

NEW
PHYSIOGNOMY
OR,
SIGNS OF CHARACTER,

AS MANIFESTED THROUGH
TEMPERAMENT AND EXTERNAL FEATURES,
AND THE MENTAL FACULTIES,
FOR THE STUDY OF THE HUMAN FACE.

"THE HUMAN FACE DIVINE."

BY
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Editor of "The Phrenological Journal;" Author of "Wedlock; or, The
Relations of the Sexes;" "Hand-Book for Home Improvement," etc.,

I do believe thee!
I saw his heart in his face.—SHAKESPEARE.

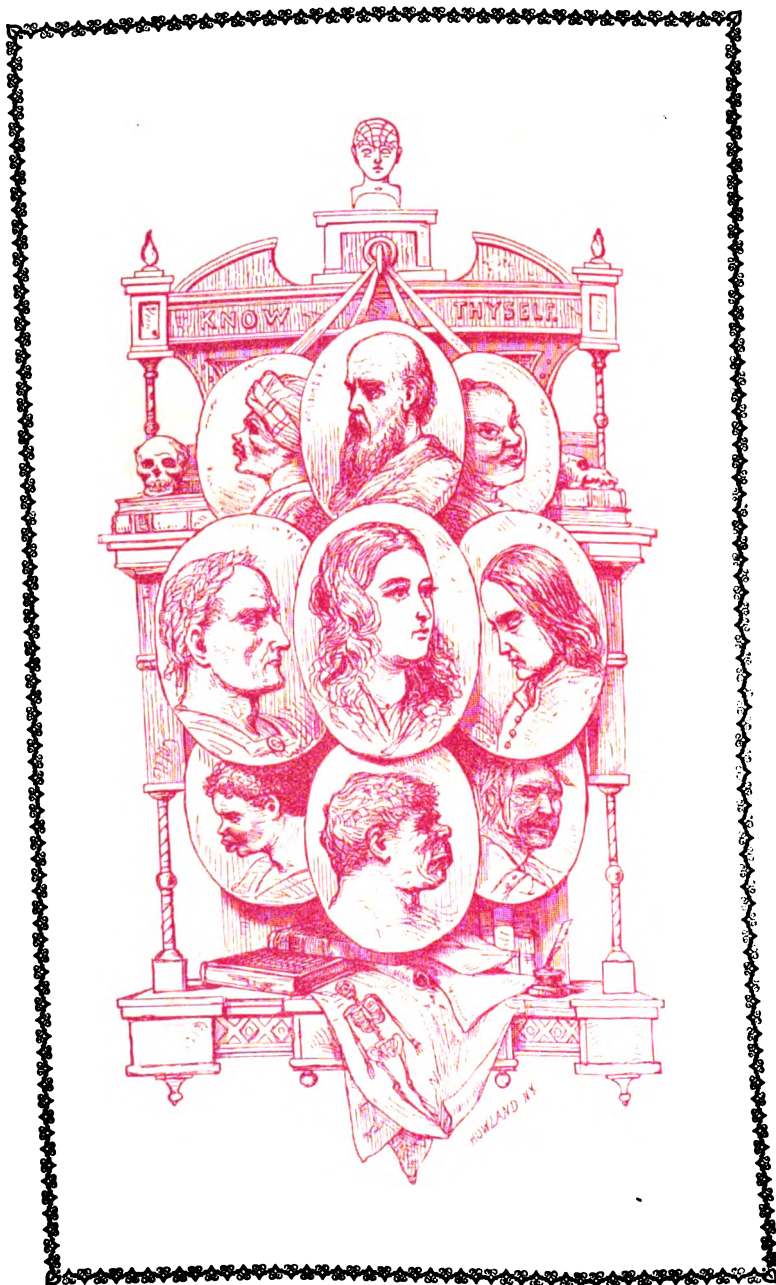
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PREFACE.

THE study of MAN, from any stand-point, is interesting. His anatomical structure is wonderful. His physiology, with the vital organs of breathing, circulation, digestion, and assimilation, furnishes the materials for illimitable investigation. But when we come to the nervous system, including the brain, the organ through which mind is manifested, we seem to approach the verge of another world. From this, the highest and most comprehensive stand-point, we may trace, locate, and name the various nerves, arteries, and veins through all their ramifications and discover the particular office or function of each; but what can we *know* of the immortal mind? We can comprehend something of matter, its properties and uses, but almost nothing of the mind itself, save that it occupies and uses the body for a time, and then drops it to return to the God who gave it.

We know how widely mankind differ in looks, in opinion, and in character, and it has been our study to discover the *causes* of these differences. We find them in organization. As we look, so we feel, so we act, and so we are. But we may *direct* and *control* even our *thoughts*, our *feelings*, and our *acts*, and thus, to some extent—by the aid of grace—become what we will. We can be temperate or intemperate; virtuous or vicious; hopeful or desponding; generous or selfish; believing or skeptical; prayerful or profane. We are free to choose what course we will pursue, and our bodies, our brains, and our features readily adapt themselves and clearly indicate the lives we lead and the characters we form.

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It has been our aim to present this subject in a practical manner, basing all our inferences on well-established principles, claiming nothing but what is clearly within the lines of probability, and illustrating, when possible, every statement.

Previous authors have been carefully studied, and whatever of value could be gleaned, we have systemized and incorporated, adding our own recent discoveries. For more than twenty years we have been engaged in the study of man, and in "character-reading" among the people of various races, tribes, and nations, enabling us to classify the different forms of body, brain, and face, and to reduce to METHOD the processes by which character may be determined. Hitherto but partial observations have been made, and of course only partial results obtained.

We look on man as a whole—made up of parts, and to be studied as a whole, *with all the parts combined*.

The author gratefully acknowledges his indebtedness to the kind, intelligent, literary, and scientific services of his friend, Mr. D. H. Jacques, who has assisted in every department of this work. Mr. Nelson Sizer, one of the earliest and most competent teachers and delineators of character, has also rendered important services.

If a perusal of these pages shall prove useful, by way of inducing the study of character, and encouraging to a better life; or if it shall prove suggestive in the way of calling out and developing more harmoniously body and brain, cultivating the faculties, and thereby improving and elevating the mind, beautifying and spiritualizing the whole, the object of the work will be accomplished.

O wad some power the giftie gie us,
To see oursel's as ithers see us !
It wad frae mony a blunder free us,
An' foolish notion.—BURNS.

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INTRODUCTION.



Figure 1.

IN its most general sense, Physiognomy (from *φύσις*, nature, and *γνωμονικός*, knowing) signifies a knowledge of nature; but more particularly of the *forms* of things—the configuration of natural objects, whether animate or inanimate.

As restricted in its application to man, it may be defined as a

knowledge of the relation between the external and the internal, and of the signs through which the character of the mind is indicated by the developments of the body.

Popular usage limits the signification of the term still more, and makes it mean simply, the art of reading character by means of its signs in the face.

A more full and exact definition of the word, as we wish it to be understood in this work, will be found in our third chapter.

A HISTORICAL SKETCH.

Physiognomy seems to have attracted considerable attention among the ancients, but it was with them rather a fanci-



Fig. 2. — PLATO.

ful art than a natural science. Pythagoras and his disciples believed and practiced it; and Plato mentions it with approbation in "Timæo." Aristotle is said to be the author of a treatise on it, which Diogenes Laertius cites in his "Life of Aristotle." The Sophists generally taught the correspondence between the internal character and the external developments, without being able to explain it.

When the physiognomist Zopyrus declared Socrates to be stupid, brutal, sensual, and a drunkard, the philosopher defended him, saying: "By na-

ture I am addicted to all these vices, and they were restrained and vanquished only by the continual practice of virtue."

The Greek authors on this subject, whose writings have been preserved, were collected and published at Altenburgh, Germany, in 1780, under the title of "*Physiognomiae Veteres Scriptores Græci.*"

Among the Romans, physiognomy had its professors who disgraced it by connecting it with prognostications of future events; just as the astrologers of the day degraded astronomy. Cicero seems to have been somewhat devoted to it. He defines it as "the art of discovering the manners and disposition

of men by observing their bodily characters—the character of the face, the eyes, and the forehead.” The remark of Julius Cæsar on the physiognomy of Cassius and Antony is well known,* and we have a very striking physiognomical description of the Emperor Tiberius by Suetonius.

During the dark ages, physiognomy, like most other branches of knowledge, became greatly obscured. It was generally connected with astrology, magic, and particularly with chiromancy and chiromancy. On the dawning of more enlightened days, it was either entirely rejected or received with suspicion, on account of the company in which it was found.

In 1598, Baptista Porta, a man distinguished in his day for his attainments in science, published in Naples a folio entitled “De Humana Physiognomia,” which is said to entitle him to be considered the founder of modern physiognomy. About half a century later, Cureau de la Chambre, physician of Louis XIII., wrote on the subject, but with less ability.

ADVENT OF LAVATER.

At length, in 1778, appeared the magnificent, but, in some degree, fanciful work of the celebrated Lavater, which being

-
- “Would he were *fatter* : but I fear him not ;
 Yet if my name were liable to fear,
 I do not know the man I should avoid
 So soon as that spare Cassius. He reads much
 He is a great observer, and he looks
 Quite through the deeds of men. He loves no plays,
 As thou dost, Antony ; he hears no music :
 Seldom he smiles, and smiles in such a sort
 As if he mocked himself and scorned his spirit
 That could be moved to smile at anything ;
 Such men are never at heart's ease
 While they behold a greater than themselves,
 And therefore are very dangerous.”

SHAKESPEARE, *Julius Cæsar*, Act I.

soon translated into all the languages of Europe, attracted universal attention to the subject.

This work, which was entitled "Physiognomical Fragments for the Promotion of the Knowledge and Love of Mankind," is very desultory and deals mainly in generalities, but is written in an animated and pleasing style, and can not fail to make a favorable impression upon the mind of any intelligent and candid reader. It is perceived at once that the author is an admirer of truth, a lover of his fellow-men, honest in his convictions, and very much in earnest in all he says. Every one is forced to admit, too, notwithstanding its imperfect presentation, that there is too much evidence in favor of the system to permit its rejection without further inquiry.

On the publication of the "Fragments," M. Zimmerman, the celebrated physician of Hanover, between whom and Lavater many communications on the subject had previously passed, wrote to him congratulating him on his success. He says: "Your penetration appears to me more than human. Many of your judgments are divinely true. No book ever made on me a more profound impression, and I certainly consider it one of the greatest works of genius and morality that ever appeared. You may rely on my encouragement and support in every possible manner. How happy I am in the friendship of Lavater!"

Lavater's delineations of character were often exceedingly happy and strikingly correct, but they appear to have been founded mainly on his intuitive impressions. His son-in-law, Gessner, says: "He relied very much on the first impressions which the external appearance of any person made on him; and he has often declared that this impression has much less frequently deceived him than his subsequent reasoning when its force became weaker. This kind of intuition certainly can not be learned."

MORE MODERN WRITERS.

Since the days of Lavater, many writers have touched incidentally upon the subject of physiognomy in connection with kindred topics. Among these, Camper, Blumenbach, Spurzheim, Sir Charles Bell, Bichat, and Broussais are particularly noted. Their works, however, are not accessible to the general reader.



FIG. 8. SPURZHEIM.

In our own day, Alexander Walker, in England, De La Sarthe, in France, and James W. Redfield, in the United States, have published works on physiognomy to which we shall have occasion to refer more than once in the following chapters.

PHYSIOGNOMY TO-DAY.

The subject is now attracting more attention than at any previous time since the death of Lavater, and we hope to see this interest go on increasing till physiognomy shall form a part of the education of every individual.

But many still look upon it as a mere fanciful art, utterly incapable of being reduced to scientific formulæ, and fitted only to amuse the idle and the curious. We shall show that it is something more—that if not yet entitled to the dignity of a science, it has at least the elements of a science in it, and can successfully claim to rank among the most useful branches of knowledge.

IT IS UNIVERSALLY PRACTICED.

Everybody believes and practices physiognomy, though in most cases without being aware of it. We instinctively, as it were, judge the qualities of things by their outward forms. "Appearances" are said to be "often deceitful." They are sometimes seemingly so; but in most cases, if not in all, it is our observation that is in fault. We have but to look again, and more closely and carefully, to pierce the disguise, when



Fig. 4.—WEBSTER.

the thing will *appear to be* just what it *is*. Appearances do not often deceive the intelligent observer. A weak man seldom appears to be strong, or a sick man to be well;



Fig. 5.—IDIOTIC.

and a wise man does not often look like a fool. We can not possibly conceive of a Webster with the meaningless face and small, backward-sloping head of an idiot.

The very art of dissimulation, sometimes urged as an objection, is founded on physiognomical principles. If a knave try to appear like an honest man, it is because he recognizes the fact that honesty has a certain characteristic expression, and knows that his fellow-men are aware what this expression is. He hopes to pass off his counterfeit for the real coin which it slightly resembles.

Men, women, and even children, make a practical application of physiognomy every day of their lives and in almost every transaction, from the selection of a kitten or a puppy to the choosing of a wife or a husband. When the cartman wants a suitable horse for his dray, he never by mistake buys

a racer; and the sportsman who is seeking a fox hound can not be deceived into the purchase of a bull-dog. They have



Fig. 6.—BULL-DOG.

not studied physiognomy as a science, but they know that *form indicates character*.

Do you think that if a big-fisted, bullet-headed boxer, putting on the garb



Fig. 7.—FOXHOUND.

of a gentleman, were to offer himself to you as a teacher of dancing or of drawing, that you could be induced to employ him in either of those capacities? By no means! You would see at a glance the physiognomical signs of his real avocation, instead of those of his assumed profession. It is not necessary to ask Dinah whether she be accomplished in fine sewing and embroidery or not. It is enough to look at her face or her hands.

We say of one man, "he has an honest look," and we trust him, knowing nothing more; but with another, whose "appearance is against him," we will have nothing to do. There are those whose faces, though perhaps far from being beautiful, in the ordinary sense of the word, win their way at once to the heart. On the other hand, there are individuals from whom the first impression we receive is that of repulsion, if not absolute antipathy. We dislike them—we shrink from them—and know not why. We do not think of Lavater, nor dream that we are practicing physiognomy, but so it is.

EMERSON ON PHYSIOGNOMY.

"Neither Aristotle, nor Leibnitz, nor Junius, nor Champollion has set down the grammar rules of this science, older than the Sanscrit, but they who can not yet read English can read this. Men take each other's measure when they meet

for the first time, and every time they meet. How do they get this rapid knowledge, even before they speak, of each other's power and disposition? One would say that the persuasion of their speech is not in what they say—or, that men do not convince by their argument, but by their personality."

TESTIMONY.

Physiognomy might safely be left to stand upon its own merits; but such is the weight of authority with many, that we are disposed to quote a few passages from celebrated authors, not distinctively known as physiognomists, who have recorded their testimony in its favor. Our first witness is

SOLOMON.

"A naughty person—a wicked man, walketh with a froward mouth. He winketh with his eyes; he speaketh with his feet; he teacheth with his fingers.

"The countenance of the wise sheweth wisdom, but the eyes of the fool are in the ends of the earth." [As an illustration, observe the vacant stare of the poor weak idiot.]

"Where there is a high look, there is a proud heart. A wicked man hardeneth his face. There is a generation, oh, how lofty are their eyes! and their eyelids are lifted up."—*Proverbs*.

Jesus, son of Sirach, author of "Ecclesiasticus," says:

"The heart of man changeth his countenance, whether it be for good or evil; and a merry heart maketh a cheerful countenance.

"A man may be known by his look, and one that hath understanding by his countenance, when thou meetest him. A man's attire and excessive laughter and gait show what he is."—*Ecclesiasticus*.

"A man full of candor and probity," Marcus Aurelius says,

"spreads around him a perfume of a characteristic nature. His soul and character are seen in his face and in his eyes."

Montaigne says: "You will make a choice between persons who are unknown to you—you will prefer one to another, and this not on account of mere beauty of form. Some faces are agreeable, others unpleasant. There is an art of knowing the look of good-natured, weak-minded, wicked, melancholic, and other persons."

Bacon classes physiognomy among the sciences, and he remarks, in one of his works, that

"it is founded on observation, and ought to be cultivated as a branch of natural history."

Dr. Gall says: "I shall show here that I am nothing less than a physiognomist. I rather think the wise ones have baptized the child before it was born. They call me a craniologist, and the science which I discovered craniology; but in the first place, all learned words displease me; next, this is one not applicable to my profession, nor one that really designates it."—*Works, Vol. I.*

Leibnitz, Herder, and other modern writers have also treated the subject as one of great interest and importance; but it is not necessary to extend our quotations here. From several of them we shall draw extensively in the body of our work. In the mean time the reader will have the assurance that in



Fig. 8.—MONTAIGNE.

entering upon the examination of physiognomy, he will find himself in good company.

BENEFITS OF PHYSIOGNOMY.

But, *cui bono*? This question is sure to come up, and may as well be answered here as elsewhere. What *good* will it do?

"Know thyself!" is the injunction of the ancient philosopher; and wise men in all ages have considered self-knowledge as the most useful and important of all learning. Physiognomy furnishes us with the key to this knowledge. It enables us to read our own characters, as legibly recorded on our physical systems, to judge accurately of our strength and our weaknesses, our virtues and our faults; and this self-knowledge is the first step toward selfimprovement. Without a knowledge of our physical, mental, and spiritual nature, we must go blindly about the work of developing or disciplining ourselves in either department. One might as well undertake to repair a steam-engine or a watch without any knowledge of mechanism. Knowing ourselves aright, we can, as it were, reconstruct ourselves on an improved plan, correcting unhandsome deviations, moderating excessive developments, supplying deficiencies, molding our characters, and with them our bodies, into symmetry and harmony.

Next to a knowledge of ourselves is that of our fellow-men. We are social beings. We are brought into daily and hourly contact with other social beings. Much of our happiness and success in life depends upon the character of the intercourse we hold with them. To make it pleasant and profitable we must be able to read men as an open book. Physiognomy furnishes the alphabet, which, once learned, "he who runs may read."

MATRIMONIAL HINTS.

Would you choose a wife or a husband? It is too important a matter to be left to chance. If Love be blind, Reason

should lead him. The head should guide the heart. Knowing ourselves, and having always at command the means of knowing those around us, it will be our own fault if we make an unwise choice, and wreck our happiness on the rocky headlands of conjugal discord.

All the young women who present themselves before the wife-seeking bachelor in society, bear their "characters" about with them, plainly written on their faces. Were we all well-instructed physiognomists, Margaret, the kitchen maid, would not find it necessary to carry hers in her pocket also. Any pretty girl can smile, more or less sweetly, when the occasion seems to require it, but there are certain lines about the mouth

when the features are entirely at rest, that will inform us whether or not a cheerful disposition and a kind heart lie back of the smile. Some



Fig. 9.—SMILES.



Fig. 10.—FROWNS.

lips have s-c-o-l-d inscribed very plainly upon them. He who is too ignorant or careless to decipher this in time, will not wait long after the honeymoon before the fact which the word represents will be made as audible as it is now visible. There is *meaning*, young man, in those rosy lips, that handsome chin, those sparkling eyes. It is all important that you should understand it. And you must bear in mind, at the same time, that your own features tell their tale quite as plainly as those of the fairer sex. Your mouth speaks even while the lips are closed. If grossness and sensuality be written on your chin,

the handsomest beard will not be able to hide their signs from the eyes of the fair physiognomist. There are two paths, the right and the wrong. Which are you pursuing? The record is on your face, and we shall teach the young women how to read it.

ITS APPLICATION TO BUSINESS.

Possessed of a thorough knowledge of physiognomy, the business man would never engage with a partner whose dishonesty or unmethodical habits might bring ruin upon the firm, nor employ a clerk to whom the money-drawer would prove a snare. The lines of integrity, on the face, are not to be hidden or counterfeited.

So the parent, the teacher, and the clergyman, understanding the individual peculiarities of their children, pupils, or parishioners, would be enabled to adapt their teachings, their counsels, and their admonitions to each particular case, which many of them are far from being able to do at present.

To the statesman, the military commander, the lawyer, the physician, the merchant, and the artisan, physiognomy may be made equally available and useful.

To the artist and to the actor it possesses a special value in addition to the general applications which the other professions may make of it, as it enables them to understand exactly how the various passions and emotions express themselves on the human face, and in the attitudes and movements of the body—a knowledge absolutely essential to any correct representation of these passions and emotions, whether on canvas, in marble, or on the stage.

With physiognomy universally understood and practiced, villainy would be almost impossible. The thief, the gambler, the *roué*, the robber, and the murderer wear labels on their foreheads. If we fail to read the inscription, it is merely on account of our imperfect knowledge of the language in which

it is written. Their characters once read and known by all men, their occupation would be gone.

SELF-IMPROVEMENT.

Finally, but by no means least in importance, physiognomy, by teaching us the true relation between the exterior and the interior of man—between inward goodness and outward beauty—points out an infallible method of improving our personal appearance as well as our characters, and shows conclusively that the former must be reached through the latter.



Fig. 11.—PALMER, MURDERER.

ITS HARMONY WITH PHRENOLOGY, ETC.

Physiognomy, as we shall explain and teach it, being founded on physiology and phrenology, is of course in perfect harmony with them from beginning to end. In fact, the three are properly parts of one great whole—anthropology—the science of man. Each verifies, explains, and illustrates the others. If one of them be made the text, the others serve as commentaries. We are unable to understand either fully without its related sciences.

In some respects physiognomy has important advantages over phrenology. One of the most obvious of these is its greater practical availability. Its leading signs being in the face are open to observation at all times, whether the head be covered or not. The beard on the unshaved masculine chin, being itself significant, forms only a partial exception. It does not conceal the general form of the lower part

of the face, and a few touches of the fingers pierce the luxuriant thickets in which the "Loves" strive to hide themselves. We can call into service our knowledge of physiognomical signs in all places and on all occasions, at home and abroad; in the parlor and on the street; in the lecture-room and in the railway trains; and that without taking any liberties with the toilets of the ladies or gentlemen on whom we may choose to exercise our skill; but we recommend that phrenology be, in all cases, studied in connection with physiognomy.

It was our original intention to reply here, in advance, to some of the objections which will doubtless be brought against the system we advocate; but, on a second thought, we will waste no ammunition in random firing. If we have succeeded in the following chapters in demonstrating the truth of physiognomy, that will be sufficient. All objections must fall to the ground before that fact. The truth may sometimes prove unpalatable, but it is always advantageous. On this basis we are content to rest. Let the reader "prove all things, and hold fast only that which is good."



PHYSIOGNOMY.

I.

PREVIOUS SYSTEMS.

"I understand but little of physiognomy; I have been and continue to be daily mistaken in my judgment; but these errors are the natural and most certain means of correcting, confirming, and extending my knowledge."—LAVATER



Fig. 12.—CONGENIALITY.

BEFORE introducing our own system of physiognomy, we shall present brief notices of two or three others advanced by writers who have preceded us. This will enable the reader to compare one with another, to see where they agree and where they conflict, and to judge

how far originality and superior practical utility may be claimed for the present work. It is not necessary to go back to the writings of the ancients on this subject, as they were generally mere fanciful speculations, though founded on a more or less distinct conception of the grand central principle of the correspondence between form and character. It will serve our purpose to commence with

THE SYSTEM OF LAVATER.

Lavater, we are aware, did not claim to have constructed a system. His modesty permitted him merely to assume the

garb of a student; and when he published his work, he sent it forth simply as a collection of "Fragments." He was not, by

organization, a theorizer. A glance at his portrait shows clearly enough that he was a man of perceptive and intuitive insight rather than of abstract reasoning. Prominent and active observing faculties, warm affections, and considerable executive force, the whole well controlled by predominating moral or spiritual sentiments, give his work its character, and caused him to publish



Fig. 13.—LAVATER.

it—to use his own words—"to promote the knowledge and love of mankind." We need not look to such a man for a theory or even a system, though one may perhaps be constructed out of the materials he has left us.

Of the sincerity and integrity of Lavater there can be no question. That his intuitive perceptions of character were often wonderfully correct is equally certain; but the nature of his mental organization does not inspire the same confidence in his deductions from the facts he observed. He perceived accurately, but did not always reason soundly. He evidently had no knowledge of phrenology—in fact, though Lavater and Gall were cotemporaries, the discoveries of the latter had not been made public when the former issued his great work. He also labored under the additional disadvantage of being almost equally ignorant (according to his own confession) of anatomy and physiology.

The nearest approach to a systematic presentation of the subject, to be found in Lavater's writings, is in the "One Hundred Physiognomical Rules," left in manuscript and published after his death; and we can not give him a more favorable introduction than by copying the more important of these rules, with the illustrations drawn by himself and originally

engraved under his own supervision to accompany them.* We allow them to speak for themselves, neither indorsing nor controverting their statements. The reader will judge them for himself in the light what we have said of the character of their author, and of the principles laid down and illustrated in the chapters which follow. Lavater's own words furnish all the additional preface required. He says:

"Prove all these rules. I have maturely considered, rigidly examined by the test of experience, advanced nothing on conjecture. But prove them all, and only adhere to the most approved."

GENERAL RULES.

1. If the first moment in which a person appears, in a proper light, be entirely advantageous for him; if his first impression have in it nothing repulsive or oppressive, and produce in thee no kind of constraint; if thou feel thyself in his presence continually more cheerful and free, more animated, and contented with thyself, though he do not flatter thee, or even speak to thee, be certain that he will always, so long as no person intervenes between you, gain upon thee and never lose. Nature has formed you for each other. You will be able to say to each other much in a little. Study, however, carefully, and delineate the most speaking traits.

2. Some countenances gain greatly upon us the more they are known, though they please not at the first moment. There must be a principle of dis-harmony between thee and them, to prevent them from producing their full effect at first; and a principle of harmony by which they produce it more and more every time they are seen. Seek diligently the trait which does not harmonize with thee. If thou find it not in the mouth, be not too much disheartened; shouldst thou find it there, observe carefully in what moments, and on what occasions, it most clearly displays itself.

* We copy from the large English edition in three volumes, now out of print, but a copy of which we are fortunate enough to possess. The more recent editions in one volume contain the Rules without the illustrations, which omission renders them almost valueless.

3. Whoever is most unlike, yet like to himself; that is as various, yet as simple as possible; as changeable, yet unchangeable, and harmonizing, as possible, with all animation and activity; whose most movable traits never lose the character of the firm whole, but are ever conformable to it—let him be to thee sacred. But whenever thou perceivest the contrary—a conspicuous opposition between the firm fundamental character and the movable traits—then be tenfold on thy guard, for there is folly or obliquity of understanding.

4. Observe the moments, rapid as lightning, of complete surprise. He who in these moments can preserve the lineaments of his countenance favorable and noble; he who then discovers no fatal trait; no trait of malignant joy, envy, or cold-contemning pride, has a physiognomy and a character capable of abiding every proof to which mortal and sinful man can be subjected.

5. Very discreet, or very cold, or very dull, but never truly wise, never warmly animated, never capable of fine sensibility or tenderness, are those the traits of whose countenances never conspicuously change. Very discreet, when the lineaments of the countenance are well proportioned, accurately defined, strongly pronounced. Very dull, when the lineaments of the countenance are flat, without gradation, without character, without flexion or undulation.

6. Of him whose figure is oblique, whose mouth is oblique, whose walk is oblique, whose handwriting is oblique—that is, in an unequal irregular direction—of him the manner of thinking, character, and conduct are oblique, inconsistent, partial, sophistic, false, sly, crafty, whimsical, contradictory, coldly sneering, devoid of sensibility.

THE FOREHEAD.

1. When a finely arched forehead has in the middle, between the eyebrows, a slightly discernible, perpendicular, not too long wrinkle, or two parallel wrinkles of that kind—especially when the eyebrows are marked, compressed, and regular, it is to be ranked among the foreheads of the first magni-

tude. Such foreheads, beyond all doubt, appertain only to wise and masculine mature characters; and when they are found in females, it is difficult to find any more discreet and sensible, more betokening royal dignity and propriety of manners.

2. That forehead betokens weakness of intellect which has in the middle and lower part a scarcely observable long cavity—being itself consequently long—I say scarcely observable; for when it is conspicuous, everything is changed.

3. Foreheads inclining to be long, with a close-drawn wrinkleless skin, which exhibit no lively cheerful wrinkles even in their few moments of joy, are cold, malign, suspicious, severe, selfish, censorious, conceited, mean, and seldom forgive.

4. Strongly projecting, in the upper part very retreating, foreheads with arched noses, and a long under part of the countenance (fig. 14), continually hover over the depths of folly.



Fig. 14

5. Every forehead which above projects, and below sinks in toward the eye (fig. 15), in a person of mature age, is a certain sign of incurable imbecility.

6. The fewer hollows, arches, and indentations, and the more of smooth surface and apparently rectilineal contour are observable in a forehead, the more is that forehead common, mediocre, destitute of ideas, and incapable of invention.



Fig. 15

7. There are finely arched foreheads that appear almost great and indicative of genius, and yet are little other than foolish or only half-wise. This mimicry of wisdom is discernible in the scantiness or in the wildness and perplexity of the eyebrows.

8. Long foreheads with somewhat spherical knobs in the upper part, not commonly very retreating, have always an inseparable three-fold character—the glance of genius with

line of a cool analyzing understanding—pertinacity with indecision—cunning with impetuosity. With these they have also somewhat refined and noble.



Fig. 14

9. Of Byre wrinkles in the forehead, especially when they are nearly parallel or appear so (fig. 14), are certainly a sign of a poor, of Byre, suspicious mind.

10. Parallel regular, not too deep wrinkles of the forehead, or parallel interrupted (fig. 15), are seldom found except in very intelligent, wise, rational and justly thinking persons.

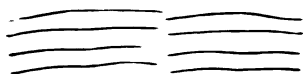


Fig. 15

11. Forehead & the upper half of which is intersected with conspicuous, especially if they are evidently arched wrinkles, while the under is smooth and wrinkleless (fig. 16), are certainly dull and stupid, and almost incapable of any abstraction.

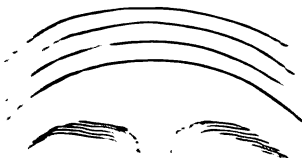


Fig. 16

12. Wrinkles of the forehead which, on the slightest motion of the skin, sink deeply downward (fig. 17), are much to be suspected of weakness. If the traits are stationary, deeply indented, and sink very deeply downward, entertain no doubt of weakness of mind or stupidity combined with little sensibility and with aversion. But let it be remembered, at the same time, that genius most luminant in abilities, usually has a line which sinks remarkably downward in the middle, under three, almost horizontal, parallel lines.



Fig. 17



Fig. 18

13. Perplexed, deeply indented wrinkles of the forehead, in opposition to each other (fig. 18), are always a certain sign of a harsh, perplexed, and difficult to manage character. A square superiority between

the eyebrows, or a gate-like wrinkleless breadth, which remains wrinkleless when all around it is deeply furrowed—oh! that is a certain sign of the utmost weakness and confusion of intellect.

14. Rude, harsh, indelicately suspicious, vain-glorious, ambitious are all those in whose foreheads are formed strong, confused, oblique wrinkles, when with side-long glance they listen on the watch with open mouth.

THE EYES.

1. Eyes that are very large, and at the same time of an extremely clear blue, and almost transparent when seen in profile, denote a ready and great capacity; also a character of extreme sensibility, difficult to manage, suspicious, jealous, and easily excited against others; much inclined likewise by nature to enjoyment and curious inquiry.

2. Small, black, sparkling eyes—under strong black eyebrows—deep sunken in jesting laughter, are seldom destitute of cunning, penetration, and artificial simulation. If they are unaccompanied by a jesting mouth, they denote cool reflection, taste, elegance, accuracy, and an inclination rather to avarice than generosity.



Fig. 21.

3. Eyes which, seen in profile, run almost parallel with the profile of the nose, without however standing forward from the level of the head, and projecting from under the eyelids (fig. 21), always denote a weak organization; and, if there be not some decisive contradicting lineament, feeble powers of mind.

4. Eyes which discover no wrinkles, or a great number of very small long wrinkles (fig. 22), when they appear cheerful or amorous, always appertain only to little, feeble, pusillanimous characters, or even betoken total imbecility.

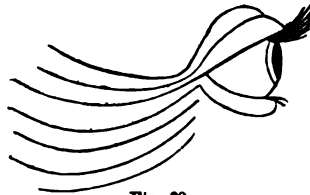


Fig. 22.

5. Eyes with long, sharp, especially if horizontal, corners—thus as, such as do not turn downward—with thick-skinned eyelids which appear to cover half the pupil, are sanguine and indicative of genius.

6. Eyes which are large, open, and clearly transparent, and which sparkle with rapid motion under sharply delineated eyelids, always certainly denote five qualities: quick discernment, elegance and taste, irritability, pride, and most violent love of women.



Fig. 13.

7. Eyes with weak small eyebrows, with little hair, and very long concave eyelashes (fig. 14) denote partly a feeble constitution of body, and partly a phlegmatic melancholic weakness of mind.

8. Tranquilly powerful, penetrating, calmly serene, harmonizing, smiling, slowly moving eyes—eyes which bear while they see, enjoy, think in them, and adore their object like themselves, and are a medium of voluptuous and spiritual enjoyment—*are* never very much, nor entirely open; never deep-sunken, or far projecting; never have oblique corners, or sharp lines turning downward.



Fig. 14.

9. Deep-sunken, small, sharply delineated, dull blue eyes under a heavy, almost perpendicular forehead which in the lower part sinks somewhat inward, and above is conspicuously rounded (fig. 15) are never to be observed in penetrating and wise, but generally in proud, suspicious, harsh, and cold-hearted characters.



Fig. 15.

10. The more the upper eyelid, or the skin below or above the ball of the eye, appears projecting and well-defined, the more it shades the pupil, and above, rises under the eyebrow (fig. 16), the more has the character of spirit, refined sense, amorous disposition, true, sincere, constant delicacy.

11. Eyes which, in the moment when they are fixed on the most sacred object of their adoration, express not veneration and inspire not seriousness and reverence, can never make claim to beauty, nor sensibility, nor spirituality. Trust them not. They can not love nor be beloved. No lineament of the countenance full of truth and power can be found with them. And which are such eyes? Among others all very projecting rolling eyes, with oblique lips—all deep-sunken, small eyes, under high, perpendicular, hard bony foreheads—with skulls having a steep descent from the top of the head to the beginning of the hair.

12. Eyes which show the whole of the pupil, and white below and above it (fig. 26), are either in a constrained and unnatural state; or only observable in restless, passionate, half-simple persons, and never in such as have a correct, mature, sound, unwavering understanding.



Fig. 26.

13. Fixed, wide open, projecting eyes (fig. 27), in insipid countenances, are pertinacious without firmness, dull and foolish with pretension to wisdom, cold though they wish to appear warm, but are only suddenly heated, without inherent warmth.



Fig. 27.

THE EYEBROWS.

1. A clear, thick, roof-shaped, over-shadowing eyebrow (fig. 28), which has no wild luxuriant bushiness, is always a certain sign of a sound, manly, mature understanding; seldom of original genius; never of volatile, aerial, amorous tenderness, and spirituality. Such eyebrows may indicate statesmen, counselors, framers of plans, experimentalists; but very seldom bold, aspiring, adventurous minds of the first magnitude.



Fig. 28.

2. Horizontal eyebrows, rich, and clear, always denote understanding, coldness of heart, and capacity for framing plans. Wild eyebrows are never found with a mild, ductile, pliable

character. Eyebrows waving above the eyes, short, thick, interrupted, not long nor broad—for the most part denote capacious memory, and are only found with ingenious, flexible, mild, and good characters.

3. Thick, black, strong eyebrows, which decline downward, and appear to lie close upon the eye, shading deep large eyes, and accompanied by a sharp, indented, uninterrupted wrinkle of the cheek, which, on the slightest motion, manifests contempt, disdain, and cold derision, having above them a conspicuously bony forehead, are only to be consulted for advice when revenge is sought, or the brutal desire of doing injury to others entertained; in other respects they are to be treated in as yielding a manner as possible, and that yielding as much as possible concealed.

THE NOSE.

1. A nose physiognomically good is of unspeakable weight in the balance of physiognomy; it can be outweighed by nothing whatever. It is the sum of the forehead, and the root of the under part of the countenance. Without gentle archings, slight indentations, or conspicuous undulations, there are no noses which are physiognomically good or intellectually great. Without some slight sinking in or excavation, in the transition from the forehead to the nose, though the nose should be considerably arched—we are not to conceive any noses to be physiognomically great.

2. Noses which are much turned downward (fig.



Fig. 20.

20), are never truly good, truly cheerful or noble, or great. Their thoughts and inclinations always tend to earth. They are close, cold, heartless, incommunicative, often malicious, suspicious, ill-natured, or extremely hypochondriacal or melancholic. When arched in the upper part, they are fixed and unchangeable.



Fig. 21.

3. Noses which are somewhat turned up (fig. 21), are more cheerful and communicative, but are not so fixed and unchangeable as the preceding (fig. 20).

are by nature inclined to pleasure, ease, jealousy, pertinacity. At the same time they may possess refined sense, eloquence, benevolence, and be rich in talents.

4. Noses which have on both sides many incisions or lines (fig. 31) that become more visible on the slightest motion, and never entirely disappear even in a state of complete rest, betoken a heavy, oppressive, frequently a hypochondriac, and frequently a maliciously knavish character.



Fig. 31.

5. Noses which easily and continually turn up in wrinkles are seldom to be found in truly good men, as those which will scarcely wrinkle, even with an effort, are in men consummately wicked. When

noses which not only easily wrinkle, but have the traces of these wrinkles indented in them, are found in good men, these good, well-disposed men are half-fools.

6. Turned-up noses, in rude, choleric men, under high, in the lower part arched, intelligent foreheads, with a projecting under lip (fig. 32), are usually insupportably harsh and fearfully despotic.



Fig. 32.

7. A hundred flat snub-noses may be met with in men of great prudence, discretion, and abilities of various kinds. But when the nose is very small, and has an inappropriate upper lip; or when it exceeds a certain degree of flatness (fig. 33), no other feature or lineament of the countenance can rectify it.

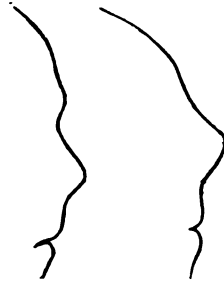


Fig. 33.

no other feature or lineament of the countenance can rectify it.

THE CHEEKS.

1. The trait or lineament extending from the sides of the nostrils toward the end of the mouth is one of the most signif-

icant. On its obliquity, its length, its proximity to, or distance from, the mouth depends the evidence of the whole character. If it is curved, without gradation or undulation, it is a certain sign of stupidity. The same when its extremity joins, without an interval, to the ends of the lips. The same when it is at a great distance from the ends of the lips.

2. Whenever, in laughter, three parallel circular curves are formed, there is a fund of folly in the character of the person.

THE MOUTH.

1. Every mouth which is full as broad again as the eye, that is, from the corner toward the nose to the internal end of the eye, both measured with the same rectilinear measure (fig. 34), denotes dullness or stupidity.

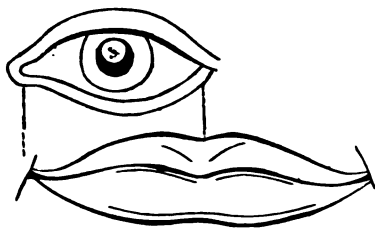


Fig. 34.

2. When the under lip, with the teeth, projects horizontally, the half of the breadth of the mouth seen in profile (fig. 35), expect, allowing for other

gradations, one of the four following qualities, or all the four: stupidity, rudeness, malignity, avarice.



Fig. 35.

3. Never entertain any prejudice against a man who, silent and speaking, listening and inquiring, answering and relating, laughing and weeping, mournful and cheerful, has an either graceful, or at least guileless mouth, which retains its fair proportion, and never discovers a disgusting malignant tooth. But whoever trembles with his lips, especially the one half of the upper lip, and endeavors to conceal that trembling, though his satirical ridicule may be instructive to thee, it will deeply wound thee.

4. All disproportion between the upper and under lip (fig. 36) is a sign of folly or wickedness. The wisest and best men have well-proportioned upper and under lips. Very

large, though well-proportioned lips always denote a gross, sensual, indelicate, and sometimes a stupid or wicked man.



Fig. 36.

5. He who has contempt on his lips, has no love in his heart. He, the ends of whose lips sink conspicuously and obliquely downward (fig. 37), has contempt on his lips, and is devoid of love



Fig. 37.

in his heart, especially when the under lip is larger, and more projecting than the upper.

6. In proportion to the cavity in the middle of the under lip, in a person not otherwise deficient in the signs of intellect, is the fancy, the sarcastic wit, the coldness of heart, and the watchful cunning.

7. When in a person who, in other respects, exhibits proofs of intellect and a powerful character, we find, not far from the center of the middle line of the mouth, an opening which scarcely or not at all closes, and suffers the teeth to be seen, even when the mouth is shut—it is a sign of cold, unmerciful severity and condemning malignity, which will seek its advantage by injury done to others.

8. Sharply delineated lipless middle lines of the mouth, which at the ends turn upward, under an (improper) upper lip, which, seen in profile, is arched from the nose (fig. 38), are seldom found except in cunning, active, industrious, cold, harsh, flattering, mean, covetous characters.



Fig. 40.



Fig. 38.

9. He is certainly of a base and malignant disposition who laughs, or endeavors to conceal a laugh, when mention is made of the sufferings of a poor man or the failings of a good man. Such characters have commonly little upper or under lip, a sharply delineated middle



Fig. 39.

line of the mouth, which at both ends turns disagreeably upward (fig. 39), and fearful teeth.

10. A small narrow mouth, under a small nostril, with a circularly arched forehead (fig. 40), is always easily intimidated, fearful, feebly vain, and ineloquent. If accompanied by large, projecting, dull eyes, and an oblong, bony chin, the signs of imbecility—especially if the mouth be open—are still more decisive. But if it only approaches to this conformation, the character is economical, useful, and prudent.

THE CHIN.

When the chin decisively indicates good sense, the whole will certainly have the character of discernment and understanding. That chin decisively indicates good sense which is somewhat incurved, or indented in the middle, of which the under part somewhat projects (fig. 41), which is marked with various gradations, incurvations, and lines, and below sinks in somewhat in the middle. A long, broad, thick chin—I speak of the bony chin—is only found in rude, harsh, proud, and violent persons.



Fig. 41.

THE FOREHEAD AND MOUTH.

Observe the forehead more than any other part of the countenance, when you would discover what a man is by nature, or what he may become according to his nature—and the motionless closed mouth, when you would know what he actually is. The open mouth shows the present moment of habituality. A calm, uncontracted, unconstrained mouth, with well-proportioned lips, under a characteristic, retreating, mild, tender, easily movable, finely lined, not too sharply pointed forehead, should be revered as sacred (fig. 42).



Fig. 42.

STUPIDITY

1. Every countenance is stupid, the mouth of which, seen in profile, is so broad that the distance of the eye, measuring from the upper eyelid to the extreme corner of the mouth, is only twice that breadth.

2. Every countenance is stupid, the under part of which, reckoning from the nose, is divided by the middle line of the mouth into two equal parts (fig. 43).



Fig. 43.

3. Every countenance is stupid, the under part of which, taken from the end of the nose, is less than a third part of the whole (fig. 44); if it is not stupid, it is foolish.

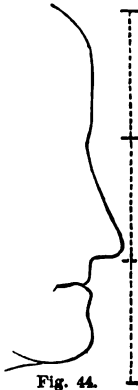


Fig. 44.

4. Every countenance is stupid, the firm under part of which is considerably longer and larger than either of the two upper parts (fig. 45).

5. The greater the angle is, which the profile of the eye forms with the mouth, seen in profile (fig. 46), the more feeble and dull is the understanding.

6. Every countenance is by nature dull and stupid, the forehead of which, measured with a pliant close-fitting measure, is considerably shorter than the nose, measured in the same manner from the end of the forehead; though measured perpendicularly, it should be of the same length (fig. 47).

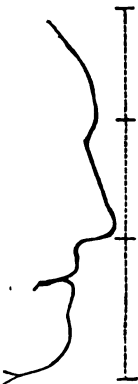


Fig. 45.

7. Every countenance is stupid in which the distance from the corner of the eye to the middle of the side of the nostril is shorter than from thence to the corner of the mouth (fig. 48).



Fig. 46.

8. Every countenance is stupid in which the eyes are dis-

cernibly more distant from each other than the breadth of an eye.

FOLLY.

He who laughs without an object, with oblique lips; who often stands alone without any determinate tendency or direc-

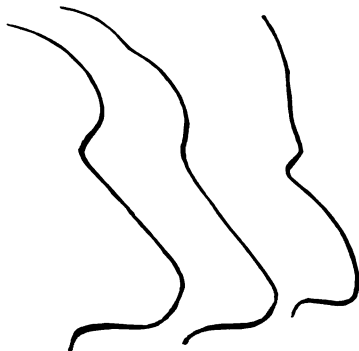


Fig. 47.

tion; who salutes by only nodding his head forward, while his body remains erect—is a fool.

SOPHISTS, KNAVES.

Small, weak, ill-defined eyes, with a watchful glance; a leaden-coloured complexion; smooth, short, black hair; a turned-up nose; a strongly projecting under lip which turns up-

ward, accompanied by a well-formed intelligent forehead, are seldom found except in consummately subtle, shameless sophists; obstinate wranglers; artfully knavish, caballing, suspicious, self-interested, mean, abominable men.



Fig. 48.

WOMEN.

1. No forward, confident woman is formed for friendship. Such a character no woman can conceal, however prudent or artful she may be. Observe, only, the sides of the nose, and the upper lip in profile, when mention is made of a female, whether a rival or not a rival, who excites attention.

2. Women with brown, hairy, or bristly warts on the chin, especially the under parts of the chin, or the neck, are commonly industrious, active, good housewives, but extremely suspicious and jealous.

3. If the manner of walking of a woman be disgusting, decidedly disgusting, not only disagreeable, but impetuous, without dignity, contemptible, verging sideways—let neither her beauty allure thee to her, nor her understanding deceive thee, nor the confidence she may seem to repose in thee, betray thee. Her mouth will be like her gait; and her conduct harsh and false like her mouth. She will not thank thee for all thou mayest do for her, but take fearful revenge for the slightest thing thou mayest omit. Compare her gait with the lines of the forehead, and the wrinkles about the mouth, and an astonishing conformity will be discovered between them.



Fig. 49.

4. Women with rolling eyes, tenderly movable, wrinkly, relaxed, almost hanging skin, arched nose, ruddy cheeks, seldom motionless mouth, a conspicuous under-chin, a well-rounded, wrinkly, tender skinned forehead (fig. 49), are not only of persuasive speech, prolific in imagination, ambitious, and distinguished for capacious memory, but also by nature extremely inclined to gallantry, and easily forget themselves notwithstanding all their good sense.

CAUTION.

Be on your guard against every one who speaks mildly and softly, and writes harshly; against him who speaks little, and writes much; against every one who speaks little, and laughs much, and whose laughter is not free from superciliousness and contempt. Such characters are distinguished by short foreheads, snubbed noses, very small lips, or projecting under lips, large eyes, which never can look directly at you, and especially broad harsh jaw-bones, with a projecting, in the under part, firm fat chin.

THE SMILE.

He who gains on you in a smile, and loses in a laugh—who, without smiling, appears to smile condescendingly, and when silent conciliates to him all around him—who when he smiles or laughs at what is witty or humorous betrays no cold con-

vening derision—who smiles with pleasure when he observes the joys of innocence, or hears the praise of merit—will have in his physiognomy and his character everything noble, everything harmonizing.

TO BE AVOIDED.

1. Be circumspect as possible in the presence of a corpulent choleric man, who continually speaks loud, and never at his ease, looking round with rolling eyes; who has accustomed himself to the external parade of politeness and ceremony; and who does everything with slovenliness and without order. In his round, short, snubbed nose, in his open mouth, his projecting protuberance-producing forehead, his sounding step, are contempt and harshness; half-qualities with pretension to supereminence; malignity with the external appearance of civility and good-humor.

