to exercise or action of corresponding brain centers. Speakers have complained of a sense of fatigue or an ache in the frontal region

and ascertain what is out of function. There is a want of equilibrium in the circulation. It may be due to some fault of digestion; something that prevents the heart from doing full duty. To remedy the condition one must know the cause. We could say generally that it is due to systemic debility, in which case hygienic measures are the best.

CORRECTION AND TEMPER.—ANXIOUS PARENT.—Look to yourself and see how much of the child's disposition you are responsible for. Master your own irritability and be calm and gentle when you would attempt any correction of the little one's waywardness. Angry looks, harsh voice, severe shakings, impetuous violence can do little good, but usually impress serious faults upon children. They will imitate their parents' passionate expressions. You should be firm and gentle in your reproof. The manner of it will usually be more influential than the punishment itself. Never punish in excitement. The parent that does this is unworthy of being a parent, while self command, firmness, patience on the father's or mother's part cultivate harmony of character and develop the best virtues of parent as well as child. Society is burdened with unfit parents. Make yourself an exception and an example.

PHRENOLOGISTS AND INFIDELITY.—S. B.—Now and then an inquiry comes from some thoughtful person with regard to the religious bearings of phrenology. The inquirer is persuaded that there is much truth in the system, but his rather close affiliation with some church or religious society renders him solicitous about the effect an acknowledgment of his attitude toward phrenology would have upon his character and reputation in the religious community.

In reply to an inquiry of the kind like that under consideration we said: Our method is governed by scientific principles. We consider man as he is, as nature organized him, and leave the question of his origin to those who make that department of anthropology their field of investigation. How the "soul" or spirit comes into contact and operation with the body we frankly admit is an unsolved problem.



In this department we give short reviews of such new books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

ANIMALS' RIGHTS, Considered in Relation to Social Progress, with a Biographical Appendix. By HENRY S. SALT, author of "The Life of Henry D. Thoreau." Also, an Essay on Vivisection in America. By ALBERT LEFFINGWELL, M.D. 16mo, pp. 176. New York and London: Mac-Millan & Co.

A very serious book this. We are at once reminded of "Where Is My Dog?"—that somewhat supra-ethical discussion of the possible immortality of those animals whose apt intelligence bids us pause ere we relegate them to the limbo of annihilation. Mr. Salt has a most benevolent heart, and withal it is associated with a fair degree of reason. In his discussions of the claims of animals on our kindness and justice he points to many features of their service and subjection to man that should certainly receive a better reward than cruelty and harshness. The animal food question is discussed at some length. The hunters who kill for fun get a share of sharp condemnation; so, too, fashionable women who sustain the trade in birds for millinery purposes receive chastisement. The experimenters who plead the demands of science for their cruel operations on living creatures are made a special object of attack. In some respects there appears to be a vein of ultra or ideal sympathy for the "lower animal" shown by the writer, which leads him to statements of extravagance, but for the most part we consider his positions well taken, and that reform is desirable in most of our relations to the dumb brast and innocent bird.

HOW TO GET WELL AND HOW TO KEEP WELL. By THOMAS A. BLAND, M.D., President of the Eclectic Medical Society of the District of Columbia. 16mo, pp. 202. Boston: Plymouth Publishing Company.

Not an elaborate treatise this by any means when we compare it with the great thousand-paged volumes issued nowadays by some professor, assisted by numerous "colleagues," but it is like its author's style and manner—matter of fact, clear, direct to the point. As the product of personal observation and study it deserves consideration. As a book intended for the people at large it is certainly appropriate by reason of its conciseness and clearness. He inclines to favor the views of Eclecticism because "an eclectic is one who uses his best judgment in choosing the good and rejecting the bad from all systems" of medication. With an experience of nearly forty years in medicine and in the study of human life from several points of view he feels warranted in giving counsel with regard to the habits and manners that are at the bottom of most of the ills and infirmities of which humanity suffers, and also advises regarding the treatment of our common ailments. The advice given is mainly of the common sense order, which involves hygienic methods—obedience to nature's laws and such immediate treatment that helps the forces of nature to overcome the obstructions and irregularities that have been set up. Chapters are devoted to describing certain of the better known botanic simples and their applications. Recipes for preparing food in a simple, digestible fashion, and many valuable suggestions bearing on the employment of water, and on physical exercise, impart a broad scope to the book. The independent tone of the writer and the essential truth of what he says concerning the practice of medicine as it is usually found in conservative society make the volume worth reading and the advice certainly of value to people of fair intelligence.

NOW READY. THERAPEUTICAL USES OF INTESTINAL LAVAGE PER RECTUM is the title of a pamphlet just published by Dr. H. S. DRAYTON, the well-known author of popular works on hygiene and practical medicine.

In this the use of the rectal syringe is graphically described and its value shown as a means of preventing illness, and also as an effective method of treating many common ailments, especially those immediately related to stomach and bowel disturbance. The pamphlet should be widely read and its counsel followed. Suffering humanity would find not a little alleviation, we are sure, from the practical appreciation of such a book. The advice is given in clear, unmistakable terms, and from the point of view of personal observations. A closing note considers the treatment of cholera on similar principles. Price 30 cents. Liberal discount to those purchasing in quantity. Address Fowler & Wells Co., New York.

DEFECTIVE SPEECH AND DEAFNESS. By Lillie Eginton Warren. Price, cloth, \$1.00. The Werner Publishing Co., New York. For sale also by the author at 243 West 21st street, N. Y.

AUTUMN CATALOGUE. Bulbs, plants and seeds for 1894. Illustrated, 4to. New York: Peter Henderson & Co.

THE MAN FROM THE WEST; OR FROM THE CHAPARRAL TO WALL STREET. By a Wall Street Man. Price 50 cents. J. S. Ogilvie Pub. Co.

A spicy story giving some views of the doings in stock operations.

SINGLE HEART AND DOUBLE FACE. By CHARLES READE, of *The Golden Gem Library*. Price 25 cents, paper. New York: Optimus Printing Co.

WHITER THAN SNOW. By author of JUROR No 12. 104 of "Sunset Series. Price 25 cents, paper. New York: J. S. Ogilvie Pub. Co.

PHRENOLOGICAL SOCIETY AND FIELD NOTES.

THE HUMAN NATURE CLUB OF BROOKLYN held its regular monthly open meeting on Friday evening, Oct. 26th. Mr. M. S. Daly spoke on "What Impedes the Progress of Science," and Mr. O. F. Hallon "The Roman Skull." Both discourses were enjoyed by the audience, who showed their appreciation by laughter and applause. After the lectures Mr. Bausch made some public examinations. The next meeting will take place at Phoenix Hall, South Eighth street, near Bedford avenue, on Nov. 23d, when Dr. C. W. Brandenburg, of the New York Medical College, will speak. The new hall seats three hundred people, and we hope to have it filled. An evening class has been formed for the study of Phrenology and Physiognomy. This meets every Thursday evening at the office of Mr. Albert Bausch, 363 Bedford avenue. For further information or for tickets of admission to the lectures apply to the Secretary, Miss Julia R. Floyd, 214 Rodney street, Brooklyn.

WHY SOME DO NOT SUCCEED IN THE LECTURE FIELD. By F. M. Cooper, M.D.—Some weeks ago I received a letter stating that my friend, Prof. Blue, was at a village not far away and was just closing a series of lectures at that place, and that he would proceed to another town close by, where there was a population of about 3,000, and would put upon the boards some three or four lectures. I wrote the Professor asking him to let me know when he would be in the place referred to, and that I would visit him so that we might talk over old times and lay plans together for the future, etc.

The reply came from the genial reader of heads and faces, but stated nothing as to his whereabouts in the city. Of course, I presumed that the place would be well billed and that all the school children would know where to go to have their heads examined; hence the examining room would be easily found.