2. Avoid every one who discourses and decides in a stiff constrained manner, speaking loud and shrill, and without listening to what is said by others; whose eyes, then, become larger, and more projecting; his eyebrows more bristly; his veins more swelling, his under lip more advanced; his neck swollen; his hands clenched—and who, as soon as he sits down, becomes covertly cool;—whose eyes and lips, as it were, redden, when he is interrupted by the unexpected presence of a great man who is thy friend.

THINKERS.

There is no attentive, just thinker who does not show that he is such between the eyebrows and the descent of the forehead to the nose. If there be there no indentations or cavities, refinement or energy, we shall seek in vain in the whole countenance, the whole man, and in all the acts and operations of the mind, for the thinker—that is the man who will not be satisfied without true, clear, definite, consequent, and connected ideas.

TO BE AVOIDED.

2. Whoever, without squinting, is accustomed to look on both sides at once, with small, clear eyes in unusual directions; who has besides black teeth; and whether of high or low

stature, a bowed back, and an oblique, contemptuous laugh—him avoid, notwithstanding all his acuteness, knowledge, and wit, as a false and mean person, destitute of honor, shameless, crafty, and self-interested.

2. Avoid great eyes in small countenances, with small noses, in persons of little size (fig. 50), who, when they laugh, evidently show that they are not cheerful—and amid all the joy they seem to manifest at your presence, can not conceal a malicious smile.



Fig. 50

3. Large, bulky persons, with small eyes; round, full-hanging cheeks, puffed lips, and a chin resembling a purse or bag; who are continually occupied with their own corpulence; who are always hawking, spitting, smoking and chewing tobacco, blowing their noses, and on every occasion

consult their own ease without regard to others—are, in reality, frivolous, insipid, powerless, vain, inconstant, imprudent, conceited, voluptuous characters, difficult to guide, which desire much and enjoy little—and whoever enjoys little, gives little.

4. However intelligent, learned, acute, or useful a man may be, if he continually estimates, or seems to estimate his own value; if he affects gravity to conceal the want of internal, active power; if he walks with measured step, never forgetting *self* for even a moment, but exhibiting *self* in his head, in his neck, in his shoulder-blade; and yet, in reality, is of a light, inconsiderate, and malicious disposition, and as soon as he is alone lays aside all dignity, gravity, and self-display, though at no time his egotism—he will never be thy friend.

CAUTIONS.

1. When a hasty, rough man is mild, calm, and courteous to thee alone, and continually endeavors to smile, or excite a smile, say to thyself—"we can have nothing in common"—and hastily turn from him, before he can make the lines and wrinkles of his countenance again pleasing to thee. The line or wrinkle of the forehead, and that of the cheeks, which immediately precede his artificial counterfeiting, and which, in

this moment, almost always exhibit themselves strongly, are the true ones. Delineate both these, and call them the warning traits in thy physiognomical alphabet.



Fig. 51.

2. If thou hast a long, high forehead, contract no friendship with an almost spherical head; if thou hast an almost spherical head, contract no friendship with a long, high, bony forehead (fig. 51). Such dissimilarity is especially unsuitable to matrimonial union.

TO BE AVOIDED.

3. Form no connection with any person who has in his countenance, to thee, a disgusting trait, however small it may be, which displays itself at every motion, and seldom entirely disappears; especially when this trait is found in the mouth, or the wrinkles about the mouth. You will certainly disagree, though in other respects there should be much good in his character.

4. Avoid him who has a conspicuous oblique look, with an oblique mouth, and a broad projecting chin—especially when he addresses to thee civilities with suppressed contempt. Remark the lines in his cheeks, which can not be concealed. He will trust thee little; but endeavor to gain thy confidence with flatteries, and then seek to betray thee.

MAJESTY CHARACTER.

Almost wrinkleless, not perpendicular, not very retreating, not very flat, not spherical but cup-shaped foreheads; thick, clear, full eyebrows, conspicuously defining the forehead; above more than half open, but not entirely open eyes; a moderate excavation between the forehead and a somewhat arched brow-backed nose; lips characteristically waving, not open, nor strongly closed, not very small, nor large, nor disproportioned; a neither very projecting nor very retreating chin—are, together, decisive for mature understanding, majesty character, wise and active business.

ALEXANDER WALKER'S SYSTEM.

Alexander Walker, of England, a writer of some note on anatomical and physiological subjects, and author of "Inter-marriage," "Woman," "Beauty," etc., has also given to the world a work of considerable merit, entitled "Physiognomy founded on Physiology." We shall allow him the same privilege as we have given Lavater, letting him speak for himself by means of some extracts from his works; premising that while he rejects phrenology as a system, he admits that the brain is the organ of the mind, and that the intellectual faculties are located in the forehead, the moral sentiments in the coronal region, or tophead, and the propensities (or passions, as he calls them) in the backhead. It is his misfortune that he can not recognize distinct organs for distinct faculties—that he can not *locate* the individual functions of the mind, and we will not stop here to quarrel with him about his shortcomings. We find much to commend in his book, as well as some things which we can not indorse. The reader will, we trust, subject his views and ours alike to the test of the most critical examination. The following illustrated passages will convey a very clear idea of the main points of his system:

GENERAL RULES.

1. The face, physiognomically considered, is primarily the organ and sign of *sensation*; but
2. Its muscular parts being all under the control of the will, it thus becomes also the organ of *volition*, the state of these parts beautifully indicating the acts of the organs on which they depend.
3. In studying the face in particular, it is important to observe the predominance of one of these indications over the other. Some countenances express great sensibility and little voluntary power. Hence the vulgar often point out a species of beauty in countenances which they nevertheless grant to have little expression. Now the truth in this case is explained by the rule that some countenances present beautifully formed organs of sense, and perhaps much sensibility, but no strongly delineated muscular parts, and consequently no proof of pow-

erful mental operation; or, in other words, they have little expression. Other countenances present strong muscular traits and much expression, but less beautifully formed organs of sense, and less sensibility.

Some nations, as those of the East Indies, possess the former of these characters, namely, a fine oval face, beautifully shaped eyes and nose, and lips admirably curved, and, along with these, much sensibility; yet they have little expression, because the muscular parts of their face are scarcely apparent, and correspondingly they have a remarkably small cerebellum. This observation is also in general applicable to the faces of women compared with those of men. Other nations, again, as those of Europe, possess the last of these characteristics, viz., strong muscular traits and much expression, but less beautifully formed organs of sense and less sensibility. Such also is, in general, the case with regard to the faces of men compared with those of women.

4. Mental operation can be *directly* indicated only by the superior part of the head in which the organ [organs] of mental operation is [are] situated; but the organs of sense in the face do *indirectly* present indications of mental operations, because the acts of the will, which their muscular parts obey, never take place unless preceded by mental operation.

5. With regard to each of the organs of sense, coarse or defective construction indicates coarse or defective sensibility; and, on the contrary, delicate and perfect construction indicates delicate and perfect sensibility.

6. The primary purposes of the mouth and nose being animal, it is also obvious that their primary expressions are equally so; but as in this case the nerves which actuate them appear to be the common nerves of motion, and as there is a great tendency to sympathy in the expressions of organs—even the fingers expanding with the eyes in wonder, it is further obvious that the same actions which express animal passion and emotion will accompany, and therefore express, intellectual passion and emotion.

7. The primary purposes of the eye and ear being also intellectual, it is likewise obvious that their primary expressions

are equally so; but, as in this case, the nerves which actuate them (the eye alone admitting of much of this) appear to be the common nerves of motion, and as there everywhere exists this tendency to sympathy in organs, it is likewise obvious that the same actions which express intellectual emotion and passion will accompany, and therefore express, animal emotion and passion. And in all these expressions, the evident subject of emotion or passion will render clear the animality or intellectuality of its character.

Thus, so far as the animal organs of sense are purely organs of sense, their indications are exclusively animal; and so far as the intellectual organs of sense are purely organs of sense, their indications are exclusively intellectual; but so far as both these kinds of organs are organs of expression, their indications are, in the animal organs, primarily animal, and secondarily or sympathetically intellectual, and, in the intellectual organs, primarily intellectual, and secondarily or sympathetically animal.

THE MOUTH.

The tongue is the proper organ of taste; but as it is always concealed from our view by the lips, and as the lips—of all parts of the body possessing the most exquisite sense of touch—always bear an analogy in their form and delicacy to the tongue, they may be considered as also representing the organ of taste, and as indicating its extent, accuracy, and delicacy, and consequently the passions which are dependent upon it.

Large lips always indicate greater capacity with regard to taste and its associated desires. Hence, in the negro, who excels in that sense, the lips are greatly developed, and the sensibility as to taste greater. Narrow and linear lips always indicate less capacity of taste and its associated desires. The horizontal width of the lips indicates the permanence of these functions; their vertical extent, the intensity. Lips with coarse, irregular, and ill-defined outline (fig. 54) always indicate a corresponding rudeness of these functions. Lips with

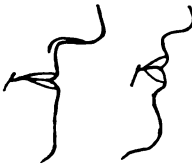


Fig. 52.

Fig. 53.

fine, regular, well-defined outline (fig. 55), on the contrary, always indicate a corresponding delicacy of these functions.



Fig. 54. Fig. 55.

Both the nose and mouth have intellectual sympathies and associations, though these are secondary, not primary effects, and they will consequently afford corresponding indications. All the parts connected with the lower jaw are acting parts. The under teeth act on the upper; the tongue, which is below, on the palate above; and the under lip upon the upper one. Now all these moving parts are under the influence of the will; and even their tendency to act indicates desire. Accordingly we find that the under lip is protruded in that species of passion—is its inflexible accompaniment and indication. The under lip undeveloped, on the contrary, indicates the absence of active gratification.

As the under lip indicates passion—including both desire and aversion—it is erected or evolved in the former, and inverted, or tightened, or rounded linear in the latter. The former is exemplified in plausible grandeur; the latter, in anger.

As in the mouth all the inferior are acting parts so are all the superior passive, or mere receiving parts. The upper teeth, the palate, and the upper lip receive the action of the corresponding lower parts. Accordingly we find that the upper lip is expanded to receive agreeable impressions, and is the inflexible

aversion, and indication of such passive enjoyment. The upper lip contracted, on the contrary, indicates the absence of passive gratification.

The long space between the nose and mouth, without any defined outline (figs. 56 and 57), and therefore indicative of passive gratification, which is neither a passion, nor a desire, nor a character of intellect, is the long space between the nose and mouth already indicated.

When the under lip is placed over the developed portion of the upper (fig. 61), it substitutes active determination for passive impression. Whoever thus places the under lip over the upper lip, will instantly experience the passion; and nothing can better establish the truth of these indications.



Fig. 60. Fig. 61.



Fig. 62. Fig. 63.

For all the reasons already assigned, it will be evident that when both lips are considerably developed (fig. 62), a character both actively and passively voluptuous exists. On the contrary, it is evident that when both lips are but little developed (fig. 63), a character proportionally opposed to the preceding exists. The sensual character is most strongly expressed where, not merely the colored portion, but the whole of the lips, to their attachments beyond the gums, protrude or hang forward (fig. 64). Where, on the contrary, the lips are gently held in, or drawn backward, or toward the angles, whatever may be their expression of passion, it is under control, and a character of coolness and precision is proportionally given (fig. 65). This is particularly marked by a depression extending downward and outward from each angle of the mouth, till it is lost on each side of the chin, or rather diffused under the colored part of the lip, and by a corresponding elevation over the depression at the angle.



Fig. 64. Fig. 65.

THE NOSE.

The short or upturned nose is evidently calculated to receive rapid impressions, and of course to lead to correspondingly rapid emotions; and it therefore indicates the rapidity with which they are sought. The long and drooping, or overhanging nose is evidently calculated slowly to receive impressions, and of course with corresponding slowness to lead to emotions; and it therefore indicates the reserve with which they are sought. Width



Fig. 66. Fig. 67.

of the nose indicates the permanence of its functions; its height, their intensity.



Fig. 68. Fig. 69.

Consistently with the mere physical capability of the short or upturned nose to receive rapid impressions, and to lead to rapid emotions, persons with such a nose are generally quick and pert. Consistently with the mere physical capability of the long and drooping nose slowly to receive impressions and lead to emotions, persons with such noses are more reserved in character.

THE EYE.

An eye of great magnitude indicates a capacity of receiving more powerful sensations of vision; because the power of all organs, equally healthy, is ever in proportion to their development. A small eye, on the contrary, presents less capacity in this respect.

Width of the eyes indicates the permanence of their functions; their height, intensity. Eyelids, therefore, which are widely expanded, so as to give a round form to the eye, resembling its appearance in the cat, owl, etc., indicate intensity and keen perception, but little sensibility.

Eyelids, on the contrary, which nearly close over the eye, indicate permanence and less keen perception, but greater sensibility. Hence, when the eyes receive too strong impressions from the light of the sun, the eyelids are more approximated; and hence, too, when a beloved object is before us, and the whole mind is filled with its image, the eyelids gradually close.

When the eyebrow, by its motions, adds to the depth of the eye, it indicates scrutiny and discernment; because such motions depend upon a voluntary employment of certain muscles, accurately to adapt the eye to the objects examined. A brow greatly elevated, on the contrary, indicates the power of deep and intense thought.

THE EAR.

The magnitude of the ear, like that of all other organs, indicates its greater capability. It is probable, how-

ever, that its susceptibility of impression also, in some measure, depends on its general thinness, since we find that animals of very acute ear have the organ not only large, but very thin, as in the cat, hare, rat, mouse, bat, etc.



Fig. 70.

An ear presenting numerous elevations and depressions, and finely elaborate, is always more delicate—a circumstance which presents its own explanation.



Fig. 71.

An ear which is unelaborate, or presents rather one general concavity than many well-defined elevations and depressions, is rarely possessed of delicacy. This is well illustrated by the difference between animals and men.

THE CHIN AND JAWS.

It is peculiarly remarkable that the projection of the occiput on which, as I have said, depends the exercise of passion [propensity], corresponds accurately with the projection of the alveolar processes and teeth, or rather of the lips, on which depend the gratification and expression of passion; so that the prominence of the posterior part of the brain may always be predicated from the prominence of that part of the face.

The breadth of the cerebellum corresponds to the breadth of the face over the cheek-bones, or the prominences of the cheeks; and the length of the cerebellum corresponds to the length of the lower jaw measured from the tip of the chin to the angle. From the cheek-bones arises the greater portion of one of the most important muscles, the masseter, which is inserted into the angle of the jaw, placing it thereby under the control of the cerebellum; and it is remarkable that the breadth of the cerebellum, on which the permanence of its function depends, corresponds to the breadth of the fixed bones, and that the length of the cerebellum, on which the intensity of its function depends, corresponds to the length of the movable bone.*

* We call particular attention to Mr. Walker's remarks in this section, as we shall have much to say in the following chapters on the subject to which they relate.

DR. REDFIELD'S SYSTEM.

J. W. Redfield, M.D., of New York, is the author of a system of physiognomy more elaborate and fully wrought out in its details than that of any one of his predecessors. This system, however, has never been given to the public in full. The author's "Outlines of a New System of Physiognomy"—now out of print—is merely what its title indicates, and is devoted mainly to the practical illustration of some of the more important of the signs of character. It furnishes no clew to his theory. His "Twelve Qualities" is hardly more than an introduction to his system; and his "Comparative Physiognomy" looks to the uninitiated very much like a collection of fanciful speculations. We are indebted to Mrs. H. S. Seymour, one of his pupils, and an accomplished teacher of his system, for the following brief sketch, which will convey a better idea of its salient points than any abstract we could make up from his published works.

It will be seen by the careful reader of the following chapters, that while we do not indorse his system as a whole, we acknowledge the value of Dr. Redfield's labors and the correctness of many of his conclusions. With these few introductory remarks we leave the following sketch to speak for itself.

ANALYSIS OF MAN.

To gain a correct knowledge of man, or of physiognomy as an exponent of man, we must learn to analyze him.

1. In the first place, we must consider man as a *whole*—as possessing individuality, unity.

2. But secondly, he is to be regarded as a *duality*—as divided lengthwise into right and left sides. Man has two arms, two legs, two eyes, two ears, and all the phrenological organs are double. The two sides are representative of male and female, positive and negative. The right side is feminine, and refers to *love* or *affection*. The left side is masculine, and refers to *wisdom* or *intelligence*. If any faculty or sign of a faculty be larger on the right side of the head or face, it indicates that that faculty has a stronger action in reference to love or affection than to wisdom or intelligence, and *vice versa*.

3. MAN may be considered as divided into *four*, by means of temperaments, not *form*. The *temperaments* indicate *temper*. A man's prevailing temper is indicated by his *temperaments*. There are *four* temperaments, viz.:

1. The *Choleric*, which is hot and dry.
2. The *Sanguine*, " hot and moist.
3. The *Melancholic*, " cold and dry.
4. The *Phlegmatic*, " cold and moist.

1. THE CHOLERIC TEMPERAMENT.—This temperament indicates a *temper* which is fiery and flashes like lightning. It is connected with the brain and the nervous system. Its absolute amount is indicated by the abundance, length, and firmness of the hair of the head. Its predominance over the other temperaments is indicated by the hair growing low on the forehead. The mane of the lion and of the horse is its indication in them.

2. THE SANGUINE TEMPERAMENT is energetic, enthusiastic, and efficient, and is connected with the *arterial blood*—the red blood; and is indicated by the size of the lungs, and the *length* and strength of the finger and toe nails, and of the hoof in animals. By *length* of the nails is meant the distance of the *root* of the nail from the end of the finger. When this temperament predominates there will be great heat and moisture, as in the negro; but its *absolute* strength is indicated by the *nails*.

3. THE MELANCHOLIC OR BILIOUS TEMPERAMENT is connected with the *venous blood* and the *secretions*, as the bile, gastric juice, etc. It inclines to pensiveness and melancholy, loves pathos and eloquence, and is favorable to the cultivation of the intellect. It is indicated by coldness and dryness of the skin, and by terseness of expression, dry remarks, etc. Also, the higher and more refined degree is indicated by the *size of the lobe of the ear*.

4. THE PHLEGMATIC TEMPERAMENT is connected with the mucous membrane, the lymphatic glands, and the excretions, as phlegm, perspiration, etc. It disposes to ease and grace of movement and position; allows the feelings to *flow out*; takes things coolly, inclines to laziness; is not subject to *inflamma-*

tory diseases. It must be judged of by the general appearance. It often gives large or broad thick feet and hands, and tends to fullness of flesh and to moisture. In its most refined development, it gives gentleness, ease, quietness, and disposes to domestic peace and amiability.

The four temperaments correspond to the four elements: Fire, Air, Earth, and Water. The *Choleric* to *Fire*, which is a generic term including *all* the imponderables, viz.: light, heat, and electricity, with their manifestations in galvanism, magnetism, etc. The *Sanguine* corresponds to *Air*, which includes all æriform substances and ponderable gases, most of which are included in the atmospheric air. The *Melancholic* corresponds to *Earth*, which includes all earthy substances, as minerals, alkalies, etc., and the solid parts of the body, which predominate in this temperament. The *Phlegmatic* corresponds to *Water*, which includes all the *liquids*, which are naturally cool and moist. The use of water and frequent bathing promote this temperament, and suppress the choleric and sanguine.

The four temperaments have other correspondences, as follows:

TEMPERAMENTS.	CHOLERIC.	SANGUINE.	MELANCHOLIC.	PHLEGMATIC.
To the four parts of the day.....	Morning...	Noon.....	Evening....	Night.
To the four seasons of the year.....	Spring....	Summer.....	Autumn.....	Winter.
To the four periods of life.....	Childhood.	Youth.....	Manhood.....	Old Age.
To the four functions of the body.....	Absorption.	Deposition.....	Secretion.....	Excretion.
To the four parts of the body.....	Head.....	{ Chest & upper extremities.	{ Abdomen and lower extremi- ties.....	Pelvis.
To the four parts of the face.....	Forehead..	{ Cheek-bones and Nose.	Mouth and Teeth.	Chin.
To the four divisions of the brain.....	Anterior....	Middle Lobe....	Posterior.....	Cerebellum.

Although each of the temperaments corresponds to and is particularly connected with a certain part of the body, head, or face, yet in their action they all blend in every part, each temperament running through the whole.

THE TWELVE QUALITIES.

Each one of the faculties of the mind has twelve ways of

manifesting itself, and these twelve ways of manifestation are called the Twelve Qualities of Mind. Three of these qualities are assigned to each temperament, or rather each temperament is *made up* of three qualities. 1. To the choleric temperament belong the qualities of Attractiveness, Repulsiveness, Endurance.

(a) *Attractiveness* is indicated by the mobility and pliability of the spine, and by the softness, fineness, and thinness of skin, and also by the exquisiteness of the touch; (b) *Repulsiveness* by the length, strength, straitness, and stiffness of the spine; and, (c) *Endurance*, by the size and *extent* of the brain. The *extent* is indicated by the convolutions.

2. To the *Sanguine* temperament belong Expressiveness, Effectiveness, and Consciousness.

(a) *Expressiveness* may be called the looking-glass of the mind. It belongs to both man and animals. It is indicated by *color* of the skin, hair and eyes, cheeks and lips. Those who have the most of it express every emotion in their faces—can not conceal their feelings. Color and style in dress are also expressive of character. Speech is the highest mode of expression. Artificial language is the *dress* of thought. (b) *Effectiveness* is the power which all the faculties of the mind have of execution, of efficiency, of bringing about results, putting into practice, etc. It is indicated by the size of the bones and muscles of the upper extremities, the hands, arms, shoulders, shoulder-blades, collar-bones, and the chest. In an intellectual point of view, effectiveness is indicated rather by the length of the upper extremities than the size, which refers more to labor. (c) *Consciousness* is the power of feeling, and *knowing* that you feel, pleasure or pain—being aware of or conscious of them. It does not imply analytical knowledge of *one's self*, but knowledge of one's enjoyment and suffering; although it supplies a broad basis for perfect self-knowledge. Consciousness is indicated by the voice, and is in exact proportion to its loudness and melody. The richer and more beautiful the voice, the greater the degree of this quality which belongs to all the faculties. Fish and insects have no voice, and are entirely unconscious of suffering. Woman has more of this quality than man.

3. To the *Melancholic* or bilious temperament belong the qualities of Improvability, Activity, and Instinctiveness.

(a) *Improvability* is that quality of the mind which corresponds to soil in the earth, and indicates the susceptibility to cultivation and improvement—not the power of storing up knowledge and learning by rote, like burying roots and seeds in the ground, but the power which the mind has of *applying* knowledge to its own growth and expansion. Its sign is the size and convolutions of the ear. In some animals the ear is larger than in man, but its construction is *simple*, while in man it is always more or less *complicated*. Man has more of this quality than woman. (b) *Activity* indicates the action of the faculties, as quick or slow. It is developed in the size of the lower extremities in man, and the posterior extremities or hinder legs in animals, but is chiefly indicated by the size of the eye ball and socket. People with stout hips, thighs, and legs will be more active in bodily motion, in walking, running, etc., and especially in the service of the affections and passions; but the size of the eye indicates more particularly intellectual activity. Insects whose eyes are very large in proportion to their bodies, evince a keenness of apprehension and a quickness of the instinctive faculties which is remarkable. (c) *Instinctiveness* is indicated by *gesture*. Those who make the most gestures in speaking have the most of it. The French are good examples—they express much by gesture. Instinctiveness seems to be an adaptation of *motion* to *feeling*, and acts involuntarily. It is a sort of inspiration—the mind of God given to man and to all the animal creation, and even in a degree to the vegetable—as in the sensitive plant, which shrinks from the touch; and the vine, which puts forth its *feelers*. It knows without learning—can not tell how it knows. It is larger in woman than in man.

4. To the *Phlegmatic* temperament belong the qualities of Impulsiveness, Reproductiveness, and Voluntariness.

(a) *Impulsiveness* is a sort of projectile quality, and gives the mind an impetuosity which often produces great rashness of action. Properly directed and balanced, it prompts to energetic action. It is indicated by the fullness and strength

of the beard. (b) *Reproductiveness* indicates the power of memory, which is not a faculty by itself, but a quality of all the faculties. Reproductiveness calls up the past for present consideration—overhauls the store-house of knowledge, and selects what is required for present use. It also keeps the feelings fresh and young. Its sign is the size and strength of the viscera, the lungs, heart, stomach, bowels, etc. It is also connected with the mucous membrane. When the viscera are small and weak, there is a lack of memory, as in dyspeptics. Nearly all celebrated men have large viscera. This quality is possessed by animals in common with man. (c) *Voluntariness* is the quality that gives to all the faculties the *power of choice* to act or not to act. It is the opposite of Impulsiveness, which, *by itself*, does not deliberate. Voluntariness makes a man *accountable* for his conduct. It is indicated by the size of the face. Animals have comparatively small faces; and in those of them whose faces are largest, a physiognomical examination will show that only that part of the face is large which indicates their particular appetites and passions; and it will be found on observation that they exercise choice and deliberation only in regard to those appetites and passions.

The third quality of each temperament is the most important one—that to which the other two lead. The third of the first temperament (the Choleric) and the third of the last temperament (the Phlegmatic) are Endurance and Voluntariness. These two, the former relating to the brain and the latter to the face, are the most important of all the qualities, and they bear a most intimate relation to each other—Endurance, or the brain, corresponding to the *root* of a tree, and Voluntariness to the perfected *fruit*. The root of the tree is first in growth, and in that sense the most important. So of the brain. In infancy and childhood the brain is large, while the face is comparatively small. Afterward the face grows faster, till it seems to overtake the brain; and at maturity they correspond to each other in size, always considering the rule, “other things being equal.” For it often happens that the quality of endurance in an individual surpasses the quality of voluntariness, and then the brain will be larger than the face, and *vice versa*.

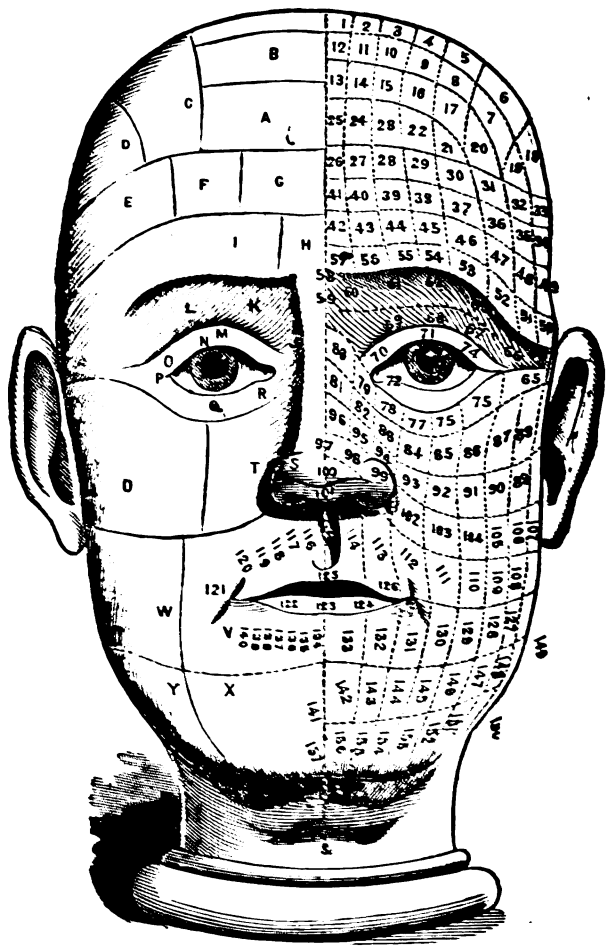


Fig. 11.—DIAGRAM, FRONT VIEW.

NAMES OF THE PHYSIOGNOMICAL SIGNS

ACCORDING TO DR. REDFIELD'S SYSTEM.

[The Numbers refer to corresponding ones on the diagrams.]

- | | | |
|-------------------------------------|------------------------------|------------------------------|
| 1. Benevolence. | 66. Conjunctions. | 182. Fraternity. |
| 2. Kindness. | 67. Contest. | 183. Sociality. |
| 3. Gratitude. | 68. Resistance. | 184. Travel. |
| 4. Respect. | 69. Subterfuge. | 185. Home. |
| 5. Immortality-Belief. | 70. Adverba. | 186. Patriotism. |
| 6. Romance. | 71. Sympathy. | 187. Philanthropy. |
| 7. Poetry. | 72. Verba. | 188. Jealousy. |
| 8. Enthusiasm—Hope. | 73. Interjections. | 189. Meanness. |
| 9. Sublimity. | 74. Prepositions. | 190. Sadness. |
| 10. Imitation. | 75. Construction. | 141. Congenality. |
| 11. Example. | 76. Shadow. | 142. Desire to be Loved. |
| 12. Discovery. | 77. Machinery. | 143. Desire to Love. |
| 13. Analysis. | 78. Molding. | 144. Violent Love. |
| 14. Metaphor. | 79. Weaving. | 145. Ardent Love. |
| 15. Analogy. | 80. Architecture. | 146. Fond Love. |
| 16. Causality <i>a priori</i> . | 81. Attack. | 147. Love of Beauty. |
| 17. Wit. | 82. Clothing. | 148. Faithful Love. |
| 18. Imagination. | 83. Water. | 149. Republicanism. |
| 19. Resemblances. | 84. Leaping. | 149a. Responsibility. |
| 20. Contrast. | 85. Watchfulness. | 149b. Caution. |
| 21. Association. | 86. Protection. | 150. Resolution. |
| 22. Induction <i>a posteriori</i> . | 87. Hurling. | 151. Perseverance. |
| 23. Correspondence. | 88. Whirling. | 152. Severity. |
| 24. Comparison. | 89. Sleep. | 153. Abstraction. |
| 25. Combination. | 90. Repose. | 154. Self-Control. |
| 26. Time. | 91. Rest. | 155. Determination. |
| 27. Events. | 92. Caution. | 156. Willingness. |
| 28. Duration. | 93. Suspicion. | 157. Engrossment. |
| 29. Velocity. | 94. Gain. | |
| 30. Prevision. | 95. Economy. | |
| 31. Plan. | 96. Relative Defense. | |
| 32. Eloquence. | 97. Self-Defense. | |
| 33. Somnambulism. | 98. Confiding. | A. Parental Love. |
| 34. Repulsiveness. | 99. Concealment. | B. Self-Love, Supercillious- |
| 35. Activity. | 100. Correspondence. | ness. |
| 36. Instinctiveness. | 101. Discovery. | C. Fatuity, Filial Love. |
| 37. Expressiveness. | 102. Inquisitiveness. | D. Reform and Triumph. |
| 38. Attractiveness. | 103. Responsibility. | E. Faith and Immortality. |
| 39. Memory. | 104. Concert. | F. Hope and Enthusiasm. |
| 40. Consciousness. | 105. Politeness, Simulation. | G. Charity. |
| 41. Voluntariness. | 106. Surprise. | H. Justice, Arbitration. |
| 42. Place. | 107. Exclusiveness. | I. Conscience. |
| 43. Direction. | 108. Love of Life. | J. Eminence, Gratitude, |
| 44. Distance. | 109. Rapacity. | and Kindness. |
| 45. Momentum | 110. Resistance. | K. Penitence. |
| 46. Colors. | 111. Subterfuge. | L. Confession. |
| 47. Order. | 112. Destructiveness. | M. Historical Truth. |
| 48. Music. | 113. Filial Love. | N. Prayer. |
| 49. Reaction. | 114. Parental Love. | O. Rapture. |
| 50. Lightness. | 115. Concentration. | P. Collating and Punctu- |
| 51. Numbers. | 116. Comprehension. | ality. |
| 52. Shape. | 117. Application. | Q. Mathematical Truth, |
| 53. Fluidity. | 118. Gravity. | Humility, Apology. |
| 54. Weight. | 119. Magnanimity. | R. Fiction, Wonder, Self- |
| 55. Size. | 120. Precision. | Justification. |
| 56. Forms. | 121. Cheerfulness. | S. Example and Influence. |
| 57. Consistence. | 122. Ostentation. | T. Admiration. |
| 58. Command. | 123. Envy. | U. Sleep. |
| 59. Nouns. | 124. Hatred. | V. Excursiveness. |
| 60. Adjectives. | 125. Adhesiveness. | W. Hospitality. |
| 61. Substitution. | 126. Approbation. | X. Buoyancy. |
| 62. Climbing. | 127. Preserving. | Y. Acquisitiveness. |
| 63. Enjoyment. | 128. Enjoyment. | Z. Economy, Submission, |
| 64. Particles. | 129. Climbing. | Subserviency. |
| 65. Medicine.—65, A. Wave | 130. Substitution. | &. Independence and Firm- |
| motion. | 131. Equality. | ness. |

CLASSIFICATION OF FACULTIES.

Figs. 72 and 73 illustrate Dr. Redfield's classification and location of faculties and their signs on the face. All the faculties

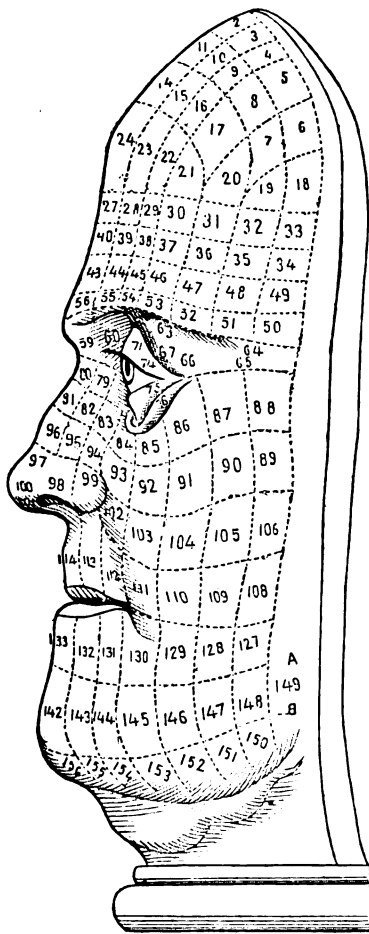


Fig. 73.—DIAGRAM, PROFILE VIEW.

marked on the profile and those on the left side of the front-face are indicated in the bones—the framework of the face. Those on the right side have their signs in the muscles. Those indicated by the bony framework lie in strict classical order, and have their places in that order; but sometimes the part of a bone belonging to a faculty is so covered with muscle that it is impossible to distinguish it there. In that case Nature hangs out the sign in some conspicuous part of the face where it can not be mistaken.

Below the eye, the face, as may be seen by the drawing, is divided into *eight horizontal lines* of faculties, with eight faculties in each line, making also eight perpendicular lines.

Above the eye are also eight horizontal and eight perpendicular lines of faculties, while that line indi-

eye. The eight lines above the eye have a peculiar correspondence to the eight lines below the eye. Also, the eight faculties in each perpendicular and in each horizontal line have interesting analogies and correspondences with each other. Those in the horizontal lines have harmonies of thirds, fourths, and fifths, corresponding to the harmonies of the musical scale of eight notes, and showing how deeply laid in nature are those eight sounds of the natural scale and their harmonies.

PRACTICAL EXAMPLES.

As a practical illustration of the system thus sketched in outline we will take up the group of the faculties whose signs are situated, as shown by the foregoing diagrams, on the bone of the chin and lower jaw.

THE LOVES AND THE WILLS.—*Love*, or *Amativeness*, in its various forms, is indicated by anterior prominence of the chin and breadth of the lower jaw below the molar teeth. *Will*, in its various manifestations, is indicated by length or perpendicular projection of the same. The relation of the Loves and Wills to each other is that of opposition or contrast. Commencing in the center of the face, we take up the faculties of Love and Will alternately.

1. *Congeniality*, the first of the faculties of Love (fig. 72, ¹⁴), is indicated by the anterior projection of the center of the chin [see initial cut at the head of this chapter]. This faculty desires a husband or wife similar to one's self—a perfect *counterpart*, and in seeking such a one is very likely to create a “beau-ideal,” such as it can never find in real life. But it is counterbalanced by

(a) *Engrossment*, the first faculty of the Will, which is indicated by length of the chin downward under Congeniality (fig. 72, ¹⁵). Engrossment is the wish or will, and the power of fixing the mind on material things; points downward to the earth, looks at stern realities, draws Congeniality away from its fancied ideal, and teaches it the excellence and worth of the *real*. But Engrossment without the influence of Congeniality would throw aside all sentiment, all ideas of congenial minds and spirits, and would lead to gross materialism

in love, and unless strongly counteracted by the higher faculties, in religion also.

2. *Desire to be Loved*—the second faculty of Love, is indicated by a prominence of the chin on each side of Congeniality (fig. 72, ¹⁴²); for it must be remembered that all the signs of faculties are *double*. This faculty is thoroughly selfish when acting by itself. It craves *all* the love either of one individual or of many. But it is counteracted by

(b) *Willingness*—the second faculty of Will (fig. 72, ¹⁴⁴), is indicated by length of the chin downward under Desire to be Loved. Willingness is the wish or will that others also should be loved by those who love us. It acts against the exclusiveness of Desire to be Loved, which would absorb not only all the *conjugal* love of the husband or wife, but all the social loves. On the other hand Willingness itself needs the counterbalance of Desire to be Loved, else it might lead to undue liberty, and swallow up conjugal love in free-love. This faculty is willing to accommodate others, and if large will lead one to incommode himself for the sake of others. Such a one is also easily persuaded to conform to the wishes of others.

3. *Desire to Love*—the third faculty of Love (fig. 72, ¹⁴⁴), gives prominence to the chin next to Desire to be Loved, making the *small* square chin. This faculty loves those opposite to ourselves in position of life, in complexion, temperaments, etc. It also loves *many*, so many that it does not know which it loves best, or which to choose for a life-partner; and probably would never choose, were it not assisted and counteracted by

(c) *Determination*—the third faculty of Will (fig. 72, ¹⁴⁴), which gives downward length to the chin under Desire to Love. This latter is a wanderer; but Determination holds it back, sets bounds and limits to it, saying, "Thus far, no farther"—enables it to select one on whom its love may be lavished, and to settle down in a happy home. Determination is large in all decided and determined people. It gives the disposition, and to some extent the power, to hold back—to restrain ourselves and also others, sometimes proceeding to

the verge of tyranny. It is larger in manhood and old age than in childhood.

4. *Violent Love or Devotion*—the fourth faculty of Love (fig. 72, ¹⁴⁴), is indicated by the prominence of the chin next to Desire to Love, giving, when large, the broad square chin. This faculty, acting by itself, invests its object with superhuman qualities and worships it; but is very liable to become morbidly sensitive and jealous. And if the love is not returned, or for any cause is withdrawn or changed, paroxysms of insanity may occur in which the individual may do violence to himself or the object of his love. But this morbid, violent action of the faculty is counteracted or prevented by



Fig. 74.—VIOLENT LOVE.

(d) *Self-Will or Self-Control*—the fourth faculty of Will (fig. 72, ¹⁵⁴), which is indicated by length of the chin downward under Violent Love. This is the strongest of the faculties of Will. One with it large is self-centered, self-poised, self-possessed, has presence of mind in times of danger; and however devoted he may be to the object of love, will not lose himself or his senses, or be thrown out of balance in either mind or body if disappointed; nor will he be liable to insanity from *any* cause. This faculty gives *weight* and dignity to the character, and is usually larger in man than in woman. Its lower action is manifested by *throwing* one's self *down* in a seat or on the floor, as a self-willed child does, bearing down as heavily as he can, so that he has to be lifted or dragged along. It also manifests itself by *stamping*. These four faculties of Love and Will are indicated in the *chin proper*, or in the front



Fig. 75.—SELF-WILL.

of the face; the other four are indicated in the length and breadth of the lower jaw on the *side* of the face, under the molar and wisdom teeth.

5. *Ardent Love*—the fifth faculty of Love (fig. 72, ¹⁴⁵), is indicated by breadth of the lower jaw under the small molars and next to Violent Love. It is also indicated by the breadth and fullness of the *red* part of the lips. It imparts warmth and ardor to the whole character, belongs to Friendship as well as to Love, and shows itself by embracing and kissing.

When large it gives a love of poetry—the disposition to write it, and other things being equal, the ability. Its excessive action is counteracted by

(e) *Abstraction*—the fifth faculty of Will (fig. 72, ¹⁵²), indicated by the length of the chin downward under the small molars and under Ardent Love, also by the fullness of the muscular part of lips, particularly the under lip, below the red of the lip—there as in the chin, lying under Ardent Love. This faculty is the power of abstracting the mind or attention from external things and fixing it on the internal. Under its



Fig. 76.—ABSTRACTION.

action a person appears absent-minded, and is often really unconscious of what is passing around him. It gives a tendency to clairvoyance and the trance state. It induces *coldness*, and thus opposes Ardent Love, which quickens the flow of the blood and induces warmth. The latter is very conscious of the external and sensitive to the touch; while the former, in its greatest degree, is entirely unconscious of the external, and entirely insensible to the touch, even when the flesh is pricked with pins or torn.

6. *Fond Love*—the sixth faculty of Love (fig. 72, ¹⁴⁶), and

7. *Love of Physical Beauty*—the seventh (fig. 72, ¹⁴⁷), have their signs so near together that it is difficult to distinguish

them; and, as they are usually either both large or both small in the same individual, it is not necessary to distinguish them. They are indicated by breadth of the lower jaw under the two large molars (fig. 77), and next to Ardent Love. The first of these, Fond Love, delights in caressing, and the second admires and loves the beauty of the human form, and looks upon it as the crown of Nature's material creation. These two faculties are very liable, when large, to lead to gross sensuality, unless held in check by equally large faculties of

(f) *Severity* (fig. 72,¹⁵²), and

(g) *Perseverance* (fig. 72,¹⁵¹), which are the sixth and seventh faculties of Will, and are indicated by the length of the jaw downward under the two large



Fig. 77.—LOVE OF BEAUTY.

molars; Severity being under the first, and Perseverance under the second. The former is manifested in strictness, rigidity, the observance of stringent rules and lines of conduct, and a stern, uncompromising adherence to an undeviating standard. One with this faculty large, practices severity toward himself and is inclined to exercise it toward others. He will scarcely allow the innocent fondling and caresses of little children—much less any indulgence of Fond Love which might lead to wantonness. Parents and teachers who are very strict with their children and pupils, have this faculty large.

Perseverance is persistence in *doing*, and the pursuit of something to be attained. When large, nothing can divert it from its purpose; and this *directness*, this going right on till the object placed before the mind is gained, acts against the indulgence of sensual love. He who is steady in pursuing great and good ends in life, is not liable to pervert the Love of Beauty, but will rather elevate and refine its action, and make it subservient to his soul's true progression.

8. *Faithful Love*—the eighth faculty of Love, is indicated by breadth of the lower jaw under the wisdom tooth, and just

forward of the angle of the jaw (fig. 72, ¹⁴⁰). It desires to beget children, not so much for their own sakes as being pledges of *conjugal love*, the faculty being a conjugal, not a parental one. In animals it is large in those who pair and remain faithful to their mates.

(h) *Resolution*—the eighth faculty of Will, is indicated by length of the lower jaw downward under the wisdom tooth (fig. 72, ¹⁵⁰). This is that power of the will that resolves, as its name implies. Of itself alone, it does not execute. It is the necessary preliminary to action—the starting point. Hence, in its physical action, it *leaps up*, jumps up—is large in prancing horses—is not easily kept down to the ground. This faculty is in its nature *aspiring*; it is the wish or the will for something better or higher than the present; so it *resolves to do better*. Good resolutions are common enough, but *who* deliberately makes *bad* resolutions? To do that a man's *whole nature* must be greatly perverted. It also sustains and strengthens Faithful Love, which, by itself, might be satisfied with the pledges, love-tokens, and promises given. It inclines the soul to rest content with these and to be in no haste for their consummation; but Resolution says, "*Now* is the time,"—is not willing to wait, and therefore hastens, in conjunction with other faculties, to remove all obstacles, so that the pledge may be redeemed—the promise fulfilled.



Fig. 73.—RESOLUTION.



II.

STRUCTURE OF THE HUMAN BODY.

"The soul is the architect and the body the workmanship."—C. P. BRONSON.

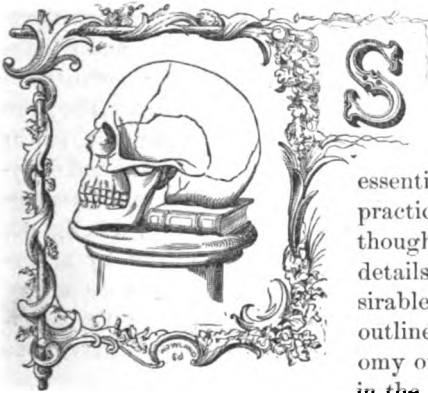


Figure 73.

SOME knowledge of the curious and wonderful mechanism of the human body will be found useful, if not essential, to the student of practical physiognomy; and, though we can not enter into details here, we deem it desirable to present the general outlines of the system of anatomy on which our teachings in the following chapters are based. It will be observed

that it is at once simple and comprehensive—capable of being taken in at a glance, and yet embracing everything.

We find in the human body three grand classes or systems of organs, each of which has its special function in the general economy. We call them—

1. The Motive, or Mechanical System;
2. The Vital, or Nutritive System; and
3. The Mental, or Nervous System.

These three systems, each naturally divided into several branches, include all the organs and perform all the functions of the physical man.

I.—THE MECHANICAL SYSTEM.

The mechanical or motive system consists of three sets of organs, forming, in combination, an apparatus of *levers* through which locomotion and all the larger movements of the body are effected. They are

1. The Bones;
2. The Ligaments; and
3. The Muscles.

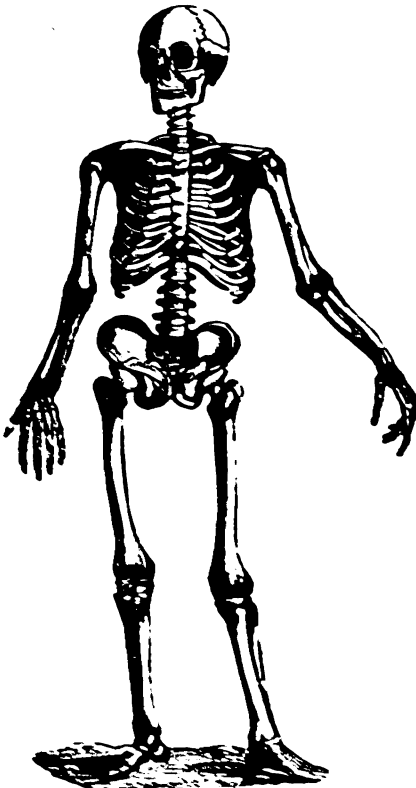


FIG. 80. THE HUMAN FRAMEWORK.

1. *The Bones.*—The bones form the framework of the human body, determine its general form and sustain and give solidity to every part. They are (including the teeth) two hundred and forty-six in number, arranged as shown in fig. 80, and united by articulations in such a way as to adapt them perfectly to their various functions.

The bones of the head are eight in number; the face, including the ears, has twenty; and there are thirty-two teeth; making a total in the head and face of sixty bones. Adding the *os hyoides* or bone of the tongue, which seems to occupy

an isolated position, we have sixty-one. As we shall have occasion in succeeding chapters to recur to the anatomy of

these parts, it is unnecessary to describe them in this particular connection.

The head, as may be seen, rests upon the spinal or vertebral column, one of the most wonderful of Nature's wonderful works. "It is composed of twenty-four bones, called *vertebræ*, linked firmly together by a complicated system of ligaments, giving it immense strength, and, at the same time, great flexibility. It is pierced by what is called the vertebral canal, through which passes the spinal cord. The spinal column is not straight, since that form would have rendered it more liable to be broken, but forming a double curve readily yields a little to any unusual pressure."

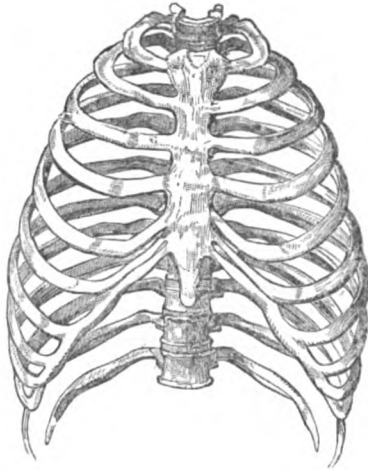


Fig. 81.—THE THORAX.

The bones of the chest are twenty-five in number, consisting of the breast-bone or *sternum* and twelve pairs of ribs, and, in connection with the spinal column, constitute the *thorax*, as represented in fig. 81.

The vertebral ends of the ribs are expanded into heads for articulation with contiguous *vertebræ*. The two lower ribs are much shorter than the others and are called floating ribs. The sternal ends

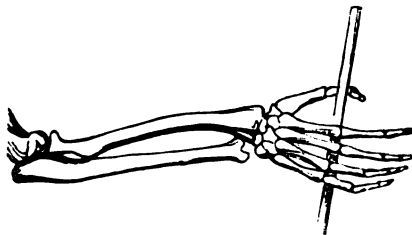


Fig. 82.—BONES OF THE HAND.

of the ribs are cartilaginous, thus contributing to the elasticity of the thorax.

The upper extremities are made up of sixty-four bones.

Each comprises the *clavicle* or collar-bone; the *scapula* or shoulder-blade; the *humerus* or arm-bone; the *ulna* and *radius* bones of the fore-arm; the bones of the *carpus* or wrist; the *metacarpus* or hand-bones; and the *phalanges* or finger-bones.

The osseous structure of the hand and wrist is very complex and curious, comprising twenty-seven bones—eight in the wrist, five in the body of the hand, and fourteen in the fingers and thumb. Their arrangement may be seen in fig. 82.

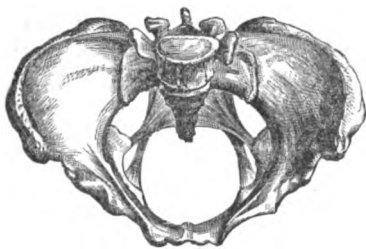


Fig. 88.—THE PELVIS.

The pelvis (fig. 83) is composed of the two bones (*ossa innominata*) which form its front, and the *sacrum* and *coccyx* behind.

In the lower extremities we find sixty bones. These are, in each, the *femur* or thigh-bone, the longest bone in the body; the *patella* or

knee-pan; the *tibia* and *fibula* or leg-bones; the seven *tarsal* or ankle-bones; the five *metatarsal* or foot-bones; and the fourteen *phalanges* or toe-bones. The structure of the foot, it will be seen, is similar to that of the hand.

The *patella* or knee-pan is called a *sesamoid* bone. There are eight of these bones in the human system. They are small osseous masses, formed in the tendons, which exert a degree of force upon the surface over which they glide, and serve to protect the neighboring parts from injurious pressure.

The connections of the bones, called joints or articulations, are very beautiful contrivances which no mechanic or artist could improve. These connections are of various kinds—by sutures or a sort of dovetailing, by cartilaginous attachments, and by movable joints.

2. *The Ligaments*.—The ligaments help, as has already been incidentally mentioned, to form the joints, and are properly called organs of connection. Their strength and toughness are so great that it is hardly possible by means of any ordinary force to tear them asunder. A distinguished medical writer says:

"It is wonderful to see how admirably the ligaments are arranged to answer the purposes for which they are intended! Where the ends of two bones meet, as in some of the joints, ligaments pass across from one to the other; and so firm are they in their structure, that they never allow the joint to become loose, however much it may be exercised. Some of the ligaments are arranged so as to keep the joint from bending the wrong way. The knee joint (fig. 84), which, were it not for its numerous ligaments, would be altogether unfit for the important offices it fulfills, has in it two of these bands, crossing each other like the legs of a saw-horse, in such a manner as to prevent the leg from being carried too far backward or forward; and to guard against dislocations sideways, strong lateral bands are placed on each side of the joint. Not only the large, but the small bones of the body, likewise, are bound together in this way as firmly as if they were secured by clasps of steel. Add to all this, the ligaments, like the bones themselves, are nearly insensible, being of a white and shining substance."

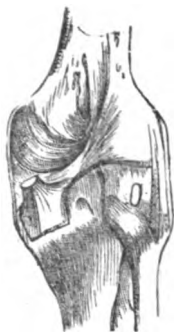


Fig. 84.—KNEE JOINT

3. *The Muscles*.—These are simply bunches of red flesh growing tougher and more compact toward the extremities by which they are attached to the bone, and terminating in white tendons or cords. They are *par excellence* the organs of motion. It is by means of them that the indwelling mind, telegraphing its mandates through the appropriate nerves, effects any desired movement, by causing a contraction of the fibers of which they are composed; thus drawing the parts to which they are attached toward each other. The arrangement of the external



Fig. 85.—MUSCLES OF THE ARM.

muscles of the forearm and hand are beautifully shown in fig. 85. They are divided into three classes: the Voluntary, the Involuntary, and the Mixed.

The *Voluntary* muscles are those which belong to the animal life of the individual, and are under the control of the will; they are situated chiefly in the extremities, but many are also found attached to the head, neck, and trunk: they are usually symmetrical, and correspond on each side of the body.

The voluntary muscles are generally of a deep red color, possessed of fibers more or less longitudinal, and consist of a central larger portion or belly, and two extremities more or less contracted and tendinous; the exceptions, however, are numerous.

The *Involuntary* muscles belong to the organic life, and are confined to the cavities of the thorax and abdomen, with the exception of the iris. They are found in the heart, esophagus, stomach, and intestinal canal, thus forming the hollow viscera: they are not symmetrical, and are of a pale yellowish color, are composed of fibers taking different directions, some longitudinal, some transverse, others oblique or circular, and many, as in the heart, closely interlaced with each other: the muscular fibers of this organ are of a *pale reddish* color, and do not possess tendons, if we except the chordæ tendineæ of the ventricles.

The *Mixed* class of muscles are those which are to a certain extent under the influence of the will, but still act independently of it, as in sleep. The *diaphragm*, *orbicularis palpebrarum*, the muscular coat of the bladder, and *sphincters* belong to this class.

Although thus classed, many of these muscles may act so as to change their condition from the voluntary to the involuntary class, and *vice versa*; thus the voluntary muscles of the extremities frequently act spasmodically, and thus become involuntary muscles; but this is not their normal state, and this only must be our guide in their classification.

II.—THE VITAL SYSTEM.

The vital or nutritive system consists of three classes of organs, forming a complicated system of *tubes*, which perform

the functions of absorption, circulation, and secretion, and incidentally of purification. The principal seat of these organs is the trunk of the body. They comprise

1. The Lymphatics,
2. The Blood-Vessels, and
3. The Glands.

1. *The Lymphatics*.—These are small transparent tubes furnished with valves at short intervals, and connected with the ganglia or glands which are distributed over the body, but are most numerous on the sides of the neck, the arm-pits, the groins, and the mesenteric folds of the intestines. Their office is to absorb nutriment and pass it into the circulation. They convey the lymph from every part of the system to the descending *vena cava*, where it mixes with the venous blood returning to the heart. When, through disease or deficiency of food, the supply of nutriment from the ordinary sources is inadequate to the wants of the system, these absorbents take up the fat which has been deposited in the cellular tissues, to be reserved for a time of need, and empty it into the chyle duct, to be thrown into the circulation. This causes the falling away or emaciation observed in the sick or starving. Even the muscles and cellular tissues are thus appropriated, in extreme cases.

These organs, when they open into the intestines and serve to convey a portion of the nutriment elaborated by the stomach through the thoracic duct to its proper destination, are called lacteals.

2. *The Blood-Vessels*.—The circulation of the blood is effected by means of a system of *tubes*, consisting of the heart, the arteries, and the veins. The center of circulation is the heart (fig. 86), a muscular organ situated in the lower part of the thoracic cavity, between the two folds of the pleura, which form the central partition of the chest. It consists of two parts, a right and a left, in each of which are two cavities, an auricle and a ventricle. In other words, it forms a double force-pump, most ingeniously constructed, with well-fitted valves, which always act perfectly, and never get out of order

or wear out. Connected with this double engine are the two interwoven sets of tubes, the arteries and the veins; the former of which carries the blood to every part of the body, while the latter returns it to the center of circulation.

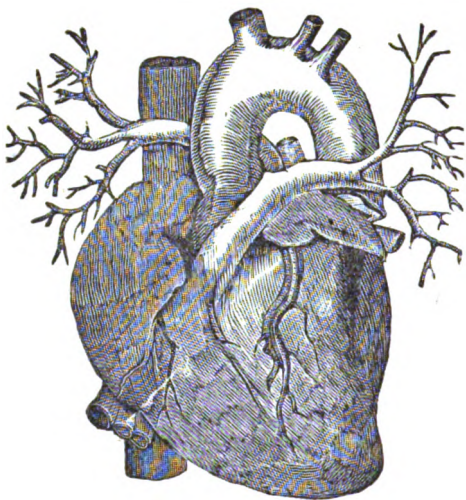


Fig. 86—THE HEART.

Two different qualities of blood are in constant circulation: one is, the venous, dark, or carbonized blood; the other is the arterial, red, or decarbonized blood. The first circulates through the veins and right side of the heart; the last through the arteries and left side of the heart. The pulmonic circulation is an exception to this, as the pulmonary artery conveys the black

or venous blood, the pulmonary veins the red or arterial blood.

The arrangement of a double circulation as in man is repeated in adult mammals and birds; but in reptiles, fishes, and lower tribes of animals, a single circulation only exists—the ventricles communicating by a gap in the septum; or there being but one auricle and one ventricle; or, finally, no heart, but a circulation of vessels only.

3. *The Glands*.—The glands or filters are the organs which secrete or deposit not only the various substances of which the different organs are composed, but the fat, hair, milk, and other animal products. They consist of two sets of capillary vessels, the one for the circulation of arterial blood, and the other for secreting their proper materials. The lungs, stomach, intestines, reproductive organs, and especially the liver, are mainly glandular in their structure, and so far are included in this system.

III.—THE MENTAL SYSTEM.

The mental or nervous system forms the medium of connection between the soul and the external world, and is the instrument through which thought and impulse culminate in action. It consists, structurally, of a series of globules bound by membranous investments into fibers of various forms. The chief seat of this system is the head. Its three orders of organs are—

1. The Organs of Sense,
2. The Cerebrum, and
3. The Cerebellum.

1. *The Organs of Sense.*—The organs through which we receive impressions from external objects—the eye, the ear, etc.—need not be described. They communicate their impressions to the brain by means of special nerves, some of which are represented in fig. 87. They all seem to center in the base of the brain.

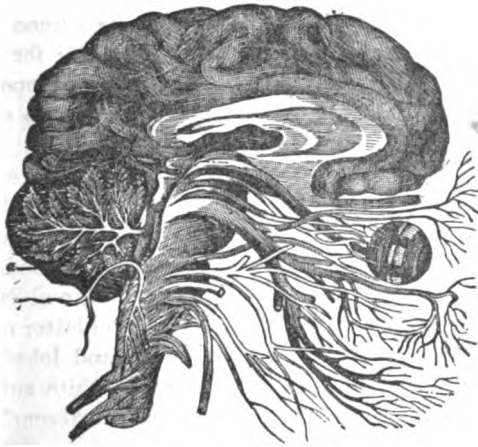


Fig. 87.—THE BRAIN.

2. *The Cerebrum.*—The human brain (fig. 87), speaking of it as a whole, is an oval mass filling and fitting the interior

of the skull, and consisting of two substances—a gray, ash-colored, or cineritious portion, and a white, fibrous, or medullary portion. It is divided, both in form and in function, into two principal masses, called the cerebrum and the cerebellum. At its base there are two other portions, called the annular protuberance and the medulla oblongata.

The cerebrum is divided longitudinally by the falx, or scythe-shaped process, into two equal hemispheres, and each of these, in its under surface, into three lobes. But the most remarkable feature in the structure of the cerebral globe is its complicated convolutions, the furrows between which dip down into the brain and are covered by the pia mater, a delicate fibro-vascular membrane, which lies upon the immediate surface of the brain and spinal marrow, bending down into all their furrows or other depressions. By means of these foldings the surface of the brain is greatly increased and power gained with the utmost economy of space; for it is a well-ascertained fact, that in proportion to the number and depth of these convolutions is the power of the brain.

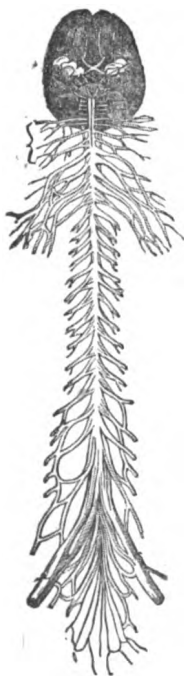


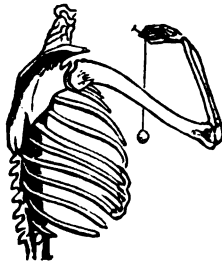
Fig. 88.—SPINAL CORD AND NERVES.

3. *The Cerebellum.*—The cerebellum is the organ of the procreative function, and of physical life and vital power. It lies behind and immediately underneath the cerebrum (fig. 87, *a*), and is about one eighth the size of the latter organ. It is divided into lobes and lobules, and consists of a gray and white substance like the cerebrum, but differently disposed, the white substance being internal in the

latter and external in the former; in which both substances are disposed in thin plates instead of convolutions. There is said to be no direct communication between the lobes of the cerebrum and the cerebellum.

Extending from the base of the brain to the atlas or bony pivot on which the head rests, is the medulla oblongata. It is conical in shape, and may be considered as merely the head or beginning of the spinal cord, which continues it, and, as it were, extends the brain down the vertebral column; and, by means of the nerves which it gives off, and which pass through notches between the vertebræ, connects it with every part of the body. The general arrangement and distribution of the nerves may be seen in fig. 88.

Space does not permit us to extend our remarks, nor does our plan render it necessary. Those who desire to do so may with profit consult works devoted specially to this subject. Where further details are essential to the full comprehension of the matters which it is our special object to set forth, they will be given in the proper place.



III.

GENERAL PRINCIPLES.

"The active and plastic principle is the soul—the true man—of which the body is but the external expression and instrument."—PHYSICAL PERFECTION.



Fig. 89.—NEWTON.

WE have already, in our introductory remarks, defined the word Physiognomy. It signifies, in its broadest sense (we may repeat), a *knowledge of nature*, but more particularly the *forms* of things—the configuration of natural objects, whether animate or inanimate. In this sense we may speak of the physiognomy of a country or a plant, as well as of an animal or of a man; and it is with an instinctive appreciation of this fact that we talk about the *face* of nature,

the features of a landscape, and so on.

But it is mainly to the human form that physiognomy as a science or system, and as an art, is usually applied; though animal, and even vegetable and mineral forms may be referred to in illustration of principles or of facts. In this narrower application we may define it as—a knowledge of the corre-

spondence between the external and the internal man—between the physical system and the spiritual principle which animates and controls it—between the manifest effect and the hidden cause—and of the signs by means of which this correspondence is expressed in the face and other parts of the body. As an art, it consists in reading character by means of its indications in the developments of the body as a whole, but more particularly of the face.

We say, more particularly of the face, because it is there that the greater number of the signs of character are most clearly and legibly inscribed; but physiognomy, as we purpose to expound it, embraces the **WHOLE MAN**. It takes into account the temperament; the shape of the body; the size and form of the head; the texture of the skin; the quality of the hair, the degree of functional activity, and other physiological conditions, as well as the features of the face. It embraces, in fact, in its practical application, the wide domains of physiology, phrenology, and their kindred sciences.

A distinction may very properly be made between physiognomy and pathognomy—the former referring to the powers and inclinations of man, and the latter to his passions. The one is a knowledge of character at rest and the other of character in action. Physiognomy shows what man is in general, pathognomy what he becomes at particular moments. The former deals with permanent traits, the latter with transient expression. The two are, however, inseparable; and we shall consider physiognomy as, in a general sense, covering the whole ground.

I.—THE LAW OF CORRESPONDENCE.

The first general principle or law that we shall lay down has already been incidentally but somewhat loosely stated. It is this:

Differences of external form are the result and measure of pre-existing differences of internal character—in other words, configuration corresponds with organization and function.

Everything has a form—a configuration—in other words,

a physiognomy peculiar to itself. The faces of countries differ, as well as the faces of men. Compare our Rocky Mountains with the prairie lands of Illinois, Maine with California, Vermont with Florida; the Highlands of Scotland with the bogs of Ireland; Switzerland with Holland. Place an oak by the



Fig. 90.—AN EAGLE.

side of a pine, contrast an eagle with a goose, a tiger with an ass. On this difference of external form are founded the classes, orders, genera, and species into which natural objects are divided. No two classes are alike, no two orders, no two genera, no two species. Spe-



Fig. 91.—GOOSE.

cies are made up of individuals. In the lowest order of forms, prevailing in the mineral world, we can carry classification no farther. All crystals of the same species are exactly alike—at least we can perceive no difference. In the stems and branches of vegetables, which abound largely in mineral matter, the rectilinear and parallel arrangement of parts, proper to crystallization, is proximately continued; but there is *life* in the plant, and its fibers refuse to conform wholly to the arrangement of dead matter. The straightest tree-trunk has more or less curvature. In the lowest forms of vegetable life, though individual differences exist, they are comparatively slight. Two stalks of grass, of the same species, may be so much alike that we can hardly distinguish them, but the resemblance between two trees is never thus close; and the individual differences increase in proportion to the rank of the tree; fruit trees of the same species presenting far greater differences among themselves than timber trees, and cultivated trees than wild ones. But it is in the animal kingdom, eminently, and with increasing distinctness as the rank rises, that individuals become distinguishable from each other; for it is here that diversity of character gets opportunity, from complexity of nature, freedom of generating laws, and the varied influence of circumstances, to impress dissimilarity deepest

and clearest.* The mother bird and beast know their own young; the shepherd and the shepherd's dog know every one of their own flock from every other on all the hills and plains; and among the millions of men that people the earth, a quick eye can detect a perfectly defined difference.

Classifying the individual differences which we find within the limits of a species we form varieties; but it is found that the individuals thus thrown together are still far from being exactly alike. Each Morgan horse differs from every other Morgan horse, and, still more, each Anglo-Saxon man from every other Anglo-Saxon man; and the more highly civilized and the more liberally educated the race or variety, the greater will be the individual differences.†

What is the meaning of this unlimited variety in all living things? What do these infinitely multiplied differences in *form* and *structure* indicate? Differences in *function* and *character*—always.

It is everywhere the indwelling life which determines the external form of things. Throughout nature, in strict accordance with this law, differences of configuration are, in all cases, found to be commensurate with differences of character and use. Things which resemble each other in quality and function resemble each other in shape; and wherever there is unlikeness in quality and function, there is unlikeness in form; in other words, there is a determinate relation between the constitution and appearance of material objects; and the reason why any particular animal or plant assumes its own precise figure rather than any other, need be sought only in the necessity of adapting configuration to character.

The slender and upright stalks of the maize could not be made to support and nourish the ponderous pumpkin; nor

* Narrowness of relation and simplicity of function are as narrowly constrained in range of conformation. Complexity makes proportionate room for difference; and variety is the result, the sign and the measure of Liberty.—*Dr. Wm. Elder.*

† There is a comparative sameness in the faces and forms of individuals composing a savage tribe or nation, but in civilized countries both features and bodily contours are more varied.

could the graceful willow or the majestic elm bear apples. We can not possibly associate the cruel and bloodthirsty propensities of the tiger with the meek and gentle physiognomy of



Fig. 92.—A TIGER.

the lamb. So man, endowed with reason, spirituality, and hope, aspiring after immortality, "made a little lower than the angels," could not grovel on the earth like a reptile. He *necessarily*



Fig. 93.—A LAMB.

stands upright and lifts his face toward heaven, and his cunning fingers are ready to obey the soul's behests. He could not have any other form and be a man.

Descending from generals to particulars, from species to individuals, we find the same law in operation. As men differ in character, so do they differ in face and figure, as well as in the form of the cranium; and it is because they differ in character that they are unlike in bodily configuration, and for no other reason. One is tall and muscular; another, short and plump; a third, small and slender; and we never find the special character which properly belongs to one of these figures associated with either of the others. Each individual soul molds the body in which it is incarnate, and gives it a configuration exactly adapted to its own proper manifestations.

Is it not one of the most indubitable of truths that corresponding cause and effect are everywhere united? Does this grand law fail in its application to man? If we read the character of a country on its face, must we confess that the human countenance—that mirror of the Divinity—bears no legible inscription? Can we conceive for a moment that a Newton or a Leibnitz could by any possibility have the countenance of an idiot? or that the latter in the brain of a Hottentot conceived his "Theodicea;" and the former in the head of an Esquimaux, who lacks the power to number farther than six, dissected the rays of light and weighed worlds?

Do joy and grief, pleasure and pain, love and hatred, all exhibit themselves under the same traits—that is to say, no



Fig. 94.—REV. DR. BOND.

traits at all—on the exterior man? Do prize-fighters and preachers look alike? or butchers and poets? But we may as well ask whether truth is ever at variance with itself, or eternal order but the trick of a juggler,



Fig. 95.—YANKEE SULLIVAN.

whose purpose is to deceive! As the soul, so the body.

II.—THE LAW OF HOMOGENEOUSNESS.

Closely related to the foregoing is the law of homogeneity, conformably to which

Every part of a thing corresponds with every other part and with the whole—in other words, and paradoxically—the whole is in every part.

Lay before Professor Owen a single bone of an unknown animal, and he will construct for you its entire osseous framework, and if need be, clothe it with muscles. Professor Agassiz is able to do the same from a single scale of a fish. Their power to do this depends upon a law of comparative anatomy, to which the principle just stated is a counterpart. If it be true, then, that animal forms generally are homogeneous, so that, given but one tooth, we can describe every bone of the beast, to the last joint of the tail, is there



Fig. 96.—AGASSIZ.

any difficulty in going farther and declaring that the human form is homogeneous in all its parts? If the practical botanist or pomologist can determine from a single leaf the characteristic form, not only of the tree, but of the fruit also, is it too much to believe that we may be able to tell the shape of a man's head or face



Fig. 97.—A TALL TREE.

by inspecting his hand? If it be admitted, as it must be, that round apples always grow on round topped, short limbed, and



Fig. 98.—A SHORT TREE.

thick bodied trees, and oblong apples on tall, long limbed trees, should it be deemed incredible that in animals and man, round heads and faces may be predicated of round or plump bodies, and high heads and long faces of tall bodies?

In some of its applications, the law of homogeneity is universally admitted and acted upon in dealing with the human form. "If you take from the Apollo's nose the tenth part of an inch," Fuseli says, "the god is lost." The congru-

ity, he means, is destroyed—the features no longer agree with each other, or with the figure as a whole, and discord is introduced where harmony had till then prevailed. The rules by which the Greek artists, as well as those of modern

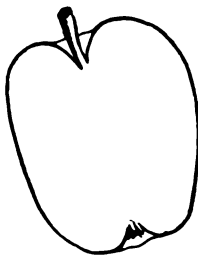


Fig. 99.—OBLONG APPLE.

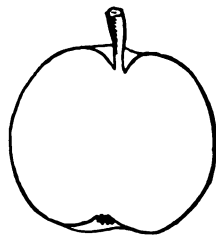


Fig. 100.—ROUND APPLE.

times, were guided in attaining correct proportions in their figures are based upon it. They require that the whole figure be six times the length of the foot (and whether the form be slender or plump, this rule holds good); that the face, from

the highest point of the forehead, where the hair begins, to the end of the chin, be one tenth of the whole stature; and that the hand, from the wrist to the end of the middle finger, be the same. The chest must be a fourth, and from the nipples to the top of the head the same. From the top of the chest to the highest point of the forehead is a seventh. The circumference of the wrist is just half that of the neck. If the length of the face, from the roots of the hair to the end of the chin, be divided into three equal parts, the first division determines the point where the eyebrows meet, and the second the place of the nostrils. The navel is the central point of the human body (including the limbs); and if a man should lie on his back, with his arms and legs extended, the periphery of the circle which might be described around him, with the navel for its center, would touch his head and the extremities of his hands and feet. The height from the feet to the top of the head is the same as the distance from the extremity of one hand to the extremity of the other, when the arms are extended.

These are some of the rules according to which the painter draws his picture and the sculptor models his statue. The physiognomist may carry the same principle still farther. The hand, for instance, indicates a great deal more than the length of the face. It reveals its shape and quality also, and the general characteristics of its individual features—in fact, it is an index of the temperament and make of the whole body. If the hand be long and slender, we find corresponding features, temperament, and character. A plump round hand goes with a full face, full red lips, a thick nose, a round head, and a vital temperament. The oval hand belongs to the oval face; and with the oval face we may expect to find shapely lips, a handsome nose, delicate skin, and an expression of intelligence and refinement. We might go on and show how these correspondences may be carried into the minutest details—show that even the finger-nails are significant, and, in form, stand in direct relation with the skull; but these things fall more appropriately into another chapter. Our purpose here has been simply to illustrate the general principle laid down at the commencement of this section.

The law of homogeneousness is often somewhat modified in its practical application by what we may call

III.—THE LAW OF SPECIAL DEVELOPMENT.

The growth or development of the different parts or organs of the body is *normally* uniform, the tendency being to keep unimpaired, or if impaired to restore, the symmetry or harmony of the whole, as indicated in the preceding section; but

As exercise (within certain limits), by attracting the vital currents, strengthens and increases the size of the organ or part exercised, therefore when any organ or part is disproportionately exercised or excited, it is correspondingly developed, and the harmonious relation of the parts is impaired.

According to the law of proportion, the circumference of the wrist, as we have said, is just one half that of the neck; but where the hand and arm have for a considerable time been subjected to some exercise or labor especially calculated to develop them, this proportion is disturbed, and it will be found a

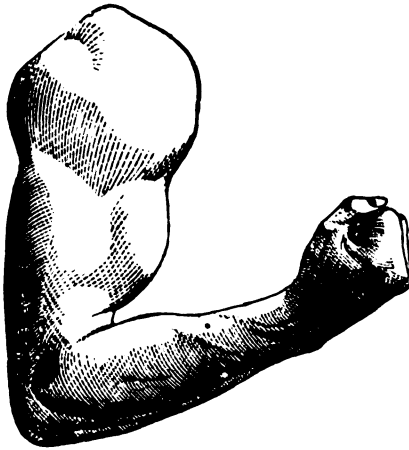


Fig. 101.—ARM OF A GYMNAST.

little more than half the size of the neck. So the arms and hands of the blacksmith or the trained boxer, or gymnast, are larger in proportion to the rest of the body than the law of beauty or symmetry requires. The same rule holds in relation to the brain and to the features of the face. If, for instance, the faculty of Acquisitiveness be excessively exercised, its organ in the brain, expanding under

the influence of the increased quantity of blood sent to it, presses out the skull, and finally causes, in extreme cases, a protuberance quite subversive of the symmetry and beauty of

the cranium. Its sign in the face shares in the extra development. So it is with any other organ or sign of a faculty in the head or face.

These facts do not by any means invalidate the law of homogeneousness, or detract from its importance, but they are always to be taken account of in applying that law to any particular case.

IV.—THE LAW OF QUANTITY OR SIZE.

In general terms—

Size is the measure of power—that is, other things being equal, the larger the head, the face, the body, or any particular organ or part of either, the greater the power indicated.

As this is a universal and undisputed law, it is not necessary to enter into any detailed exposition of it. It is the basis of all our calculations and reasonings in mechanics and natural philosophy, as well as in physiology, phrenology, and physiognomy. Large bodies overthrow and crush small ones; big brains dominate over little brains. A Napoleon or a Webster with a small head could never have become *the* Napoleon or *the* Webster of history.

Size, *other things being equal*, is the measure of power; but a piece of wrought iron is much stronger than a piece of cast iron of the same size; a comparatively small horse may sometimes draw a heavier load than a much larger one; and some men with moderate-sized heads manifest more mental power than others whose heads are much larger; which facts indicate that there is some other law or laws modifying that of quantity or size, and this brings us to



Fig. 102.—NAPOLEON.

V.—THE LAW OF QUALITY,

which may be thus stated:

Size and other conditions being equal, the higher or finer the organic quality the greater the power.

Density gives weight. Porous, spongy objects are light and weak. The lion is strong in proportion to his size on account of the density and toughness of his bones, ligaments, and muscles. The same law applies to man as to beast—to nerve and brain as to bone and muscle.

To be a truly great man, one must have a tough, firmly knit body, strong nerves, and a bulky, compact brain—in other words, large size and high organic quality must be combined. Small-headed men are sometimes brilliant, acute, and, in particular directions, strong; but they are not comprehensive, profound, commanding, and suited to grand occasions; and large-headed men are sometimes dull, if not stupid, because their brains are of a low organic quality; but when a high quality and a large size are found combined, the result is the highest order of power, whether it be of body or mind.

We may add, as another form or application of the law of quality, that

A coarse or defective construction of any organ or part indicates coarseness of feeling or defective sensibility in that organ or part, and that a fine or delicate construction, on the contrary, indicates fineness or delicacy of feeling or sensibility.

VI.—THE LAW OF TEMPERAMENT.

Closely related to the foregoing and further modifying the Law of Quantity or Size, is that of Temperament. As we devote a separate chapter to the subject, it will be sufficient to state here that

The action proper to any particular physiognomical development, as well as the development itself, is modified by temperament.

VII.—THE LAW OF FORM.

This is in a manner included in the preceding, but its importance justifies a separate statement. It should be understood, then, as an established principle, that

Length indicates and causes activity and intensity; and breadth, comprehensiveness, stability, latent force, and endurance.

In accordance with this law, stout broad-built persons are slow but plodding, take good care of themselves, and are not soon worn out by overwork, while those built on the long and narrow principle are quick-motined, lively, fond of action, and apt to overdo and prematurely exhaust themselves. This law explains the fact that woman's mental operations are more rapid and intense and less prolonged than those of man. Her head has relatively less breadth and more length than his.

An explanation of this principle may be found in the fact that a fluid (and there is a nervous fluid), governed by a well-known mechanical law, passes more rapidly—the pressure or propelling force being the same—through a narrow tube or aperture than through a broad one.

VIII.—THE LAW OF DISTINCT FUNCTIONS.

In comparing the head with the face it must be noted that while

The brain (having its signs on the cranium) indicates the absolute power of the mind, its voluntariness and ability to act at will (and consequently its habitual activity), are indicated by the facial signs; and that the two sets of indications, taken either collectively or individually, are not necessarily equal—in other words there may be latent power—mental capacity not manifested in the character or shown in the face.

If, therefore, the sign of a faculty be large in the face, and its phrenological organ at the same time be moderate or small, there will be more activity than endurance or continuance in its characteristic manifestation; while, on the other hand, if the phrenological sign show more development than the physiognomical, there will be more endurance than activity. In the first case there will be a higher degree of manifestation than the brain, considered by itself, would warrant us in counting upon. In the second there would be less; a certain amount of power continually remaining latent. The reader's observation will furnish abundant illustrations of this important prin-

ciple, which accounts for a large share of the misconception which exists in regard to both phrenology and physiognomy.

IX.—THE LAW OF LATENCY.

The principle of latency, mentioned in the preceding section, has a special application to two sets of cases; and it should be noted that



Fig. 103.—OLD AGE.

In the very young (the character being in a rudimentary condition and much of its power lying latent) many of the facial signs of character are as yet undeveloped; while in the very old many of them are partially or wholly effaced.

It does not follow from the foregoing statement that we are to consider the faces of young children and very old persons characterless, but simply that it is necessary to make allowances

for the conditions mentioned. For instance, we are not to predicate absolute, inherent, and permanent weakness and lack of ardor and affection from the small, concave nose and the little retreating chin proper to childhood. The faculties which the nasal and inferior maxillary bones indicate have not yet been called into action, and it is not till the age of puberty that they naturally assume their permanent form. In the mean time, the shape of the head (in judging of which also the fact of natural undevelopment must be taken into account), the temperamental conditions, and the hereditary predisposition furnish a clew to the latent power of the dor-

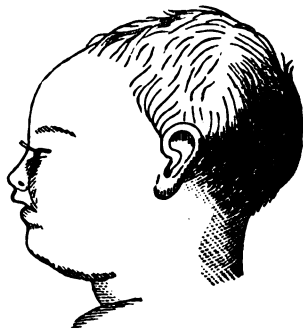


Fig. 104.—INFANCY.

mant faculties. Just what their final development will be, however, depends largely upon education and other external influences.

In some persons the features, and especially the nose and chin, retain through life their infantile form. These are cases of either absolute and congenital imbecility or of arrested development, which are not uncommon among the lowest and most ignorant classes.

Old age, the second childhood, differs from infancy in respect to some of the faculties not actively manifested, and the signs of which are not wholly legible; but the same principle applies to both cases.

In the foregoing well-established general principles we have a sufficient foundation for a science of physiognomy. If the superstructure be still far from perfect it is at least well based, and requires but time and labor to give it harmony, consistency, and completeness.



IV.

THE TEMPERAMENTS.

"Made him of well-attempered clay,
As such high destiny befitted,
And bade him rule."

MARVEL.



Fig. 105.—HIPPOCRATES.

THE first condition to be noted in the study of character through its physical manifestations, is temperament; which may be defined as "a particular state of the constitution, depending upon the relative proportion of its different masses, and the relative energy of its different functions."

In their last analysis, the temperaments are as numerous as the individuals of the human race, no two persons being found with precisely the same physical constitution.

Tracing them back, however, we find them all to result from the almost infinite combinations of a few simple elements.

THE ANCIENT DOCTRINE.

Hippocrates, "the father of medicine," describes four temperamental conditions depending, according to his theory,

upon what he called the four primary components of the human body—the blood, the phlegm, the yellow bile, and the black bile. The preponderance of one or the other of these components in a person produces his peculiar constitution or temperament. Bodies in which blood superabounds have, he says, the sanguine temperament; if phlegm be in excess, the phlegmatic temperament; if yellow bile be most fully developed, the choleric temperament is produced; and if the black bile (*atrabilis*) be most abundant, the melancholic or *atrabilious* temperament. These four temperaments are thus described by Paulus Ægineta, an ancient physician, who adopts the theory and follows the classification of Hippocrates:

1. The sanguine or hot and moist temperament is more fleshy than is proper, hairy, and hot to the touch. Persons having this temperament in excess are liable to putrid disorders.

2. The phlegmatic or cold and moist temperament is gross, fat, and lax. The skin is soft and white; the hair taw-

ny and not abundant; the limbs and muscles weak; the veins invisible, and the character timid, spiritless, and inactive.

3. The choleric or warm and dry temperament is known by abundant dark hair; large and prominent veins and arteries, dark skin, and a firm, well-articulated, and muscular body.

4. The melancholic or cold and dry temperament is known



Fig. 106.—HON. WM. MAULE PANMURE, M.P.

by hard, slender, and white bodies; fine muscles, small joints, and little hair. As to disposition, persons of this temperament are spiritless, timid, and desponding.

MODIFICATIONS.

This doctrine of the temperaments was much discussed by the ancients, but never greatly modified. It may be said to have stood unchanged till the revival of letters after the dark



Fig. 107.—THOMAS MOORE.

ages; and even then the same four-fold division was generally adopted. Stahl first adapted it to the modern doctrines of humoral pathology. Bærrhaave increased the number of temperaments to eight, but supposed them to be formed merely by different combinations of the four cardinal qualities. Dr. Gregory, to the four temperaments of the ancients, added a fifth, which he called the nervous, but failed to

establish it on any satisfactory basis. Cullen reduced the temperaments to two—the sanguine and the melancholic.

In reference to the character, as modified by temperament, Hoffmann says: “The choleric temperament disposes men to be precipitate and impetuous, prone to anger, impatience, temerity, and quarrels. The melancholic renders persons slow in business, timid, anxious, and suspicious. The phlegmatic are inclined to be lazy, somnolent, and torpid; while the san-

guine—a happier temperament—gives cheerfulness and a careless good-humor. Melancholic men should be counselors; choleric persons, generals, ambassadors, and orators; and sanguineous people, courtiers; but persons who have the misfortune to be phlegmatic must be condemned to the lowest employments, being fit only for common laborers or soldiers.”

Richerand,* who has written on the temperaments with much good sense (describing them with great clearness, as they appear from his stand-point), considers the melancholic or atrabilious temperament of the ancients as a diseased and abnormal rather than a natural state of the constitution. The nervous temperament of Dr. Gregory he looks upon as an equally unnatural condition.

THE BRAIN LEFT OUT

Thus far, it will be seen that the *brain*, as affecting temperamental conditions, is left out of the account altogether, which leaves the most important of the four temperaments unexplained—the brain being the seat and center of both mental and physical life, and holding to the lungs, stomach, and liver a relation which may be compared to that in which the sun stands to the earth. The writers we have quoted and referred to, even as far back as Hippocrates, knew all that



Fig. 108.—D. C. McCallum.

* *Elements de Physiologie*, chap. 11.

was necessary to know, in a merely physiological point of view, of the lungs, the liver, and the stomach, and attributed to them their proper functions. They were acquainted also with the reciprocal action of these organs, and knew that upon the proper balance of their forces depends the health of the body. The brain, however, was a *terra incognita*—an unexplored and unknown region till the Columbus of the mental world, the great Dr. Gall, added its broad fields to the domains



Fig. 109.—McDONALD CLARK.

of science. It was now seen that the brain must necessarily form the basis of a special temperamental condition. But the attention of Dr. Gall, and of Dr. Spurzheim also, was mainly directed to other and more strictly phrenological points, and little was added by them to our knowledge of the temperaments. The latter, however, describes them briefly as follows:

DR. SPURZHEIM'S DESCRIPTION.

1. The lymphatic constitution, or phlegmatic temperament, is indicated by a pale white skin, fair hair, roundness of form, and repletion of the cellular tissue. The flesh is soft, the vital actions are languid, the pulse is feeble; all indicates slowness and weakness in the vegetative, affective, and intellectual functions.

2. The sanguine temperament is proclaimed by a tolerable consistency of flesh, moderate plumpness of parts, light or chestnut hair, blue eyes, great activity of the arterial system, a strong, full, and frequent pulse, and an animated countenance. Persons thus constituted are easily affected by external impressions, and possess greater energy than those of the former temperament.

3. The bilious temperament is characterized by black hair, a dark, yellowish, or brown skin, black eyes, moderately full but firm muscles, and harshly expressed forms. Those endowed with this constitution have a strongly marked and decided expression of countenance; they manifest great general activity and functional energy.

4. The external signs of the nervous temperament are fine thin hair, delicate health, general emaciation, and smallness of the muscles, rapidity in the muscular actions, vivacity in the sensations. The nervous system of individuals so constituted preponderates extremely, and they exhibit great nervous sensibility.

The ancient doctrine of the temperaments, of which that of Dr. Spurzheim and modern writers generally is but a modification, has clearly a physiological foundation. The stomach, the liver, the lungs, and the brain furnish four distinct constitutional influences, either of which predominating gives its peculiar conformation and complexion to the body and its specific tone to the mind; but the nomenclature adopted to designate these bodily conditions (borrowed from pathology rather than from anatomy or physiology) is open to weighty objections, and two of the conditions or temperaments themselves—the lymphatic and the nervous—as usually described, are diseased and abnormal and not healthy and natural states of the constitution. While we acknowledge, therefore, the correctness of the classification and its value in a pathological point of view, we base our delineations of character on what may be called the anatomical system of temperaments, a concise exposition of which is given in the following sections, as at once simpler and more comprehensive. Those who prefer the old classification, however, can readily apply it, either by

THE TEMPERAMENTS.

of connection with the new. It will be well, in any case, to bear in mind the fact that such conditions, morbid as they be, as are described under the heads of the lymphatic and the nervous temperaments of the old physiologists, and are to be taken into the account in our estimates of character and conduct, whatever name we may give to them.

THE NEW CLASSIFICATION.

The human body is composed, as has been shown in the last chapter, of three grand classes or systems of organs, each of which has its special function in the general economy. We designate them—

1. The Motive or Mechanical System;
2. The Vital or Nutritive System; and
3. The Mental or Nervous System.

As the natural anatomical basis rests the most simple and elementary doctrine of the temperaments, of which there are three, corresponding with the three systems of organs just named. We call them—

1. The Motive Temperament;
2. The Vital Temperament; and,
3. The Mental Temperament.

The character of these temperaments is determined by the predominance of the class of organs from which it takes its name. The Motive Temperament is marked by a superior development of the osseous and muscular systems, forming the locomotive apparatus; in the Vital Temperament, the principal seat of which is in the nutritive organs, the principal seat of which is in the nutritive organs; while in the Mental Temperament, the brain and nervous system exert the controlling influence.

1.—THE MOTIVE TEMPERAMENT.

The framework of the human body determines its general configuration, which is modified in its details by the organs and cellular tissues which overlay it. In the Motive Temperament, the bones are proportionally large and strong, rather than broad, and the outlines of the form

manifest a tendency to angularity. The figure is commonly tall and striking if not elegant; the face oblong, the cheek-bones rather high; the front teeth large; the neck rather long; the shoulders broad and definite; the chest moderate in size and fullness; the abdomen proportional; and the limbs long and tapering. The muscles are well developed and correspond in form with the bones. The complexion and eyes are generally but not always dark, and the hair dark, strong, and abundant. The features are strongly marked, and their expression striking. Firmness of texture characterizes all the organs, imparting great strength and endurance.

This temperament gives great bodily strength, ease of action, love of physical exercise, energy, and capacity for work. Those in whom it predominates generally possess strongly marked characters, and are



Fig. 110.—JAMES MONROE.

in a high degree capable of receiving and combining rapidly many and varied impressions. They are the acknowledged leaders and rulers in the sphere in which they move; and are often carried away, bearing others with them, by the torrent of their own imagination and passions. This is the temperament for rare talents—especially of the executive kind—great works, great errors, great faults, and great crimes. It is sometimes, though not necessarily, characterized by an ob-

jectionable degree of coarseness and harshness of feelings, manifested by a corresponding coarseness of fiber in the bodily organs, bushy hair and beard, and a harsh expression of countenance.

The motive temperament is emphatically the American temperament, as it was that of the ancient Romans, though with us it is modified by a larger proportion of the mental temperament than with them. An aquiline or a Roman nose, great ambition, and an insatiable love of power and conquest go with it.

Men of this temperament often pursue their ends with a stern and reckless disregard of their own and others' physical welfare. Nothing can turn them aside from their purpose; and they attain success by means of energy and perseverance rather than by forethought or deep scheming. They are men of the field rather than of the closet—men with whom to think and to feel is to act. As speakers, they make use of strong expressions, emphasize many words, and generally hit the nail with a heavy blow.

In its typical form, the motive temperament is less proper to woman than to man, but there are several modifications of it which give much elegance and beauty to the female figure.

The first is that in which the bones, except those of the pelvis, are proportionally small, which gives the figure additional delicacy and grace. This conformation, while it adds to the beauty of the female figure, detracts from the strength and consequently the beauty of the masculine form. The *Diana* of Grecian sculpture furnishes a fine example of the motive temperament thus modified.

The second modification is that in which the ligaments and the articulations which they form are proportionally small, which corrects the tendency to angularity which is characteristic of this temperament, and tends to round the contour of the joints. This will be particularly observable in the wrists and ankles.

The third modification of this temperament is that which presents proportionally shorter bones, and, except around the pelvis, smaller and more rounded muscles, affording less

strongly marked reliefs and more of that rounded plumpness essential to the highest style of female beauty. In this characteristic, it approaches the vital temperament, to which this modification is allied.

In accordance with the law of homogeneousness, stated, explained, and illustrated in the preceding chapter, we find, on examining this temperament more closely, that it is characterized in details, as well as in general form, by length. The face is oblong, the head high, the nose long and prominent, and all the features correspond. This structure indicates great power and activity in some particular direction, but lack of breadth or comprehensiveness.

An abnormal development of the motive temperament, in which the vital and mental systems are both sacrificed to mere animal strength, forms what the ancients called the athletic temperament. It is marked by a head proportionally small, especially in the coronal region; a thick neck; broad shoulders; expanded chest; and strongly marked muscles, the tendons of which are apparent through the skin. The Farnese Hercules furnishes a model of the physical attributes of this abnormal condition, in which brute strength usurps the energies necessary to the production of thought, and leaves its possessor decidedly deficient in all the higher mental and moral manifestations. The celebrated statue of the Dying Gladiator (fig. 111) also represents the same bodily and mental constitution.

II.—THE VITAL TEMPERAMENT.

As this temperament depends upon the preponderance of the vital or nutritive organs, which occupy the great cavities of the trunk, it is necessarily marked by a breadth and thickness of body proportionally greater, and a stature and size of limbs proportionally less than the motive temperament. Its most striking physical characteristic is *rotundity*. The face inclines to roundness; the nostrils are wide; the neck rather short; the shoulders broad and rounded; the chest full; the abdomen well developed; the arms and legs plump but tapering, and terminating in hands and feet relatively small. The

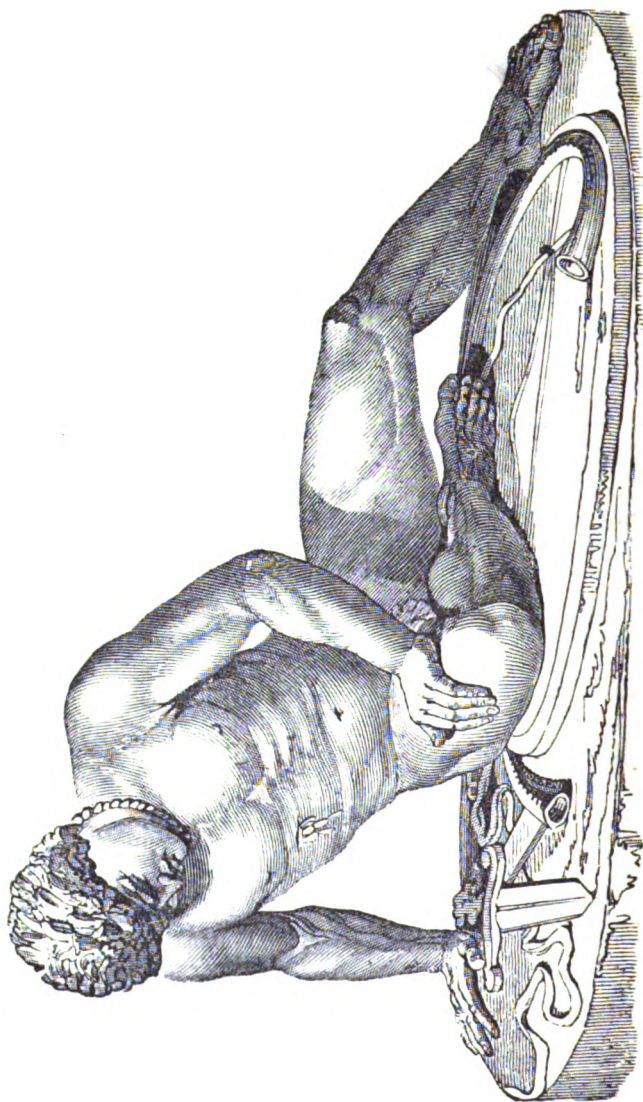


FIG. 111.—THE DYING GLADIATOR

complexion is generally florid; the countenance smiling; the eyes light; the nose broad, and the hair soft, light, and silky.