On the 23d of October, about noon, I arrived in the city in question, and set out to find my friend. Inquiry located the two halls, but found them locked and no clue as to where the Professor could be seen. I visited four hotels and two boarding houses with no better results. The business firms on either side of the place where the lecture was to be given knew nothing as to where he was.

During my tramping from place to place I passed the hall several times, and saw six people trying the door of the room, but could not get in. Of two I inquired what

they wanted, to which they replied: "We want our heads examined, but can't find the Professor—wonder if he is in town yet."

No evidence outside the hall gave any sign that a lecture had been delivered, or would be delivered, and seven persons in the immediate vicinity could not give me any information on the subject, except one, who said he had heard that some one was going to talk about "funny things" some time soon, but did not know much about it anyway. I made further inquiry of ten people, including three boys. Three men had heard of a lecture to be given, but could not tell me who was to give it, where it was to be given, or when. One of the boys said he knew that a man was to be at the hall that night and was to do fortune telling.

Suddenly I discovered, watch in hand, that of the five hours at my disposal when I arrived in the town only two remained. I straightened up, made new bearings, for my collar seemed to be growing smaller, my eyes began to change color, and my voice had reached the neighborhood of upper G, while every fiber of my rapidly-moving body was growing more and more tense.

At a quarter to 3 o'clock P.M. I found in the eighteenth person one who said he thought that a lecturer was stopping with a Mr. Gay, and that I could find him at one of the three stores on Cheerless street. Upon calling there and asking if that was where Mr. Gay made his headquarters the answer was "No; but if you will call at the second door you can find out, as the gentleman usually stops there when in the city." In a few moments I was making inquiry at the second door, and was told that the person in question was probably in his office upstairs.

Thanking my informant, I was off upstairs, two steps at a jump, into the first room with a bound, but there was no one in sight. An open door leading into a back room was soon reached, where I found, in a dingy, half-lighted, small room, four men, of whom I inquired, "Is Mr. Gay in?"

One of the gentlemen arose, and, walking to the door, said: "That is my name." Thanking the stars that I was about to obtain a clue I asked, "Can you tell me where I shall find Professor Blue?" "Yes," said he, "he has been here ever since dinner, until just now he went over to the hall." I thanked him and proceeded to the

hall at once, where I found the Professor beginning to arrange for putting up his pictures in an empty storeroom, in which he expected to put a few chairs for the audience that he supposed would find him out as I had done and force upon him a packed house, but they'll not find you, I thought.

After the usual greeting with my friend I found that he had not been feeling very well, owing to an extra allowance of cider and apples the day before, which was some excuse for his not being on hand, but his not being fully advertised was not explained until I asked how the advertising had been done, if the place had been billed, etc."

I was informed that "a few bills were distributed the day before and none that day, and that he didn't expect to do much—kind of a dead place, etc." "Well, Professor," said I, "as you sow so shall you reap; and if I were you I would secure the assistance of a few boys and personally superintend putting a small dodger or circular in every house and place of business, in the hands of every passer-by, and in every vehicle on the streets.

"Oh," said the Professor, "times are too hard, no money, and don't think it would pay. I don't expect to do much." "Well, my friend," said I, "you will not be disappointed, for it is an established fact that we receive no more than we expect."

I have made many observations of this kind, and find, as a rule, too little advertising is done, and what is attempted is usually without system and direction. The hall, if in cool weather, is usually poorly heated and seldom well lighted; or the doors opened on time, or soon enough. On this point let me say more: First, that I have observed personally the ill effect of having the hall or lecture room not lighted until about eight o'clock. A number of my acquaintances upon several occasions concluded to go to a lecture, and finding it convenient to go a little early, found the doors not open and the place not even lighted, consequently they concluded there would not be any entertainment and returned home. On one of these occasions, had the doors been open or the place lighted a little after seven o'clock, several dollars would have been added to the door receipts, I am certain. Upon another occasion \$2.50 and still another \$3.25 would have been added. Now, if we pay for advertising, why not get the most for our money? Do we not desire to call attention to the place where the entertainment is to be given, as well as to what it is to be? An early and well-lighted hall or

church has been the means of swelling to a respectable number an otherwise meager audience. Remember that a comfortably warm room properly ventilated is a life preserver of great importance, particularly if the floor is clean. It is the duty of every one who appears before an audience to thus advocate sanitary measures.