In a woman of this temperament (which seems to be peculiarly the temperament of woman), the shoulders are softly rounded, and owe any breadth they may possess rather to the expanded chest, with which they are connected, than to the bony or muscular size of the shoulders themselves; the bust is full and rounded; the waist, though sufficiently marked, is,

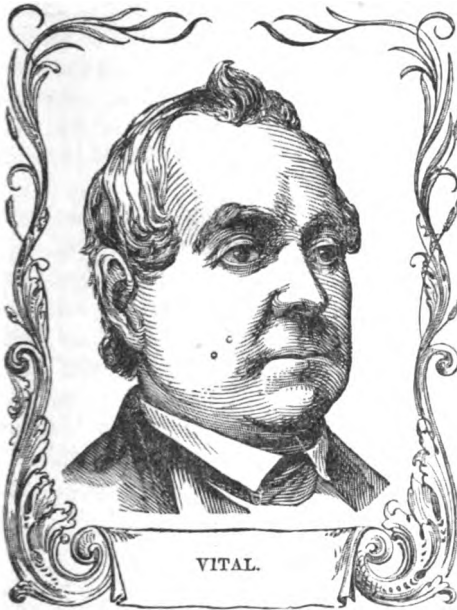


Fig. 112.—SILAS WRIGHT.

as it were, encroached upon by the plumpness of the contiguous parts; the haunches are greatly expanded; the limbs tapering; the feet and hands small, but plump; the complexion, depending on nutrition, has the rose and the lily so exquisitely blended that we are surprised that it should defy the usual operations of the elements; and there is a profusion of soft, and

fine flaxen or auburn hair. The whole figure is plump, soft and voluptuous. This temperament is not so common among American women as could be desired.

Persons of this temperament have greater vigor, but less density and toughness of fiber than those in whom the motive predominates. They love fresh air and exercise, and must be always doing something to work off their constantly accumu-

lating stock of vitality; but they generally love play better than hard work.

Mentally, they are characterized by activity, ardor, impulsiveness, enthusiasm, versatility, and sometimes by fickleness. They are distinguished by elasticity rather than firmness, and possess more diligence than persistence, and more brilliancy than depth. They are frequently violent and passionate, but are as easily calmed as excited; are generally cheerful, amiable, and genial; always fond of good living, and more apt than others to become addicted to the excessive use of stimulants. Their motto is *dum vivimus, vivamus*—let us live while we live. There is great enjoyment to them in the mere sense of being alive—in the consciousness of animal existence. The English furnish some of the best examples of the vital temperament. Our illustration gives a good idea of it so far as its outlines are concerned.

An undue and abnormal preponderance of the absorbent system, and a sluggish action of the circulatory organs, give rise to the lymphatic temperament, described in a previous section, which presents forms softer and more rounded even than those we have been describing, but lacking their well-defined and graceful outlines. A feeble color of the skin; a flabbiness of the flesh; a lack of expression in the countenance; insurmountable sloth, and a general apathy both of body and mind characterize this state of the system, which is so evidently the result of disease that we see no propriety in classing it with the natural temperaments.

III.—THE MENTAL TEMPERAMENT.

The mental temperament, depending upon the brain and nervous system, is characterized by a slight frame; a head relatively large, an oval or a pyriform face; a high, pale forehead; delicate and finely chiseled features; bright and expressive eyes; slender neck; and only a moderate development of the chest. The whole figure is delicate and graceful, rather than striking or elegant. The hair is soft, fine, and not abundant or very dark; the skin soft and delicate in texture; the voice somewhat high-keyed, but flexible and varied

in its intonations; and the expression animated and full of intelligence.

Women in whom this temperament predominates, though often very beautiful, lack the rounded outlines, the full bosom, and the expanded pelvis, which betoken the highest degree of adaptation to the distinctive offices of the sex.

The mental temperament indicates great sensitiveness, refined feelings; excellent taste; great love of the beautiful in nature and art; vividness of conception; and intensity of emotion. The thoughts are quick, the senses acute, the imagination lively and brilliant, and the moral sentiments active and influential.

This is the literary, the artistic, and especially the poetic temperament.

There is at the present day, in this country especially, an excessive and morbid development of this tem-



Fig. 113.—PROF. THOLUCK.

perament which is most inimical to health, happiness, and longevity. It prevails particularly among women (to whom even in its normal predominance it is less proper than the preceding), and answers to the nervous temperament of the old classification. It is characterized by the smallness and emaciation of the muscles, the quickness and intensity of the sensations, the suddenness and fickleness of the determinations, and a morbid impressibility. It is caused by sedentary habits,

lack of bodily exercise, a premature or disproportionate development of the brain, the immoderate use of tea and coffee, late hours, and other hurtful indulgences.

The three primary temperaments, combining with each other in different proportions and being modified by various causes, form sub-temperaments innumerable, presenting differences and resemblances depending upon the relative proportion of the primitive elements. The simplest combination of which the three temperaments already described are susceptible, gives us six sub-temperaments, which we designate as—

1. The Motive-Vital Temperament;
2. The Motive-Mental Temperament;
3. The Vital-Motive Temperament;
4. The Vital-Mental Temperament;
5. The Mental-Motive Temperament; and,
6. The Mental-Vital Temperament.

The names of these compound temperaments sufficiently indicate their character. The motive-vital and the vital-motive differ but slightly, the name placed first in either case indicating the element which exists in the larger proportion. The same remark applies to the motive-mental and the mental-motive, and to the vital-mental and mental-vital.

Perfection of constitution, it is evi-



Fig. 114.—MADAME DE STAËL.

dent, must consist in a proper balance of temperaments. Where any one of them exists in great excess, the result must necessarily be a departure from symmetry and harmony, both of form and character. Whatever, therefore, has a tendency to promote this disproportionate development should be carefully avoided.

Each person is born with a particular temperament in which there is an inherent tendency to maintain and increase itself, since it gives rise to habits which exercise and develop it; but this tendency may be greatly modified, if not counteracted entirely, by external circumstances—by education, occupation, superinduced habits, climate, and so forth; and more especially by direct and special training instituted for that purpose; but of this we have more to say in another chapter.

It will be seen by the foregoing statements, which we have aimed to make as clear and explicit as the nature of the subject will admit, that a thorough practical knowledge of the temperaments alone will enable one to form a very correct general estimate of individual character. The character, as a whole, which we have attributed to the motive temperament, is never found in connection with either of the others; and the same remark applies equally to the vital and the mental. The difficulty (which is not insurmountable, however) lies in estimating correctly the relative proportion of the different elements in each individual temperament so as to give to each its due degree of influence on the character. Study, observation, and practice will enable the persevering student to do this, in time, with great exactness.



V.

MAN AND WOMAN.

"He for God only, she for God and him."

MILTON.



Fig. 115.—APOLLO BELVIDERE.

IN applying physiognomical principles to the discernment of character, the important modifications resulting from sex must always be taken into account. The contours of man and woman, both in general form and in particular features are strikingly different; and what may be appropriate and beautiful in the one, would be incongruous and ugly in the other. A masculine woman and a feminine man make an equally disagreeable impression upon our minds.

In either case we feel that there is something out of place—in other words, the true order of nature seems to have been interfered with.

SIZE—VENUS AND APOLLO.

The first difference we note between the male and female figures is the greater size of the former. The ancient artists,

who well understood the proportions of the human figure and the distinctive differences between the sexes, made the Apollo a little more than half a head taller than the Venus, and proportionally stout. A comparison between the men and the women of the present day, when the habits of the fairer sex are less favorable to physical development than those of the ancient Greek women, and less so too than those of the masculine portion of existing society, would reveal still greater differences.

GENERAL FORM.

The next thing that strikes us is a remarkable difference in the general form. We observe that, while the shoulders of a symmetrically developed man are broader than his hips (fig. 116), and he tapers downward from his shoulders, woman's hips are broader than her shoulders (fig. 117), and she tapers both ways from her hips. Cam-



Fig. 116.
THE MALE FIGURE.



Fig. 117.
THE FEMALE FIGURE.

per showed that in tracing the forms of the male and the female within two elliptical areas of equal size, the female pelvis extended beyond the lines, while the shoulders were within; and that the male shoulders reached the lines, while the pelvis was within them.

The neck of woman, though apparently longer, on account of the drooping of the shoulders, is really shorter than that of

man. Her arms and legs are also proportionally shorter and her trunk longer, her back more hollow, her bust smaller but more rounded, and her bosom greater in volume and more elegant in form. Man is characterized by compact and muscular developments and a strongly hinged frame, indicative of power; woman, by bending and varied lines, gracefully rounded limbs, smooth surfaces and elasticity, indicative of delicacy and grace. As Milton says:

"For contemplation he, and valor formed;
For softness she, and sweet attractive grace."

Roundness prevails in her, angularity in him. She has more of the vital system, with its cellular tissues; he more of the motive apparatus, with its muscular fibers.* In each, form corresponds with function in perfect accordance with the law of adaptation stated in our first chapter.

SEX IN THE FEATURES.

In the features, the same law prevails as in the general form of the body. Those of the male are more strongly marked, and there is a closer approach to the straight line than in those of the female. The accompanying outlines of the profiles of a brother and a sister of the same temperament and analogous configuration (fig. 118) will illustrate this remark. Here we have the same style of face in both, but while one is decidedly masculine the other is as unmistakably feminine. The difference will be seen to lie mainly in the greater *roundness* of the latter.

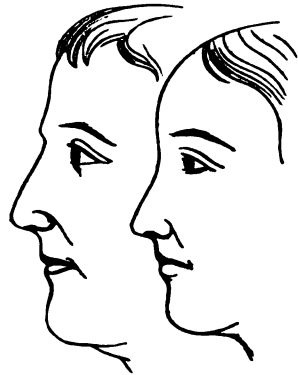


Fig. 118.—PROFILES.

PHRENOLOGICAL DIFFERENCES.

The head in man is more massive than in woman, but hers is often somewhat longer from the forehead to the occiput.

* Jacques; "Hints toward Physical Perfection," Chap. II.

It is also narrower laterally, and the basilar and frontal regions are proportionally smaller. The occipital region is elongated, the organs of Parental Love, Friendship, Love of Home, and Love of Approbation being relatively large. In the male head there is a relatively larger development of the base of the brain, as well as of the superior frontal region. In the



Fig. 119.—FEMALE HEAD.

coronal region—the seat of the spiritual sentiments—woman has relatively a fuller development than man. Alex. Walker remarks, that the female skull seems in



Fig. 120.—MALE HEAD.

general narrower than that of the male; and hence (length giving intensity and breadth permanence), all her mental operations, though more intense and brilliant during their continuance, have, on the same principles, less of permanence. With regard to the heads of females, it may also be observed, that the frontal sinuses are less, the glabella [space between the eyebrows] less elevated, and the superciliary ridges on which the eyebrows rest less prominent; that the alveolar outline of the upper and lower jaws is more elliptical; that the teeth are less; and that the os hyoides or bone of the tongue is smaller. The accompanying heads (figs. 119 and 120) illustrate imperfectly the phrenological differences we have endeavored to indicate.

PHYSIOGNOMICAL DISTINCTIONS.

The strictly physiognomical developments of the two sexes vary as widely as the phrenological characteristics. The female forehead is smoother and more rounded than the male, the nose is less prominent, and instead of being slightly convex, as generally in man, is either straight or more or less con-

cave. The breadth or expansion of the wings of the nose is greater, comparatively, in woman than in man. The upper lip is generally concave in woman and shorter than in man, in



Fig. 121.

whom it is oftener either straight or slightly convex. The lower lip is more softly rounded in woman than in man (figs. 121 and 122), and the chin smaller, rounder, and more delicate, corresponding with her smaller cerebellum. She



Fig. 122.

has relatively larger eyes, finer and softer hair and skin, and features generally less strongly marked and more mobile than man.

The presence of the beard in man and its absence in woman forms a striking mark of distinction in the Caucasian race; but among the Mongolians, Malays, and other races, the men are often as destitute of beard as the women. It will be found that the men of these races lack something in the elements of the highest manhood as required by our standards.

LAVATER'S ANTITHESSES.

Lavater has a fragment on the physiognomical differences between the two sexes, and he sets them forth antithetically thus:

- "Man is the more firm, woman the more flexible.
- "Man is the straighter, woman the more bending.
- "Man stands steadfast, woman gently trips.
- "Man is the taller and broader, woman less and tapering.
- "Man is rough and hard, woman smooth and soft.
- "Man has more convex lines, woman more concave.
- "Man has more straight lines, woman more curved lines.
- "Man is more angular, woman more round.
- "The eyebrows of man are more compressed, those of woman less frowning.
- "The hair of man is stronger and shorter, that of woman longer and more pliant.
- "Man is serious, woman is gay.
- "Man surveys and observes, woman glances and feels."

LET WOMAN BE WOMANLY.

Woman gains nothing by striving to become more like man. Her crowning beauty consists in being truly *womanly*. It is that quality which wins the love of man, in whom she loves above all things else strength, *manliness*—something to lean upon, look up to, be proud of. It is a grand, a noble thing to be a **MAN**. To be a *woman* is to be truly

“God’s last, best gift to man,”

without whom his strength is useless, his wisdom folly, his life a failure.



VI.

GENERAL FORMS.

"Tout dans la nature est rapport et harmonie, chaque apparence externe est le signe d'une propriété : chaque point de la superficie d'une corps annonce l'état de sa profondeur et de sa structure."—DE LA SARTHE.

"In nature, all is connection and harmony. Each external appearance is the sign of an inherent quality ; each point on the surface of a body indicates the condition of the internal parts of the structure."



Fig. 122.—MENSHIKOFF.

IN the physiognomical examination of the human face, the first thing to be done is to observe its general outlines. These alone contain a synopsis, so to speak, of the whole character. The minuter markings—the details of the features—merely elaborate the leading ideas presented in the *ensemble*. The skillful and experienced physiognomist needs but to

get the visage within the range of his eye to make himself master of its secret at a glance. To him each man, woman, and child is labeled in big capitals, and he can determine the

rank of each in the social scale as readily as you can tell a general from a captain by his shoulder-straps.

The reader who has studied and mastered the general principles laid down in Chapter III., and made himself familiar with our doctrine of the temperaments, as set forth in Chapter IV., will be prepared to profit by the remarks which follow.

FACES CLASSIFIED.

The human body, as we have shown in Chapter II., consists of three grand classes or systems of organs, each of which has its special function in the general economy. We have called them:

1. The Motive or Mechanical System ;
2. The Vital or Nutritive System ; and,
3. The Mental or Nervous System ;

and proved that each of them, by its predominance, determines and indicates a temperament and a peculiar configuration. We wish now to further illustrate this principle, particularly in its application to the face.

Taking a front view of the head and face, we observe striking differences in the form of the outline thus presented by different individuals. The variety may seem infinite, no two being exactly alike, but we find all faces readily and naturally reducible to three grand classes—

1. The Oblong Faces ; 2. The Round Faces ; and, 3. The Pyri-form Faces.



Fig. 124.—CHARLOTTE CORDAY.

I.—THE OBLONG FACE.

When the motive or mechanical system, embracing the bones, ligaments, and muscles, is the predominant or most

GENERAL FORMS.

the figure is commonly tall and striking, if not *oblong*, as represented in fig. 125, and the face *oblong*, as represented in fig. 124. Associated with this form of face and figure (as stated in the chapter on the temperaments), we generally, but not always, find a dark complexion; dark eyes; and dark, strong, and abundant hair. Firmness rather than delicacy of texture characterizes all the organs, imparting great strength and endurance.

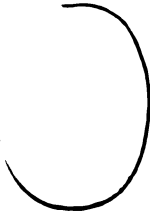


Fig. 125.

Persons with this form of face, to recapitulate still further, are naturally vigorous, active, energetic, and impassioned, and possess strongly marked characters. They manifest great capacity for both perception and conception, receiving and combining rapidly many and varied impressions, and are liable to be carried away, bearing



Fig. 124. ANDREW JACKSON.

others with them, by the torrent of their imagination and passions. They are almost always very firm, self-reliant, persevering in whatever they undertake, and constant in friendship and love. They are the acknowledged leaders in the sphere of active life. They are men of the field rather than the closet—men with whom to think and to feel is to act; and they attain success by means of energy and per-

severance rather than by forethought or deep scheming. As they use strong expressions, emphasize many words, and hit the nail on the head with a heavy blow. Oliver Cromwell, and Andrew Jackson were of this stamp, and they illustrate the character we have

attributed to the oblong face. The traits we have named are of course modified by sex, but are as easily recognized in woman as in man.

The outlines of some oblong faces approach closely to the rectilinear, as shown in our portrait of Menschikoff (fig. 123), in which case we find the mental characteristics of this form intensified or increased by an added degree of uncompromising directness and unswerving persistency in any particular course of action. In this face—though belonging more properly than elsewhere to the class we are considering—there is great breadth both of the base of the brain and of the lower part of the face proper, indicating great executiveness, abundant vitality, and immense animal power. Ethnologically, it is the Slavonic face, and belongs more particularly to a race noted for physical strength, endurance, and unconquerable tenacity. Menschikoff, who commanded the Russian army in the Crimean war, was of this race, and showed the qualities we have ascribed to the form of which we are speaking. The indomitable persistency and cool courage with which he held the allied armies of England and France so long in check, and the terrible repulses they met at his hands, are matters of history. He is a good type of the modern Russian of the highest class.



Fig. 127.—THE ENGLISH GIRL.

II.—THE ROUND FACE.

The predominance of the vital or nutritive system, occupying the great cavities of the trunk, tends to give breadth and thickness of body, limbs, and head. The most striking characteristic of this constitution is *rotundity*

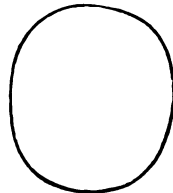


Fig. 128.

The face inclines to roundness (fig. 128); the nose is rather short, the shoulders are broad and round, the abdomen well developed; the arms and legs plump but tapering and delicate; and the hands and feet relatively small. The complexion is generally rather florid; the countenance cheerful if not smiling; the eyes blue or light gray, and the hair soft, light, and fine. The portrait of the English girl (fig. 127) strikingly illustrates this constitution and its accompanying form of face.



FIG. 128.—JEAN PAUL RICHTER.

They usually have more elasticity than firmness, more diligence than persistence, more brilliancy than depth. They are fond of physical action and can not bear confinement, but at



FIG. 129.—LOUIS XVIII.

the same time love their ease and prefer play to hard work. They are amiable, loving, and cheerful, and less likely than the preceding class to become either cruel or selfish. They are always companionable and fond of good living. Their appetites are their greatest enemies, and if they fail to reach old age, for which they seem to be especially designed and adapted, it is generally through

indulgence in some form that health and life are destroyed. The portraits of great men furnish no examples belonging

strictly to this class in which some of the elements of greatness are evidently lacking, but many great men have approached more or less closely to it, the face proper having all the fullness and roundness of the typical form, but there being at the same time an elevation and expansion of the forehead, modifying in a most decided manner the contour of the whole, as strikingly exemplified in the accompanying portrait of the quaint Jean Paul Richter (fig. 129), and showing mentality asserting the mastery over the vital system. Peter the Great, Napoleon, and our General George H. Thomas, are also noted examples, their temperament being mental-vital.

When the reverse of this takes place, and the lower part of the face is expanded at the expense of the upper, as in fig. 130, we see animality decidedly in the ascendancy, and appetite lording it over both intellect and sentiment. With this last form of face we find the abdomen relatively larger than the chest, and the lymphatic system more active than the sanguineous.

The blending of the elements of this and the preceding form in about equal proportions gives us the square face, oftener seen among the Germans than elsewhere. Its indications are great energy, endurance, and vital power, with something of the impulsiveness and ardor which belong to the round or vital form.

III.—THE PYRIFORM FACE.

When the brain and nervous system, whose chief seat and center is the grand dome of the skull, exercise the predominating influence in the constitution, the expansion of the superior parts of the face, including the forehead, gives a pyriform or pear-shaped outline (fig. 132) to the whole. The forehead is high and pale; the features delicate and finely chiseled; the eye bright and expressive; the hair fine, soft, not abundant, and commonly of a light color; the neck slender; the chest rather narrow; the limbs small; and the whole figure delicate and graceful rather than striking or elegant.

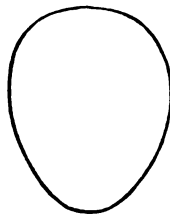


Fig. 131.

The accompanying portrait of Rachel, the actress (fig. 132), illustrates the pyriform face and mental temperament. This



Fig. 132.—RACHEL.

temperament and form of face indicate great activity of the brain and nervous system. The thoughts, as we have remarked in the chapter on the temperaments, are quick, the senses acute, the imagination lively and brilliant. It is the literary, the artistic, and especially the poetic form. Shakspeare, Chaucer, Spenser, Tasso, Dante, Cervantes, Montaigne, Madame Genlis, Rogers, Wordsworth, Tennyson, Poe, Mazzini, Rubens, Flaxman, Horace Vernet, Allston, Cole, and Church furnish

noted examples of this style of face.

The pyriform or conical face, in its typical form, is never



Fig. 133.—HORACE VERNET.

proper and natural in childhood, and where it exists, as in fig. 134, indicates precociousness and an excessive, abnormal, and hurtful development of the brain, either inherited or acquired, through injudicious and premature mental culture, at the expense of the body. Such cases should be taken in hand at once, and every effort made to restore the balance by a proper course of physical training, by encouraging out-door re-

creation, healthful sports, and careless good-humor, and by a

complete suspension of all set mental tasks and school studies. The proper form of the childish face is represented in fig. 135.

The connection between this form of face and mentality is beautifully illustrated in the effect produced by cultivation on



Fig. 134.—PREOCIOUS BOY.

persons who have grown up in comparative ignorance and under circumstances not calculated to call the intellectual faculties into activity, but afterward are thrown into society of



Fig. 135.—NATURAL BOY.

cultivated people and have their frontal organs aroused and developed by education. A gradual but perceptible change takes place in the form of the outline we have been considering. The forehead and superior parts of the face expand laterally as well as anteriorly (Mirthfulness, Ideality, and Constructiveness, imperfectly developed in all uncultivated and savage people, being most remarkably increased), while there takes place at the same time a diminution of the lower parts, producing from day to day a more marked departure from the circular form represented by fig. 128. The accompanying outlines (fig. 136) will indicate in an imperfect way the character of the change we have indicated. Opposite conditions reverse this change by calling a different set of faculties into action, and the base of the brain expands, the lower features grow broader, the neck becomes thicker, the eyes duller, the mouth coarser, and the whole face rounder and less expressive.

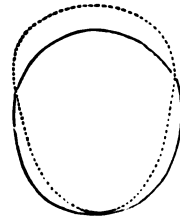


Fig. 136.

There are, of course, a thousand modifications of these three typical forms of face resulting from the different proportion in which the three temperamental elements are combined in each

GENERAL FORMS.

development of the several features; and other physiological conditions. The artist must take these conditions into the account, and give each its due weight in forming an estimate of character.

PROFILES.

In taking note of the general form of the head and face, a side view should also be taken, and the outlines of the profile carefully observed.

It will be seen that in faces of the first or oblong form, the side view presents lines approaching the rectilinear, and that there is a tendency as in fig. 137. The second or round form gives (as well as in the front view) its characteristic shown in fig. 138; while faces oval or pyriform in the front (and form) have a profile less rounded than the second and less angular than the first, but finer and more delicate than either, as represented in fig. 139.



Fig. 138.



Fig. 140.—DIANA.

FACIAL ANGLES.

The learned and ingenious Camper on examining certain antique gems observed that the artists, in attempting to imitate them, failed in the heads from not throwing them sufficiently forward to make the line which touched the teeth nearly perpendicular. He conceived and drew a profile so that the forehead and lips

touched the perpendicular line, as in fig. 140, he obtained the characters of an antique head. If, on the other hand, he let this line fall back and accommodated the outline of the head to it, he diminished the beauty and perfection of the form and the expression of intelligence. For example, if the line formed an angle of seventy degrees with a line drawn from the opening of the ear to the base of the nose, it became the head of a negro; and if declining still further, by the depression of the calvarium or brain-case—say to sixty degrees—it declared the face of an orang-outang, and so on down to the lowest animal. The heads of Europeans, he found to form an angle of about eighty degrees, and that a character of sublime and more than human beauty was given by the ancient artists to the heads of their gods by making the facial angle still greater, amounting, in some cases, to one hundred degrees.

As the degree of intelligence depends upon many other conditions besides those indicated by this mode of measurement, it is evident that it can not be accepted in the extended application claimed for it by Camper; but taken in connection with other indications, it is not without its value.

The falling back of the facial line, it will be seen (fig. 141), depends either upon the projection of the jaws, the recession

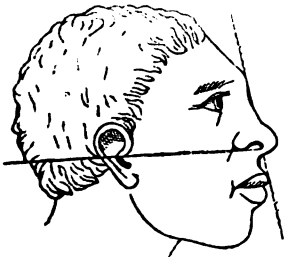


Fig. 141.

of the forehead, or upon both combined, and the character of the angle is determined by these conditions—the first of which (in excess) betokens animality, and the last (negatively) a low grade of intelligence. *Other things being equal*, then, the smaller this angle, the lower the degree of intelligence; and the greater this angle, up to

ninety or perhaps one hundred degrees, the higher the grade of intelligence. By throwing the line forward so as to form an opening of more than one hundred degrees, and accommodating the head to it, we create deformity, producing a projecting forehead, found only in the abnormal or diseased conditions of the brain.

Bearing in mind, then, its limitations and modifications, it is well in all cases, when making a physiognomical examination, to observe the facial angle. Fig. 142 will help to convey

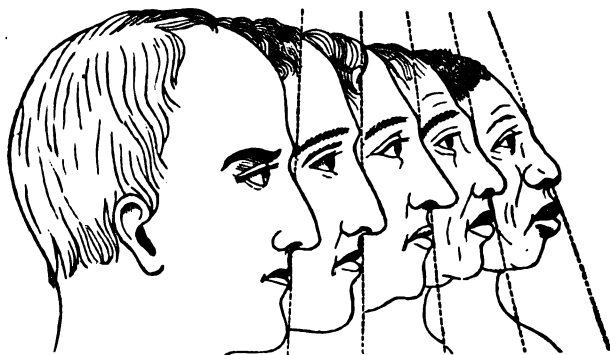


Fig. 142.—GRADES OF INTELLIGENCE.

an idea of the different grades of development and intelligence as indicated in the profile, size, as well as form, being taken into the account.



VII.

OUTLINES OF PHRENOLOGY.

"This is truth, though at enmity with the philosophy of ages."—GALL.



Fig. 148.

PHYSIOGNOMY, as we understand and teach it, being based on Phrenology, it is necessary before entering upon the more practical details of the former to give such outlines of the latter as will enable the reader to understand any allusions we may make to it in the following chapters.

PHRENOLOGY DEFINED.

Phrenology is a science and an art. It is the science of the existence, organization, and mode of action of the mind as embodied, and as related through the body to whatever else exists.

The term "Phrenology" means, strictly, Science of the Brain. This term, in itself, relates only to the immediate material organ and instrument of the mind. It is, however, proper enough; for it is the special characteristic of Phrenol

ogy to take the brain into the account—to take the common-sense and practical view which looks at the mind, not as it ought to be, nor as it may be claimed that it must be, but as it is. Mind must (to us who are in the flesh) act through a material instrument. Other mental philosophies have not sufficiently considered this, nor the necessary limitations which such an instrument imposes upon mental action, nor the indications derivable from such an instrument about mental action. As these limitations and indications are of the very utmost importance, and as their introduction with their right dignity into mental science totally revolutionizes it, and makes it for the first time worthy the name of a science, it is eminently proper that they should characterize the name of the science in its new shape.

PHRENOLOGY AS AN ART.

Every science has its corresponding art. The principles of science, when modified into application to the practical demands of life, become the rules of their corresponding art.

Phrenology, as an art, consists in judging from the head itself, and from the body in connection with the head, what are the natural tendencies and capabilities of the individual. The practical uses of this art are many. They consist in applying to the practical needs of life the principles of phrenological science. For instance, it is a principle of Phrenology that, *all other conditions being the same*, the largest brain is the best. In selecting an apprentice, a clerk, therefore, or a lawyer, or a helper, or counselor of any kind, he who practices the art of Phrenology would choose, out of any two or more, him with the largest head, *provided other conditions, such as quality, shape, etc., were equal*. Mistakes would sometimes occur in applying this rule, but in the long run it would be found far more correct than any other known means.

Again, it is a principle of Phrenology that there are separate mental faculties. It is another, that these faculties may be dealt with, trained, or neglected, separately. It is another, that where faculties are defective or feeble, their defect or weakness can usually be made up for by the employment of

some other faculty or faculties. It is easy to see that these principles, reduced to rules, would form a very important part of a system of education, particularly of self-education; for evidently an intelligent person, trying one combination of faculties after another, will be able ultimately to exercise himself in exactly such habits of thinking and feeling as will best make up for the points in which he is wanting. If, for instance, he knows that he is deficient in Cautiousness, he can cultivate habits of forethought, reflection, recollection, and observation. This procedure will use Causality, Comparison, Eventuality, and Individuality to do the work of Cautiousness, and will, at the same time, tend to stimulate and strengthen the faculty of Cautiousness as a separate instinct.

THE BASIS OF PHRENOLOGY.

The science of Phrenology is based upon observation. Its principles are simply the recital of truths which lie open before every man's eye. It is therefore as capable of demonstration as chemistry or natural philosophy. In this it differs entirely from all previous systems of mental science. These have been based upon *a priori* assumptions (that is, things taken for granted) to begin with. Having thus the radical imperfections of mere human conception in their very rudiments and seeds, they have been muddled, visionary, impractical, sophistical, unprogressive, and useless, even almost as much as the verbal scholastic philosophies of the Middle Ages.

FIRST PRINCIPLES.

Phrenology does not now claim to be an entirely completed science. As far as it has now advanced it consists as a science of two parts, viz :

1. A system of physiological facts and their corresponding mental phenomena.
2. A system of mental philosophy deduced from these facts and phenomena, and from other facts and phenomena related to them.

The chief principles of the basis or fundamental or physiological part of the science of Phrenology may be stated thus.

1. The brain is the special organ of the mind. The essence and mode of operation of the mind itself are inscrutable; we can only study its manifestations.

2. The mind, though essentially a unit, is made up of about forty different faculties, each of which is manifested by means of a particular part of the brain, set apart exclusively for it and called its organ. The faculties may be possessed in different degrees by the same person, and so may the same faculty by different persons.

3. When other conditions are the same, the larger the brain the stronger it is; and the larger the portion of brain occupied for the manifestation of a faculty, the stronger its manifestation.

4. Those portions of brain used for faculties related to each other are located together. Thus the brain is divided into regions or groups, as well as into organs. The location and boundaries of these organs and regions may be best learned from the Phrenological Bust, and the accompanying diagram (fig. 144).

5. Each group has its collective function. The propelling faculties give force in all actions; the social adapt us to our fellows; the selfish lead us to take care of ourselves; the intellectual enable us to understand men and things, whatever is to be known, and the means of dealing with them; and the moral and religious are meant to control all the rest, by subjecting them to the tribunals of kindness, justice, and of the Divine Law.

6. The original normal conditions which determine the excellence and efficiency of the mind as operative through the brain are:

1. Quantity of brain.
2. Quality of fiber of brain.
3. Relative size of parts of brain.
4. Influence of body upon brain.

7. Each faculty is susceptible of improvement or deterioration, and may be strengthened, perverted, neglected, or weakened.

8. Each faculty is in itself good, and was given by the Creator for good. The improvement of man, therefore, does not imply the extinction, or distortion, or stunting of any fac-

ulty, nor the creation of new ones, but the culture needed by each, the harmonizing of all, and their pleasant action separately or together, in due subordination, and with the right degree of activity.

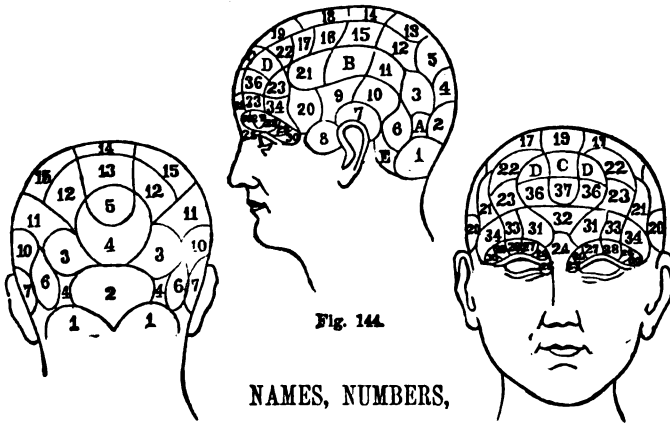


Fig. 144.

NAMES, NUMBERS,
AND
LOCATION OF THE ORGANS.

1. AMATIVENESS.	18. SELF-ESTEEM.	26. SIZE.
A. CONJUGAL LOVE.	14. FIRMNESS.	27. WEIGHT.
2. PARENTAL LOVE.	15. CONSCIENTIOUSNESS.	28. COLOR.
3. FRIENDSHIP.	16. HOPE.	29. ORDER.
4. INHABITIVENESS.	17. SPIRITUALITY.	30. CALCULATION.
5. CONTINUITY.	18. VENERATION.	31. LOCALITY.
E. VITATIVENESS.	19. BENEVOLENCE.	32. EVENTUALITY.
6. COMBATIVENESS.	20. CONSTRUCTIVENESS.	33. TIME.
7. DESTRUCTIVENESS.	21. IDEALITY.	34. TUNE.
8. ALIMENTIVENESS.	B. SUBLIMITY.	35. LANGUAGE.
9. ACQUISITIVENESS.	22. IMITATION.	36. CAUSALITY.
10. SECRETIVENESS.	23. MIRTH.	37. COMPARISON.
11. CAUTIOUSNESS.	24. INDIVIDUALITY	C. HUMAN NATURE.
12. APPROBATIVENESS.	25. FORM.	D. SUAVITY.

In addition to these diagrams, the student of Phrenology should have at hand a PHRENOLOGICAL BUST, somewhere near the size of life, showing the exact location of each organ. Then, by comparing living heads one with another, the differences would appear most palpable. Extend your observations, and compare the well-known characters of those having long and narrow heads with those of persons who have short and broad heads; or compare the high heads with the low, and however skeptical you may be, you will be compelled to accept the general principles of Phrenology.

DEFINITION OF THE ORGANS.

DOMESTIC PROPENSITIES.

1. **AMATIVENESS.**—Connubial love; attachment of the sexes to each other; adapted to the continuance of the race. *Excess:* Licentiousness and obscenity. *Deficiency:* The want of affection, and indifference toward, the opposite sex.



Fig. 146.
QUEEN VICTORIA.*

A. UNION FOR LIFE.—Desire to pair; to unite for life; and to remain constantly with the loved one. *Excess:* The almost impossibility of transferring our affections from one to another. *Deficiency:*



Fig. 147.
A. JOHNSON.*

cy: Want of conjugal affection.

2. **PHILOPROGENITIVENESS.**—Parental love; fondness for pets, and the young and helpless generally; adapted to the infantile condition. *Excess:* Idolizing and spoiling children by caresses and excessive indulgence; a slave to maternal duties. *Deficiency:* Neglect of the young.

3. **ADHESIVENESS.**—Love of friends; disposition to associate. Adapted to man's requisition for society and concert of action. *Excess:* Excessive fondness for company. *Deficiency:* Neglect of friends and society; the hermit disposition.

4. **INHABITIVENESS.**—Love of home; desire to live permanently in one place; adapted to the necessity of a home. *Excess:* Prejudice against other countries. *Deficiency:* A roving disposition.

* Observe the difference in the back heads of these two personages. While the distance from the ear back, in the head of Victoria, is considerable, there is very little in the head of Johnson. The queen was a loving wife, and the mother of many children; while Johnson was not only never married, but was said to be a woman-hater. He had little or no adhesiveness, amativeness, or philoprogenitiveness. These organs are all large in Victoria, and are so in other well-organized human beings.

5. **CONTINUITY.**—Ability to chain the thoughts and feelings to one particular subject until it is completed. *Excess*: Prolixity; tediously long stories. *Deficiency*: Excessive fondness for variety; has several irons in the fire at once; seldom finishes what has been commenced; very transitive and impatient.

SELFISH PROPENSITIES.

E. **VITATIVENESS.**—Love of life; youthful vigor even in advanced age. *Excess*: Extreme tenacity to life; fear of death. *Deficiency*: Letting go, and yielding up life, when one might still live.



Fig. 148.
YANKEE SULLIVAN.*

6. **COMBATIVENESS.**—Self-defense; love for discussion; resistance; the energetic go-ahead disposition. *Excess*: A quick, fiery, excitable, fault-finding, contentious disposition. *Deficiency*: Cowardice.



Fig. 149.
REV. DR. BOND.*

want of courage and self-defense.

7. **DESTRUCTIVENESS.**—Executiveness; propelling power; the exterminating feeling. *Excess*: The malicious, retaliating, revengeful, and murderous disposition. *Deficiency*: Tamelessness; inefficiency, and want of resolution.

8. **ALIMENTIVENESS.**—Appetite; enjoyment of food and drink. *Excess*: Gluttony; gormandizing, intemperance. *Deficiency*: Daintiness; want of appetite and relish.

9. **ACQUISITIVENESS.**—Economy; the disposition to save and accumulate property. *Excess*: Miserly avarice: theft; extreme selfishness. *Deficiency*: Prodigality; inability to appreciate the true value of property; lavish and wasteful.

* Supposing the heads of these two men were of the same size, i. e., containing the same quantity of brain, but differing thus widely in shape, is it not probable that there would be an equal difference in the characters of the two men? See how broad at the base,—between the ears,—and how comparatively low and flat on top, is the one, and how narrow, long, and high, the other! Each stood at the head of a class widely different from the other. The one was a trained boxer, the other an educated clergyman. The reader can decide, even without the names, "which is which."

10. **SECRETIVENESS.**—Policy; management. *Acquisitiveness gets, Secretiveness keeps.* *Excess:* Cunning; disguise; hypocrisy; intrigue. *Deficiency:* Want of tact and restraint; openness; bluntness of expression.

11. **CAUTIOUSNESS.**—Prudence; carefulness; watchfulness; solicitude. *Excess:* Fear; timidity; procrastination. *Deficiency:* Careless; blundering; heedless: reckless.

ASPIRING AND GOVERNING ORGANS.

12. **APPROBATIVENESS.**—Love of praise; affability; ambition to be approved and promoted. *Excess:* Vanity; self-

Small.



Fig. 150.

DIFFIDENCE.*

praise; and extreme sensitiveness. *Deficiency:* Indifference to public opinion, or to praise or blame; and disregard for personal appearance.

Large.



Fig. 151.

AUTHORITY.*

13. **SELF-ESTEEM.**—Dignity; manliness; love of liberty; nobleness; an aspiring and commanding disposition. *Excess:*

Extreme pride; an arrogant, domineering spirit. *Deficiency:* Clownishness; servitude, and lack of self-respect and personal appreciation.

14. **FIRMNESS.**—Decision; stability; perseverance; fortitude; unwillingness to yield. *Excess:* Obstinacy; willfulness. *Deficiency:* Fickle-minded. No dependence can be placed on one without Firmness—there is no stability or decision of character in such a one.

MORAL SENTIMENTS.

15. **CONSCIENTIOUSNESS.**³—Justice; integrity; sense of right and duty, and power to resist temptations. *Excess:* Censori-

* In fig. 150, Self-Esteem and Firmness are wanting, and the character is weak, undecided, submissive, and "your very humble servant, sir;" while in fig. 151 there is a natural crown to the head. See how high and full where the other is so deficient! Such heads are usually found in the lead, and at the head of affairs. How marked the difference, in both head and face, of these two characters!

ousness; scrupulousness; remorse; self-condemnation; unjust censure. *Deficiency*: No penitence for sin, or compunction for wrong-doing; self-justification in all things.

16. HOPE.—Sense of immortality; expectation; looking into the future with confidence of success. *Excess*: Extravagant



Fig. 152
BISHOP WHITE.*

promises; castle building; and anticipation of impossibilities. *Deficiency*: Despondency; gloom; melancholy; foreboding evil.

17. SPIRITUALITY.—Intuition; perception of the spiritual; the prophetic cast of mind. *Excess*: Belief in ghosts, hobgoblins, witch-



Fig. 153.
MALEFACTOR.*

craft, etc. *Deficiency*: Lack of faith; extreme incredulity, like the "doubting Thomas;" dark skepticism.

18. VENERATION.—Devotion; reverence; worship; adoration; respect for the aged, authority, and for antiquity. *Excess*: Idolatry; superstition; worship of images and idols. *Deficiency*: Disregard for things sacred and venerable.

19. BENEVOLENCE.—Kindness; sympathy; desire to do good; philanthropy; disinterestedness. *Excess*: Giving alms to the undeserving; too easily overcome by scenes of suffering. *Deficiency*: Extreme selfishness; indifference to suffering; no sympathetic regard for the distressed.

PERFECTIVE FACULTIES.

20. CONSTRUCTIVENESS.—Mechanical ingenuity; ability to

* Fig. 152 represents a moral, spiritual, and intellectual head, with a high, full top-head, and all the organs in active use, while fig. 153 affords a striking contrast. It is not only unlike fig. 152 in general, but in detail. See how low and retreating the forehead! how deficient in Veneration, Spirituality, Hope, and Conscientiousness! All the propensities are enormously developed, with little to regulate them. Though not an idiot, he was unfortunate in growing up without moral or intellectual culture. Such beings must fill low and menial spheres, while their superiors make laws for their regulation and punishment. Would it not be better to educate them, and teach them self-government?

invent; use tools; construct. *Excess*: Attempting perpetual motions, and other impossibilities. *Deficiency*: Inability to use tools or understand machinery; lack of skill in planning, contriving, and dexterity in mechanism.

21. IDEALITY.—Love of the perfect and beautiful in nature and art; refinement; ecstasy; poetry. *Excess*: Fastidious-

ness, and a disgust even for the common duties of life. *Deficiency*: Roughness; vulgarity; want of taste or refinement; disregard for the beautiful.

B. SUBLIMITY.—Fondness for the grand and sublime, the magnificent, the wild and romantic, as Niagara Falls, and mountain scenery. *Excess*:



Fig. 154.
RAPHAEL.*



Fig. 155.
CORREGGIO.*

Extravagant representations; magnified statements; fondness for tragedies. *Deficiency*: Indifference to the grandeurs of nature; hears the thunder and views the terrific lightning without emotion.

22. IMITATION.—Power of imitating; copying; working after a pattern; aptitude for different pursuits. *Excess*: Mimicry; servile imitation. *Deficiency*: Inability to conform to the manners and customs of society.

D. AGREEABLENESS.—Blandness and persuasiveness of manner, expression, and address; pleasantness; insinuation; the faculty of saying even disagreeable things pleasantly. *Excess*: Affectation; blarney. *Deficiency*: Want of ease of manner; inability to make one's self agreeable or acceptable when among strangers.

23. MIRTHFULNESS.—Wit; fun; playfulness; humor; ability to joke, make fun, and enjoy a hearty laugh. *Excess*:

* Fig. 154, imperfect as our likeness of Raphael may be, shows, first, a well-developed forehead, with large perceptive faculties; and considerable breadth through the temples, in the regions of Constructiveness and Ideality. A close inspection of all the life-sized portraits we have ever seen confirms us in the opinion that his head and character were in the most perfect conformity. The same is also true of fig. 155 (Correggio), who has by his genius placed his name high on the roll of fame as an artist.

Ridicule and sport of the infirmities and misfortunes of others.

Deficiency: Extreme gravity and seriousness; indifference to all joyous play, amusements, and hilarity.

PERCEPTIVE FACULTIES.

24. INDIVIDUALITY.—The desire to see; ability to acquire knowledge by observation; the looking faculty. *Excess*: An insatiable desire to see; a tendency to stare; prying curiosity; extreme inquisitiveness.

Deficiency: A want of practical knowledge derived from personal observation; inability to notice external objects.



Fig. 156.
GOVERNEUR MORRIS.*



Fig. 157.
MEDITATION.*

25. FORM.—Memory of shapes, forms, faces; the configuration of things; aids in spelling, drawing, modeling, etc.; when

large, one seldom forgets countenances. *Deficiency*: A poor memory of faces, shapes, etc.

26. SIZE.—Ability to judge of size, length, breadth, height, depth, distance, and weight of bodies by their size; of measuring angles, perpendiculars, etc.; ability to judge accurately of the proportion which one body holds to another. *Deficiency*: Unable to judge by the eye between small and large; seldom judges correctly the dimensions of an object.

27. WEIGHT.—Gravity; ability to balance one's self, required by a marksman, sailor, or horseman; also the ability to "carry a steady hand." *Excess*: Excessive desire to climb

* In fig. 156 (Morris), the lower forehead, including the organs of Individuality, Eventuality, Form, Size, and Weight, are most prominent, while in fig. 157 the upper forehead predominates. Causality and Comparison are much larger than in fig. 156. The one is a looker—has a practical common-sensed intellect, and inclined to the study of science; while the other is a thinker, and disposed to philosophize rather than observe. The real characters of the two men were as different as their capacities and organisations.

or go aloft unnecessarily. *Deficiency*: Inability to keep one's balance; liability to stumble.

28. COLOR.—Judgment of the different shades, hues, and tints, in paintings; the rainbow, flowers, and all things possessing color, will be objects of interest. *Excess*: Extravagant fondness for colors; a desire to dress with many colors. *Deficiency*: Color blindness; inability to distinguish or appreciate colors, or their harmony.

29. ORDER.—Method; system; arrangement; neatness and convenience. "A place for things, and everything in place." *Excess*: More nice than wise; spends too much time in fixing; greatly annoyed by disorder; old maidish. *Deficiency*: Slovenliness; carelessness about the arrangement of books, tools, papers, etc.; seldom knows where to find anything, although recently used.

30. CALCULATION.—Ability to reckon figures by mental arithmetic; to add, subtract, divide, multiply; cast accounts, etc. *Excess*: A disposition to count everything. *Deficiency*: Inability to understand the most simple numerical relations.

31. LOCALITY.—Recollection of places; the geographical faculty; desire to travel and see the world. *Excess*: A roving, unsettled disposition. *Deficiency*: Inability to remember places; liability to get lost; can not tell the points of the compass.

LITERARY FACULTIES.

32. EVENTUALITY.—Memory of events; the love of history, anecdotes, facts, items of all sorts; a kind of walking news-

Large.



Fig. 158.

PROF. LONGFELLOW.*

paper. *Excess*: Constant story-telling to the neglect of duties. *Deficiency*: Forgetfulness; a poor memory of events.

33. TIME.—Recollection of the lapse of time; day and date; ability to keep the time in music, marching, and dancing; to be

Small.



Fig. 159.

INDIAN WOMAN.*

* In fig. 158 we have an even, harmonious, and well-developed brain.

able to carry the time of day in the memory. *Excess:* Drumming with the feet and fingers, much to the annoyance of others. *Deficiency:* Inability to remember dates.

34. TUNE.—Love of music, and perception of harmony; power to compose music. *Excess:* A continual singing, humming, or whistling, regardless of propriety. *Deficiency:* Inability to comprehend the charms of music, or distinguish one tune from another.

35. LANGUAGE.—Ability to express ideas verbally or in writing, and to use such words as will best express our meaning; memory of words. *Excess:* Volubility of expression; great talkativeness; more words than thoughts. *Deficiency:* Extreme hesitation in conversation; inability to select appropriate language for the expression of ideas.

REASONING FACULTIES.

36. CAUSALITY.—Ability to reason and comprehend first principles; the “why and wherefore” faculty; originality. *Excess:* Too much theory, without bringing the mind to a practical bearing. Such a mind may be philosophic, but neither practical nor scientific.



Fig. 160.—GALILEO.*



Fig. 161.—IDIOT.*

37. COMPARISON.—Inductive reasoning; ability to classify, and apply analogy to the discernment of principles;

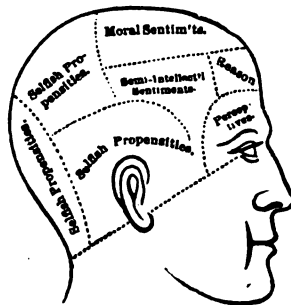
Here are no excesses, no deficiencies. Each and all the powers of mind may be readily called into action, and freely expressed. The mental tools given him at birth have been kept bright by use, and grown sharp by contact with the world. This is a fully developed brain. Now observe the opposite. In fig. 159 there are the same number of senses, organs, and faculties, but in different degrees of development. The one had a cultivated, the other an untutored mind. The one could use his mental tools to advantage; the other could not. The one lived in the passions; the other in the sentiments. The one was low and gross, the other high and refined. There is as marked a difference in their phrenological developments as in the general expression of their physiognomies.

* Fig. 160 represents the head of a philosopher, and fig. 161 that of a

to compare, discriminate, and illustrate; to draw correct inferences, etc. *Excess*: "Splitting hairs," or unnecessary criticism. *Deficiency*: Inability to perceive the relation of things.

C. HUMAN NATURE.—Intuition, discernment of character; perception of the motives at the first interview. *Excess*: prying into the character of another to the exclusion of duties, and at the sacrifice of courtesy and politeness. *Deficiency*: Misplaced confidence; supposing everybody honest.

fool. The one was thoughtful, the other thoughtless. The one had ten talents, the other none. One was accountable to civil law, the other was not. One had a large and healthy brain, that of the other was small and weak. The quality of the one was fine and good, that of the other was coarse and poor. In all these conditions, the physiology, phrenology, physiognomy, and character are in the most perfect accordance. This, then, is the basis on which the system of Phrenology rests, and on which it must stand or fall. We claim that it is God-given, and immutable.



GROUPS OF ORGANS.

VIII.

ANATOMY OF THE FACE.

"The outward forms result from the degree of developments of the contained organs."

SIR CHARLES BELL.

"Your face, my thane, is as a book, where men
May read strange matters."

SHAKESPEARE.



Fig. 162.—THE MUSCLES EXPOSED.

WE shall not require or expect the reader to familiarize himself with all the details of facial anatomy, but we shall have so frequent occasion to mention the principal bones and muscles of the face, that it is necessary to name and briefly describe them before going further. Having the description and accompanying illustrative drawings to refer to, as occasion may require, the intelligent

student will be able readily to comprehend all the allusions to particular bones or muscles that we may find it necessary to make in the following chapters.

THE FRAMEWORK OF THE FACE.

The bones generally considered as belonging to the face are fourteen in number:

Two Nasal;	Two Palate;
Two Superior Maxillary	Two Inferior Turbinated;
Two Lachrymal;	One Vomer; and
Two Malar;	One Inferior Maxillary.

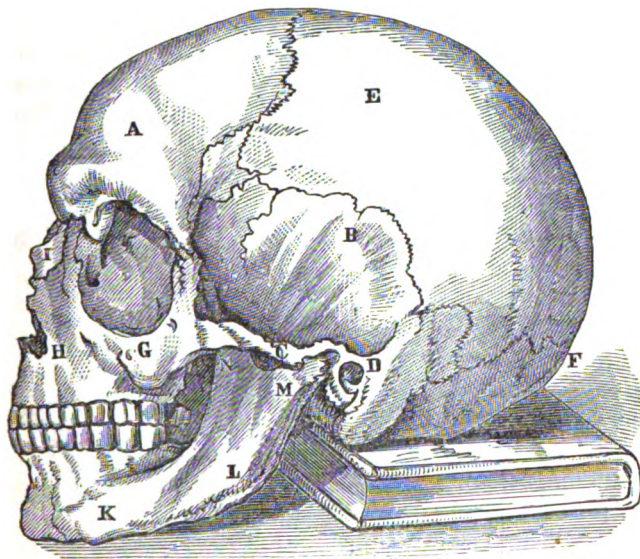


Fig. 163.—BONES OF THE HEAD AND FACE.

The bones of the cranium, which, as connected with and in part belonging to the face, we shall include in our description, are eight in number:

One Frontal;	One Occipital;
Two Parietal;	One Sphenoid; and
Two Temporal;	One Ethmoid.

1. *The Occipital Bone* (fig. 163, F) forms the base and back part of the cranium. Its external surface is marked by two transverse ridges. In the center of the upper one is a projection called the *occipital protuberance*.

2. *The Parietal Bones* (fig. 163, E) are situated at the side and top of the skull, and are connected with each other at the center by the *sagittal suture*. The *parietal* bones are traversed lengthwise by an arched and more or less distinctly marked elevation called the *temporal ridge*.

3. *The Temporal Bones* (fig. 163, B) are placed at the side and base of the skull. The lower and back part, which forms a projection behind the ear, is called the *mastoid process*, and serves for the insertion of the large oblique muscle of the neck. A long arched process, called the *zygoma* (fig. 163, C) projects outward and forward, and with the process of the cheek-bone forms an arch (*zygomatic arch*), under which the tendon of the temporal muscle passes, to be inserted into the lower jaw.

4. *The Frontal Bone* (fig. 163, A) forms the forehead, a part of the roof of the nostrils, and the orbits of the eyes. The projections which support the eyebrows are called the *superciliary ridges*. Behind them lies the cavity or canal called the *frontal sinus* (fig. 164, A).

5. *The Ethmoid* (sieve-like) *Bone* is a square cellular bone between the orbits at the root of the nose.

6. *The Nasal Bones* are the small quadrangular pieces (fig. 163, I) forming the bridge and base of the nose.

7. *The Superior Maxillary Bones* (fig. 163, H) form the whole of the upper jaw, and assist in forming the orbit, nose, cheek, and palate. They are united in the center, under the nasal bones, by a close *suture*. The lower part of the jaw presents the *alveolar process* for containing the upper teeth. the projection which extends back under the eye is called the *malar process*, and is joined by a *suture* to the malar bone.

8. *The Malar Bones* (fig. 163, G) are the four-sided pieces



Fig. 164.—THE SINUSES OF THE FACE.

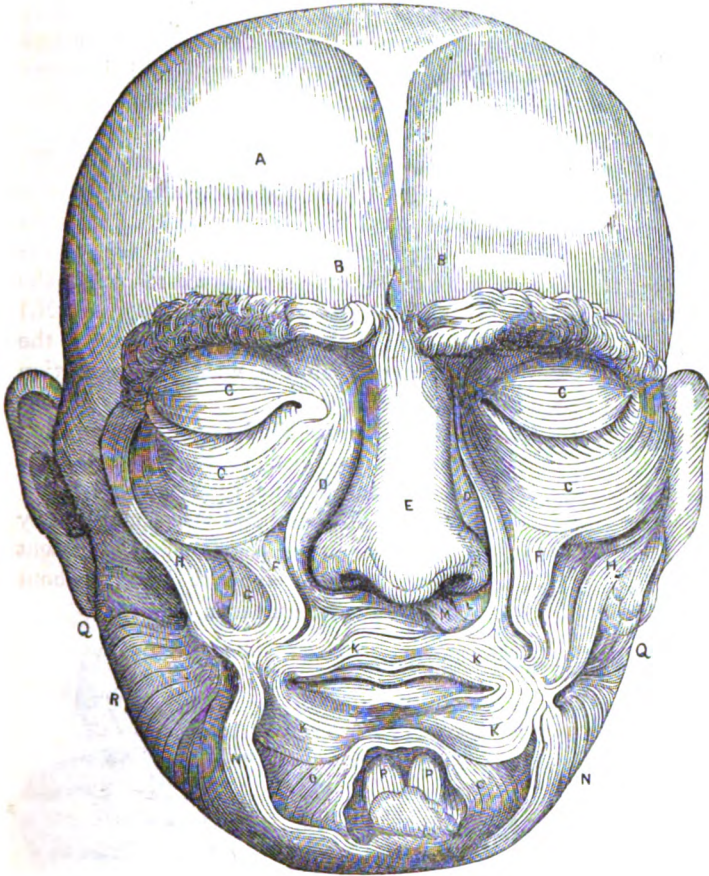


Fig. 165.

MUSCLES OF THE FACE.

A. OCCIPITO FRONTALIS;
 B. CORRUGATOR SUPERCILII;
 C. ORBICULARIS PALPEBRARUM;
 D. LEVATOR LABII SUPERIORIS;
 E. COMPRESSOR NASI;
 L. DEPRESSOR ALÆ NASI;
 F. LEVATOR LABII PROPRIUS;
 G. LEVATOR ANGULI ORIS;

H. ZYGOMATICUS;
 K. ORBICULARIS ORIS;
 M. NASALIS LABII SUPERIORIS;
 N. TRIANGULARIS ORIS;
 O. QUADRATUS MENTI;
 P. LEVATOR MENTI;
 Q. BUCCINATOR;
 R. PLATYSSMA MYOIDES.

which form the prominences of the cheeks. A process called the *frontal* ascends to articulate with the *frontal bone* and form the outer border of the orbit; another, called the *zygomatic*, unites with the *temporal bone*; and a third, as we have just seen, forms a connection with the *superior maxillary*.

9. *The Inferior Maxillary Bone* or lower jaw (fig. 163, K) is the arch of bone forming the chin and containing the under row of teeth. The lower and back part (fig. 163, L) is called the angle of the jaw. Extending upward from this is the *ramus*, terminating in two projections or processes called the *condyles* (fig. 163, M), and the *coronoid process* (fig. 163, N.) The first moves in the socket in the temporal bone, and to the second is attached the temporal muscle, which, in connection with other muscles, moves the jaw.

10. *The Sphenoid, Lachrymal, Turbinated, Palate, and Vomer Bones* need not be described, as they are situated interiorly, and we shall have no occasion to refer to them.

11. *Sutures*.—The bones of the head and face are united by *sutures*, or seams in which their processes seem to indent themselves, as they grow, into the opposite bone, without there being an absolute union between them.

THE MUSCLES OF THE FACE.

FOREHEAD AND EYEBROW.—"The forehead," Sir Charles Bell says, "is more than any other part characteristic of the human countenance. It is the seat of thought, a tablet where every emotion is distinctly impressed; and the eyebrow is the movable type for this fair page." Pliny says: "*Frons hominis tristitiæ, hilaritatis, clementiæ, severitatis, index est.*"*

There are but four external muscles which it is necessary to describe under this head:

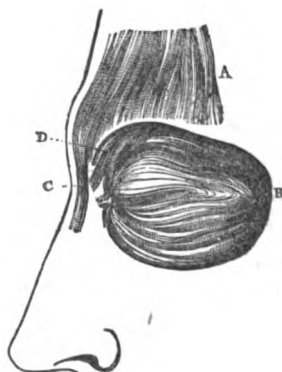


Fig. 166.
MUSCLES OF THE EYEBROW.

* The human forehead is an index of grief and joy, clemency and severity.

1. *The Occipito Frontalis* (fig. 166, A) arises in a web of fibers from the back of the skull, descends over the forehead, and is inserted into the eyebrow, where it mingles its fibers with those of the *orbicularis palpebrarum*. Its action is to raise or arch the eyebrow.

2. *The Orbicularis Palpebrarum* (fig. 166, B) is the muscle which closes the eyelids. The outer and stronger portion (represented by the darker lines in the engraving) draws down the eyebrows, and is the direct opponent of the *occipito frontalis*.

3. *The Third Muscle* (fig. 166, C) is properly a part of the first, and is called the *descending slip* of the *occipito frontalis*; but as it descends on the side of the nose and is attached to the bridge, it has a different effect from the rest of the muscle—drawing down the extremity of the eyebrow, while the other portions are being raised.

4. *The Corrugator Supercilii* (fig. 166, D) arises from the lowest part of the frontal bone where it joins the bones of the nose, and running obliquely upward is inserted in the skin under the eyebrow. This muscle and the *orbicularis palpebrarum*, acting together, knit the eyebrows.

MUSCLES OF THE EYE.—What is called the *Ocular Group* consists of seven muscles.

1. *The Levator Palpebræ Superioris* (fig. 167, '1') is the muscle which raises the upper eyelid, acting in opposition to the *orbicularis*. It arises deep within the orbit, and is attached to the cartilage which gives firmness to the upper eyelid. It is long, thin, and triangular.

2. *The Rectus Superior* (fig. 167, '2') arises with the preceding, and is inserted into the globe of the eye, which its action draws directly upward.

3. *The Rectus Inferior* (fig. 167, '3') arises from the inferior margin of the *optic foramen* (opening) and is inserted into

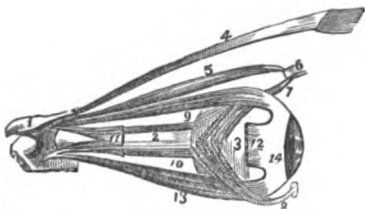


Fig. 167.—MUSCLES OF THE EYE.

the lower surface of the globe, which its office is to draw downward.

4. *The Rectus Internus* (fig. 167, ¹⁰) is a short thick muscle arising from the common tendon and sheath of the optic nerve (fig. 167, ¹), which almost conceals it in our drawing, and being inserted into the inner surface of the globe. Its action draws the eyeball toward the inner angle of the eye.

5. *The Rectus Externus* (fig. 167, ¹¹), the extremity of which, at its insertion, is shown in our cut, is the antagonist of the preceding, and draws the globe toward the outer corner of the eye.

6. *The Obliquus Superior* (fig. 167, ⁴) arises from the margin of the optic opening, and is inserted into the *sclerotic* coat near the entrance of the optic nerve. Its office is to roll the eyeball inward and forward.

7. *The Obliquus Inferior* (fig. 167, ⁵) (the opponent of the preceding) arises from the margin of the *superior maxillary* bone, and is inserted into the outer and posterior portion of the eyeball, which its action rolls outward and backward.

MUSCLES OF THE NOSE.—We may enumerate four muscles connected with the nose which have a physiognomical signification, and whose location and action should be understood by the student.



Fig. 168.

MUSCLES OF THE NOSE.

1. *The Levator Labii Superioris alæque Alæ Nasi*, or elevator of the upper lip and wing of the nose (fig. 168, A), has its origin on the upper jaw-bone and descends to the lip; but a part of it stops short and is attached to the movable cartilage of the nostril, which it raises along with the upper lip.

2. *The Depressor Alæ Nasi*, or depressor of the wing of the nose (fig. 168, B) arises from the upper jaw-bone close to the sockets of the front teeth, and descending is inserted into the cartilage of the side of the nostril, which it draws down.

3. *The Compressor Nasi*, or compressor of the nose (fig.

168, C), arises from the bridge of the nose, and is inserted in the lateral cartilage of the nostril. As its name implies that, it compresses the nose; but it also expands the nostril by raising the lateral cartilage.

4. *The Orbicularis Oris* (fig. 168, D) belongs to the next group; but a slip from it, detaching itself from the mass of that muscle, runs up the edge of the *septum* of the nose.

THE LIPS AND CHEEKS.—The mouth is the center of expression, and it is here that the greatest number of muscles connected with expression are concentrated. It is important that their location and action should be understood.

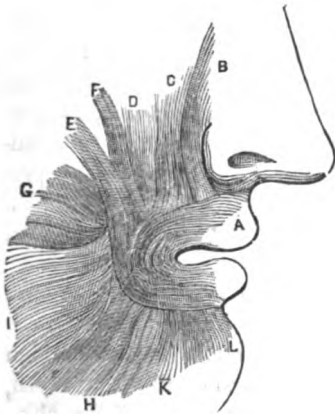


Fig. 169.—MUSCLES OF THE MOUTH.

1. *The Orbicularis Oris* (fig. 169, A) is the circular muscle which surrounds the mouth, and to which the fleshy structure of the lips is in a great measure owing. It has properly no origin, its fibers being traceable continuously around the lips, which its office is to close. It is the opponent of many other muscles, which, taking their origin

from the prominent bones of the face, are concentrated toward the mouth, and, besides opening it, move the lips in various directions.

2. *The Levator Labii Proprius* (fig. 169, C) arises from the upper jaw, near the orbit, and is attached exclusively to the upper lip, which it raises.

3. *The Levator Anguli Oris* (fig. 169, D) lies under the last named, and is, of course, shorter. It raises the angle of the mouth.

4. *The Zygomaticus* (fig. 169, E) arises from the *zygoma*—a process of the cheek-bone (fig. 163, G) described in a previous section, which joins the temporal bone and helps to form the *zygomatic arch*—and is inserted into the angle of the

mouth. Its whole course may be seen in fig. 165 (H). There is sometimes an additional muscle arising and inserted in a similar manner, called the *zygomatikus minor*.

4. *The Buccinator* (some fibers of which may be seen at G, fig. 169) is a flat muscle which lines the inside of the cheek. It arises from the sockets of the back teeth of both jaws, and is inserted into the angle of the mouth, which its action draws back.

5. *The Triangulis Oris, or Depressor Anguli Oris* (fig. 169, H), is a comparatively powerful muscle arising from the lower jaw and inserted into the angle of the mouth, which it depresses. In the drawing, some muscular fibers (I) may be seen, which join the *triangulis oris*, and pass to the angle of the mouth. These are parts of the *platysma myoides*, a superficial muscle of the neck which mounts over the jaw to terminate in the cheek. The uppermost *faciculus* (bundle) represented in the drawing has been described by Santorini as a distinct muscle, and from its action in laughter has obtained the name of *risorius* (laughing muscle) *Santorini*.

6. *The Quadratus Menti* (fig. 169, K) is a small square muscle situated on the chin, which depresses the lower lip.

7. *The Levator Menti* (fig. 169, L) is a small muscle which arises from the lower jaw, near the sockets of the front teeth, and passes to be inserted into the integument of the chin. When this and the last-named muscle act together, they throw up the chin and project the lower lip. The *levator menti* is sometimes called *superbus*, from the look of lofty contempt which its action gives to the mouth.

We have now briefly described all the bones and muscles of the face and head that are prominently concerned in expression or in the formation of the more prominent signs of character. To some of these we shall have frequent occasion to refer, and the reader who can make himself master of their locations and offices will find his progress greatly facilitated; but in any case this chapter can readily be consulted, and will prove invaluable.

IX.

THE CHIN

**"Mark you, when you but speak to her,
The amorous movement of her chin—
That fair, round chin!"** **OLD PLAY.**



Fig. 170.

O one can fail to be struck with the great variety which exists in the form and quality of the chin. It may be prominent or retreating; long or short; broad or narrow; pointed, round, or square; double or single, coarse or delicate. Few attach any importance to these differences, supposing them to be merely accidental; but they are all significant, and it is our purpose in this chapter to show what they mean.

THE CHIN AND THE CEREBELLUM.

The chin corresponds in position with the cerebellum, and there is a close anatomical relation between the lower jaw, of which the chin forms a part, and the base of the back-head.

A glance at the drawing (fig. 163) will show how closely the *condyles* of the *rami* (M) approach the anterior part of the cerebellar lobe.

In strict accordance with its position and anatomical relations, we find the chin to indicate by its degree of anterior and lateral development the voluntary power and activity of *Love* or *Amativeness*.

Animals have properly no chins, though they have a cerebellum; and they have the faculty of Love or Amativeness as a latent power, brought into action at stated periods by the blind instinct of procreation, but there is no degree of that *voluntariness*, or ability to act at will, which is indicated by the facial sign we are considering. Natural-born idiots have little or no chin, as may be seen by reference to fig. 171, and are also generally deficient in the region of the cerebellum. If they manifest Love at all, it is simply as an animal impulse.



Fig. 171.—Idiotia.

LOVE OR AMATIVENESS.

The anterior projection of the chin, depending upon the length of the lower jaw forward from the angle, indicates the intensity of love and its breadth the steadiness, stability, and endurance of the passion. This is in accordance with the law of form laid down in Chapter III., Section VII., and the length of the lower jaw will generally be found to correspond with the length of the cerebellum and its breadth with the breadth of that organ, though this is not necessarily always the case, for reasons explained in Chapter III., Sections VIII. and IX.

Both the facial sign of Love and its corresponding phrenological organ were enormous in Aaron Burr (fig. 174), and his character is well known to have corresponded with his developments. The accompanying portrait of Catharine II., of Russia (fig. 172), also shows a large prominent chin and a very full cerebellum.

In further illustration of this point it may be observed that

in the most prolific races of men we find the chin as well as the cerebellum most prominent. Take the Irish, the Germans, and the Scotch for examples. The same is true in general of the Anglo-Saxons. On the other hand, the Chinese, the Malays, and the Hindoos, who are much less prolific, have comparatively small chins and small cerebellums. The North American Indians, with their retreating chins (fig. 173), are noted examples of a lack of prolificness, a family among them, according to Mr. Catlin, the artist and ethnologist, rarely comprising more than two or three children. The entire cerebellum is generally moderate or small in both sexes, and there is comparatively little manifestation of love among either the men or the women.



Fig. 172.—CATHARINE II. OF RUSSIA.



Fig. 173.—BLACK HAWK.

CHINS CLASSIFIED.

Love has many forms of manifestation, some of which may be determined with considerable accuracy by the *form* of the chin; and we

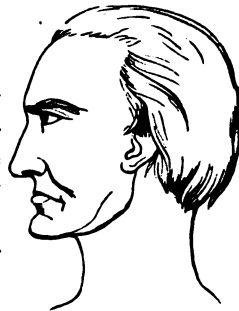


Fig. 174.—AARON BURR.

shall now give some practical rules for distinguishing them. Chins, considered with reference to their anterior and lateral development, may be separated into five general classes:

1. The Pointed, or Narrow Round Chins;
2. The Indented Chins;
3. The Narrow Square Chins;
4. The Broad Square Chins; and
5. The Broad Round Chins.

1. THE POINTED CHIN.—When the greatest anterior prominence of the inferior maxillary bone (fig. 163, K) is in the center, under the first incisor teeth, the pointed or narrow round chin (fig. 175) is formed, and we have an indication of *Congenial*



Fig. 175.

Love—a love for one exactly adapted to one's self. A person with this kind of chin (well represented in the accompanying portrait (fig. 176), is likely to have a *beau ideal*, and will not be easily satisfied with any



Fig. 176.—M'LE ———.

one of the *real* men or women by whom he or she may be surrounded. The dominance of this feeling is a very frequent cause of celibacy. Failing to find the "other self," for which they are seeking, many men and women remain single through life. This chin, and the sentiment indicated by it, are more common among women than among men.

2. THE INDENTED CHIN.—A prominence on each side of the preceding sign sometimes causes a slight vertical depression in the center, and forms what we have called, for want of a better term, the indented chin (fig. 177). This indentation, however, must not be confounded with the dimple caused in some plump faces by the action of the muscles. Persons with the indented chin (fig. 178) have great *Desire to be Loved*—hunger and thirst for



Fig. 177.

affection, and are miserable without some one of the opposite sex to love them. Such chins are more common in man than



Fig. 178.—PRINCE OF WALES.

in woman, and the feeling which they indicate leads him to seek and sue for her love. When this sign is very large in woman, she may sometimes overstep the bounds of etiquette, and "make love" to a person who pleases her. Should both this and the preceding sign be large, there will be no depression in the center, but the chin will assume a degree of roundness allying it to the first form; but it will be less pointed.

3. THE NARROW SQUARE CHIN.—The narrow square chin (fig. 179), is more common among women, and indicates a *Desire to Love*, which harmonizes beautifully with man's stronger Desire to be Loved. This faculty co-operates with Benevolence, and



Fig. 179.

inclines one to bestow love as a favor. A woman with this sign largely developed, is disposed to love and marry some humble individual, who, from lack of wealth or personal charms, is less likely than others to win love on other grounds; and it is often



Fig. 180.—ISABELLA ALBRIZZI.

through the feeling here indicated, that beautiful women, rejecting the offers of many a handsome suitor, finally marry very plain and apparently unattractive men.



Fig. 181.

4. THE BROAD SQUARE CHIN.—Where the chin is broad and square (as in figs. 181 and 182), we may look for *Violent Love*, or at least a very earnest and devoted attachment—a feeling bordering on worship, which in excess may manifest itself in love-sickness and even in insanity. It is often accompanied by jealousy and distrust.



Fig. 182.

5. THE BROAD ROUND CHIN.—When a general fullness of the chin proper is accompanied by great breadth of the jaw



Fig. 183.—CATHARINE ALEXIEONA.

under and back of the first two molar teeth, we may look for Ardent Love combined with great steadfastness and permanence



Fig. 184.

in affection (breadth everywhere denoting stability and endurance), and in the conjugal relation, *Faithfulness*. Men or wo-

men thus constituted are less liable than others to be drawn away from their married partners, or from those to whom they are engaged, by any new object of affection, however attrac-

tive. In wedlock they desire children, and esteem them as pledges of Love.

The broad round chin is accompanied by breadth and fullness of the red part of the lips, and especially of the lower lip. The foregoing portrait of Catharine Alexieona (fig. 183), who from a poor peasant girl became Empress of Russia, and was noted for the qualities it represents, illustrates the full development of the sign of Ardent Love, both in the chin or lower jaw, and in the lips. The faculty manifests itself mainly in fondling, embracing, and kissing. It is very largely developed in the negro, and more so in woman than in man. Men seldom kiss and embrace each other, but in woman this seems natural and proper.



Fig. 185.—Miss ———

The action of Love on the chin, constituting what may be called its natural language, consists in throwing it forward, as in fig. 186, or sidewise, as in fig. 187, the



Fig. 186.

former movement being the more natural to woman and the latter to man. Observe the action in our initial portrait of the love-sick Greek poetess Sappho; or better, observe the move-



Fig. 187.

ments of any two lovers of to-day during a *tête-à-tête*, and you will need no further illustration of this point. Here, as elsewhere, "actions speak louder than words."

WILL OR DETERMINATION.

Closely allied to *Love* or *Desire* is *Will* or *Determination*. The former, as we have shown, is indicated by the anterior projection of the chin and the horizontal projection of the

lower jaw. The latter finds its natural expression in the perpendicular or downward projection of the same. When there is great length downward of the chin proper, as in figs. 189 and 190, great *Self-Control*, *Self-Will*, and power to take one's self away from surrounding things and circumstances, and live apart in a world of one's own, or in other ways to be *Self-Sufficing*.



Fig. 188.—OLIVER CROMWELL.

Length of the lower jaw downward back of the chin proper, as shown in figs. 191 and 192, indicates the faculty of Will in its relation to other persons and surrounding circumstances; and those who have this sign largely developed are generally noted for *Resolution*,

Executiveness, *Perseverance*, and the ability to control others, and to make external circumstances bend to a human purpose. These qualities, which may all be embraced under the head of *Will-Power*, are strong in all great commanders and leaders, and in the men



Fig. 189.



Fig. 190.

and the women who are "born to rule" in whatever sphere of life; and we invariably find in them the deep, strong

decisive chin of which we have been speaking. See portraits of Cæsar, Napoleon, Wellington, Jackson, and others noted for their energy, tenacity, and power over men and circumstances, in proof of this statement. The same qualities display themselves in the walks of commerce, art, and science; and we find in Franklin, the philosopher, as prominent a chin and as strong a lower jaw as in Napoleon the great commander, and Dr. Franklin showed the



Fig. 191.



Fig. 192.

same pluck, resolution, and power of the Will as did the Great Corsican, though in a different sphere of action.



Fig. 193.—WELLINGTON.

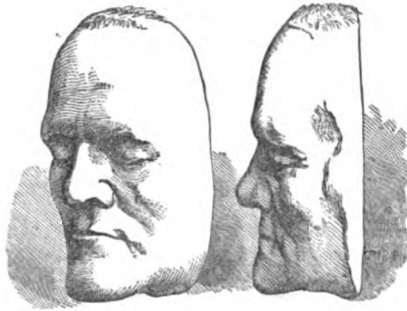


Fig. 194.—CAST OF FRANKLIN'S FACE.

SCORN AND CONTEMPT.

The signs we have mentioned are all situated on the bone of the chin and lower jaw. There are two or three connected with the muscles which may now be mentioned.

Scorn is indicated by the drawing of the chin upward, as

shown in fig. 195, which depends upon the action of two small muscles (*levator mentis*, fig. 165, p. 145) which, as shown in Chapter VIII., arise from the lower jaw near the alveolar process, and are inserted into the integument of the chin. This



Fig. 195.—WILLIAM GILMORE SIMMS.

sign is very large in the accompanying portrait of William Gilmore Simms. It causes in some persons a short transverse wrinkle between the chin and lower lip. The same muscles serve to protrude the lower lip and form the sign of the closely allied quality of *Contempt*, of which we shall have more to say when we come to speak of the mouth. Scorn is a kind of disdainful pride and haughtiness, while Contempt is

pride exhibited toward whatever we consider low, vulgar, or beneath us. Both will be found associated with a large development of Self-Esteem,



Fig. 196.—SCORN.

and generally with deficient Approbativeness and Veneration. They are hardly consistent with Christian humility, which teaches us to "unlearn contempt," and not to scorn kindred clay, since it has, like ours, God's image stamped upon it, and furnishes a temporary habitation for an immortal soul.

ECONOMY.

A fullness under the chin, making, when large, what is

called a double chin, as seen in this portrait of Franklin (fig. 197), in which the author of "Poor Richard" has his thumb on the precise point, is said to indicate the faculty of *Economy*. It increases with age, and people generally get more economical as they grow old; but whether there is any necessary relation between the double chin and a disposition to save or not, our observation has not yet enabled us to decide with any degree of certainty; but this temperament, build, and form of chin will be frequently met with among economists of both sexes, and especially among bankers.



Fig. 197.—FRANKLIN.

X.

THE JAWS AND TEETH.

"Some principle must be sought for, not yet acknowledged, which shall apply not only to the form of the whole head, but also to the individual parts. This principle, I imagine, is to be found in the form of the face as bearing relation to its various functions."—SIR CHARLES BELL.

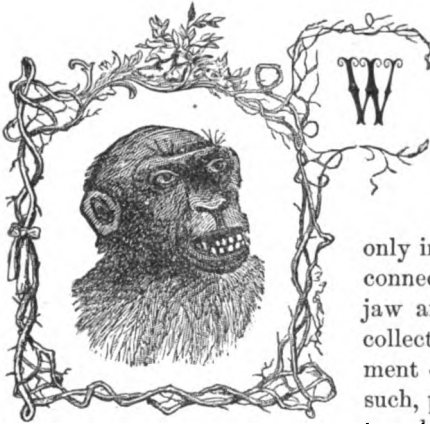


Fig. 198.—HEAD OF A GORILLA.

WE have spoken in the previous chapter of the lower jaw in some of its aspects. It will be necessary to refer to it here only in general terms and in connection with the upper jaw and the teeth. These, collectively, form the instrument of mastication, and, as such, present signs of character which it will not be profitless to study.

COMPARATIVE ANATOMY.

"In examining the jaws of animals," Sir Charles Bell says, "we shall be convinced that the form of the bones is adapted to the necessities of the creature, independently altogether of the sense of taste; that in man, whose jaw-bones are smaller than those of other animals, this sense is most perfect, most exquisite in degree, and suited to the greatest variety in its exercise. The mouth is for feeding, certainly, even in man;

but in him it is also for speech. Extend the jaws, project the teeth, widen the mouth, and a carnivorous propensity is de-



FIG. 199.—AN IGNORANT BOOB.

clared; but concentrate the mouth, give to the chin fullness and roundness, and due form to the lips; show in them the quality of eloquence and of human sentiments, and the nobleness is enhanced which was only in part indicated by the projection of the forehead. Turning to the skulls of the horse and the lion, we shall see that the one is fitted for powerful mastication and the other for tearing and la-

cerating, not for cutting or grinding; and if we examine the form of the teeth more narrowly, we shall perceive that there



FIG. 200.—HEAD OF A WOLF.



FIG. 201.—HEAD OF A SHEEP.

must necessarily be a form of jaw corresponding to these actions. In the lion, the wolf, and all carnivorous animals,

much of the character of the face lies in the depth of the jaw forward, because this depth is necessary for the socketing of the long canine teeth. When, on the contrary, the jaw is deep and strong toward the back part, it is for the firm socketing of the grinding teeth, and is characteristic of the form of the head of the horse, the sheep, and of all graminivorous animals.

A SIGN OF ANIMALITY.

We here see the anatomical reason why large or protuberant jaws are unconsciously associated in our minds with predominant animality; and

if we seek a confirmation of this impression, we need but to examine any good collection of human crania, or drawings from such crania. Such an examination will show that the lower and more close to the animal the race or the individual

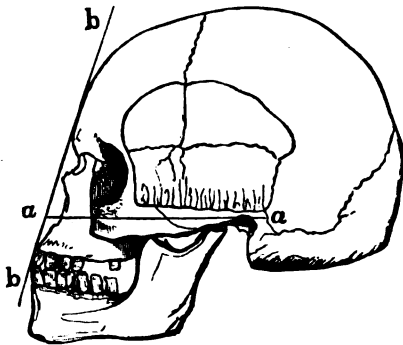


Fig. 202.—SKULL OF A NEGRO.

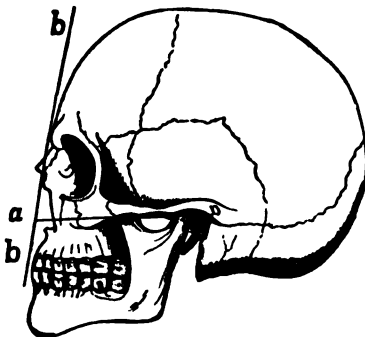


Fig. 203.—SKULL OF A CAUCASIAN.

may be (other things, of course, being equal), the stronger and more prominent are the jaws.

Sir Charles Bell has shown that in the negro, the whole of the face is actually smaller, when compared with the brain-case, than that of the European; but the jaws, contrasted with the other parts of the face, are larger. Figs. 199,

202, and 203 illustrate this point and render argument unnecessary. A personal examination of an immense number of skulls of all nations and races has convinced us that as we

advance from the lower to the higher, the jaws recede as inevitably as the forehead advances. The lower anterior part of the lower jaw, forming the chin, has, however, a relatively greater projection in the higher than in some of the lower races.

THE JAWS AND DIET.

In carnivorous animals, the lion, the tiger, and the wolf, for instance, the upper jaw projects forward of the lower, while in vegetable eaters the reverse is true, as seen in the sheep, the goat, the cow, etc. In carnivorous birds, the upper mandible is much longer than the lower, bending over, as in the eagle, the hawk, etc. It is believed that in man analogous physical peculiarities indicate dispositions allied to those of the



Fig. 204.—DESTRUCTIVENESS LARGE.

class of animals to which the resemblance may be traced. Thus an individual like that represented by fig. 204, whose upper jaw projects slightly beyond the lower, will be found to have large Destructiveness, and to be particularly fond of animal food; while fig. 206 represents one who prefers vegetable



FIG. 205.—HEAD OF AN EAGLE.

food, and is adverse to the shedding of blood, Destructiveness being small.

DESTRUCTIVENESS.

It has been seen that in the carnivora, much of the character of the jaws, and consequently of the lower part of the face, depends upon the presence of the long canine teeth; and any improper enlargement of these teeth



Fig. 206.—DESTRUCTIVENESS SMALL.

THE JAWS AND TEETH.

Destructiveness, and gives an air of **savage-**

The action of the muscle (*Levator anguli*
which raises the angle of the mouth and ex-
posed tooth, is a sign of malignant rage, as shown
that calls the parts concerned in this action **ris-**
ing muscles.

LOVE OF OVERCOMING.

When the lower canine teeth stand out a little
from the others. This indicates what Dr. Redfield
calls the *Love of Overcoming*. One who has this sign

large does not shrink
from the contemplation
of obstacles in his way,
but looks at the worst in
anticipation of meeting
and overcoming it. The
sign is large in all car-
nivorous animals, and
particularly large in the
lion and the mastiff.
When the lower canine
tooth stands out much
from the line of the other
teeth, the part of the lip
which lies over it is
pressed outward and ap-
pears full, as in portraits
of Washington.



MALDENANT.

MARKS OF PHYSICAL DEGENERACY.

In an article on the "Doings of the Sunbeam,"
we have on this point which we can fully indorse

many signs that fall far short of the marks of
as plain as that is to the *visus eruditus*,
every hour of the day in every circle of soci-
these are partial arrests of development. We

do not care to mention all which we think may be recognized, but there is one which we need not hesitate to speak of, from the fact that it is so exceedingly common.

"The vertical part of the lower jaw is short, and the angle of the jaw is obtuse, in infancy. When the physical development is complete, the lower jaw, which, as the active partner in the business of mastication, must be developed in proportion to the vigor of the nutritive apparatus, comes down by a rapid growth, which gives the straight-cut posterior line and the bold right angle so familiar to us in the portraits of pugilists [see our group of boxers in another chapter], exaggerated by the caricaturists in their portraits of fighting men, and noticeable in well-developed persons of all classes. But in imperfectly grown adults the jaw retains the infantile character, the short vertical portion necessarily implying the obtuse angle. The upper jaw, at the same time, fails to expand laterally: in vigorous organisms it spreads out boldly, and the teeth stand square and with space enough; whereas in subvitalized persons it remains narrow, as in the child, so that the large front teeth are crowded, or slanted forward, or thrown out of line. This want of lateral expansion is frequently seen in the jaws, upper and lower, of the American, and has been considered a common cause of caries of the teeth."



XI.

THE MOUTH.

"All parts of the face, doubtless, have their fixed relations to each other and to the character of the person to whom the face belongs. But there is one feature, and especially one part of that feature, which more than any other facial sign reveals the nature of the individual. The feature is *the mouth*, and the portion of it referred to is *the corner*. A circle of half an inch radius, having its center at the junction of the two lips, will include the chief focus of expression.—Dr. HOLMES.



Fig. 208. — MRS. ANNA C. LYNCH BOTTA.



HE tongue may be silent, but the mouth never ceases to speak. Motionless lips are often the most eloquent; they discourse to the eye, revealing to it what might never reach the ear, never find utterance in words, Love and Hate; Mirth and Gloom; Dignity, Firmness, Pride, Scorn, Contempt. The closest mouth can hide no secrets from the physiognomist. Full lips

and thin lips; red lips and pale lips; curved lips and straight lips; prim lips, pouting lips, slouchy lips; lips protruded and lips drawn back, all have their meaning. There are lips ardent and electric, which open but to utter loving words, and whose kisses thrill with bliss unutterable the thrice happy mortal to whom they are vouchsafed; and there are lips cold and passionless, whose touch sends a chill to the heart. There

are lips on which smiles are at home, and laughter a frequent guest; and lips that do little but grumble and scold. There are lips refined and pure, and lips gross and sensual, and the physiognomist recognizes each at a glance. Silence avails nothing.

THE MOUTH TELLS TALES.

The mouth not only reveals much of a man's character, but something of his history, also. Some one has said that "our other features are made for us, but we make our own mouths;" and though the first part of the proposition is not wholly correct, the last is emphatically so. We *do* most certainly make our own mouths, and when made they are sure to tell tales about us, no matter how closely we keep them shut. Contrast the pretty mouth of the little child, with its gentle curves and its expression of simplicity and purity, with that of the prematurely aged victim of dissipation or licentiousness—lax, flabby, and dilapidated. The latter may once have been like the former. Between the two stretches the long, sad record of a misspent life; and we might trace the downward progress of the man, step by step, in the gradual deterioration of his lips.

When the lips move, uttering familiar words or smiling sweetly upon us, we all readily comprehend them; but they have a *silent* speech in which there is not even motion. Shall we make use of our art to translate that into words? There are *secrets* hidden in it; but to you, gentle reader, as a special favor, we will unfold some of them.

GENERAL REMARKS.

Large mouths indicate more character than small ones—more capacity in regard to the qualities expressed by the mouth; but here, as in all other cases, quality as well as size must be taken into account. Coarse, irregularly formed lips indicate strength or power combined with rudeness and coarseness of function; while fine, delicately organized, and clearly and beautifully outlined lips are significant of corresponding mental delicacy and an exquisite susceptibility.

A straight middle line of the mouth is the sign of strength

and hardness, and is more common among men than among women, in whom curve lines prevail. If the lips be narrow and close, there will be lack of affection and a reserved, secretive, and abstinent disposition. Mouths slightly open, on the contrary, like that of Queen Victoria, indicate a frank, outspoken communicative nature. Self-control



Fig. 209.

closes the mouth and draws the lips backward; impulse opens the mouth and protrudes the lips. In the first case there may be passion, but it will be restrained by a stronger will; in the latter, passion is the stronger, and will rule.



Fig. 210.

All disproportion between the upper and lower lips is subversive of beauty, and shows a want of harmony between the active and passive principles of the affections, the upper lip representing the latter, and the lower lip the former.

The sense of touch is represented in the human face chiefly by the lips. Their primary function is to touch the morsel of food before it is comminuted by the teeth and tasted by the tongue. In the inferior animals it seems to be the sole organ of touch, taking in that respect the place of our fingers. The lips, therefore, indicate, in a general way, the extent, accuracy, and delicacy of the sense of touch, and consequently of the ideas which are dependent upon it.



Fig. 211.

Closely related to touch is taste, the proper organ of which is the tongue; but as this is always concealed from view by the lips, they are in a most legitimate way its representatives; so that large lips are signs of great gustatory desires; and the appreciation of flavors and the qualities of aliments will be dull and coarse or delicate and exquisite



Fig. 212.

in proportion to the coarseness or the delicacy of these organs. The negro has great sensibility to taste, but it is of a low order, and he is satisfied with the least delicate flavors, provided they are decided, and can not appreciate those of a more exquisite character. In the latter respect the French are remarkable, and they have very fine lips.

THE LIPS AND THE AFFECTIONS.

Between sensation and sentiment—between touch and taste, and the affections, there is a close relation; and accordingly we find a direct nervous communication between the lips and the organs of the social propensities in the back part of the head, as well as with the chin, which represents the cerebellum in the bony framework of the face. Here lies the basis of the



Fig. 213.—HOSPITALITY.

PHILOSOPHY OF KISSING,

which, however, it is not our purpose to expound in this connection. It is enough to call attention to the fact that kissing is not a mere arbitrary sign, but the natural language of the affections, and especially of love. There is truth as well as poetry in what Tennyson makes the lover say in "Locksley Hall:"

*Many an evening by the waters did we watch the stately ships,
And our spirits rushed together at the touching of the lips.*

And where he makes an ardent, loving woman say,

Once he drew
With one long kiss my whole soul through
My lips,

he hardly exaggerates the feeling for which we here see the physiological reason; but beware of such kisses, fair reader, unless you truly love and can wholly *trust* the giver. In any other case they are most dangerous, and may lead to remediless harm. The kiss of love is too sacred a thing to be trifled with.

FRIENDSHIP.

Friendship (Adhesiveness) holds fast, clings, adheres, and is represented by the round muscle (*orbicularis*, A, fig. 169)

which surrounds the mouth and *draws together* or closes the lips. When this muscle is large and strong it produces slightly converging wrinkles in the red part of the lips (a fig. 214) sometimes extending slightly into the white part. Small perpendicular wrinkles in the red part of the lips indicate a smaller degree of Friendship, but not a deficiency. Perfectly smooth lips, though they may be loving, are not to be trusted undoubtingly in matters of friendship. In the hour of adversity, when the true friend is more a friend than ever before, they may be found wanting. Closely related to Friendship, though in some respects antagonistic to it, is the sentiment of



Fig. 214.

HOSPITALITY.

indicated by the broad muscle (*buccinator*, or trumpeter's muscle, n., 165, Q) which draws the corners of the mouth

directly backward, causing, when the action is strong, two or more perpendicular or slightly curved wrinkles or furrows in the cheeks, outwardly from the corners of the mouth, as shown at b, fig. 214, and in the portrait fig. 213, which also shows the sign of Friendship fairly developed. Persons with this sign large are fond of receiving into their houses, and entertaining at their tables, any who may present themselves, without regard to their rank or profession, and irrespective of



Fig. 215.—ANNA CORA MOWATT RITCHIE.

friendship, personal connection, or political interest. Friendship likes to entertain a *few chosen ones*—friends and not

strangers. Vanity bestows its attentions on persons of supposed rank, distinction, or wealth.

The sign of Hospitality, as well as the thing signified, is more common in the country than in the town or city, and in southern than in northern climates.



Fig. 216.

LOVE IN THE LIPS.

Love, and especially its most ardent form, as we have already incidentally mentioned (Chap. IX.), has its sign in the red part



Fig. 217.

of the lips, and its strength is in proportion to the size and fullness of that part (figs. 215 and 217). Fig. 216 shows the sign small, and indicates deficiency of warmth in love. Large, full, red lips are fond of kissing and of being kissed, and go with warm hearts and loving dispositions. There may be excess here as elsewhere, and while one who desires to be warmly loved and fondly caressed may well beware of tight, thin, pale lips, especially in women, all should beware still more of those gross, thick, pendent lips whose ardor is merely the heat of passion, and whose love is but beastly sensuality.



Fig. 218.—SENSUALITY.

JEALOUSY.

Love, ardent and devoted, is sometimes accompanied by *Jealousy*, which is indicated by an oblique fullness below the lip, as shown in the accompanying outline (fig. 220). Jealousy has its legitimate action,

in which it causes one to guard carefully his good name, to watch over the character of his friends, and to guard those he loves against all evil influences. In excess it becomes a



Fig. 219.—JEALOUSY.

“dog-in-the-manger” sort of feeling, which would obscure the sun if it could, rather than allow others to enjoy its light. It generally accompanies large Self-Esteem and Approbation, with manifestations of Scorn, Contempt, and Love of Distinction.

THE LIPS OF CONTEMPT.

Scorn, as we have shown in Chap. IX., is indicated by the small

muscles (*levator mentis*, fig. 165, P) which draw the integument of the chin upward (fig. 121, b). The same muscles serve to protrude the lower lip and form the sign of *Contempt*, as seen at a, fig. 221. Our portraits, figs. 195 and 196, in Chap.

IX., illustrate both signs. The reader will unfortunately find too many examples within the range of his observation.



Fig. 220.

APPROBATIVENESS.

The desire to be approved—to have the good opinion of our fellow-men—is a natural and laudable one. It makes us affable, polite,



Fig. 221.

anxious to excel, and careful of appearances as well as character. In excess, however, it leads to vanity, affectation, and ceremoniousness, and gives too great eagerness for popularity, and too great sensitiveness to blame. *Approbation*

manifests itself in the face by the lifting of the upper lip, sometimes exposing the teeth, as shown in fig. 223. It is generally largely developed in the French, the Irish, and especially in the Negro. The latter is no less remarkable for his love of praise than for showing his teeth. Growing out of Approbativeness is the

LOVE OF DISTINCTION,

which slightly curls the upper lip, as shown in the accompanying outline (fig. 224) and in the portrait of the Roman Empress Julia Domna (fig. 222). It leads one to be ambitious to shine in conversation, literature, or some other legitimate line of effort, and to occupy a high position generally. Abused or perverted, it sometimes becomes a mere love of notoriety.



Fig. 222.—JULIA DOMNA.

FIRMNESS AND SELF-ESTEEM.

The sign of *Firmness*, corresponding with the situation of its phrenological organ, is the perpendicular straightness and stiffness of the center of the upper lip (fig. 225). To tell a



Fig. 223.



Fig. 224.



Fig. 225.



Fig. 226.

man to "keep a stiff upper lip" is equivalent to bidding him hold his ground, to never give up, and to meet the assaults of adversity or the attack of enemies as the rock meets the

wave. Allied to this faculty, and generally co-operating with it, is

Self-Esteem, which gives a fullness and convexity to the upper lip on each side of Firmness (fig. 226). Whenever you



Fig. 227.—JEFFERSON.

find a person with both these signs large, you may set him down as entirely intractable. He can not be subjected to your control. He will use you rather than you him. You will neither persuade nor force him to serve you. He has opinions, a will, and a way of his own.

GRAVITY AND GLOOMINESS.

Gravity, as every one knows, or ought to know, draws the corners of the mouth slightly downward (fig. 228), lengthening the upper lip over the angle. It gives seriousness and weight of character. It is generally more fully developed in man than in woman. One who has this sign large, feels



Fig. 228.

that life is no mere holiday, but a season of work and struggle—that existence is a *responsibility*. He seldom laughs, and can easily restrain any feeling of mirthfulness from its characteristic manifestation. The accompanying portrait of Jefferson will serve to illustrate this sign and also show the true manly form of mouth.



Fig. 229.

We have but to depress the corners of the mouth a little more, and Gravity becomes *Gloominess*, as fig. 229 will plainly show. It will do a child more good to laugh than to cry, to

strengthen its lungs (if it do it with a will), and it is not beneficial for a man or a woman to draw down the corners of the mouth as in fig. 229. It is far better to exercise the "laughing



Fig. 230.—CRYING



Fig. 231.—LAUGHTER.

muscle" (*risorius Santorini*), as shown in fig. 231, or at least turn up the corners of the mouth, as in the following illustrations of *Mirthfulness* large (figs. 232 and 233).