A PRACTICAL TEST.—"During the lecture last evening Prof. George Morris illustrated certain points by a peculiar example. One of our esteemed citizens, Mr. Thomas Clark, consented to go on the platform and sit as an illustration. Phrenology teaches that certain faculties are located in, or find their expression through the use of certain portions of the brain. Among these, the faculties of individuality, size, form and weight are located just where reason would indicate a proper position—between or over the inner corners of the eyes. Everybody who is conscious of his own mental action knows that when intently singling out particular items or objects from many, or estimating the size, form or weight of anything, there is a peculiar focusing of cerebral action at the lower front part of the brain. Even the eyes are intently focused on the object.

"Mr. Clark, who is now 54 years old, was formerly an expert molder in a foundry. About nineteen years ago he was kicked by a barefooted horse. The hoof struck him just between the eyes, at the base of the middle front brain, crushing in the skull at that point. What has been the result? After the wound was healed Mr. Clark went back to the shop and undertook to resume former duties. But he found it impossible to do the work. The power to estimate, balance and discriminate in matters of form, size, weight or individuality, so necessary in his business, was gone. And to this day he has been obliged to follow another business not requiring the use of those faculties. Mr. Clark cannot well climb a ladder, finding it hard to calculate the steps. When picking up a knife or other object he involuntarily reaches beyond or to one side of it. So with treading on anything. As janitor of the A. O. U. W. hall he has occasion, at times, to arrange the chairs in rows, but finds it very difficult to adjust them to one another in straight rows. Mr. Clark has lived here for several years, and his residence is now at 321 Clark street. Many were interested in the reading given last evening by Prof. Morris, illustrated by the kindness of Mr. Clark."—*Rochester (Minn.) Daily Bulletin* of October 11th.



FOWLER & WELLS CO.

On February 29, 1884, the FOWLER & WELLS CO. was incorporated under the laws of the State of New York as a Joint Stock Company, for the prosecution of the business heretofore carried on by the firm of FOWLER & WELLS.

The change of name involves no change in the nature and object of the business, or in its general management. All remittances should be made payable to the order of
FOWLER & WELLS CO.

The Subscription Price of the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH is \$1.50 a year, payable in advance, or \$1.65 when premiums offered are sent to subscribers.

Money, when sent by mail, should be in the form of Money Orders, Postal Notes, Express Money Orders, Drafts on New York, or Registered Letters. All Postmasters are required to Register letters whenever requested to do so.

Silver or other coin should not be sent by mail, as it is almost sure to wear a hole in the envelope and be lost.

Postage-stamps will be received for fractional parts of a dollar. The larger stamps are preferred; they should never be stuck to the letters, and should always be sent in sheets; that is, not torn apart.

Change of post-office address can be made by giving the old as well as the new address, but not without this information. Notice should be received the first of the preceding month.

Letters of inquiry requesting an answer should inclose a stamp for return postage, and be sure and give name and full address every time you write.

All Letters should be addressed to Fowler & Wells Co., and not to any person connected with the office. In this way only can prompt and careful attention be secured.

Any Book, Periodical, Chart, etc., may be ordered from this office at Publishers' prices.

Agents Wanted for the PHRENOLOGICAL JOURNAL and our Book Publications, to whom liberal terms will be given.

CURRENT EXCHANGES.

Sanitarian, November, discusses the unhygienic conditions that produce diseases, the cultivation of vaccine lymph, water pollution, etc. Dr. A. N. Bell, Editor, New York.