MIRTHFULNESS.



Fig. 232.—JOSEPH C. NEAL.

In fig. 233 we have the expression of *Cheerfulness*. The lips do not smile, but you see wheresmiles have left their bright foot-prints. The accompanying portrait of that genial humorist Joseph C. Neal furnishes a good illustration, both physiognomical



Fig. 233.

and phrenological, of large *Mirthfulness*. The reader need but to make a few careful observations to be convinced (if, indeed, any one doubts it) that there is the relation of cause and effect between a disposition to make and enjoy "fun" and the upward curving of the corners of the mouth.

Among celebrated men, Cervantes, Rabelais, Sterne, Voltaire, and Piron were noted for their large development of Mirthfulness, and their portraits show the sign we have indicated strongly marked.



Fig. 284.—STERNE.



Fig. 285.—W. H. BLANET.

A full development of Mirthfulness is in the highest degree favorable to health and long life. The injunction to "laugh and grow fat!" is not without a physiological reason, nor is the Shakesperian adage that "a light heart lives long," a mere poetical flourish.

"Jog on, jog on the foot-path way
And merrily hent the style-a ;
A merry heart goes all the day,
Your sad tires in a mile-a."

ANIMALS AND SAVAGES.

The capacity for receiving ludicrous ideas appears to be completely denied to animals, Mirthfulness being entirely wanting, and they are utterly incapable of the accompanying action of laughter. They have not the proper muscles for producing it. Dogs, perhaps, approach most closely to it. In their expression of fondness there is a slight eversion of the lips, and they grin and snuff amid their frolic and gambols in a way that slightly resembles laughter. It may be observed, also, that savages are generally deficient in Mirthfulness, seldom laughing, and showing little appreciation of wit or of the ludicrous.

COMPLACENCY.

Akin to Mirthfulness, is the sentiment of *Complacency*, indicated by the long muscle (*levator labii proprius*, fig. 169, C) which passes from the corner of the mouth to the arch of the cheek-bone, drawing the mouth upward, as shown in the cut (fig. 236). It gives a smiling look, which, when the faculty is exercised benevolently, is pleasant to see, and serves to put one at his ease in the presence of a person of superior station and abilities; but it often becomes a *self-complacent* expression, and sometimes, when in excess, is changed into the hypocritical smile of assumed good-nature on a face whose natural expression is malign or bitter.



Fig. 236.

SELF-CONTROL.

When the lips are gently held in or drawn backward toward the angles, they cause a depression or furrow and a corresponding fullness terminating the corners of the mouth, as so well shown in the accompanying portrait (fig. 237), and give an expression of *Self-Control*, coolness and precision. A person with this sign large will be master of himself, and able to abstain from any indulgence he may consider hurtful. It oftener than otherwise goes with thin lips and rather deficient affection, but if there be love or any other strong passion, it will be restrained by the higher faculties.



Fig. 237.—E. A. SMITH.

Dr. Redfield names the sign of which we have been speaking *Precision*—literal and minute correctness—and points it out as largely developed in grammarians and lexicographers. The faculty doubtless gives preciseness and often formality,

Among cele-
taire, and Pin-
Mirthfulness.
cated strong



Fig. 200.

is the sign of *Capacity for Enjoyment*; but it takes the outline fullness which corresponds with this furrow the sign of *Charmess*, or the power of expressing truth clearly. We perceive the great reason for the view of Mr. Walker, but not for that of Dr. Redfield. Our own observations have not yet settled the question.



Fig. 201.

"The vertical furrow on the upper lip, extending from the middle of the lip to the nose, appears," Mr. Walker says, "generally to bear, in its depth, relation to the development of the lip. Its sides appear to be somewhat elastic, and it interchanges



Fig. 202.

state or condition with the furrows which descend from the wings of the nose and pass outward. It affords, therefore, similar indications." We hope in a future edition to give the results of observations now in progress on this and other signs.

for, speech, and the manner in which one without the other can never have. The great comparative anatomist, Blumenbach (fig. 203), has a marked manifestation of it.

ENJOYMENT.

Of the furrows which descend from the wings of the nose and pass somewhat outward as seen in the outline (fig. 204), Walker says: "They are increased when pleasurable sensation affects the upper lip, or might be extended, and therefore indicate capacity for such sensation." In other

DISSATISFACTION AND HATE.

Dissatisfaction draws the under lip backward and a little downward, causing perpendicular or curved wrinkles below the angle of the mouth, as in fig. 240. In its normal action, this faculty leads one to dislike dissimulation, hypocrisy, and all acting in assumed characters, and to be satisfied with nothing false or unreal. In its excess or abuse it deteriorates into habitual grumbling at men and things in general. *Hate* draws the lower lip still farther downward, exposing the under teeth.

The horizontal drawing of the lips, which just discloses the teeth of both jaws, gives a general expression of the bitter and malignant passions. It is caused by the action of the muscles which are the opponents of the *orbicularis* or circular muscle.

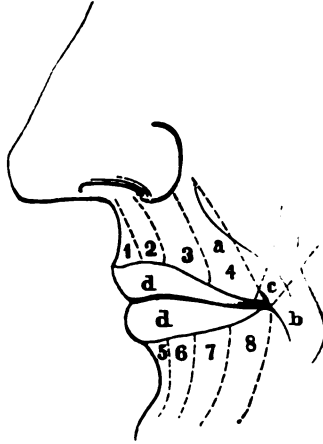


Fig. 241.

- | | |
|-----------------------|---------------------|
| 1. Concentration. | 7. Patriotism. |
| 2. Comprehension. | 8. Cosmopolitanism. |
| 3. Application. | a. Clearness. |
| 4. Gravity. | b. Precision. |
| 5. Love of Traveling. | c. Cheerfulness. |
| 6. Love of Home. | d. Love. |

OTHER SIGNS.

In addition to the signs of character which we have already pointed out, and most of which, if not all, we consider fully established, Dr. Redfield enumerates several others, which will be found indicated on the accompanying diagram (fig. 241). We give them here without indorsing them. If they be correct, observation will ultimately demonstrate the fact. We present the reader with the means of observing for himself.

According to Dr. Redfield, then, there are in the breadth of the round muscle (*orbicularis*) which surrounds the mouth and which gives perpendicular length to the lips, eight distinctly marked signs of character, as numbered from 1 to 8 inclusive on the accompanying diagram (fig. 241). The first is

1. *Concentration*, which is indicated by the length of the

THE MOUTH.

of the upper lip in the center, as shown in the outline (fig. 242). It sometimes causes a small indentation in the red part of the lip. This sign is generally more developed in woman than in man. The faculty it signifies is the ability to observe minutely and to bring to bear upon the so-called little

It endues woman with the power to perform cheerfully her small but not unimportant domestic duties. It is a very useful faculty to the physiognomist, who has constantly to exercise it. Portraits of Lavater show that it was very fully developed



Fig. 242.

of the upper lip below the nostril, as shown in the cut (fig. 244). The faculty enables one to apply his mind patiently to study, or the hands to continuous labors. Artists develop this faculty largely, as they require its exercise both in its intellectual and its merely physical aspects. Its sign will be found large in their faces, as illustrated by the portrait of Rembrandt, the celebrated painter, of which the reader is referred. See also the portrait of Benjamin West, Washington Allston, and J. M. W. Turner. [This sign has already been described and illustrated.]



Fig. 244.

in the length of the upper lip below the nostril, as shown in the cut (fig. 244). The faculty enables one to apply his mind patiently to study, or the hands to continuous labors. Artists develop this faculty largely, as they require its exercise both in its intellectual and its merely physical aspects. Its sign will be found large in their faces, as illustrated by the portrait of Rembrandt, the celebrated painter, of which the reader is referred. See also the portrait of Benjamin West, Washington Allston, and J. M. W. Turner. [This sign has already been described and illustrated.]

in stature, wings, similar results signs.

of the lower lip, opposite the sign of Concentration, is the index of—

5. *Love of Traveling*, in the length or fullness, or both, of that part (fig. 245). We find it large in travelers and persons who are fond of visiting distant places and foreign countries. The accompanying portrait of a noted Rambler (fig. 246) shows it well developed, and the phrenological organ of Locality large, while Inhabitiveness is deficient.



Fig. 245.

6. *Love of Home*, or Inhabitiveness, has its sign on each side of Love of Traveling (fig. 247). A person with this sign large, desires to have a home, a room, a place of his own, and finds this home, however humble, "the place most



Fig. 246.—THE RAMBLER.

sweet and nearest heaven," and is liable to be homesick when absent from it. It is large in the Swiss, and in the inhabitants of mountainous regions generally. Closely allied to Love of Home is

7. *Patriotism*, or Love of Country, which is indicated by the length or fullness of the lower lip, next to the last-mentioned



Fig. 247.



Fig. 248.



Fig. 249.

sign and opposite Application (fig. 248). We see it large in portraits of Washington, Patrick Henry, Clay, Webster, Jackson, and other noted patriots. A broader love, embracing all countries and all mankind, may exist in the same character

without effacing the more intense but less expansive love of one's native land. This may be called

8. *Cosmopolitanism* or Philanthropy. Its sign is the length or fullness of the lower lip at the angle of the mouth and opposite Gravity (fig. 249). Washington, in whom this sign was prominent, furnishes a marked example of the most exalted patriotism combined with a warm love for the world and mankind in general.



THE LAUGHING DOCTOR—(DR. BURDICK.)

XII.

ABOUT NOSES.

"A nose physiognomically good is of unspeakable weight in the balance of physiognomy."—LAVATER.



ALTHOUGH the nose is a leading feature in the human face (which is the reason probably why most people "follow their noses!"), we are not disposed to exalt it at the expense of the eyes, the mouth, the chin, or any other feature; but its prominence, the impossibility of concealing it, and its comparative immobility invest it with great interest and importance as an index of character and a

measure of force in nations and individuals. A skillful dissembler may disguise, in a degree, the expression of the mouth; the hat may be slouched over the eyes; the chin may be hidden in an impenetrable thicket of beard; but the nose will stand out "and make its sign," in spite of all precautions. It utterly refuses to be ignored, and we are, as it were, compelled to give it our attention.

The ancient physiognomists speculated a good deal concerning the nose as a sign of character, but they arrived at no satisfactory conclusions. Porta, De La Chambre, and their contemporaries added little to our knowledge on this point. According to Albert (le Grand), large nostrils are a sign of courage. Porta, following the ancients, says that long and narrow nostrils, being proper to birds, indicate in men an analo-

gous character—activity and quickness. Something of what Lavater saw in the nose may be learned from our extracts from his works in Chapter I.; but we must look to still later writers for anything valuable on this subject.

SOME GENERAL REMARKS.

The nose is primarily the organ of smell. On its perfection depends the perfection of the sense it subserves. The finer, the more delicately organized, and the more elegantly formed the nose, the more exquisite will be the appreciation of odors.

In the second place, the nose is a part of the breathing apparatus. The breath is properly inhaled and exhaled through the nostrils. Their size corresponds, therefore, with that of the lungs, and indicates the development of the chest. Observe this correspondence in the

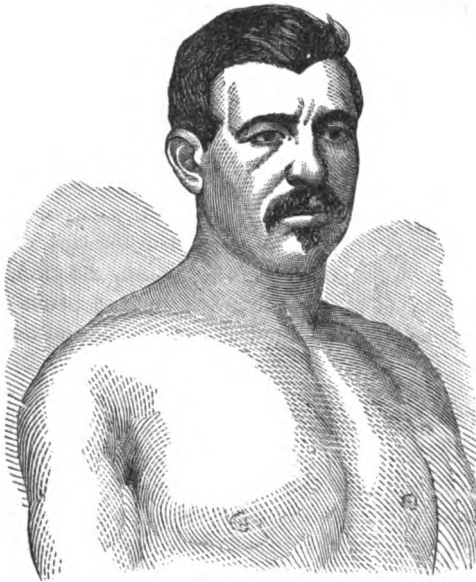


Fig. 251.—HEENAN, THE PUGILIST.

accompanying portrait of Heenan, the pugilist (fig. 251), and in all men and animals. The connection is anatomical and physiological, and if exceptions occur, they are referable to the law of special development set forth in Chap. III., Sec. III.

The reason why the ancients associated large nostrils with courage is probably to be found in the fact that its exercise, by quickening and increasing the respiration, has a tendency to expand them; but anger and even fear have the same effect.

Thirdly, the nose is incidentally concerned in the voice, its prominence and the consequent enlargement of its cavities helping to give volume and manliness to the vocal utterance; and it is because these cavities, together with others in the central part of the face, reach their normal development at puberty that the voice of boys then changes. Fig. 164 (Chapter VIII.) shows these cavities as developed in the adult.

The body of the nose has but little motion, but we have shown in Chapter VIII. the provisions existing, in the arrangement of the muscles, for the movement of the wings. These parts can be raised and depressed, expanded and contracted, and are, as we shall see further on, largely concerned in expression.

THE NOSE AS A SIGN OF DEVELOPMENT.

Taking a more strictly physiognomical view of the nose, we will first consider it as a sign and measure of development. It will be seen that its various contours mark every stage of human progress, whether in individuals or in a race. The



Fig. 252.—THE MONGOLIAN.

baby-nose is a diminutive pug—the nose of weakness and undevelopment; and it properly retains its inward curve till the age of puberty, when the interior force of the new life, which at that epoch expands the whole physical system, pushes the nasal bone outward and downward, and the organ assumes its more permanent form, in accordance with the men-



tal status of the individual and of the race to which he belongs. A straight or an aquiline nose, projecting from the rounded cheeks of a little child, is an absolute deformity, betokening a most unhealthy precociousness of mind and body. Unfortunately, examples of this abnormal development are

not rare, especially in this country, where the forcing system of education is so much in vogue, and parents are so anxious that their children shall appear clever, or, in our dialect, "smart."

Noses which fail properly to assert themselves, on their entrance into a man's or a woman's estate, afford examples of *arrested development*, which, we are sorry to say, are as common as ignorance and sin, even in our most cultivated communities.

Here, side by side, are two outlined profiles—portraits, we will suppose, of two Irish girls—the one (fig. 255), "the daughter of a noble house," whose ancestors have been, from time immemorial, lords of the soil, and who inherits the men-



Fig. 254.

tal and physical results of ten generations of culture and refinement; the other (fig. 254), the offspring of some low "bog trotter," whose sole birth-right is the degradation and brutality transmitted through as many generations of ignorance and vulgarity, among the denizens of mud huts, and in



Fig. 255

oppression, dependence, and poverty.*

* To show that degradation of physical structure is simultaneous with mental degradation, we quote the following statements, made on the authority of the *Dublin University Magazine*:

"There are certain districts in Leitrim, Sligo, and Mayo, chiefly inhabited by descendants of the native Irish driven by the British from Armagh and the south of Down, about two centuries ago. These people, whose ancestors were well-grown, able-bodied, and comely, are now reduced to an average stature of five feet two inches, are pot-bellied, bow-legged, and abortively featured, and are especially remarkable for open projecting mouths, with prominent teeth and exposed gums (i. e., prognathous-jawed—the Negro type), their advancing cheek-bones and depressed noses bearing

"Look on this picture, and then on that." They speak for themselves. The nose alone in each tells the story of its wearer's rank and condition. The one is elegant, refined, and beautiful; the other, gross, rude, and ugly. The one is fully and symmetrically developed, the other is developed only in the direction of deformity.

It is the same with nations as with individuals. The more cultivated and advanced the race, the finer the nose. Compare, in this particular, the Ethiopian and the Mongolian with the Caucasian. It will be seen that the noses of the first two, though differing widely from each other in many particulars, agree in being both compressed and shortened, in comparison with the last; approaching, in this respect, the snouts of the lower animals, which seldom project beyond the jaws.*



Fig. 256.—THE ETHIOPIAN.

In the Caucasian, the nose averages in length one third of the face; in the Mongolian the average is about one fourth, and in the Ethiopian somewhat less. In horizontal projection, the difference between the white race and the other two is still greater, as a glance at our portraits will show.

barbarism on their very front. In other words, within so short a period, they seem to have acquired a prognathous type of skull, like the savages of Australia, thus giving such an example of deterioration from known causes as almost compensates by its value to future ages for the sufferings and debasement which past generations have endured in perfecting its appalling lesson."

For further facts and illustrations, see also "Hints Toward Physical Perfection." (Published by Fowler and Wells.)

* Nothing sensual is indicated by the form of the human nose; although by depressing it and joining it to the lip—the condition of the brute—as in the satyr, the idea of something sensual is conveyed.—*Sir Charles Bell.*

"An inch on a man's nose," a late writer says, "would be, in a majority of cases, a striking elongation; but the



Fig. 257.—THE CAUCASIAN.

antique sculptors, when they had modeled the noblest and most symmetrical human face, full of strength and dignity, power and majesty, the face of an ideal monarch or hero, had only to add a few lines to the length of the nose, and the face becomes that of a god. So the great painters, in the revival of art in Europe, when they have gathered all beauty into the countenances of holy personages,

have made their faces divine by the idealization of this single feature. Look, for example, at the 'Ecce Homo' of Correggio, or at the Madonnas of Raphael. I think that if there were any doubt whether a Greek statue were intended for a deity or a mortal, it could always be settled by measuring the nose. There are striking proofs of the accuracy of the ancient sculptors in their representations of mortals. The Hebrews on the slabs from Nineveh might have been copied from photographs taken at the Royal Exchange. The negroes of the Egyptian frescoes are the veritable Sambos of a plantation in Brazil or Alabama. And, please to observe, in each case the nose is the distinguishing feature. It was from observation, then, that they gave their great men great noses;

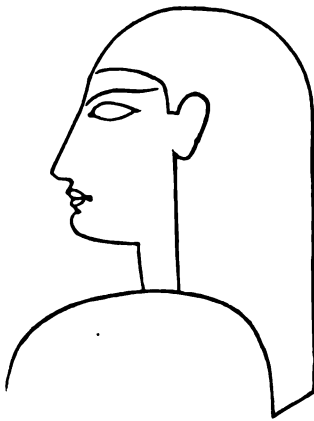


Fig. 258.—A GREECO-EGYPTIAN.

great, I mean, in the true elements and signs of greatness. Naturally they expanded these when they attempted the representation of divine attributes."

In their noses, as well as in their other features, the less advanced the race the greater the degree of sameness. While nations are in their infancy, and the mass of the people are uneducated, the features, receiving no impression from within, take the form impressed from without, and follow the national



Fig. 259.—A SYRIO-EGYPTIAN

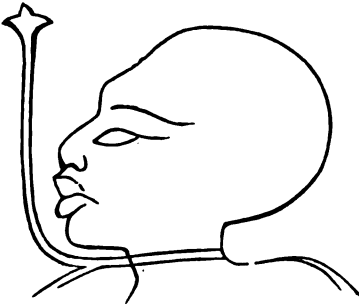


Fig. 260.—AN EGYPTIAN NEGRO.

type. Perhaps no nation displays a more universal dead level and general sameness than the snub-nosed Chinese. Their faces seem to be all cast in the same mold. Their form of government is admirably adapted to keep the people in a state of childhood. Every superior in China, from the Emperor to the Mandarin, is "a father," and must be obeyed without question or demur. A people thus treated as children must ever remain in a state of infancy, and bear about in their noses the sign of their weakness and dependence.

NOSES CLASSIFIED.

Noses have been variously classified. The following arrangement, based on the profile alone, will serve our present purpose, all known noses being included in the five classes named:

1. The Roman Noses;
2. The Greek Noses;
3. The Jewish Noses;
4. The Snub Noses; and
5. The Celestial Noses.

Between these, of course, as in all other similar cases, there are infinite crosses and mixtures, but in the side view there are exhibited only the five simple elements indicated in the foregoing classification, be the combinations as numerous as they may.

THE ROMAN NOSE—EXECUTIVENESS.

This is the energetic, the decided, the aggressive nose—the nose of the conqueror. Plato designates it, from its being indicative of power, “the royal nose.” The ancient artists gave this nose to Jupiter, Hercules, Minerva Bellatrix, and other energetic deities. It loves power and dominion; seeks personal aggrandizement; and pushes onward toward its object with a terrible energy, a stern determination, and an utter disregard of the little courtesies of life. From Julius Cæsar to Lord Wellington, the character of the Ro-



Fig. 261.

man-nosed arbiters of human destiny has been in these respects the same. For proof of this, consult the biographies of Sesostris, Cato the Censor, Lucretius, Charlemagne, Charles V. of Spain, Canute, Columbus, Americus Vesputius, Cortes, Pizarro, Robert Bruce, Queen Elizabeth, the Earl of Chatham, Hendrick Hudson, Daniel Boone, General Daniel Morgan, Francis Marion, Andrew Jackson, Sam Houston, Thomas H. Benton, Winfield Scott, and Zachary Taylor (and we might mention twenty more), all of whom had either strictly Roman noses, or noses closely approaching that type. These were persons, though not all conquerors on the field of war, whom no hardship could de-



Fig. 262.—LUCRETIVS.

ter, no fear daunt, no affection turn aside from any purpose they had undertaken—that purpose being, in most cases, pursued with a reckless disregard of personal ease and the welfare of others.

Numerous portraits, both in marble and on coins, demonstrate that the nose we are considering was very properly named from the ancient conquerors of the world, among whom it was a peculiarly characteristic feature, and who manifested in a most remarkable degree the traits of character which it indicates.

Noses of the pure Cæsarian type, in its complete development, are comparatively rare at the present day; but those which closely approach it, and which we shall call Roman, since they are of the same general form, are not uncommon among Europeans and Americans. The departure from the classical outline generally consists in a slight downward removal of the most prominent portion of the ridge.

THE GREEK NOSE—REFINEMENT.

Natural refinement, artistic tastes, and great love of the beautiful, whether indicated by it or not, generally accompany this classic nose. It takes its name, as is well known, from the wonderful art-loving Greeks, in whose physiognomy it was a prominent characteristic. It was not of course universal among them, but belonged to many of their historical characters, and especially to the women; and their sculptors gave this trait to Juno, Venus, Apollo, and all the rest of the more refined of their deities.



Fig. 268.

"The owner of the Greek nose," the author of "Notes on Noses" says, "is not without some energy in the pursuit of that which is agreeable to his tastes; but, unlike the owner of the Roman nose, he can not exert himself in *opposition* to his tastes." This remark is strikingly true when applied to the Greeks themselves, as history clearly shows.

Among the distinguished Greek-nosed men of more modern days we may mention Petrarch, Milton, Spenser, Boccaccio, Canova, Raffaele, Claude, Rubens, Murillo, Titian, Addison,

Voltaire, Byron, and Shelley. Greek-nosed women have not been entirely wanting in modern days. Among the literary ones, Hannah More, Letitia Barbauld, Felicia Hemans, Mary Tighe, Maria Edgeworth, and Madame de Stael are well known. Of women celebrated for their beauty, from Andromache to Pauline de Borghese, nearly all have had noses either purely Greek or closely approaching that form. Judging by such portraits of them as have come under our observation, such was the nose of St. Catharine, Vittoria Colonna, Isabella of Castile, Catharine II. of Russia, Heloise, Petrarch's Laura, Dante's Beatrice, Eleanora d'Este, Beatrice Cenci, and many



Fig. 264.—DANTE'S BEATRICE.



Fig. 265.—VIRGIL.

others who might be named. It is the most beautiful nose in woman, and agrees with her superior natural refinement of character and elegant tastes. "The Greek-nosed woman," one of her admirers says, "whether born in a cottage or a palace, makes everything about her beautiful. Taste presides alike in the adornment of her person and the furnishing and embellishing her rooms. A wreath of green leaves or a little vase of flowers may as truly show it as a tiara of pearls or the appointments of a luxurious *boudoir*."

The noses of poets and artists, it may be observed, often have the Greek form, or show a tendency toward it. Thus,

Virgil, though a Roman, had a Greek nose, like many more modern worshippers of the muse.

Alexander the Great, Constantine, Frederick II. of Prussia, Alfred the Great, Washington, Napoleon, Sir Walter Raleigh, Sir Philip Sydney, Lorenzo de Medici, Richelieu, and Wolsey had noses compounded of the Roman and the Greek, but approaching more nearly to the former. A combination in which the Greek element predominates is not uncommon among either men or women of culture and refinement, and forms a very beautiful and desirable nose.

THE JEWISH NOSE—COMMERCIALISM.

This form of nose is almost universal among the Israelites, from whom it receives its common name. It is by no means peculiar to the Jewish nation, however, who possess this form of profile in common with all the inhabitants of Syria and the Syrian races everywhere; and Sir G. Wilkinson proves that the nations represented in the Egyptian sculpture with the hawk-nose are not always Jews, as was once supposed, but Syrians. The ancient Phœnicians were Syrians, and the portraits we

Fig. 266. have of these people on the Egyptian sculpture, as read by Sir G. Wilkinson, all exhibit this form of nose. The Arabs of the present day—descendants of Abraham through the wild son of Hagar—have features, in many respects, similar to those of the Jews. A large number of portraits of Arabs of all classes and ranks, taken by French artists in Africa, and now before us, show that the form of nose called Jewish



Fig. 267.—A BEDOUIN ARAB.

is all but universal among them. Our cut (fig. 267) is copied from one of these portraits.

The author of "Notes on Noses" calls the Jewish or Syrian nose the Commercial Nose, and says that "it indicates worldly shrewdness, insight into character, and ability to turn that insight to a profitable account." This is a perfectly correct and well-expressed definition, but, as we shall show in another place, the *Commercialism* (Acquisitiveness) is indicated, not by the outline of the ridge, but by the breadth of the nose, which is almost universally great in connection with this form.

The Emperor Vespasian, his son Titus, Theodosius the Great, Mahomet, Correggio the artist, Adam Smith, Albert Gallatin, Peter Stuyvesant, and other noted men, had the Jewish nose; and many well-developed specimens of it may be seen any fine day on Chatham Street, in our good city of New York.

THE SNUB NOSE—UNDEVELOPMENT.

The fact that this is the nose of weakness and undevelopment, as we have shown it to be, precludes the possibility of it being, through its own merits, an historical nose. Such a flattened and shortened proboscis can not, in the nature of things, have made any legible mark on the records of the world's progress. Its wearers have never conquered realms and enslaved nations, like the owners of the royal Roman nose, or built magnificent temples and adorned them with works of high art, like the Greek-nosed children of genius.

A few personages who have accidentally, or by force of circumstances, become historical, however, had noses more or less snubbed. The following are all that occur to us at present—James I., George I., the Em-



Fig. 268.



Fig. 269.—THE EMPEROR PAUL.

peror Paul of Russia, and Kosciusko. Of these, the last is the only one who has any claim at all to be called great, and his nose, if a portrait of him in our possession be correct, was not so markedly snubbed as some have represented. It was not, however, a very strong nose, nor was he a man of very great force of character. With a Roman nose on her leader's face, Poland might now have been free.

"*Pœnitet me hujus nasi*," exclaims the author of "Notes on Noses." "We wish we had never undertaken to write of these noses. Having done so, however, we must fulfill our engagement; but the mind shrinks from the thought that, after contemplating the powerful Roman-nosed movers of the world's destinies, and the refined and elegant Greek-nosed temple-builders, it must descend to the horrid bathos, the imbecile inanity of the Snub. Perhaps the reader expects that we are going to be very funny on the subject of these noses. But we are not; far from it. A Snub nose is to us a subject of most melancholy interest. We behold in it a proof of the degeneracy of the human race. We feel that such was not the shape of Adam's nose—that the type has been departed from—that the depravity of man's heart has extended itself to his features, and that, to parody Cowper's line,

"God made the *Roman*, and man made the *Snub*."

THE CELESTIAL NOSE—INQUISITIVENESS.



Fig. 270.—A CHILD.

Add somewhat to the length of the Snub, and give it a turn upward, and you have the Celestial nose—*le nez retroussé* of the French. It is the exact converse of the Jewish nose, being concave where the latter is convex. The noses of women often have this incurvation, and such noses in the fair sex are not without their ardent admirers. The Celestial may be defined as the inquisitive

Fig. 271.



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whom we are not dis-
upon us for support and
confounded with noses of
a little at the end. The
concavity from the root to
THE NOSE.

senior, was a sagacious, an ob-
We need hardly add, therefore,
with the importance of his son
pathetic was his sorrow when
His own family had suffered
a defect in the length of an
grandfather, when tendering his
who afterward consented to
men," was forced to capitulate to
of his nose.

able, madam,' said he, 'that you,
pounds to your fortune, should
of three hundred pounds a

nose, sir.'

is a very good nose.'

like an ace-of-clubs.'

was silenced;" and for many years
was burdened with the payment of
of a small estate, because his great-
nose. Well might Mr. Shandy (the
"that no family, however high, could
of short noses."

WHAT IS A COGITATIVE NOSE?

The author of "Notes on Noses" has made a class based on
the breadth, and called it the Cogitative. His theory is, that

it indicates a mind having strong powers of thought and given to serious meditation. Reserving our own views on the subject of broad noses for another place, we allow Mr. Warwick to tell for himself how he came to the conclusion that broad noses indicate cogitative minds.



Fig. 272.

"This nose long puzzled us. We found it among men of all pursuits, from the warrior to the peaceful theologian. Noticing it more particularly among the latter, we were at one time inclined to call it the religious nose; but further observation convincing us that that term was too limited, we were compelled to abandon it. We were next, from seeing it frequent among scientific men, disposed to call it the philosophic nose; but this was found to be too confined also, as, in the modern acceptance of the term, it seemed to exclude the theologians, and we moreover traced it accompanying other and very different conditions of mind. It soon became manifest, however, that it was noticeable only among very first-rate men (men of the very *highest* excellence in their several departments), and that search must be made for some common property of mind which, however directed by other causes, would always lead to eminence. It appeared to us that this property was deep, close meditation, intense concentrated thought, eminently 'cogitative,' in fact; and, therefore, we adopted this term, which permits to have included in it all serious thinkers, whatever the subject of their cogitations."



Fig. 273.—OLIVER CROMWELL.

From what has already been said, it will appear evident enough that the nose is an *index* feature—that whichever way it may turn, upward or downward, or outward into illimitable

space—it always points to *something*. But what? Why are Roman-nosed people energetic, warlike, and aggressive? Why have the Greek-nosed nations been builders of temples and palaces, adorned with columns and statues? Why are Snubs weak, and Celestials inquisitive and impudent? Why, in short, has any particular nose its particular character rather than any other?

That there is a physiological “reason why” in each of these instances, we are quite certain; but that we can in all cases point out the muscular or the nervous connection on which it depends, is not so clear. On these and other points in Physiognomy, we may, without shame, confess ourselves still learners; but such light as we have been able to draw from our extensive reading and observation, we shall gladly throw upon the subject.

THE APPREHENSIVE NOSE.

The best and most beautiful noses, as we have seen, are one third of the length of the face. Many noses vary, some in the one way and some in the other, from this proportion. Some are relatively too long, and others are relatively too short. The character varies correspondingly.



Fig. 274.

The perpendicular length of the nose from the root downward (fig. 275, *a b*) indicates, according to Dr. Redfield, the quality of *Apprehension*. The term, however, very imperfectly expresses the nature of the faculty to which it is applied. It imparts, when fully developed, not only a quick apprehension, which (acting with Cautiousness) keeps one on the alert and constantly looking out for “breakers ahead,” but it gives also, perhaps partly through its action upon other faculties, a deep insight into character and a forecast that anticipates the events of the future and the intentions of

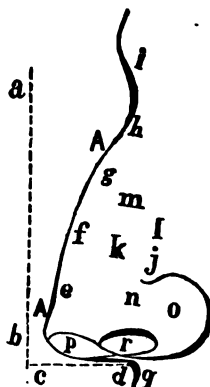


Fig. 275.

men, in a practical and material sort of a way. Perverted, it makes a person in the highest degree suspicious and distrustful of the motives and intentions of others.

An undue downward extension of the nose, caused by an excessive development of Apprehension, forms what has been called



Fig. 276.—STEPHEN GARDINER.

John Knox, Bishop Gardiner, Spenser, and Dante had noses of this character.

The Melancholy nose is often seen in clergymen, who dwell more on fear than on hope in their discourses.

THE INQUISITIVE NOSE.

The horizontal length of the nose from the lip outward (fig. 275, *c d*), indicates the faculty of *Inquisitiveness*. When

THE MELANCHOLY NOSE, which indicates a tendency to despondency and dark forebodings of the future.

A person with this excessively elongated nasal protuberance is liable to be unnecessarily fearful of dangers (often imaginary), and to make himself miserable by "borrowing troubles," and indulging in "the blues." With such persons the future is allowed to overshadow and darken the present as with a cloud of sorrow. Calvin,



Fig. 277.—EDMUND SPENSER.

Apprehension is small and this faculty large, the nose is inclined to turn up (figs. 271 and 278), as it often does in children, who are very inquisitive, but have, in general, very little Apprehension.

Persons with this sign large, ask a great many questions, and take great pains to draw people out, and to get possession of their secrets. They have "inquiring minds," and are continually in close pursuit of knowledge of all kinds. Detectives, who are engaged in ferreting out offenders against the laws, and bringing to light deeds of darkness, develop this sign largely. It is supposed also to give a disposition to dig in the earth in search of treasures or of food, and, in co-operation with Acquisitiveness, to give a sordid disposition of mind.



Fig. 279.

Where both Apprehension and Inquisitiveness are large—the one striving to extend the nose perpendicularly, and the other pushing it out horizontally—there sometimes occurs a thickening of the end of the nasal organ, forming what is called a "bottle nose" (fig. 279).

A similar configuration, however, sometimes indicates a too familiar acquaintance with the article which the name suggests; in which case, however, the *complexion* is very different. We find in Shakspeare the following illustration of

A TOPER'S NOSE.

The inimitable Falstaff says to his follower, Bardolph.

"When thou ran'st up Gad's-hill in the night to catch my horse, if I did not think thou hadst been an *ignus fatuus*, or a ball of wildfire, there's no purchase in money. O thou art a perpetual triumph, an everlasting bonfire-light! Thou hast saved me a thousand marks in links and torches, walking with thee in the night betwixt tavern and tavern: but the sack that thou hast drunk me would have bought me lights as good cheap, at the dearest chandler's shop in Europe. I have maintained that salaman-



Fig. 280.

der of yours with fire any time for these two-and-thirty years; Heaven reward me for it!"


COMBATIVE NOSES.

Prominence of the nose undoubtedly indicates strength, energy, power—full manly development. Prominent noses are of several different forms, depending upon the relative development of different portions of the ridge. In all of them we find indications of a disposition to fight, contend, dispute, argue, or in some form, or under some circumstances, to manifest Combateness. According to Dr. Redfield, Combateness has three forms of manifestation, or, more properly speaking, there are three Combative faculties: 1. Self-Defense; 2. Relative Defense; and 3. Attack.

Adopting in the main Dr. Redfield's views, as at least plausible and worthy to be placed here and put to the test of careful observation, we arrange the Combative Noses in three classes, and call them

1. The Defensive Noses;
2. The Irritable Noses; and
3. The Aggressive Noses.

1. THE DEFENSIVE NOSE.



The sign of *Self-Defense* is the breadth or anterior projection of the nose just above the tip (fig. 275, e), caused by the prominence of the nasal bone at that point. This faculty manifests itself in a disposition to stand on the defensive. It does not "carry the war into Africa," but, being always ready for a fight, sometimes considers itself attacked when it is not. A person with this sign large likes to be on

the opposite side; is inclined to contradict; loves argument; is easily provoked; and does not like to be elbowed, crowded, leaned upon, or interfered with in any way. You may read *noli me tangere* (touch me not) on his nose. On his own ground he will fight to the death, and in argument is pretty sure to have the last word.

Its national manifestation finds expression in the adoption

of the adage, "In peace prepare for war," in standing armies, forts, arsenals, etc., and in a defensive attitude generally.

2. THE IRRITABLE NOSE.

The faculty of *Relative Defense*, or the disposition to defend others, is indicated on the ridge of the nose above Self-Defense, or about the middle (fig. 275, *f*). It manifests itself in the defense of kindred, friends, home, and country. With this sign large, a person is disposed to espouse the cause of others, especially the weak and defenseless; to defend his family, friends, and native land; to resist every encroachment upon the rights of the people; and to receive the hardest blows rather than allow them to fall upon any one whose champion he feels called upon to be.

Relative Defense is an ally of Patriotism, and is well developed in the American character, as its sign is in the American nose. The French and Swiss also show this sign large.



Fig. 282.

In the nervous temperament, and especially in a disordered state of the system, the action of this faculty is apt to lead to fretfulness and *irritability*. Its large development in our national character and our constitutional excitability makes us an irritable and touchy people, very readily thrown into a defensive attitude by any attempt to override the "Monroe Doctrine," or interfere with our neighbors.



Fig. 283.

"To illustrate the sign of this faculty in the lower animals, we may take the horse. A prominence of the middle part of the ridge of the nose, as in fig. 283, indicates a great deal of irritability, a disposition to fret and chafe in the harness. The action of the faculty throws

the head into the position represented in the cut. It is very strong in the camel, in which the large sign in the nose and the position of the head agree."

3. THE AGGRESSIVE NOSE.

Next above the sign of Relative Defense, on the ridge of the nose, and indicated in the same way, is that of *Attack* (fig. 275, *g*). It may be seen very largely developed in the noses of Lucretius and Otho the Great, as represented in our portraits of these well-known historical characters.



FIG. 284.—OTHO THE GREAT.

Persons in whom the faculty of Attack is largely developed and active are disposed to take the offensive—to become the attacking party, to carry the war into the enemy's country—are aggressive, provoking, and vexatious; and are not always willing to allow others to

remain in quiet enjoyment of their opinions or possessions.

In the low, gross, and uneducated, large Attack leads to brawls and personal encounters; and in the intellectual and cultivated, to onslaughts upon opinions and institutions. In nations, it is manifested in wars of conquest and attempts to enslave neighboring or even distant nations. The English have it more largely developed than any other modern nation, and their faces show the sign proportionally prominent. The aggressive, bullying islanders are true to their nasal indications. The French, who fight rather for the glory of France and the liberation of oppressed nationalities than for conquest, have more Relative Defense.

The reader is now prepared to understand why Roman-nosed people are so energetic, warlike, and aggressive, since

it is the prominence of the three signs we have just considered, and especially the last, that gives the nose the peculiar form known as the Roman. The departure from the strictly Roman form, in the Executive noses of the present day, results from the comparatively smaller development of the faculty of Attack in the moderns.

CONTRASTED NOSES.

The Jewish, which is also strictly a Combative nose, receives its peculiar form principally from an extraordinary development of the sign of Apprehension, with relatively smaller Inquisitiveness, which gives it a downward and inward tendency at the end. Its dominant commercialism is indicated in its breadth.

The lack of executive force, and the sometimes intrusive inquisitiveness manifested by Celestial-nosed people, is clearly explained by the form of the nose, which, as shown in figure 285, is exactly the opposite of the Jewish. The signs of the Combative faculties, and especially of Relative Defense, are deficient, while Inquisitiveness is relatively large.



Fig. 285.

THE TASTEFUL NOSE.

The three Combative faculties—Self-Defense, Relative Defense, and Attack—when relatively large, give a prominence to that portion of the ridge of the nose occupied by their signs, but leave a marked depression just below the root, thus forming what we have called the Combative Nose—the Roman and its modifications.

Unlike this, the Greek nose (fig. 263) continues the line of the forehead, with only a slight indentator at most, to mark the transition from the one to the other.

In the space thus filled up, Dr. Redfield locates the signs of two faculties—Architecture (fig. 275, *h*) and Memory of Names (fig. 275, *i*). He says of the former: "The taste and talent for Architecture displayed by the ancient Grecians is indicated by this feature, which has given the name of Grecian nose, as the signs of Attack and Relative Defense, for which

the Romans were remarkable, have given the name of Roman nose. The faculty of Architecture does not refer to the parts of the building or superstructure, but rather to the pillars and columns which are superadded and serve as supports, and to which is attributed the peculiar style of architecture, as the Corinthian, the Ionic, the Doric, the Gothic, and the Composite."

The great fondness of the Greeks for architectural display, and particularly for columns, also favors Dr. Redfield's views. The nose itself, we may add, not inaptly represents a column, on which seems to rest the grand dome of the cranium—the palace of the soul. With us, however, the question of the exact indications of this sign is yet an open one; but, having examined all the busts and portraits within our reach, consulted history and biography, and analyzed closely the dispositions of all our acquaintances whose noses approach that classic form, we are convinced



Fig. 236.

that, whether because the Greek nose indicates all its qualities, or because other signs which do indicate them are always associated with that nose, Greek-nosed persons universally have the character we have attributed to them in a previous section—are noted for natural refinement and love for the beautiful, and possess elegant tastes generally. Look again at our list of Greek-nosed celebrities, whose characters and tastes are well known. The fact that the Greek is rather a feminine than a masculine nose (poets and artists having a large admixture of the feminine element), and that women, though possessing better tastes, generally, than men, have no special taste for architecture or love of columns, should also be noted

MEMORY OF NAMES.

Next above the sign of Architecture, as we have said, Dr. Redfield locates that of the Memory of Names, which, when large, completes the filling up of the space between the sign of Attack and the base of the forehead. This faculty was undoubtedly largely developed in the ancient Greeks.

INTELLECTUAL NOSES.

The signs which follow under this head are given on the authority of Dr. Redfield, our own observations on these points not being as yet sufficiently extensive to warrant us in either accepting or rejecting them. The illustrations are our own.



Fig. 287.—JEAN PAUL RICHTER.

Directing our attention to the base of the nose, but looking at it still in profile, we observe that the line of its horizontal projection varies almost infinitely, and that while in some noses the septum or partition between the nostrils is entirely hidden by the alæ or wings, in others it extends below them, and that its outline varies also in different individuals. It is important to know what these varieties of form signify.

In the downward extension of the septum of the nose is indicated the power of discovering, analyzing, and combining—a three-fold mental process by means of which truths are established and systems formed.

The faculty of *Discovery* is indicated in the downward length of the anterior part of the septum (fig. 288). It gives the disposition and ability to invent and discover, and a love for new things. Those who have it large are inclined to think for themselves, and are generally noted for originality.

Combination has its sign just behind *Discovery*, as indicated in fig. 289. The faculty gives the ability to generalize—to put things, words, or thoughts together in

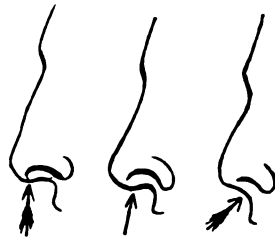


Fig. 288.

Fig. 289.

Fig. 290.

their proper order. *Analysis* has its sign in the bony part posteriorly from Combination, and when large, pushes the cartilaginous part downward so as to cause a prominence on the upper part of the lip, as shown in fig. 290. It may be accurately observed by pressing the finger against it and ascertaining how far it descends. It may be observed large in chemists and persons who show great ability to find out the constituents of things.

The faculty of *Metaphor* is indicated by the *breadth* of the middle part of the septum of the nose (fig. 291). The sign may be observed by placing the individual under examination above us. With it large, one abounds in figures of speech and loves imagery of all kinds.



Fig. 291.

The curving of the wing of the nostril upon the septum (fig. 275, *q*) indicates the faculty of *Analogy*. When large, it causes a shortening of the posterior part of the opening. The faculty of Analogy gives the ability to see the relations which exist between things, as between the mind and the body, for instance, and is much exercised in the study of physiognomy.

The faculty of *Comparison* is indicated by the widening of the anterior part of the wing of the nose where it joins the septum (fig. 275, *p*.) It shortens the orifice opposite to Analogy. Woman has generally more of this faculty and its sign than man. It puts objects side by side in order to see their differences, and is apt to look at both sides of a thing.



Fig. 292.—DR. GALL.

On the wing of the nose, indicated in its perpendicular length, we will notice two physiognomical signs—Example and Imitation.

Example (fig. 275, *n*) gives downward length to the anterior part of the wing. It sometimes forms a perpendicular ridge on

that part of the nose. It is the teaching faculty, especially teaching by example, and sets examples for others in conduct.

The sign of *Imitation* gives downward length to the posterior part of the wing (fig. 275, o). When large, the part descends, as shown in fig. 293. It is relatively larger in children than in adults, and enables them to profit by the teachings of example. When very large, it gives the love of mimicry and the ability to take on the characters and imitate the manners of others.



The height of the upward curve of the wing of the nose (fig. 294) indicates the faculty of *Reasoning à Priori*, or from cause to effect. It may be observed largely developed in the faces of Gall and Lavater, as represented in the portraits we have of them, and they manifested the faculty in the way they studied character. See also portrait of Richter (fig. 287).



Two lateral prominences at the end of the nose (fig. 295) indicate the faculty of *Correspondence*. This sign, when large, makes the nose appear as if it were divided into lateral halves. To ascertain its development, when not obvious to the eye, press the thumb upward upon the end of the nose. A person with this sign large has a clear perception of the fitness of things, and the correspondence of one thing with another, and a quick sense of propriety in manners, dress, and everything else.



Fig. 295.

FRONT VIEWS.

Taking a front view of a collection of noses, we observe



Fig. 296.



Fig. 297.



Fig. 298.

that some are wide-nostriled and have expanded wings (figs. 296 and 297), while others (fig. 298) are narrow; and that some are

thick while others are thin; and we can not doubt but that

these differences of shape indicate corresponding differences of character.

THE SECRETIVE NOSE.

The breadth of the wings of the nose next to the face indicates the faculty of *Concealment* or Secretiveness (fig. 299, a, b). This is in accordance with the physiological action of

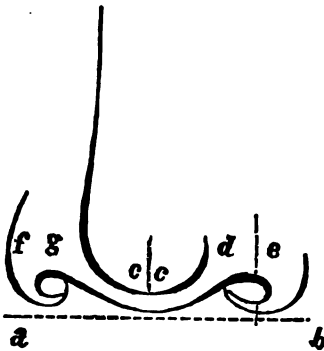


Fig. 299.

this faculty, which tends to shut the mouth and expand the nostrils. This sign is large in the Negro, the Chinese, the North American Indian, and in most savage and half-civilized tribes. It disposes one to seek concealment, to hide things, and to "lie low and keep dark." All successful actors have it large, and it is essential to success on the stage. It acts in opposition to

Inquisitiveness in others, and is not inclined to answer questions prompted by mere curiosity. Persons who have it large manifest its natural language in various ways—buttoning up the coat to the chin, wearing a high, tight cravat, or, if a woman, a dress fitting high up on the neck. Those who possess little Secretiveness wear their clothes more loose and open. The character of the aborigines of this country furnishes a striking illustration of the action of Secretiveness in the savage. The Negro, too, is very secretive, and generally "don't know nuff'n 'bout it," when you endeavor to extract any information from him. The Chinese are still more remarkable for the same trait of character. The sign of this faculty is generally found larger in women than in men.

THE CONFIDING NOSE.

The breadth of the nose forward of Secretiveness (fig. 299, d), and embracing the anterior half of the wing, indicates the faculty of *Confiding*, which is the opposite of Concealment.

and counteracts its too great reticence. Women generally have both largely developed, and, while very secretive toward the world in general, are frank and confiding toward those whom they love.

THE ACQUISITIVE NOSE.

The sign of *Love of Gain*, or Acquisitiveness, is the thickness of the nose above the wing and opposite to Self-Defense (fig. 275, *j*). The Jewish nose, seen in front (fig. 297), generally shows it large. The Arab and the Negro also have a full development of it. Portraits of Astor, Billy Gray, Girard, and other millionaires, show this sign large. Observe, in our portrait of Mr. Girard, the correspondence between the facial sign and the phrenological organ. The head is very broad, it will be seen, through from side to side in the region of Acquisitiveness.



Fig. 300.—STEPHEN GIRARD.*

The Love of Gain being one of the strongest passions of our nature, co-operates with the combative or executive faculties, indicated in the ridge of the nose, in giving energy or force to the character. When in excess, and not adequately restrained by the moral faculties, it may lead to a grasping, over-reaching, miserly disposition.

THE ECONOMICAL NOSE.