Harper's Bazar.—Late numbers contain excellent views of social and community life, and a good practical story for fortune hunters called "Beyond the Dreams of Avarice." New York.

Century, November, commences a new biography of Napoleon Bonaparte. Chinese affairs, now specially interesting, have their representation in the city of Canton. The Old Dutch Masters is continued, while How Thieves are Made in New York will interest all readers. The portraits of young thieves, burglars, etc., are certainly very faithful. The Churches of Provence carries us to an old region of France. The current topics and open letters have relation to matters of interest to the reader. New York.

Popular Science News reviews the field of science in an agreeable way for the attraction of general readers, and keeps in view those matters in which the public takes much interest. November number at hand. New York.

Christian Advocate, weekly.—Organ of the M. E. Church, combines many features of interest to the general reader and church member. New York.

Le Progrès Medical, weekly.—An excellent gazette of medical affairs in France. Bourneville, Editor-in-Chief, Paris.

Quarterly Journal of Inebriety.—October number at hand. An interesting example of this useful publication. Those who are working along the line of reform in a methodical, scientific fashion will find this magazine an excellent help. Hartford, Conn.

Eclectic Magazine of Foreign Literature, November, contains twenty well selected papers from leading English periodicals. New York.

Harper's Magazine, November.—Elaborately illustrated, with a variety of topics quite in season with current events at home and abroad. The story department is fully abreast with the foremost, a good short story or two being included. Harper & Brothers, New York.

The Arena, November, is bulky, opening with a fine portrait of the transcendental philosopher, Emerson, it proceeds to the open and free discussion of several questions of weight at the present time. Among them the causes of the Chino-Japanese war, occultism, modern spiritualism, political corruption, imbecility and crime, etc. Boston.

American Medical Journal, November.—Practical papers, well written and useful to the earnest doctor, appear in this number. The clinical reports are specially notable. St. Louis, Mo.

American Medico-Surg. Bulletin. Semi-monthly.

We take this occasion to announce that we have now ready for delivery the third edition, thoroughly revised and enlarged, of Bates Torrey's Practical Typewriting, and orders may now be sent to us. This work has become a necessity in office and school, and even experienced typewriters admit with enthusiasm the benefits they have derived from a study of its pages. As it has won its way by pure merit to the front place of treatises on this subject we bespeak for it a large sale and print a large edition.

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Lantern Slides.—We are frequently asked whether we can furnish to those giving stereopticon exhibitions lantern slides suitable for the illustrating of phrenological subjects. We have recently perfected arrangements whereby we can supply a large variety of high-class slides, and can make to order slides illustrating any phase of Phrenology or Physiognomy which our customers may desire to throw upon the screen—including photographs of almost every prominent public character. Those of our readers who are in the lecture field will do well to correspond with us on this subject. These slides are also most entertaining and instructive for parlor exhibitions, and are sold as low as is consistent with high-class work.

The Calendar of Jewels.

We desire to state to our patrons that we are prepared to deliver a most beautiful, lithographed calendar for 1886, bearing the above title. Its form will be 12 inches wide by 17 inches long, made of extra heavy and finest bristol board. Upon this is lithographed, in the full complement of twelve colors, twelve children's faces; eleven of them as cherubs, grouped and surrounding, in various attitudes, a central extra large and superb child's face.

The eleven cherubs and the central child represent the twelve months of the year; the cherubs are voicing to the child prophetic messages of the events that shall take place in each of their months. The child knowing the future of the month that he represents, and being thus the recipient of the world's hope and fear, life and death, success and failure for the whole twelve months, discloses, by his rapt attention, his absorbed and awakened spirit—some such expression upon his face as we might imagine was upon the face of Samuel when he heard the words, "Samuel, Samuel, where art thou?" While the cherubs of Sir Joshua Reynolds, Raphael, or any of the great painters of them may be suggested by these faces, they are in no sense a copy of any great master, but are an entirely original grouping by a famous artist from suggestions and thoughts expressed by us to him for this calendar.

The name, *THE CALENDAR OF JEWELS*, has thus its poetic and romantic interpretation, for of all jewels the wide world over, children are the purest, the brightest and the most priceless, and by poetic license we have taken them (and not the flashing diamond, the blood-red ruby, the green-eyed emerald, etc.) to illustrate our thought. Too much cannot be said in praise of this new, original and beautiful picture, concerning which we rest assured that our friends and patrons will be as delighted with it as we are, for it will be an exquisite and valuable work of art.

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The printed part of the calendar is restricted to a pad divided into twelve months, each month having its representative jewel—the Garnet for January, the Amethyst for February, the Bloodstone for March, the Diamond for April, and so on through the twelve months of the year; and each day of each month will have its appropriate motto or quotation, for which all general literature has been explored, referring either directly or by poetical allusion to the jewel for that particular month.

The calendar has an increased value for this distinctive and interesting literary feature, as it is only by great labor and extensive reading that such a literary result has been obtained. This calendar should have an immense sale both as a picture and for the literary jewel quotations, and these two attractions joined together must create a widespread interest. We wish to stir up all our agents also over this matter, and to open before them this extensive prospect of successful business.

The retail price of the calendar will be \$1.50, postpaid, [though the picture alone will be easily worth

many times that amount. We have examined the calendar designs now on exhibition by the leading houses, and we are justified in claiming that this one is superior to them all. It will be securely packed in a suitable box.

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Announcement.—In response to a considerable demand the articles published by Dr. H. S. Drayton on the therapeutic uses of the rectal douche in the Science of Health department of *THE PHRENOLOGICAL JOURNAL* are now published in a revised and extended form. The great value of the treatment having been demonstrated in his professional practice as well as by observers long before him, it is confidently and earnestly recommended to those afflicted by disorders of digestion and maladies related to digestion.

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The Splendid Calendar of Jewels described in this department of the *JOURNAL* will be delivered postpaid to subscribers to this journal who subscribe for an additional year, on payment of \$2.25. This sum includes the additional year's subscription for the *JOURNAL* and the calendar. Price of the calendar, separate, \$1.50. Price of *JOURNAL*, separate, yearly, \$1.50.

New subscribers for a year, on payment of \$2.25, will also have the calendar sent to them postpaid.

Agents, send for terms.

Of Such is the Kingdom, and other poems, by Anna Olcott Commelin. 8vo, 110 pages. Fancy cloth, gilt. Price, \$1.50. Fowler & Wells Co., publishers, New York.

An exceedingly well made book so far as the publisher's art goes, and attractive at first sight to even the casual reader. But its dainty covers are merely an expression of the verse within them. The first poem gives its title to the volume, and that is charmingly set off by the beaming child faces of the really beautiful design of the frontispiece. The topics that represent the author's muse are various, now expressive of liveliness, hope, and sunny joyfulness, anon reflecting some phase of sadness that is common enough among our homelife. The "Poems of Sorrow" are sweet, and to the sorrowful can not but be acceptable. They breathe a gentle spirit that is replete with consolation. It is even a pleasure to dwell on such verses as "How Shall It Be?" or "A Star in the Night."

Among the miscellaneous poems the ascriptive to the golden rod as "A National Flower" is one of the most finished productions of the volume. "Summer Friends" is a very delicate bit of work. "The Poet's Gift," "The Light Within" are to be mentioned also, while "My Valentine" is a charming feature of schoolgirl prankishness. Mrs. Commelin's lyric fancy is decidedly taking, and dealing as it

does with things in our real home and society life her conceits impress us at once and leave us with that feeling which is experienced when a ray of sunshine glances upon us. We are brightened, made glad and the happier by the inspiration of her thoughts. She has given us just the book for our home table, the companion for the moment or an hour's reading, and a genial, helpful companion at any time.

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Every Person contemplating matrimony would do wisely to purchase "The Science of a New Life," by John Cowan, M. D. This work has received the unqualified indorsement of the medical profession, the clergy and our other best people. Crown 8vo, 406 pages, illustrated. In cloth, \$3; leather, \$3.50; half turkey, \$4. Address this office.