Above the sign of Acquisitiveness and opposite Relative

* Stephen Girard, the founder of Girard College, Philadelphia, was a Frenchman, who amassed an immense fortune in this country, and died in 1831, leaving property to the amount of \$9,000,000, of which \$2,000,000, besides the residue of a portion of his estate, out of which some legacies were to be paid, was set apart for the erection and support of a college for orphans.

Defense (fig. 275, *k*) is that of *Economy*, also prominent in the Jewish nose, but much less so in the Negro nose. The disposition and ability to keep or save does not always accompany the desire to get. This fact is illustrated in our national character. We are a money-getting people—loving the golden gain which comes of trade, enterprise, and industry—but, unlike the English, we are proverbially liberal, generous, extravagant, and wasteful. We do not gather to hoard up, but to scatter again. If we get rich, it is not because we spend so little, but because we make so much.

This faculty and its sign increases with age. Observe it in old women—your grandmother, for instance, who is saving up all the scraps of everything for her children and grandchildren. This manifestation is supposed to be more particularly indicated, however, as we remarked in a previous chapter, by the fullness under the chin, giving what is called the double-chin, as seen in portraits of Franklin (fig. 197).

FEMININE NOSES.

The commentators have a curious difficulty with a line of Catullus. They can not make out, with certainty, whether he wrote—

“*Salve nec nimio puella naso—*”

(Hail, damsel, with by no means too much nose,)”

“*Salve nec minimo puella naso—*”

(Hail, damsel, with by no means nose too little.)

It matters not, however, what Catullus wrote. It is certain that women, at the present day, have “by no means too much nose;” though we find this organ in its feminine form so captivating, that we seldom have the heart to wish it more prominent, lest it might become, at the same time, more aggressive, less refined, and less interesting.



Fig. 301.—ISABELLE.

Mr. Warwick is sarcastic when he says that Pope's line,

"Most women have no *characters* at all,"

would, but for a small hiatus in the prosody, read equally well thus :

"Most women have no *noses* at all !"

and that the lack of character is sufficiently accounted for by the lack of nasal development ; but the statement is, of course, not to be taken in an absolute and literal sense in either form. It is true, however, be the cause what it may, that, as a general rule, the noses of women are less developed



Fig. 803.—MARGARET.

than those of men—that is, they depart less from the rudimental form common to both sexes in childhood. Doubtless the higher culture and more extended sphere that woman is now claiming, and to some extent receiving, will modify in no small degree this index of character. In the mean time, we thankfully take women and their noses as we find them.

"In judging of the feminine nose,"

Mr. Warwick says, "comparison must not be made with the masculine, but with other feminine noses. All the rules and classifications apply to the one as well as the other, but allowance is to be made for *sex*."

"The Roman nose largely developed in a woman mars beauty, and imparts a hardness and masculine energy to the face which is displeasing, because opposed to our ideas of woman's softness and gentle temperament. In a man we admire stern energy and bold independence, and can even forgive, for their sakes, somewhat of coarseness ; but in a woman the former are, at the least, unprepossessing and unfeminine, and the latter is utterly intolerable. Woman's best sustainer is a pure mind ; man's, a bold heart."

"Moreover, the exhibition of character in women should be different from that in men. From the masculine Roman nose

we may justly look for energy in the active departments of life, but in a woman its indications are appropriately exhibited in firmness and regularity in those duties which legitimately fall to her lot."

NATIONAL NOSES.

We have spoken of the Roman, Greek, and Jewish noses. The naming of particular forms of noses after particular nations or races might be extended indefinitely. Each nation has its peculiar, characteristic nose, though we do not claim to be able, at present, to point out and define them all. To do this would require still more extensive and careful observation, which we hope yet to make. We offer the following remarks as mere hints toward a system of ethnological nasology.

THE AMERICAN NOSE.

It can hardly be expected that, in a nation made up of so many and diverse elements as ours, there should yet have been developed any very distinct national cast



Fig. 303.—REV. ALEXANDER CLARKE

of countenance. We may observe, in general terms, however, that our national features are sharp and prominent,

compared with the Anglo-Saxon and Teutonic races of Europe from whom we are most largely descended. In the profile of our noses such forms as represented in figs. 304 and 305, and especially the



Fig. 304.

Mr.

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well th

and the
the last
course,
either
that, a

— NOSE

Clarke, is not uncommon. The
noses are by
all the com-
monly by their
Relative De-
velopment
of national char-

Fig. 306.

but less prom-
resembles in the outlines
Apprehension and Inquisitive-
ness the latter. Secretiveness,
are largely indicated, as are the
Analysis, Combination, Com-
prehension. See portrait of Jean

ROMAN NOSE.

more prominence above the center,
either the American or the Ger-
man, is more to the Roman form. It is at

Fig. 307.—The Ameri-
must not be mistaken. It indi-
cates a fine nose, great
as well as a fine face of Lord

"The
beauty, and conquers na-
face when she successfully to
man's sword she
stern end of the sword; as, for
their sake
former and
the latter
pure mind

"Moreo
different fr



Fig. 307.—ROBERT EMMET.

the middle class also fine specimens

are often seen ; but in the class most largely represented in this country, a lower form is common. There is generally a tendency to turn up at the end, indicating great inquisitiveness ; considerable prominence in the region of Self-Defense ; a large sign of Secretiveness ; a moderate indication of Apprehension ; and a decided depression at the root. As a proof of the fact that cultivation and external influences modify configuration, look at the Americanized Celts—the Irish-Americans. The first generation born in this country shows a decided progress in physiognomy, and the next presents some of the finest faces we have among us. Cases of “arrested development” become more and more rare. Even those born and brought up in Ireland often show a decided improvement in their physiognomy after having been here a few years.

THE FRENCH NOSE.

The French nose is thinner and sharper than the English, and indicates a smaller development of the aggressive element in the French character. Of the Combative faculties, as indicated on the ridge, the most largely developed is Relative Defense, which corresponds with the irritable but chivalric disposition of the French people. A close approach to the Grecian type is more common among the French than among the English or the Americans.



Fig. 808.—BURTON.

MISCELLANEOUS NATIONAL NOSES.

The nose of the Russian lower classes is generally Snub-Celestial ; but the noblemen of the empire have generally fine, well-developed nasal organs, showing how culture, domination, habits of command, and positions of responsibility create force

of character and its signs. Similar differences may be observed between the higher and lower classes of other nations.

The Laps and Fins have flat noses, but the Hungarians, supposed to have descended, like the former, from the ancient Huns, have Roman or Greco-Roman noses (fig. 309), and are a fine, independent, noble-minded, intellectual people, with great force of character, energy, and warlike tastes.

The ancient Huns, by the way, are said to have had frightful features, and to have been so hideous in their aspect, and so savage and demoniacal in their warfare, that the terrified Goths could not believe them to be born of woman, but asserted that they were the unnatural offspring of demons and witches begotten in the fearful solitudes of the icy North.



Fig. 309.—BATHYNTI.



Fig. 310.—N. AMERICAN INDIAN.

INDIAN NOSES.

The North American Indian very generally has a nose closely approaching the Roman in type, but lacking the length of the true Roman nose. It is an energetic, warlike, aggressive nose, and corresponds well with the character of its wearer. We have examined a large number of living faces, busts,



Fig. 311. Fig. 312.

and portraits of noted chiefs and warriors, and, almost without exception, they have one or the other of the forms of nose represented in figs. 311 and 312. The nostrils are very large, betokening good lungs, and

the wings extended laterally (Secretiveness), but having little perpendicular extent. Black Hawk's nose was emphatically Jewish in its form of profile, and very large, as shown in the bust from which our drawing (fig. 312) was made. The nose in the accompanying portrait also approaches the same type.

NEGRO NOSES.

The Negro nose is the Jewish or Syrian nose flattened and shortened. We may call it the Snubo-Jewish. This abbreviation, of course, takes away much of the force of character and penetration that belong to the physiognomy of the true Jewish nose. Fig. 314 is an outline of the nose of a Negro chief, and shows indications of considerable force, but does not depart from the general form except in being less flattened.



Fig. 313.



Fig. 314.

THE MONGOLIAN NOSE.

We have already spoken of the Mongolians as a Snub-nosed race. In outline of profile we observe some diversity, but the prevailing form is the Celestial, as shown in fig. 315. There is in all cases both a flattening and an abbreviation in horizontal projection, in comparison with the nose of the Caucasian. See the Chinese, Japanese, Calmucks, Tartars, etc., for examples



Fig. 315.

NOSES OF THE PACIFIC ISLANDERS

Of the natives of the Pacific Islands, those nearest the old continent of Asia, and therefore nearest the old blood, are of the lowest possible mental and physical organization, little elevated above the low



Fig. 316.



Fig. 317.—NEW ZEALANDER.

class of animals—kangaroo and the ornithorynchus—of the

Australian plains, those at a greater distance—the New Zealander and the Otaheitan—exhibit a development which may vie with that of the Caucasian nations. Their noses are often nearly Roman in profile, as in fig. 317, and when not of that form are decidedly Jewish, as in fig. 316, which represents the nose of Harrawauky, a New Zealand chief, from a bust in our collection. The fierce energy of these people does not belie their noses. Civilization would give them the intellectual development which they now lack, and fit them for a high place among the races of men.

NOTED NOSES.

• An anonymous writer in an English magazine discourses very learnedly and eloquently on the noses of celebrated characters as follows:

“When I had pondered Lavater, and surveyed antiquities in stone and bronze, frescoes and vases, I looked into the collections of portraits of distinguished men, looking especially, as we always do and must look, at the most prominent feature. What wonderful noses they have! There was not such a nose in all Europe, in his time, as that worn upon the face of the Emperor Charles V.; and those of Henry IV., Pope Alexander VII., Charles XII. of Sweden, and Frederick II. of Prussia, were scarcely less remarkable. The fierce nose of the youthful Napoleon compacted into the massive one of the Emperor; and then, for a soldierly and heroic nose, where would you look for a finer one than that which marked, among a million, the striking face of Wellington? All that was great in firmness, patience, and heroism in the character of Washington is stamped on his prominent and handsome nose.



Fig. 318.—Tasso.

"Look now at the beautiful noses of the poets. Tasso, Dante, Petrarch, have noses like the gods of immortal verse.



Fig. 819.—CHAUCER.

Our own bards are in no way deficient. Study the portraits of Chaucer, Shakespeare, Milton, Dryden, Pope, and so down to the present Laureate, Tennyson. See also Molière, Voltaire, Erasmus, Pascal, and Schiller—all men of genius, but how varied! But there is not a greater variety in character than in that feature which

the ancients called 'honestamentum faciei;' and which is all that, and something more. Could Schiller's bust change noses with Voltaire's? Try the experiment, and if it proves satisfactory I will abandon the whole theory, and call science a cheat and nature an impostor, and Lavater a dupe and a donkey. Show me a thief with the nose of Algernon Sydney; show me an empty fop, if there be any yet extant, with the nose of Lord Bacon; or some soft poltroon with the profile of Philip the Bold, or Elliott, the hero of Gibraltar; find me, in a group of costermongers and potboys, the noses of Cato and Cicero, Locke and Johnson, Loyola, Titian, Michael Angelo, or Lord Brougham, and you may have my head for



Fig. 820.—ALGERNON SYDNEY.

a foot-ball, and do what you like with its special honest-amentum."

PHOTOGRAPHED NOSES.

"Or if you have any doubts of the accuracy of these portraits; if you say that painters are apt to flatter, and so admit the whole argument when you allow that to paint a man with a strong, or bold, or subtle, or heroic nose is flattery, here is a study for you in the nearest stationer's window, or in those admirable collections of photographic portraits in Regent Street, the Strand, or Fleet Street, or scattered over the metropolis [or in Broadway, Chestnut Street, or Washington Street]. Compare a row of distinguished portraits, from the aristocracy of birth and blood, oft ennobled by noble deeds, or the aristocracy of talent and genius, with another line which you may select from the show-board of the sixpenny galleries, and to which no names are attached. 'Comparisons are odious,' but in the cause of science they are more than justifiable. I could spend hours in studying the distinguished and beautiful faces which bear upon them the stamp of birth and the refinement of breeding, or the power and energy of genius and ambition—those who have been ennobled in the past, and those who are ennobling themselves."



Fig. 331.—HOMER.

THE NOSES OF SCULPTURE.

"How beautiful are the noses on the Egyptian sculptures! You may spend hours in studying them on covers of porphyry sarcophagi. But if you would have all the majesty of a nose, look at the Greek Jupiter; or if all the masculine beauty, study the Apollo. The bust of Homer may be of doubtful authenticity as a portrait, but what a nose! You ask, perhaps, what that signifies if it is not a portrait. It shows us, my friend, what the observation of the Greek sculptors had taught them to consider a suitable

nose for a Homer; and that is no slight consideration. If painters and sculptors were to represent heroic and beautiful ideals with mean and grotesque noses, we should think them worthy of a lunatic asylum; and in this verdict we concede all that Lavater has claimed.

"Look again at the busts of Pythagoras and Plato. What majesty! what wisdom! and what noses! One nose there was in ancient Greece, which is, it must be confessed, a hard nut for Lavater—the conspicuous pug of Socrates. But we have the testimony of the philosopher himself, that his wisdom and virtues were a triumph of constant effort over his natural dispositions. And such a pug as we see portrayed upon the mug of the philosopher betokens not a little energy, and that it is exceptional, proving a rule, is shown by the fact that everybody is astonished that such a man should have such a nose." [Said to have been broken by accident.]

LORD BROUGHAM'S NOSE.

The author of "Notes on Noses" thus describes the nose of Lord Brougham. The reader can refer to our portrait of that distinguished man for an illustration of his remarks. It will be seen, notwithstanding our author's facetious description, that the nose is a strong one, and full of character.



Fig. 322.—LORD BROUGHAM.

"It is a most eccentric nose; it comes within no possible category; it is like no other man's; it has good points, and bad points, and no point at all.

When you think it is going right on for a Roman, it suddenly becomes a Greek; when you have written it down Cogitative, it becomes as sharp as a

knife. At first view it seems a Celestial; but Celestial it is not; its celestuality is not heavenward, but right out into illimitable space, pointing—we know not where. It is a regular Proteus; when you have caught it in one shape, it instantly becomes another. Turn it, and twist it, and view it how, when, or where you will, it is never to be seen twice in the same shape, and all you can say of it is, that it's a queer one. And such exactly is my Lord Brougham—verily my Lord Brougham, and my Lord Brougham's nose have not their likeness in heaven or earth—and the button at the end is the cause of it all."

SOME POETICAL NOSES.

Of his own nose, Robert Southey says: "By-the-by, Dr — told me that I have exactly Lavater's nose; to my no small satisfaction, for I did not know what to make of that protuberance or promontory of mine."

Wordsworth's nose is described as "a little arched and large." If another of the so-called "Lake Poets," John Wilson, of Elleray, be nasologically identified with Christopher North, he must have been as noticeable for his nose as that other noticeable personage for his large gray eyes.

"Then," the Ambrosian Shepherd says, "what a nose! Like a bridge, along which might be driven cartloads o' intellect—neither Roman nor Grecian, hookit or cockit, a wee thocht inclined to the ae side, the pint being a pairt and pendicle o' the whole, an object in itsel, but at the same time finely smoothed aff and on intil the featur; while his nostrils, small and red, look as they would emit fire, and had the scent o' a jowler or a vultur."

A DOUBLE NOSE.

The nose of Francois, Duke of Anjou, "was so swollen and distorted that it seemed to be double," and at which "people did laugh in their sleeve, and among themselves;" for as the historian tells us, "this prominent feature did not escape the sarcasms of his countrymen, who, among other gibes, were wont to observe that the man who always wore two faces might be expected to have two noses also." When the double-

facéd Duke visited the Low Countries, an epigram was circulated on the article of his nasal development, of which the following is Dr. Cooke Taylor's English version :



Fig. 323.—CHRISTOPHER NORTH.

Good people of Flanders,
pray do not suppose
That 'tis monstrous this
Frenchman should double
his nose :
Dame Nature her favors but
rarely misplaces—
She has given two noses to
match his two faces.

THE END OF THE NOSE.

Here we come to the end of the nose—or, at any rate, to the close of this chapter on noses—and wish to conclude by recommending the reader to give the subject such attention as it may seem to merit, and if any important

discoveries be made, to report them to us; and above all, not to forget that the form of our noses depends upon the style of our characters, and that if we desire to improve the former we must elevate the latter.



DANTE.

XIII.

ABOUT THE EYES.

"They are the books, the arts, the academics,
That show, contain, and nourish all the world."—SHAKESPEARE



Fig 824 —NELL GWYNNE.

THE EYES," Emerson says, "speak all languages. They wait for no introduction; they are no Englishmen; ask no leave of age or rank; they respect neither poverty nor riches, neither learning nor power, nor virtue, nor sex, but intrude and come again, and go through and through you in a moment of time. * * *

The eyes of men converse as much as

their tongues, with the advantage that the ocular dialect needs no dictionary, but is understood all the world over. When the eyes say one thing and the tongue another, a practiced man relies on the language of the first. If a man be off his center, his eyes show it. You can read in the eyes of your companion whether your argument hits him, though his tongue will not confess it. There is a look by which a man shows he is going to say a good thing, and a look when he

has said it. Vain and forgotten are all the fine offers and offices of hospitality if there be no holiday in the eye. How many furtive inclinations are avowed by the eye though dissembled by the lips! * * * Some eyes are aggressive and devouring, seem to call out the police, take all too much notice, and require crowded Broadways and the security of millions to protect individuals against them. * * * There are asking eyes, asserting eyes, prowling eyes, and eyes full of fate—some of good and some of sinister omen. The alleged power to charm down insanity, or ferocity in beasts, is a power behind the eye. It must be a victory achieved in the will before it can be signified in the eye. It is certain that each man carries in his eye the exact indication of his rank in the immense scale of men, and we are always learning to read it. * * * The reason why men do not obey us is because they see the mud at the bottom of our eye."

All this is very fine, and most of it very true; but how much more pointed and effective might the philosophic dreamer of Concord have made his oracular sayings if he had understood the true physiogomy of the eye—known why it languishes with love, glows with passion, gleams with hate, sparkles with mirth, flashes with anger, melts with pity, and lights up with joy, or is darkened in sorrow; why prayerfulness turns it upward and humility bends it toward the earth; what expression commands, what forbids, what reproves (giving "the chastisement of the eye"), what commends with "an approving look," and so on!

SIZE OF THE EYE.

The first thing that strikes us, ordinarily, on looking at the eye, is its size. In this it differs greatly, as may be seen by observing figs. 324 and 325, in comparison with each other. Large eyes have always been admired, especially in women, and may be considered essential to the highest order of beauty, in almost every description of which, from Helen of Troy to Lola Montes, they hold a prominent place. We read of "large spiritual eyes," and

Eyes loving large,

and of "little, sparkling, beady eyes," to which the epithets "spiritual" and "loving" are never applied.

An Arab expresses his idea of the beauty of a woman by saying that she has the eye of a gazelle. This is the burden of his song. The timidity, gentleness, and innocent fear in the eye of the "deer" tribe are compared with the modesty of the young girl: "Let her be as the loving hind and the pleasant roe."

Physiologically, the size of the eye indicates the measure of its capacity for receiving sensations of vision. It is for this reason that it is large in the deer, the hare, the squirrel, the cat, etc., while the hog, the rhinoceros, and the sloth are instances of small eyes and very moderate capacity of vision. Physiognomically, we find in the size of the eye the sign of *Vivacity*—liveliness or activity and intelligence, considered as an attribute of the mind, appertaining to all its faculties, but seeming to be more closely connected with the social and religious feelings than with the others.



Fig. 825.—GEO. CANNING.



Fig. 826.—THE ANTELOPE.



Fig. 827.—THE HOG.

Persons with large eyes give us the impression of being "wide awake" and ready for action, while small-eyed people

have more generally "a sleepy look" and a sluggish temperament or habit of body. Dr. Redfield observes, that "persons with large eyes have very lively emotions, think very rapidly and speak fast, unless there be a predominance of the phlegmatic temperament. Of persons with small eyes the reverse is true. The former are quick and spontaneous in their feelings and in the expression of them, and are therefore simple, like the Scotch, Swiss, and all who inhabit mountainous regions. The latter are slow and calculating, and therefore artful, like the Gipsies, a people who generally inhabit level countries. There is a connection between activity and the ascending and descending acclivities, a fact which we evince in running up and down stairs, and which an active horse exhibits when he comes to a hill; and hence the Scotch Highlanders, as well as the sheep, goat, chamois, etc., have large eyes and very great activity."

PROMINENCE OF THE EYE—LANGUAGE.

A large development of the organ of *Language* in the brain pushes the eye outward and downward, giving it prominence or anterior projection. Prominence or fullness, therefore, is an indication of large Language, and persons with prominent eyes are found to have great command of words, and to be ready speakers and writers; but it may be observed, that as a projecting eye most readily receives impressions from all surrounding objects, so it indicates ready and universal observation, but a lack of close scrutiny and perception of individual things. Such eyes see everything in general but nothing in particular. Deep-seated eyes, on the contrary, receive more definite, accurate, and deeper impressions, but are less readily impressed and less discursive in their views.



Fig. 328.



Fig. 329.

WIDTH OF THE EYES—IMPRESSIBILITY.

The most beautiful eyes have a long rather than a wide opening. Eyelids which are widely expanded, so as to give

a round form to the eye, like those of the cat and the owl, for instance, indicate ability to see much with little light, and mentally to readily receive impressions from surrounding objects



Fig. 330.

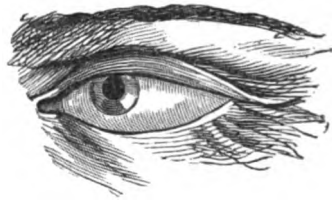


Fig. 331.

and from ideas presented to the mind, but these impressions are apt to be vague and uncertain, leading to mysticism and day-dreams.

Eyelids, on the contrary, which more nearly close over the eye denote less facility of impression but a clearer insight, more definite ideas, and greater steadiness and permanence of action. Round-eyed persons see much—live much in the senses, but think less. Narrow-eyed persons see less, but think more and feel more intensely.

THE UPLIFTED EYE—PRAYERFULNESS.



Fig. 332.—PRAYERFULNESS.

In Chapter VIII. we described six muscles as concerned in the movements of the eye. Their action is shown in the accompanying diagram (fig. 333). One of them (the *rectus superior*), as we have shown, draws the globe of the eye directly upward (c). Its habitual action indicates the quality of *Prayerfulness* (fig. 332). Sir Charles Bell says, "When wrapt in devotional feelings, when all outward impressions are unheeded, the eyes are raised by an action neither taught nor acquir-

ed, the eyes are raised by an action neither taught nor acquir-

ed. Instinctively we bow the body and raise the eyes in prayer, as though the visible heavens were the seat of God. In the language of the poet—

Prayer is the upward glancing of the eye,
When none but God is near.

“Although the savage does not always distinguish God from the heavens above him, this direction of the eye would appear to be the source of the universal belief that the Supreme Being has his throne above. The idolatrous negro, in praying

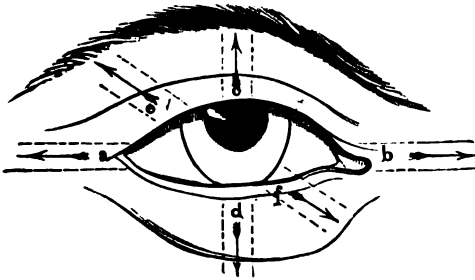


Fig. 888.—EYE—MUSCULAR ACTION.

for rice and yams, or that he may be active and swift, lifts his eyes to the canopy of the sky.

“So, in intercourse with God, though we are taught that our globe is continually revolving, and though religion inculcates that God is everywhere, yet, under the influence of this position of the eye, which is no doubt designed for a purpose, we



Fig. 884.



Fig. 885.—THE PRAYERFUL MAN.

seek him on high. ‘I will lift mine eyes unto the hills,’ the Psalmist says, ‘from whence cometh my help.’”

Veneration, of which Prayerfulness is one of the manifestations, has its human as well as its divine aspects. We look

up to those above us and we ask favors of our fellow-men, as well as offer petitions at the throne of grace, and with asking comes naturally the upturning of the eyes, unless Humility be more strongly developed or more active than Prayerfulness, so as to prevent the latter from manifesting itself in its natural way.

THE DOWNCAST EYE—HUMILITY.

The second perpendicular straight muscle of the eye (*rectus inferior*) draws the eyeball directly downward, and indicates the quality of *Humility*. Painters give this feeling its natural language in their pictures of the Madonna. Prayerfulness and Humility are mutual in action. We should be



Fig. 336.

first humble, then prayerful. Christ says, "Verily, verily I say unto



Fig. 337.—WM. ETTY.

you, whosoever shall not receive the kingdom of God *as a little child*, shall not enter therein."

But some persons are prayerful without being humble, and in their petitions to the Infinite One *demand* rather than entreat, and sometimes almost assume the tone of *command*. This is not the true Christian frame of mind.

In the time of St. Philip of Neri there appeared, in a convent near Rome, a nun who laid claims to certain rare gifts of inspiration and prophecy. The Pope was somewhat troubled by these new claims, and consulted St. Philip, who undertook to visit the nun and ascertain her real character. He mounted a mule and hastened through the mud and mire to the convent. He told the abbess the wishes of his Holiness, and begged her to summon the nun at once. She was sent for, and soon came into the room, when St. Philip stretched

out his leg, all bespattered with mud, and desired her to draw off his boots! The young nun, who had become the object of much attention and respect, drew back with anger and refused the office. St. Philip ran out, mounted his mule, and returned instantly to the Pope. "Give yourself no uneasiness, Holy Father," he said, "here is no miracle, for here is no humility."

RAPTURE AND WONDER.

The muscles concerned in the signs of which we have been speaking belong to the class called voluntary—that is, they act in obedience to the will, and in connection with the other two straight muscles (*rectus internus* and *rectus externus*) move the eye in every direction required by vision. When these straight muscles cease to act, whether from weariness or exhaustion, or from some abnormal condition of the system, the two other muscles, called oblique, are brought into operation. They are involuntary in their action, and govern the movements of the eyes in sleep, in that condition of bodily insensibility produced by animal magnetism, and in somnambulism, ecstasy, trance, and similar unnatural states of the system.



Fig. 333.—RAPTURE.



Fig. 334.—WONDER.

The inferior oblique muscle, which draws the eyeball upward and outward (fig. 333, *e*), indicates the faculty of *Rapture*—a violence of pleasing passion which lifts one out of himself, as it were, in the contemplation of something divine or supernatural. It is allied to prayerfulness; and Addison says, speaking of music, "it strengthens devotion and advances praise into *rapture*."

The superior oblique muscle draws the eyeball downward and inward (fig. 333, *f*), and indicates

THE EYES.

emotion excited by whatever is very prominent in children than in educated people. A little girl, running into the house and saying, "oh! mother, there are *twenty* cats here," her mother says, "I don't think there *can* be so many." The girl replies, "There are *our* cat and *another*." The mother does not mean to tell a lie, but she saw with the influence of the oblique muscles, and through the action of the voluntary muscles not having full control.

The mother says, "is the effect of *novelty upon ignorance* to wonder at what we understand." To wonder is a miracle. Wonder, if rightly directed, however, leads to knowledge. The mother wonders, saying, "I wonder *what* it is!" and, proceeding to *investigation*; but if we are content to *merely* wonder in ignorance.

THE EYELIDS.

The position of the upper eyelids, as shown in fig. 340, generally indicates the expression of humility, and indicates *Penitence*, the disposition to repent, to feel sorry for our sins, and to do "works meet for repentance." The weight of our sin bows our spirits and lowers the eyes—makes us humble. Both Humility and Penitence may often be seen large in devotees of the Church, with whom acts of worship are habitual. The position of the lower eyelids is believed to indicate *Apology*, the disposition to extenuate and to justify one's self—to defend one's conduct by giving what we claim to be good reasons.

sons for it—by showing that it is not wrong, though it may appear so to another.

MIRTHFULNESS IN THE EYE.

Mrs. Barrett Browning speaks of one whose eyes

Smiled constantly, as if they had by fitness

Won the secret of a happy dream she did not care to speak ;

and Mrs. Osgood describes

Laughing orbs that borrow

From azure skies the light they wear.

Every one recognizes the mirthful expression referred to, but it would be difficult to describe it so far as it affects the eye alone. The action of the eyelids in such cases is, however, susceptible of illustration.

In laughing (and in crying also), the outer circle of the round muscle (*orbicularis*, fig. 166, Chap. VIII.) of the eyelid contracts, gathering up the skin about the eye, and at the same time compressing the eyeball. The physiological reason for this is, that



Fig. 841.—LAUGHTER.

during every violent act of expiration, whether in hearty laughter, sneezing, coughing, or weeping, there is apparently a retrograde impulse imparted to the blood in the veins, which not only extends the vessels, but is even regurgitated into the minute branches; and were the eye not properly compressed at the time, and an efficient resistance given to the shock &c

delicate textures might be irreparably injured. Fig. 341 shows the appearance of the eyelids and contiguous parts in a person convulsed with laughter. Among the noticeable traits exhibited are several furrows or wrinkles running outward and downward from the corners of the eyes, as if to meet those which turn upward from the angles of the mouth. These wrinkles, where the action that primarily causes them is habitual, become permanent lines, and are infallible indications of large Mirthfulness.

PROBITY.

The wrinkles observed in some faces running outward and upward from the corners of the eyes are said by Dr. Redfield to indicate *Probity* or personal truthfulness. Persons with this sign large, according to him, are noted for always keeping their promises, and for doing as they agree to do. As probity comes from the Latin *proba*, to prove, so these persons prove their personal truthfulness by their actions. They are apt to be slow to make promises, especially if Cautiousness be large; but when made, you may trust them.

THE EYE OF THE DRUNKARD.

In the drunkard there is a heaviness of the eye, a disposition to squint and see double, and a forcible elevation of the eyebrow to counteract the dropping of the upper eyelid and prevent the eyes from closing. The peculiar expression is thus explained by Sir Charles Bell:

“In the stupor of inebriation, the voluntary muscles of the eyeball resign their action to the oblique muscles, which, as we have seen, instinctively revolve the eye upward, when insensibility comes on. At the same time, the muscle which elevates the upper lid yields, in sympathy with the oblique muscles, to the action of the *orbicularis* (round muscle) which closes the eyes, and the eyelids drop. The condition is, in short, the same as that of falling asleep; when the eyeballs revolve as the lids close. It is the struggle of the drunkard to resist, with his half-conscious efforts, the rapid turning up of the eye and to preserve it under the control of the volun-

tary muscles, that makes him see objects distorted, and strive, by arching his eyebrows, to keep the upper lid from descending. The puzzled appearance which this gives use to, along with the relaxation of the lower part of the face, and the slight paralytic obliquity of the mouth, complete the degrading expression."

COLOR OF THE EYES.

The bright black eye, the melting blue,
I can not choose between the two ;
But that is dearest all the while,
Which wears for us the sweetest smile.—Holmes.

There is truth as well as poetry in the last two lines of the foregoing stanza. The eyes we love best are the best eyes—the sweetest eyes—the most beautiful eyes—to us. But all eyes are not alike, and all have not the same signification. Black eyes do not tell the same tale as blue eyes, or gray eyes as either. Each has a story of its own, and a way of telling it. There are eyes that glow with passion; eyes that languish with love; eyes that sparkle with mirth; eyes that flash with indignation. Some are calm and serene, others troubled and restless; some penetrate you, some entreat, some command; none are meaningless.

But there are mooted questions in reference to the physiological indications of the various colored eyes. We will leave them (both the questions and the eyes) open for discussion while we continue our observations; but in the meantime we will give the reader the benefit of whatever light we may be able to throw upon the subject.

WHAT IT INDICATES.

Arranging all the various colored eyes in two grand classes—light and dark—we would say that the dark indicate *power*, and the light, *delicacy*. Dark eyes are tropical. They may be sluggish. The forces they betoken may often be latent, but they are there, and may be called into action. Their fires may sleep, but they are like slumbering volcanoes. Such eyes generally accompany a dark complexion, great toughness of

body, much strength of character, a powerful but not a subtle intellect, and strong passions. Light eyes, on the other hand, belong naturally to temperate regions, and they are temperate eyes. They may glow with love and genial warmth, but they never burn with a consuming flame, like the torrid black eyes. The accompanying complexion is generally fair and the hair light; and persons thus characterized are amiable in their disposition, refined in their tastes, highly susceptible of improvement, and are mentally active and versatile. The light-eyed races have attained a higher degree of civilization than the dark races. When the complexion is dark and the eyes light, as is sometimes the case, there will be a combination of strength with delicacy.

In this view of the case, of course the various shades of the light and dark eyes will indicate corresponding intermediate shades of character. Brown and hazel eyes may perhaps be considered as occupying the middle ground between the dark and the light.

EFFECTS OF CLIMATE.

In tropical countries the tendency is to become dark like the natives. For example, when blue-eyed New Englanders settle in Alabama, Louisiana, or other Southern States, they become the parents of dark-eyed children. The first one born to them in a tropical country will be a shade darker than the parents, the second still darker, and so on, till the sixth, eighth, or tenth, whose eyes will be *black*, and their grandchildren will all have black eyes. But should they—the grandchildren—return to the northern home of their ancestors, settle, and become parents, their descendants will, in time, recover the blue or light eyes of their ancestry. The eye is the first to show the effects of the change, and the hair the next; then the skin becomes a shade darker—if in the tropics—or lighter, if in the temperate zones.

The same may be seen in many fair-haired and light-eyed English, Scotch, and Irish families, who, having emigrated to the East Indies, and remaining there ten, fifteen, or twenty years, return to their native northern islands, bring with them

broods of black-eyed and dark-haired children, who, settling in the homes of their fathers, become, in time, the parents of children with fair complexions.

We do not elaborate our thought here, because it is not fully wrought out in our own mind; but in place of any speculations of our own, we will bring together and introduce to the reader's attention various facts and fancies, original and selected, which have accumulated on our hands. The facts will, we trust, be useful and suggestive, and the fancies at least entertaining.

BLUE EYES.

Here is what some lover of blue eyes says of the cerulean orbs most dear to *him*. Oh, azure-eyed maidens, hear him!

"The eyes which borrow their tint from the summer sky—what eyes they are! How they dazzle and bewilder!—how they melt and soften!—how they flash in scorn and swim in tears, till one's heart is scarcely worth a moment's purchase, even for a housewife's sieve! The large, light blue eye, with the golden eyelash and the faintly-traced brow—the type of heavenly purity and peace—the calm, sad blue eye that thrills one's heart with a single glance, and the well-opened one that flashes upon you with a glorious light—with a smile that makes your head whirl, and a meaning that you never forget—oh, blue eyes! blue eyes! that have looked upon me here and there, that have stirred my heart and haunted my dreams for ten long years—that have shone upon me in the summer sky at noon, and the winter sky at night—that have looked up from every page I have written, and almost from every page I have read."

The poets have praised blue eyes more perhaps than any other kind. An Italian writer characterizes them as

Eyes with the same blue witchery as those
Of Psyche, which caught Love in his own wiles;

and Wordsworth says,

Those eyes,
Soft and capacious as a cloudless sky,
Whose azure depths their color emulates,
Must needs be conversant with upward looks—
Prayer's voiceless service.

Those who admire blue eyes most are fond of comparing them to the sky. Thus one says:

Brown her curls are, and her eyes,
(In whose depths Love's heaven lies,)
Owe their color to the skies.—*Anon.*

Another sings:

Those laughing orbs that borrow
From azure skies the light they wear,
Are like heaven—no sorrow
Can float o'er hues so fair.—*Mrs. Osgood.*

But here is the prettiest conceit of all, and with it we must close our quotations on this point, though we might fill columns:

I look upon the fair blue skies,
And nought but empty air I see;
But when I turn me to thine eyes,
It seemeth unto me
Ten thousand angels spread their wings
Within those little azure rings.—*Holmes.*

BLACK EYES.

Of these an admirer enumerates four kinds: First, the small, brilliant, hard black eye which looks like a bead, and which one might crack like a cherry-stone; second, the glowing, cavernous black eyes, hot with smoldering fires; third, the soft, swimming, sleepy black eye; and fourth, the large, well-set, and finely-formed black eye, "solemn as the hush of midnight, still as the mountain lake, yet full of passion, full of thought and intellect and feeling that rise in a storm till the quiet surface glows again; an eye that has no need of words—that never smiles, but knows the warmth of tears; an eye that goes straight to the heart with a single glance, and never leaves it more; an eye that does not intoxicate like the blue, but draws you steadily and surely on, and touches chords in your heart which have been untouched before, and can never wake for a lesser power again.

"The first may be the eye of a vain beauty and belle. Eugene Aram, I fancy, had the second, and many an inmate of Bedlam has it now. The third languishes in the harem of the

Turk; and the fourth—it is well it is not a common one, or we should all be worse off than we are now—is the most beautiful, and also the most dangerous of all. For the blue eye launches a score of arrows whose wounds may one day heal; but this has only one, and if it hit the mark, Heaven help you! the poisoned shaft will linger in your heart forever.”*

DANIEL WEBSTER’S EYES.

Prof. Shedd, speaking of Webster, the statesman, said:

“The tropical eye, when found in conjunction with Caucasian features, is indicative of a very remarkable organization. It shows that tremulous sensibilities are reposing upon a base of logic. No one could fix his gaze for a moment upon that great Northern statesman without perceiving that this rare combination was the physical substrata of what he was and what he did. That deep, black iris, cinctured in a pearl-white sclerotic, and, more than all, that fervid, *torrid* glance and gleam, were the exponents and expression of a tropical nature; while the thorough-bred Saxonism of all the rest of the physical structure indicated the calm and massive strength that underlay and supported all the passion and all the fire. It was the union of two great human types in a single personality. It was the whole torrid zone upheld in the temperate.”

BROWN EYES.

Thy brown eyes have a look like birds
Flying straightway to the light.—*Mrs. Browning.*

Brown eyes are often confounded with hazel, but though hazel eyes are brown, they deserve to form a separate class.

“The true brown eyes,” an anonymous writer says, “have a softness and a beauty peculiarly their own. Some are eager,

* Buffon says that there are no black eyes—that those supposed to be black are only yellow-brown or deep orange. They appear to be black, he adds, because the yellow-brown color is so contrasted to the white of the eye that it appears black.

quick, and merry; they generally go with light hair, and fair, fresh complexions, and their laughing brightness, their frank glances are as different from the cooler and calmer look of the hazel as light from darkness. Others, strangely enough, have a reddish glow, or, rather, an auburn light, that gives them a peculiar charm, especially if, as I have often seen, the hair matches, shade for shade. Others, of a more decided brown, go with a black hair and a dark complexion, pale or brilliant, as the case may be; and others still are large and soft, with a starry light within—a twilight radiance, rather—that only need the curling hair, and the pale, gentle face, the dainty form, and the tender, womanly heart to complete the charm.”

HAZEL EYES.

Hazel or light brown eyes have a character of their own, differing essentially from the true brown ones of the preceding class. Speaking of hazel-eyed girls, Major Noah once said—

“A hazel eye inspires at first sight a Platonic sentiment, as securely founded as the rock of Gibraltar. A woman with a hazel eye never elopes from her husband, never chats scandal, prefers his comfort to her own, never talks too much or too little—always is an intellectual, agreeable, and lovely creature.

“The gray is the sign of shrewdness and talent. Great thinkers and captains have it. In women it indicates a better head than heart. The dark hazel is as noble in its significance as in its beauty. The blue is amiable, but may be feeble. The black—take care! there’s thunder and lightning there.”

A fair writer glorifies hazel eyes in the following graceful verses. We can readily guess the color of the eyes she loves best.

Away with your “bonnie eyes of blue,”
I’ll have no more with them to do;
They can be false as well as true.

But the glorious eye of hazel tinge,
With its drooping lid of softest fringe,
The flood-gates of the soul unhinge!

Graceful and tender, loving, kind,
The wide world o'er you will not find
Eyes that so firm the heart can bind.

So eager some good to fly and do,
Grateful and loyal, brave and "true,"
Ne'er fretting or getting sulkily "blue."

Sing, then, of the lovely hazel eyes,
Born of twilight's deep'ning dyes
Of purple that floats o'er summer skies.—*Jessie Carroll.*

We have not a word to say against hazel eyes, but a writer whose remarks on the eyes are before us, says that "hazel-eyed women are quick-tempered and fickle." Perhaps the sign is less unfavorable in *men*.

GRAY EYES.

A young poet, in love with gray eyes, sings their praises thus:

THE GRAY EYE OF MENTALITY.

Let the blue eye tell of love,
And the black of beauty,
But the gray soars far above
In the realm of duty.

Ardor for the black proclaim,
Gentle sympathy for blue;
But the gray *may* be the same,
And the gray is ever true.

The blue is the measured radiance of moonlight glances lonely,
And the black the sparkle of midnight when the stars are gleaming only;
But the gray is the eye of the morning, and a truthful daylight brightness
Controls the passionate black with a flashing of silvery whiteness.

Sing, then, of the blue eye's love,
Sing the hazel eye of beauty;
But the gray is crowned above,
Radiant in the realm of duty.

"Gray eyes," the writer says, "are of many varieties. We will pass over in silence the sharp, the shrewish, the spiteful, the cold, and the wild gray eye; every one has seen them—too often, perhaps—I am sure I have. There are some that belong only to the gallows; there are others of which any

honest brute would be thoroughly ashamed. But then, again, there are some beautiful enough to drive one wild, and it is only them I mean. There is the dark, sleepy, almond-shaped gray eye, with long black lashes—it goes with the rarest face on earth—that Sultana-like beauty of jet black hair, and a complexion neither dark nor fair—almost a cream color, if the truth must be told—and soft and rich as the leaf of the calla *Ethiopica* itself; it is the Creole face and form.

“Directly opposed to this is the calm, clear gray eye—the eye that reasons, when this only feels. It looks you quietly in the face; it views you kindly, but, alas, dispassionately; passion rarely lights it, and love takes the steady blaze of friendship, when he tries to hide within. The owner of that eye is upright, conscientious, and God-fearing, pitying his fellow-men, even while at a loss to understand their vagaries. I have often wondered if the good Samaritan was not such a man. It is the eye for a kind and considerate physician, for a conscientious lawyer (if such a man there be), for a worthy village pastor, for a friend as faithful as human being can be. It is the eye for a Joan of Arc, a Florence Nightingale, a Grace Darling; but the fairy of a household hearth should wear another guise.

“Last of the gray eyes comes the most mischievous—a soft eye with a large pupil that contracts and dilates with a word, a thought, or a flash of feeling; an eye that laughs, that sighs almost, if I may use such a term, that has its sunshine, its twilight, its moonbeams, and its storms; a wonderful eye, that wins you whether you



Fig. 842.—MARY QUEEN OF SCOTS.

will or not, and holds you even after it has cast you off. No matter whether the face be fair or not, no matter if features are irregular and complexion varying, the eye holds you captive, and then laughs at your very chains. It is easy enough to account for the witchery of Mary Queen of Scots. I have heard that her eyes were gray, and you may be sure they were like these. So, I have no doubt, were Lucretia Borgia's. Many another woman has such orbs; perhaps she uses them more innocently and legitimately, but the effect is very much the same: and if people choose to face the danger they must take the consequences."

GREEN EYES.

"And green eyes—what can be said of them? I have seen some like cats' eyes, yet the majority are very handsome. I have met with some floating in a lambent light—large, dreamy, pensive, and yet really green, though they were such as the soul of Keats, and especially of Coleridge, might have looked out of. They are not bewildering like the blue, nor dangerous like the black, neither affectionate as the brown, nor passionate as the gray; but they are the eyes for a visionary poet, whose soul has little to do with earth, and loves the land of memory and imagination better; they would have done for Mrs. Browning, and I can fancy them, to go very far back, in Psyche's face."

AN OPINION.

A correspondent who has been studying the eyes physiognomically sends us the following note:

"I believe the black eye indicates that impulse is in the ascendancy—but too much impulse is a vile thing; that blue shows sentiment on the throne—but too much sentiment is foolishness; that clear orb of gray signifies that, with passion no matter how powerful, and often with more intense passion than is indicated by the black—with sentiment no matter how active—the same amount being more powerful, because more excitable, than that which goes with the blue eye—still passion is under restraint and sentiment is directed by reason.

"The mental temperament is the result and indication of

honest brute would be thoroughly honest. There are some beautiful enough eyes—only them I mean. There is the gray eye, with long black lashes—on earth—that Sultana-like beauty of complexion neither dark nor fair—truth must be told—and soft and Ethiopica itself; it is the Creole

“Directly opposed to this is the eye that reasons, when the light is in the face; it views you with passion rarely lights friendship, when he is eye is upright, counsel low-men, even while I have often won man. It is the

a conscientious (if such a man be), for a large pastor as faithful ing can eye for a Fl. gale, but ho sh. g.

Many eyes are beautiful from expression alone. What- ever of goodness emanates from the soul gathers its soft halo in the eyes; and if the heart be a lurking-place of crime, the eyes tell its evil tales. Some eyes vary wonderfully with the passing emotions of the heart. We have seen the dull, cold eye grow liquid as the light of the morning and bright as the star of beauty under the impulse of some holy and tender sentiment. We have noted the eye that seemed the outward emblem of a meek spirit flash like the fire that leaps from heaven at the oppression of the weak and helpless. And many an eye that told of solitary misanthropy has held a world of feeling in its orb when other lips have told him, ‘Farewell—oh! be tender of them—bear them safely to their journey’s end.’”

CHILDREN’S EYES.

“The eyes of a child, how clear they are! how sinless! how full of the pure light of innocence! Is it not a pity that this

cloud-covered world should so often make them a mirror of deformities? Blessed be the maiden that hath a gentle eye. Over her the graces hold peculiar sway. If the food of affection has always ministered to her, and influences the happy and moral hedged her from contact with vice and passion, she is one of the most amiable as well as purest of beings. Great strength of intellect she may not possess, but great wealth of love, which is a better glory than honor can give or fame procure; with that will she fill your dwelling and your heart. Artists love this style of beauty; they paint the Mary-mother, that blessed among women, with blonde hair and eyes of heavenly blue."

EDUCATING THE EYE.

"The great majority of mankind do not and can not see one fraction of what they intended to see. The proverb, that 'None are so blind as those that will not see,' is as true of physical as of moral vision. By neglect and carelessness we have made ourselves unable to discern hundreds of things which are before us to be seen. Carlyle has summed this up in one pregnant sentence: 'The eye sees what it brings the power to see.' How true is this! The sailor on the look-out can see a ship where the landsman sees nothing; the Esquimaux can distinguish a white fox amid the white snow; the American backwoodsman will fire a rifle-ball so as to strike a nut out of the mouth of a squirrel without hurting it; the red Indian boys hold their hands up as marks to each other, certain that the unerring arrow will be shot between the spread-out fingers; the astronomer can see a star in the sky where to others the blue expanse is unbroken; the shepherd can distinguish the face of every sheep in his flock; the mosaic-worker can detect distinctions of color where others see none; and multitudes of additional examples might be given of what education does for the eye."

EYES OF SOME CELEBRATED PERSONS.

Cleopatra's eyes were bold and black, with a slow, voluptuous motion. Aspasia's eyes must have been gray; so were

Mary Stuart's. Catherine de Medici's were black, but beautiful, notwithstanding their craftiness and cruelty; she had all



Fig. 843.—ASPASIA.

the splendor of the tiger. The eyes of Beatrice, the heavenly mistress of Dante, inclined upward. Milton's eyes must have been beautiful, for even in the busts which we see of him, and portraits taken after he became blind, we perceive the lid to be large and finely separated from the brow, like to a well-proportioned door sliding freely.

THE EYEBROWS.

As the eyebrows are very closely connected with the eyes in action and expression,

they may very properly be spoken of here.

Eyebrows may be thick or thin, fine or coarse, smooth or bushy, arched or straight, regular or irregular; and each form and quality has its special significance in reference to temperament and character.

Thick, strong eyebrows are generally found in connection with abundant hair on the head and other parts of the body, and with a full development of the motive temperament. Such eyebrows are generally, but not always, dark. They are very common—almost universal—among the French. When also coarse, bushy, and irregular, we may expect coarseness, harshness, and unevenness of character.