The Natural System of Elocution and Oratory, by T. Alexander Hyde, B.A., H.U., B.D., and William Hyde, B.A. B.D., 650 pages, with plates, cloth, \$2. Library edition, \$2.50 postpaid.

This brilliant book has become the standard work for the classroom, actors, lawyers, ministers and public speakers. On the appearance of its first issue a distinguished statesman declared that it would soon become and long remain the classic of oratorical literature. The history of the book since has confirmed the expectations of teachers and scholars. Dr. Emerson declared that Mr. Hyde's book was the best on the subject now before the public; and a few months ago he reiterated the same statement with still greater emphasis. The book has been purchased by hundreds of teachers, and from all parts of the country come praise and acknowledgment of its great value. The strong indorsement of the press still continues and many public speakers write their appreciation of the new edition. The late Bishop Phillips Brooks declared that he had read Mr. Hyde's book with great pleasure and profit. The eminent English actor, Wilson Barrett, when in Boston lately, wrote to a member of the histrionic profession: "I have read the Natural System of Elocution and

Oratory and find it so carefully written that it must prove of great value to every student of the art of eloquence." Fowler & Wells Co., publishers.

Christ the Orator; or, "Never Man Spoke Like this Man." 212 pages, extra cloth, \$1.25 postpaid. By T. Alexander Hyde. This highly interesting work, like his "Natural System of Elocution and Oratory," is original and unique, the only book on the subject. Mr. Hyde seems to have the rare power of finding something new in the most trodden field in literature. Who would expect anything new about Christ? Yet in his "Ecce Orator" we have Christ presented in an entirely new aspect. It is such a vivid presentation of Christ in his expressional nature that many have declared "Ecce Orator" to be a fifth gospel. From all schools of thought, orthodox, liberal and even from agnostics, come the highest praise of this book. Perhaps no volume has created such wide interest in so short a time.

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Its title is "Amativeness, Including Warning and Advice to Married and Single." It constitutes No. 4 of the "Fowler & Wells Library;" and the small fraction of a dollar (25 cents) which it costs should give it a very wide circulation. The world suffers for the want of its monitions; thou-ands may be saved from going astray by its timely suggestions, and all would be profited by its perusal.

The love literature of the day, which is so widely diffused and so eagerly read, serves to cultivate and increase this wonderful factor in human life; but it does not seek to educate the young to be its own master in the wise guidance and control of its love. It is the aim of this work to meet this universally needed result. Price, 25 cents. Published by the Fowler & Wells Co., 27 East 21st St., New York.

Counsel to Parents, by Doctor Elizabeth Blackwell, is a standard publication of over 160 pages, and the fifth edition is now before the public, in cloth, at \$1.00 postpaid. The moral education of youth is a subject of the very greatest importance and affects all the life from youth to old age. In the young and tender years is the time of planting such seeds that shall ennoble and beautify character and enrich the individual with qualities of heart and mind that will glorify our human nature.

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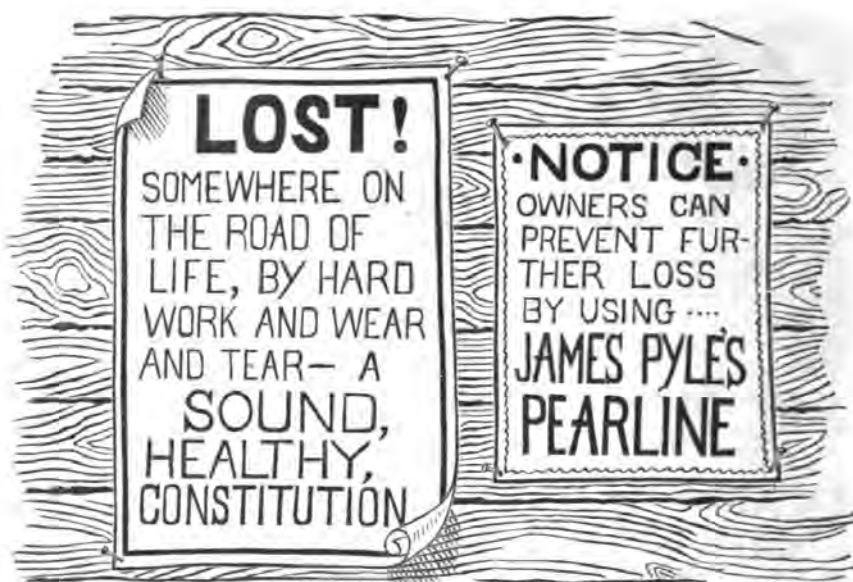
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ANOTHER:

Mr. Birge Harrison, at present one of our best known American artists in Paris, after a three years' decline in France, England, and finally in his old home in Philadelphia, came under treatment by correspondence (1885) for consumption. The following year he was again in Paris, at work at his beloved art, and has since enjoyed uninterrupted health.

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REFERENCES:

Messrs. Fowler & Wells Co., New York, publishers of Dr. Page's books; Geo. D. Mackay, Esq., New York Stock Exchange; H. A. Tenney, Esq., Globe Bank, Boston; Henry A. Gardner, Chic. go, Law Firm of Gardner, McFadden & Co.

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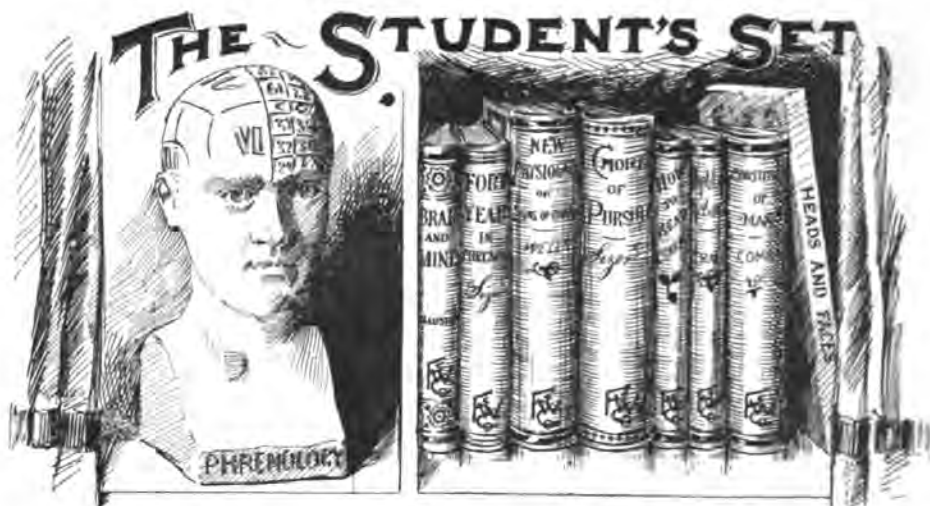
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CONTENTS FOR DECEMBER, 1894.

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Frontispiece. Institute Class of '94.

I. Studies from Photographs. Archbishop Corrigan and Dr. O. W. Holmes. By Edgar C. Beall, M. D.	- 269
II. How to Study Strangers. Chapter XXIV. By Prof. Nelson Sizer.	- 275
III. Musicians and Poets (Concluded). By J. S. Van Cleve, Ph.D.	- 281
IV. Sketches of Phrenological Biography. The Rev. E. A. Smith. By Charlotte F. Wells.	- 287
V. Closing Exercises of the Institute.	- 290
VI. Child Culture. Concerning Boys: Parental Influences; Schools in Greece.	- 300
VII. Science of Health. Hypnotism; The Liver; Over-Physical Culture.	- 303
Editorial. Clairvoyance; Are they Improved.	- 308
Answers to Correspondents.	- 314
Library.	- 315

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