Thin, fine, delicate eyebrows are indicative of a fine-grained organization, and an active, if not predominant mental temperament.

The general form of the eyebrow varies greatly. In some, it is straight and horizontal; in others, straight and sloping; in others still, it is arched; and the form of the arch varies almost

infinitely. Straight eyebrows are masculine, or indicative of the masculine elements of character; arched eyebrows are more common to woman.



Fig. 344.

Low, projecting eyebrows indicate *Discernment* and, less directly, *Reflection*; the physiological reason for which is found in the fact, that the depression and projection depend upon the voluntary employment of

certain muscles in order accurately to adapt the eye to the objects examined; hence the eyebrow is thus depressed when any object is closely examined, and hence persons reflecting are, by association, led thus to employ the muscles of the eyebrows, even when no particular object is before them.



Fig. 345.

An eyebrow greatly elevated, on the contrary, as shown in fig. 345, indicates less *Discernment* and the absence of severe thought.



Fig. 346.—GEN. BURNSIDE.

A lowering or frowning of the eyebrows accompanies and indicates the exercise of *Authority*, especially when it takes the form of *Forbidding*. It is generally associated with any marked development of the sign of *Command*, which consists in one or more transverse wrinkles over the roof of the nose. Fig. 346 shows the first of these signs well developed; and the last is equally marked in the original, though not well represented in our cut.



XIV.

THE CHEEKS.

Blonde or brunette, the blushing cheek
A truthful tale is sure to tell;
And in its rosy dimples lies
A meaning which we read as well.



CHEEKS differ as widely as noses, eyes, and mouths. They are round and full, or angular and hollow; red or pale; dark or light; rosy, peachy, olive, brown, sallow, chalky. In some, the malar bone is high, and projects anteriorly and laterally, producing the Indian form of face; while

in others it is gracefully rounded off, leaving the cheek relatively fuller below. About the eyes there are protuberances and concavities, advancing and receding points, elevations and depressions; and so with every other part. In short, the forms of the face are as varied as those of the cranium, and

doubtless equally significant, since the bones of the face must correspond, in a general way at least, with those of the skull, and both with the mental organization. If we fail to read character as readily on the one as on the other, it is doubtless because we are less familiar with the language in which it is there recorded. We shall find, when we know ourselves better, that the outer and the inner man correspond in every part.

TEMPERAMENT AND HEALTH.

The fullness or thinness, and the color of the cheeks, depend mainly on hygienic and temperamental conditions, which it

does not fall within the scope of this chapter to discuss at any considerable length. We may remark, however, in general terms, that a full, round face (as shown in Fig. 347), indicates predominant vitality, or a constitution in which the nutritive organs occupying the great cavity of the trunk are largely developed and active. It is found, as we have said in a previous chapter, in connection with a full, round chest, a stout body, and plump, tapering limbs. The complexion is generally florid, the eyes blue, and the hair light; and persons with these physical traits are generally ardent; impulsive; versatile, if not fickle; amiable; companionable; and fond of good living.



Fig. 348.—PHLEGMATIC.



Fig. 349.—PALMER.

A similar form of face, with cheeks presenting less distinct

and a paler hue, indicative of what the ancients called the *leucoderma*. (Fig. 348.)

The prominent cheek-bones (fig. 349) are associated with the muscular system, broad rather than an elegant figure, and strongly marked, impassioned, and the complexion is generally dark. The face, like that of Mrs. Judson, has a clearly curved outline, and is a sign of intellectuality and cultured mental temperament. The hollow



Mrs. H. JUDSON.

cheeks often, though not necessarily associated with this temperament, indicate either active wasting disease or deficient nutrition.

COMPLEXION.

The complexion denotes ethnological and temperamental conditions, and of course has its bearings upon physiognomy. Dark complexions are connected with the biliary secretions, and indicate physical strength and a

character. Such complexions generally occur in warm climates; and where they occur in temperate climates are often, we believe, signs of southern blood, from ancestors more or less remote, and thus re- having been lost sight of perhaps for genera-

complexions are associated with delicacy, refinement, They indicate less strength but more quickness

than the dark. Paleness and sallowness of cheek are signs of unhealthy conditions of body. A fiery redness is not less indicative of disorder, denoting inflammation (as in the hectic flush of consumption) or undue mental excitement. Very red-faced persons are far from being most healthy. A moderate diffused color—a soft, peachy bloom—is the true sign of health and physical well-being.

We shall recur to the subject of complexion in another chapter, and need therefore say no more here.

BLUSHING.

The sudden flushing of the face in blushing belongs to expression, and is a sign of *Sensibility*. "This suffusion," Sir Charles Bell says, "serves no purpose in the economy, while we must acknowledge the interest which it excites as an indication of mind. It adds perfection to the features of beauty."* In this respect the fair races have an advantage over the dark ones. A blush can not be seen in the negro.

DIMPLES.

The dimple is formed by the muscles which are inserted in the angle of the mouth acting on the plump integument of infancy and youth. It indicates *Simple and Passive Pleasure*, like that experienced by the little child. The same muscular movement relaxes the lips.

PROTECTION.

Prominence of the malar or cheek-bone under the outer angle of the eye (fig. 352, *k*), as pointed out in the accompanying portrait, indicates, according to Dr. Redfield, from whom we draw the substance of most of the following remarks, the faculty of



Fig. 351—Ma. —.

* Dr. Burgess, who has written a volume on "Blushing," affirms that a Circassian maid who blushes, brings a higher price in the slave-market.

Protection. Whether he is strictly correct in regard to this sign and the next, or not, it is certain that a degree of broadness and squareness of the upper part of the face are characteristic of the individuals and nations referred to in illustration of *Protection* and *Hurling*, and we give them and the others which follow as at least suggestive and worthy of careful observation, for the purpose of establishing or rejecting them.

Protection may be defined as the disposition to secure one's self, property, family, friends, or country against encroachments by means of defensive works—fences, walls, dykes, fortifications, etc. It co-operates with Self-Defense in preparing for war while there is



Fig. 352.

yet peace. The sign may be seen large in many of our prominent military men, giving, especially when the next faculty is also large, as it generally is in such cases, a noticeable squareness to the upper part of the face, and corresponding to, or is accompanied by, large *Combative*ness. It is large in the wall-building Chinese, and in the Hollander, who is compelled to defend his property against the sea by means of dykes.



Fig. 353.—GEN FOSTER.

HURLING.

Outwardly from *Protection*, and a little higher (fig. 352, *l*), in the lateral projection of the malar bone, is the sign of a faculty which Dr. Redfield has called *Hurling*.

A better name is needed. We should prefer to call it *Love*

of Battle, though this term may be open to objections, as the faculty has its peaceful as well as its warlike manifestations. In children, it shows itself in throwing stones from the hand or a sling; and in savage tribes, in the use of the bow and arrow, the javelin, the hatchet, etc. It seems to be allied to *Sublimity*, and loves storms, especially hail-storms; the crashing of thunder; the din of battle; the roar of cannon; and co-operates with Combativeness and Destructiveness in giving the warlike propensity. The sign is very large in the North American Indian, where it gives great breadth to the face below the line of the eye. Firemen, and boys that love to run with fire-engines, illustrate its legitimate action. Celebrated surgeons and distinguished warriors also have this faculty and its sign very large. See portraits of Washington, Wellington, Napoleon, Jackson, Scott, Grant, Sherman, Sir Astley Cooper, Abernethy, John Hunter, Dr. Mott, etc.



Fig. 354.—JOHN HUNTER.

The acts of sowing grain, mowing, reaping, and shaking down the fruit from the trees, are manifestations of the faculty of Hurling in the sphere of agricultural industry.



Fig. 355.—DR. BLANK.

MEDICINE.

Some men—and some women, too—seem to have an instinctive talent for treating disease; in other words, there are *natural* doctors, who often succeed, with but little knowledge and no professional education, in cases where learning and skill have been utterly baffled. The sign which indicates this instinctive adaptation to the practice of the healing art is the elevation of the arch of the

cheek-bone (*zygomatic arch*) posteriorly from the outer angle of the eye (fig. 352, *i*). It is called the faculty of *Medicine*.

A large development of this faculty gives an inclination to study medicine, and contributes largely to success in the practice of the physician—in fact, it is essential to the highest degree of skill and eminence in the profession; and its sign may be observed large in its most distinguished members. The North American Indians are noted for their high cheek-bones, and have great natural talent for surgery. Those who have the sign of this faculty small, get ill easily, and get well very soon of themselves, while the reverse is true of those who have it large. The former should be trusted to the care of nature, while the latter require to receive careful nursing, or medical treatment of some sort.

WAVE-MOTION.

In persons who are particularly fond of dancing, you will find the orbital process of the cheek-bone at the outer angle of the eye (fig. 352, *h*) very broad and full, indicating the faculty of *Wave-motion*.

“One who has it large, loves the motion of the sea when it is disturbed by the wind; is fond of the rocking of a vessel on the water, or of a swing or cradle; exhibits wavy or graceful motions in gait and gestures, and is particularly fond of dancing. The sign is large in the French and Italians, and particularly large in the Spanish, who in their gait are the most graceful people in the world, and who, above all others, exhibit wave-motion in their dances. The actors in the well-known Spanish Dance appear like a moving sea.” The portrait of Rachel (fig. 132, p. 122) shows a large sign of wave-motion.

WATCHFULNESS.

In selecting a nurse or a watchman, look for a prominence under the center of the eye anteriorly from Protection (fig. 352, *j*), which is the sign of *Watchfulness*.

This sign was particularly large in Napoleon, who, it is said, required only four hours of sleep out of the twenty-four. All military men, physicians, nurses, and watchmen are

obliged to exercise the faculty of Watchfulness, and generally show a large development of its sign.

REST AND REPOSE.

The downward projection of the angle of the cheek-bone under the sign of Protection (fig. 352, *m*) indicates the faculty of *Love of Rest*; and just back of this, under the sign of Hurling (fig. 352, *n*), is that of *Repose*.

In supporting the head, with the elbow resting upon the table or desk, these signs are naturally brought in contact with the back of the hand, as shown in fig. 356. Persons who are often seen in this position will be found to have great perpendicular breadth or downward projection of the cheek-bone from the angle backward, to like *siestas*, and to be partial to rocking-chairs, lounges, cushions, and other conveniences for rest and repose.



Fig. 356.—REPOSE.

SLEEP.

Connected with the faculties of Rest and Repose is that of *Sleep*, which has its sign in the long process of the lower jaw which rises up under the temporal arch (fig. 352, *o*), and to which the temporal muscle is attached. Its size may be judged of by the size and hardness or toughness of the muscle, which may be felt just outside of the orbital bone and above the zygomatic arch. "The ordinary action of this muscle is in proportion to the sign of Sleep, and closes the jaw lightly at the back part. If it were not for the connection of this muscle with the sign of Sleep, the jaws would fall apart while a person is sleeping, the voluntary muscles being then relaxed. To the signs of Rest and Repose is attached the strong muscle called *masseter*, which closes powerfully the fore part of the jaws in biting; hence the jaws are closed more tightly during rest and repose than during sleep.

XV.

THE FOREHEAD.

"From hominis tristitia, hilaritatis, clementia, severitatis, index est."—**PLINY.**

"The forehead is, more than any other part, characteristic of the human countenance. It is the seat of thought, a tablet where every emotion is distinctly impressed."—**SIR CHARLES BELL.**



Fig. 357.—PROFESSOR OWEN.

IN the forehead, Physiognomy becomes partially merged in Phrenology; but we shall here consider its various forms from the stand-point of the former, and as so many "signs of character" obvious to the sense of sight.

Considered merely in their outlines, no two foreheads are exactly alike. One is high and towering; another is "villainously

low." This is broad and massive; that is narrow and small. Here, it is built up perpendicularly, like the wall of a

house; there, it slopes like a roof or like the sides of a pyramid; and none of these forms are accidental or unmeaning, as we shall now proceed to show.



Fig. 358.



Fig. 359.

INTELLECTUAL CAPACITY.

The forehead is the region of intellect, and the question for the observer to settle, in judging of the intellectual capacity of another, is how much brain has he in that department? How deep, how broad, and how high is the forehead? What proportion does it bear to the other parts of the head? Quality must be taken into account, of course, in all cases; but, other things being equal,



Fig. 360. THE GORILLA.

size, as we have had occasion to say before, is the measure of power, whether in body or in brain.

Compare the accompanying heads (figs. 358 and 359) in

this respect. Is it difficult to determine which is the more intelligent woman of the two?

Animals, even the most intelligent of them, can hardly be said to have any forehead at all, and in natural total idiots it is very diminutive, as shown in fig. 361; but when idiocy, as is often the case, is induced by disease, the forehead may be full or even large.



Fig. 361.—AN IDIOT.

The foreheads of all really great men have been capacious. We may name as examples Bacon, Byron, Milton, Shakspeare, Goethe, Cuvier, Humboldt, Napoleon, Webster, Clinton, Professor Owen, Franklin, etc.

PERCEPTION.

When the lower portion of the forehead predominates, we find *Perception* in the ascendant, and there is curiosity; a desire to see; a love of travel; a taste for the natural sciences; the ability to describe, to learn languages, to teach, and to become learned in matters of fact. This indication of a powerful and active perceptive intellect is very strikingly apparent in the accompanying outline of the head of Elihu Burritt, the Learned Blacksmith, whose immense acquirements in languages have made him famous throughout the civilized world.



Fig. 362.—ELIHU BURRITT.

MEMORY OF EVENTS.

When the middle portion of the forehead is fullest, there will be memory of events, power of analysis, criticism, ability to classify, reason by analogy, detect defects and excellences, and adapt one's self to the varying phases of life.

REASONING POWER.

If the upper portion be largest, there will be more thoughtfulness and less observation; more philosophy and less science; more of the abstract and metaphysical than of the definite and practical. See our portrait of Professor Owen, at the head of this chapter, for an illustration of this conformation.

WIT OR MIRTHFULNESS.

If the outer portions of the upper forehead be most developed, it indicates *Wit* or *Mirthfulness* in connection with Causality. Such persons appreciate the ludicrous, the absurd, and the incongruous, and having a keen sense of congruity, logic, and fitness, the opposite is glaringly apparent, and they employ the *reductio ad absurdum* in discussion with great effect, and are inclined to satirize the follies and superstitions of the age in which they live. This organization was very apparent in Sterne, Joseph C. Neal (fig. 232, Ch. XII.), Hogarth, and others noted for the manifestation of the faculty.

IDEALITY.

Broadness of the head farther back and higher, as shown in the accompanying portrait of Paul Delaroche, the painter, forms what may be called the Poetical or Artistic forehead. Shakspeare, Goethe, Milton,



Fig. 268.—PAUL DELAROCHE.

THE FOREHEAD.

Some, Michael Angelo, Raphael, Canova, West, Alston, and other great poets and artists, had this form of forehead. It accompanies the mental temperment and a fine, high-toned, impressive organization.

BENEVOLENCE.

The action of the muscular lines, which passing down from the angle of the forehead, are spread near the root of the nose, elevates the inner extremities of the brows, causing, when contracted, short horizontal wrinkles in the center of the forehead, which denotes active Benevolence translated into kindness. Persons with this sign are not merely sympathetic, but are ready



Fig. 364.—HORACE MANN.

to take hold and help those who are in need of assistance. Men have much more of this working Benevolence than women, and it is proper they should have, as their power to help is greater; but women are more sympathetic and more readily touched by pity.

CONSCIENTIOUSNESS.

The sentiment of *Conscientiousness* is thought to be indicated by the muscle which causes perpendicular wrinkles be-

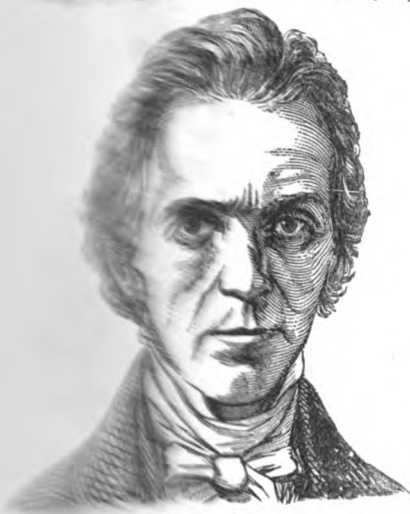


Fig. 365.—DR. BRIGHAM.

ing by the muscle which causes perpendicular wrinkles be-

tween the eyebrows, as shown in fig. 365. A single wrinkle in the center is the sign of strict *Honesty* in small money matters, or what some people would call "Close-ness." A disposition to require justice in others is indicated by two wrinkles, one on each side of the foregoing, as shown in fig. 366. Conscientiousness proper, or a disposition to apply the rules of justice to one's self, has its special sign in wrinkles outward from the last named. We give these signs, however, as conjectural rather than as established, and wish



Fig. 366.—MR. OSCANYAN.

them to be received as matters presented for investigation. The phrenological sign of large Conscientiousness is great breadth of the top-head, a little forward and on both sides of Firmness, and above Cautiousness. When the organ is small, the head will be found to be narrow on the top, jutting off abruptly, like a steep roof of a house.



ALBERT.

XVI.

THE NECK AND EARS.

"On firm neck poised his haughty head."—*ÆNEID*.



Fig. 367.—THOS. H. BENTON.

THE neck, being generally more or less exposed to view, should be taken into the account with the face in physiological and physiognomical character-reading.

VITALITY—TENACITY OF LIFE.

A short, thick neck indicates closeness of connection between the base of the brain and the vital organs, ample provisions for breathing and the circulation of the blood, and, indirectly, abundant *Vitality*

and great tenacity of life. The base of the brain is generally heavy in connection with such a neck, and the animal propensities, especially Combativeness and Destructiveness, full and active. It is the neck of the bull-dog and of the savage. The following anecdote and accompanying portrait will illustrate this remark, and show how a North American Indian reads character:

When lecturing in Port Huron, on Lake Michigan, several years ago, a family of Indians came to visit us and have their

characters delineated. After having made the examinations and given several charts, we invited the tribe to look at the gallery of paintings used in our lectures, which included the portraits of many distinguished North American Indian chiefs.

When they were satisfied with admiring the highly colored and ornamented pictures, we asked them which, among the



Fig. 368.—ESH-TA-HUM-LEAH.

forty or fifty portraits, represented, the "*best Indian?*" Reviewing the series one by one, the head of the tribe put his finger on the picture of Esh-ta-hum-leah, the Sioux chief (fig. 368). We expressed our surprise at this, regarding the one pointed out quite inferior to several others, among which were

Red Jacket, Black Hawk, Keokuk, Osceola, Big Thunder, Tecumseh, King Philip, Billy Bowlegs, etc. But our son of the forest insisted that *this* was the *best*. We asked him to state his reasons, assuring him that Red Jacket, chief of the Senecas, had much the best brain. He shook his head, assumed a crouching attitude, and replied :

“See ! big arm, big chest, big neck, and small head !”

All of which was true, and opened a new chapter to us in the reading of Indian character from an Indian’s stand-point.

Murderers are observed to almost always have big necks, which corresponds with the gross, animal, and destructive tendencies of their minds. One of this sort of criminals is said to have remarked, on being told that he was to be executed by hanging, that it would be impossible to put him to death in that way, as his neck was so large and his head so small that the rope would slip off !

MASCULINE ENERGY.

All male animals have larger necks than the females of the same species. Compare the bull with the cow in this respect, and the stallion with the mare. For war-horses, the unmutated male animal is preferred. It is such a one whose neck is said, in the poetical language of Job, “to be clothed with thunder.” The same law applies in regard to the human species, and we find the neck larger in man than in woman in proportion to the size of the head and body.

CHILDREN.

Children born with a good constitution, and left to grow up naturally, have large necks and are tough, and comparatively free from danger of disease and premature death ; while sickly and precocious children have small necks, and their chances of growing up and reaching maturity are correspondingly small. Everything should be done in such cases to increase the vital power, and to moderate the too great activity of the brain and nervous system. We can name but two strictly physiognomical signs of character in the neck that seem to us to be well established and reliable. The first is

FIRMNESS.

This faculty has one of its most striking indications in the size and strength of the cervical vertebræ, or bones of the neck, and in the perpendicularity of the neck itself, as shown in figs. 367 and 369. It will be seen that the conformation here indicated throws the head, face, and neck into the line of the phrenological organ of the faculty, and translates its natural language, as it were, into another dialect. With



Fig. 369.



Fig. 370.

the sign of Firmness large in the neck, you will generally find the "stiff upper lip" spoken of in Chapter XI, and a character that can no more be moved than a granite mountain.

SELF-ESTEEM.

While Firmness inclines us to hold up the head perpendicularly and makes us "stiff-necked," *Self-Esteem* throws it back in the direction of its phrenological organ in the crown; and we find that its sign—that is, one of its signs—is the length and arching of the windpipe, as shown in fig. 370. Self-Esteem is very different from Firmness, but the two are closely allied in their action, and have great mutual influence. Firmness says, "Stand your ground!"



Fig. 371.—SUBMISSION.



Fig. 372. AUTHORITY.

Let them come! You were put here to hold this position—never yield it."

"This rock shall fly
From its firm base as soon as I!"

"I am a man!" said Black Hawk, when introduced to General Jackson—then President. This is the language of Self-Esteem. It says, "Respect yourself!" "Carry your head high!" "Be independent!" "Have opinions of your own, and pin your faith on no man's sleeve!" "Be jealous of your liberty!"

THE EAR—TUNE.

The size of the ear, other things being equal, is no doubt the measure of its power or capacity as the organ of the sense of hearing, and an indication of the development of those mental traits which are dependent upon sensations received through it; but here, as elsewhere, the law of quantity or size is greatly modified by both quality and configuration. The susceptibility of the ear to impressions seems also to depend in some measure upon its thinness, since we find that animals with very acute hearing have the ear not only large but thin, as in the deer, the gazelle, the mouse, the rat, the cat, the hare, etc.



Fig 378.—HEAD OF HARE.

Ears which are flattened and lie close to the head are more beautiful and higher in their indications than those that project, since the latter more nearly resemble those of quadrupeds, and are adapted to receive sounds principally from before; while, unlike those of quadrupeds, they are incapable of turning in any other direction.

In man, a large ear goes with large features, large hands, large feet, and large heart, and may be said to correspond with the democratic element of character; while a small ear corresponds with small hands and feet, and is in keeping with aristocratic sentiment.

So far as observed, we have found the ears of the leading reformers and benefactors—such as Father Mathew, Peter Cooper, Josiah Mason, Wm. Lloyd Garrison, Isaac T. Hopper, Thomas Garrett, Horace Greeley, Abraham Lincoln, etc.—to be large rather than small, and in striking contrast with those of such men as Girard, Astor, the Rothschilds, and other mere money-getters, who do little or nothing for charity or for the improvement of society.

An ear which is long between its upper margin and its lobe, is best adapted to judge of the elevation, depression, and intensity of sound; while an ear of considerable breadth, on the contrary, will be able to appreciate more diffused and less decided sounds. It is a remarkable physiological fact that these forms of ear generally accompany corresponding forms of the organs of the voice; and as such forms of the organs of the voice always produce elevated and depressed in the one case, and broader tones in the other, the ear is thus adapted to receive such sounds as the voice emits. An admirable provision, since, while we may in a measure avoid hearing other voices that are disagreeable or unpleasant to us, we are necessarily compelled to hear our own, or to remain silent.



An ear presenting numerous elevations and depressions, and finely elaborate, Alexander Walker says, is always more delicate—a circumstance which presents its own explication. An ear which is



Fig. 374. unelaborate, or presents rather one general concavity than many well-defined elevations and depressions, is rarely possessed of delicacy. This is well illustrated by the difference between animals and men.

The general rule, with regard to character, which may be drawn from these facts, is conformable with the old observation—that persons destitute of a musical ear seldom possess great sensibility of any kind. Shakspeare was doubtless correct in declaring that

“The man that hath no music in himself,
Nor is not moved with concord of sweet sounds,
Is fit for treason, strategem, and spoils.”

XVII.

THE HAIR AND BEARD.

"Her hair down gushing in an armful flows,
And floods her ivory neck, and glitters as she goes."—CUNNINGHAM.

"Now Jove, in his next commodity of hair, give thee a beard."—SHAKESPEARE.



Fig. 376.—FREDERICK BARBAROSSA.

WE purpose to show that the hair has a meaning as well as the cranium which it covers and adorns; but before we proceed to speak of its physiognomical indications, it may be interesting to take a brief view of it in its physiological, esthetic, and historical aspects.

FORM AND STRUCTURE.

A microscopic examination reveals the fact that the human hair is not, as is popularly supposed, perfectly cylindrical. In all cases it is more or less flattened, so that a transverse section presents an elliptical form, or sometimes, from one side being grooved, has the shape of a bean. The beard, and all short curly hairs, are most flattened, and in general the flatness and curliness are in direct proportion. Both attain their maximum

in the hair of the negro, which is *not* wool, the fibers of the latter being round and wavy, and not spirally curled. The broad, flat surfaces are turned toward the middle of the curl.

Except at the base, into which the conical pulp enters to a variable distance, the hairs are shown by the latest microscopic investigations to be perfectly solid. The surfaces of the hairs are not smooth, but laminated, the laminæ being placed over each other in a slanting direction from the root toward the point, like the scales of a fish. Draw a hair between your fingers from the base toward the tip, and it will move smoothly and silently; but reverse it, and not only will the roughness be apparent to the sense of feeling, but there will be a slight sound caused by the friction of the serrated surfaces.

Hair is soluble in alkalies and alkaline earths, therefore depilatories are chiefly composed of quicklime. They remove the hair, but injure the skin, and are unsafe in use. It is also soluble in water at a very high temperature. Its products, when thus dissolved, are oil, sulphuret of iron, and sulphuret of hydrogen. Dark hair is found to contain more iron than light hair. It is almost indestructible, by ordinary agencies, and has been found unaltered on mummies more than twenty centuries old.

HOW THE HAIR GROWS.

The ancients held that the hair is a kind of excrescence, fed only with excrementitious matters, and no proper part of the living body. They added, that the hair does not grow by means of a juice circulating within it, as in other parts of the body, but, like the nails, by juxtaposition. The hair does truly live, however, though it must be admitted that its growth is of a different kind from that of the rest of the body, and is not immediately derived therefrom, or reciprocated therewith. It derives its food from juices in the body, but not from the same juices which nourish the body, whence it may live and thrive though the body be starved.

Wulferus, in his "Philosophical Collections," gives an account of a woman buried at Norrimburg, whose grave was opened forty-three years after her death, when hair was found

issuing from the coffin. The cover being removed, the whole corpse appeared in its perfect shape, but, from the crown of the head to the foot, covered with a thick coat of hair, long and curled. Several other instances of this post-mortem growth are recorded.

COLOR OF THE HAIR.

The human hair varies in color from the most intense black to the lightest flaxen, embracing all the shades of brown, auburn, red, golden, and yellow, according to the temperament.

The ancient Jews esteemed black hair the most beautiful, but the Greeks and Romans greatly admired yellow or golden hair, both on women and on men; and many of the historic characters of antiquity are described as having hair of this color. Of *Milto*, the beautiful Ionian, we are told: "Her hair was yellow, the locks a little curled." *Helen of Troy*, *Poppea Sabina*, and *Lucrezia Borgia* are described as having beautiful golden hair.

Leigh Hunt, in one of his essays on female beauty, assures us, on the evidence of his own eyes, that the hair of *Lucrezia* was of that kind properly called golden. Mr. Hunt was in possession of an interesting relic of mortality—a solitary hair of this famous woman's head. It was given him by Lord Byron, who obtained it from a lock of her hair preserved in the Ambrosian Library at Milan. "If ever hair was golden," he says, "this is. It is not red; it is not yellow; it is not auburn; it is golden, and nothing else;



Fig. 377.—*LUCREZIA BORGIA*.

and, though natural-looking, must have had a surprising appearance in the mass." Our portrait (fig. 377) shows its luxuriant abundance. We can imagine the effect of its auriferous sheen. Landor describes it as—

Calm hair meandering with pellucid gold.

Among the great men of whose hair history has taken note, Alexander the Great, Demetrius of Macedonia, Sylla the Dictator, Commodus, Camoens, Tasso, and Alfieri had yellow or golden hair. Cervantes had brown hair and a yellow beard. Of Commodus, the historian tells us that when he walked in the sun his locks glittered like fire, so that some believed that they had been sprinkled with gold dust.

DYEING THE HAIR.

It is true that sprinkling with gold dust was often practiced by the ancients. According to Josephus, "the horse-guards of Solomon daily strewed their hair with gold, which glittered in the sun." The much prized golden tint was also produced by some chemical process now unknown. Ælian, speaking of Atalanta, says that "the color of her hair was yellow, not produced by any womanly art, but altogether natural." He would not have spoken this way if the art had not been well known at his day. Tertullian of Carthage, one of the fathers of the African Church, also speaks of some of his black-haired countrywomen as "constantly employed in giving their hair a fair color."



Fig. 378.—QUEEN CHRISTINA.

Two centuries later, St. Jerome notices the custom of dyeing the hair *red*, which was then the favorite color. It was perhaps about this time (for we can not now recall the exact date)

that Claudia, surnamed *Rufina* (red-haired), a celebrated British lady, attracted so much attention at Rome. *Apropos*, it is related of the ancient Britons, that, not content with the natural color of their hair, which was generally fair or yellow, they made use of washes to render it still brighter.

The art of converting black or dark-colored hair into fair has been practiced, according to Mrs. Jameson, in more modern times. She says: "Every one must remember, in the Venetian pictures, not only the peculiar luxuriance, but the peculiar color of the hair—of every golden tint, from a rich full shade of auburn to a sort of yellow, flaxen hue, or rather not flaxen, but *like raw silk*. I have often been asked if these pale-golden masses of hair could always have been natural. On the contrary, the color was often artificial."

Mary Queen of Scots, and other historic women, are represented as having covered their natural hair with artificial golden locks. Black hair was considered matronly, but those who desired to be thought young put on yellow hair, which was thought to be indicative of youth.

The so-called Mrs. Yelverton, whose several marriage trials, in Scotland and in Ireland, with an English major by this name, exciting so much attention the world over, has a well-formed head—which we recently examined in England—well covered with a luxurious growth of bright golden silky hair, with a slight inclination to curl. She is very fascinating.

NATIONAL PECULIARITIES OF THE HAIR.

Dark hair, as a general rule, prevails in southern or hot countries, and light hair in more temperate latitudes. There are many exceptions to this rule, however, to explain which would take us too far into the domains of Ethnology.

Among the Americans and the English, brown hair of various shades predominates; among the Germans, sandy, flaxen, and yellow hair; among the French, dark-brown and black; among Spanish, black; among the Russians, light hair of various shades; and among the Poles and Hungarians, dark hair.

Some remarkable changes in the color of the hair and complexion of races might be noted, but may be more appropri-

ately treated in another chapter. A single fact will suffice here to call attention to the subject. The Celts (or Kelts), embracing the Irish, Scottish Highlanders, Welsh, etc., now in the main a dark-haired race, are described by the classical historians as having fair or red hair and blue eyes. This variation can hardly be due to a change of climate, but is probably the result of changed modes of life and diet. As a related circumstance, it may be noted that the people of cities are darker haired than those of the same race and nation in the rural districts, who live more in the open air.

REMARKABLE LENGTH OF HAIR.

In woman, the hair has been known long enough to fall to the feet, and so abundant as, when shaken loose, to conceal the whole person. Byron, describing one of his heroines, says:

Her clustering hair, whose longer locks were rolled
In braids behind, and, though her stature were
Even the highest for the female mold,
They nearly reached the heel.

Boadicea, Queen of Icen, is described by Dio with "very long hair, flowing over her shoulders, and reaching below the middle of her back."

MODES OF WEARING THE HAIR.

The ancient Jews wore their hair long, just as it grew, with the exception of the priests, who had theirs cut every fortnight while waiting in the temple. The Nazarites were forbidden to touch their heads with a razor.



Fig. 379.—A GREEK GIRL.

Baldness was particularly deprecated. Among the later Jews, the men (except the Nazarites) wore their hair short; but the women gloried in their luxuriant dark tresses, adorning them with ornaments of silver, gold, and precious stones.

The ancient Greeks allowed their hair to grow to a great length, and were very proud of this attribute of beauty. The men of Egypt wore their hair short, as did the Romans and the later Greeks.

The Roman ladies delighted to pile their hair tower-like upon the top of their heads, while they had several rows of curls arranged formally around their sides, and sometimes pendent curls in addition.

Both the Greeks and the Romans sometimes wore false hair. The hair trade was a flourishing one among the Romans, who esteemed particularly the blonde hair of Germany.

Among the northern nations—the Danes, the Gauls (*Gallia Comata*, the long-haired Gauls, as the Romans called them),

the Anglo-Saxons, and the ancient British, long and flowing hair was held in high estimation, and cutting it off was inflicted as a punishment for various offenses. When Julius Cæsar vanquished the Gauls, he made them cut off their hair, in token of submission, a cropped head being in ancient times a badge of slavery.



Fig. 380.—MRS. MOWATT RITCHIE.

In France, according to Gregory of Tours, it was long the peculiar privilege of royal blood to wear long flowing locks, while for all

other persons there were gradations in the length and peculiar cut, down to the close-cropped slave. When a prince was excluded from the right of succession, his hair was shorn, to denote that he was reduced to the condition of a subject.

From the time of Clovis the French nobility wore their hair short; but as they grew less martial they allowed it to grow longer. Long hair was the prevailing fashion at the court of Francis I., when that monarch, proud of the wound in his head, appeared with short hair, and thereupon the style became general.

Long hair again came into vogue in the reign of Louis XIII., and as curling was found inconvenient, wigs became fashionable. Then followed the reign of hair-powder, periwigs, and perukes of enormous dimensions, which, with many other things less preposterous, were swept away by the tide of the great French Revolution.

THE CHURCH ON LONG HAIR.

On the introduction of Christianity, the apostles and fathers of the Church launched severe invectives against the vanity



Fig. 381.—MRS. GORE.

and extravagance displayed in dressing the hair, upon which all the resources of ingenuity and art were exhausted to set it off to advantage and load it with the most dazzling finery. The mimic skill of the *friseur* was frequently called into requisition to represent fanciful devices, such as diadems, harps, wreaths, emblems of public temples and

conquered cities, or to plait it into an incredible number of tresses, which were often lengthened by ribbons, so as to touch the feet, and loaded with pearls and clasps of gold.

St. Paul denounced the wearing of long hair by men. "Doth not even nature itself," he says, "teach you that, if a

man have long hair, it is a shame unto him?" But long hair was worn at a later day, even by the priests; and Pope Anicetus is said to have been the first who forbade it. St. Wulstan declaimed with great vehemence against luxury of all kinds, and especially against long hair, as the most universal and most criminal. Afterward, Anselm, bishop of Canterbury, went so far as to pronounce a sentence of excommunication against all masculine members of the Church who wore long hair; and Serlo, a Norman bishop, acquired great honor by a sermon he preached before Henry I., in 1104, against long hair, by which the king and his courtiers were so deeply affected that they consented to resign their flowing ringlets, of which they had been so proud. It is added that the worthy prelate did not give them time to change their minds, but, producing a pair of shears from his sleeve, proceeded himself to perform the office of a barber.



Fig 382.—GEORGIANA CAVENDISH.

ABSURDITIES OF THE FEMALE COIFFURE.

The varieties in the mode of wearing the hair which have been in vogue among women, in various ages and countries (the effect of large Approbativeness), are almost innumerable. Some of them have been very beautiful, while others have outraged not only nature, but every principle of true art. The most complicated, as well as the most absurd style, per-

haps, that ever prevailed, was that which reached its culmination about the middle of the eighteenth century. Its basis consisted of complicated scaffoldings of iron or silver wires, dressed to represent castles, pyramids, ships, turban-like canopies, zodiacs, pickets, butterflies, birds, shells, leaves, flowers,

and various other structures, about which the hair was so ingeniously intertwined that they were quite indistinguishable from the lady's head. A modification of this style, which consisted in rolling or folding the hair in a peculiar way over a large cushion placed on the top of the head (fig. 382), prevailed at a later period, and was not unknown to our grandmothers on this side of the Atlantic.



Fig. 383.—A CAPUPO WOMAN

Contrast here the absurd head-dresses of Mrs. Gore (fig. 381) and Georgiana Cavendish (fig. 382) with the natural, flowing tresses of the Greek girl (fig. 379) and Mrs. Mowatt Ritchie (fig. 380). We do not object to art, but it should co-operate

with nature, instead of contravening its tendencies and deforming its creations.

NATURAL CURIOSITIES—MIXED RACES.

But the vagaries of fashion have, after all, hardly equaled some of the freaks of nature. The Cafusos, a remarkable race,



Fig. 384. A PAPUAN.

originating in a cross between the native American Indians of Brazil and the negroes imported from Africa, have perhaps the most singular hair in the world, it being a mean between the long, straight, stiff hair of the Indian and the curly hair of the negro. It rises almost perpendicularly from the fore-

head to the height of a foot or a foot and a half, thus forming a prodigious and very ugly kind of a peruke, of which our cut (fig. 383) will give a better idea than any description.

The Papuans of New Guinea furnish a similar example of the practical jokes which Nature sometimes perpetrates in her more playful moods. Forest says, "They wear their frizzled hair so much bushed out around their heads that its circumference measures about three feet, and when least, two feet and a half." Our portrait (fig. 384) shows the style of this natural coiffure.

The Papuans seem to be a mixed breed, formed by a cross between the Malays and the Negroes, though ethnologists have not been able to trace their origin with any degree of certainty.

CUTTING THE HAIR.

A man fifty years old, who has cut his hair regularly, will have thus removed from his head over *thirteen feet*, or twice his own length. Of the beard, twenty-five years' shaving takes off *eight feet*. This cutting and shaving is attended

with a great increase of the secretion of the juices which nourish the hair, a part of which is lost by evaporation from the stumps of the hairs. Bichat, the celebrated French physiologist, attributes the superior strength of the ancients to the custom of wearing the beard.



Fig. 385.—DR FOX.

WIGS.

The oldest wigs in existence are among the Egyptian antiquities in the British Museum. Astyages, king of the Medes, according to

Xenophon, wore a wig; and allusions to wigs are found in the writings of Livy, Ovid, Plutarch, and Suetonius.

In the early days of the Christian Church, the fathers, and especially Tertullian, Clement of Alexandria, and St. Ambrose, protested against the use of wigs, condemning them in very strong terms, but in vain; and not very long after, even churchmen began to cover their heads with perukes.

In the reign of Louis XIII. of France, as already incidentally remarked, the use of wigs became general. In the latter part of the reign of Louis XIV., to wear one's own hair, or to wear only a small wig, was almost an offense against good morals. The dimensions of the wig had been increasing from the beginning of this reign, till at length they extended half way down the back, while the curls on the sides fell equally low upon the breast. They were generally made of silk, though a few of the more costly were made of hair. From France the fashion pervaded all Europe. Their appearance is familiar to us in the portraits of Addison, Steele, De Foe (fig. 385), Bolingbroke, Chesterfield, and other noted men of their era. Powdering the wig did not come fully into fashion till the time of Louis XV.

The large, white, full-bottomed wig is still absurdly retained in the English courts, as a symbol of the age and dignity which should characterize the judiciary.

The large wig was considerably worn in the American colonies, where hair powder was also in vogue; but both very generally and wisely disappeared after the Revolution. Wigs are now seldom used except to conceal baldness, and for this purpose they are made in so close imitation of nature as to defy detection.

QUALITY OF THE HAIR.

As in all animals, so in all men—and women, too—the quality of the hair changes with the condition of the body. There is a physiological significance in the phrase, "fat and sleek." When an animal or a person is in a high state of health, when all the vital functions are in good working order and active, we find the hair, be its color what it may, bright, glossy, and pleasant to the touch; but, on the contrary, when the body is diseased, the blood impure, or the system feverish, the hair becomes dry, harsh, and coarse, and the head covered

with dandruff. With returning health the hair resumes its original quality and condition.

These changes are perhaps more noticeable, or, at any rate, more noticed, in our domestic animals than in man. When the horse, for instance, is well fed and well groomed, we observe that his hair is fine, sleek, and glossy; but let the same animal be half starved and otherwise neglected, and "his hair will soon show it," by becoming rough, shaggy, and coarse, and perhaps filled with parasites.* But while a healthy condition of body is favorable to the health and beauty of the hair, it is not always destroyed, or its growth sensibly checked, by diseased bodily conditions, though its quality may change. The truth probably is, that some diseases, like a fever, for instance, affect the special fluids which nourish the hair, while others do not, at least in the same degree.

GRAY HAIR.

The change of the hair which we are wont to call "turning gray" is probably, when it does not come prematurely, as natural as any of the changes effected by age, and is neither to be avoided nor regretted. In some the change takes place much earlier than in others, and is often hastened by disease and by mental and moral causes; but sooner or later it comes to all, to the healthy as well as to the diseased. Grayness is not a diseased condition of the hair, for it continues to grow as luxuriantly, and to be as moist, sleek, and glossy after the change as before; in fact, it often grows thicker and stronger.

The term gray hair is not strictly proper, since the grayness comes from the mixture of the white or colorless hairs with those of the original color. In general, the individual hair which we call gray is wholly colorless.

Physiologists know little of the immediate cause of the bleaching of the hairs. They can only say that the supply of coloring matter seems, from some unknown cause, to fail. It is observed that dark hair sooner turns white than light,

* The best remedy for parasitical insects, whether on plants, animals, or man, is to keep the plant, animal, or man well fed, and in a high state of health.

doubtless from the greater demand which it makes upon the coloring fluid, and which sooner exhausts the supply.

The hair sometimes turns suddenly gray. Bichat has noted five or six cases, coming under his own observation, in which this took place in less than eight days, and one in which the change was effected in a single night. The cause in these cases was a violent mental shock.

BALDNESS.

Baldness is not, like grayness, the natural result of age. It is always an unnatural, and therefore a diseased condition, though it by no means implies general derangement in all cases. It is believed by some to indicate power and activity of mind; and this may sometimes be the case, as undue mental exertion, by producing a febrile condition of the head, affects the hair in the same way that a fever does, though not in the same degree. But we believe that baldness, oftener than anything else, indicates the wearing of our modern water-proof and air-tight hats, which keeps that portion of the head which they cover constantly heated and unventilated. In corroboration of this remark, it may be observed that the hair is generally thick and healthy below the point covered by the hat, and that women, who use no air-tight covering for the head, are seldom bald.

The ancients held baldness to constitute ugliness, and it was associated in their minds with a licentious life. We are told that of all the honors conferred on Cæsar, there was none that he accepted more gratefully than the right to wear the laurel crown, which served to conceal his baldness.

PHYSIOGNOMICAL INDICATIONS.

Hair parting naturally in the middle and falling over the temples, as it generally does in women and sometimes in men, indicates the feminine element, and in man symmetry and beauty of soul—genius of a certain kind, which implies the *feeling* of the woman combined with the *thought* of the man. It is a very common characteristic among poets and artists, as seen in Homer, Virgil, Shakspeare, Milton, Goethe, Dante,

Raphael, Titian, Handel, Mozart, Tasso, Chaucer, Burns, Keats, Hoffman, Longfellow,* and many others. In pictures of Christ, and in other exalted, highly refined, and beautiful characters, this peculiarity is always introduced by the artist.

Sometimes the hair, on rising from its bulbs, turns in irregular rings on the forehead, giving an open air to the physiognomy. This indicates good-nature as well as exuberant vitality. Crinkled, wavy, and close-curling hair and beard indicate vivacity and excitability, if not brilliancy.



Fig. 386.—KEATS.

Regular curls symbolize Ideality, and when only part of the hair is worn in curl, are instinctively disposed over the organ of that faculty.

Straight hair may be said to indicate, in cultivated persons, evenness of character and a straightforward honesty of purpose, as well as a clear head and good natural talents.

HAIR, WOOL, FUR.

Coarseness or fineness of the hair indicates corresponding qualities in the skin, the muscles, the bones, and the character. This is illustrated in the lower animals. The hog, the dog, the ox, etc., have coarse hair and a coarse, thick skin, while both are fine in the beaver, the otter, the fox, etc.

In this matter, climate and situation have much influence, the warmer the climate the coarser being the hair or fur.

* In some cases this peculiarity is apparent only in portraits taken in youth or early manhood.

The darker the hair, the more robust the body, as a general rule, and the coarser the skin and tissues of the body; but sometimes the hair and skin are at the same time dark and fine. The relation between color and strength or hardness is well understood in its application to the lower animals. Dark horses are well known to have better constitutions than white and gray ones; and so far is this distinction carried, that even white feet are considered objectionable, as the following lines, often repeated among horsemen, imply. If the horse has

“One white foot, buy him;
Two white feet, try him;
Three white feet, deny him;
Four white feet and a white nose,
Take off his hide and give him to the crows.”

The dark-haired races are physically the strongest, but less endowed intellectually than the fair-haired. The first are more inclined to manual labor and active exercise, and the last to mental exertion. The dark races are workers, the light races thinkers, poets, artists, etc.

Black hair indicates strength and a predominance of the bilious temperament, as in the Spaniard, the Malay, the Mexican, the Indian, and the Negro.

Red hair is a sign of ardor, passion, intensity of feeling, and purity of character, and goes with the sanguine temperament, as in the Scotch, the Irish, the Swede, the Dane, etc.

Auburn hair is found most frequently in connection with the lymphatic temperament, and indicates delicacy and refinement of taste, and if the mind be cultivated, fine moral and intellectual powers. It is common among the Germans, the Danes, and Anglo-Saxons.

Dark-brown hair combines the strength of the black with the exquisite susceptibilities of the light hair, and is perhaps, all things considered, the most desirable.

POLITICAL SIGNIFICANCE OF LONG HAIR.

The manner of wearing and dressing the hair, when not controlled by fashion, is indicative of character. Wearing the hair long by men, in a country and age in which custom con-

denms it, indicates a protest against the established order of things, and is the badge of eccentricity, "come-outerism," and revolution, if not of vanity and spiritual pride. Long-haired men are generally hostile to both church and state. So well is this understood in Austria, that wearing long hair is made a political offense. In the South and Southwest of our own country, it is one of the well-known signs of rebel proclivities.

THE BEARD.

"Thou shalt not mar the corners of thy beard;" the command of Moses to the children of Israel, recorded in Leviticus xix. 27, is the first mention of the beard that learned men have been able to find. It indicates the early cultivation of the beard among the Eastern na-



Fig. 337.—LE GRAND CUSHMAN.

tions, by whom it always has been and still is held in the greatest respect. We read in the Chronicles that the ambassadors of David, having been shaved by order of the king of the Ammonites, the royal prophet sent them to Jericho to

conceal their disaster and wait until their beards should reappear.

Sculptures from Nineveh and Persepolis prove that the races inhabiting those cities wore their beards; but in Egypt, judging from ancient pictures, shaving was common among kings and other dignitaries, and a smooth face was probably a mark of rank.

THE MODERN ORIENTALS.

Among the modern nations of the East, the practice of wearing the beard generally prevails. The Turks permit the beard to grow in full luxuriance; but the slaves in the seraglio are shaved, to show their inferiority to their bearded masters. It is considered an infamy by the Turks to have the beard cut, and such is the affection cherished for it, that wives in kissing their husbands put their lips to the beard. The Persians give free scope to the mustache, but cut and trim the beard on the chin as caprice or fashion may dictate. The Orientals are unable to conceive a great man without a beard, and the greatest astonishment of the Egyptians on seeing Napoleon was to find him beardless. The Chinese, who are almost destitute of the beard by nature, occasionally wear an artificial substitute.

GREEK AND ROMAN BEARDS.

Previous to the reign of Alexander the Great, the Greeks wore beards, but during the wars of that bellicose monarch they commenced shaving, for the military purpose of depriving their enemies of a convenient appendage to lay hold of in battle. The philosophers, however, wore their beards, and Socrates was accustomed to ask the smooth-faced Greeks if they repented of their manhood.

The Romans wore the beard till the year 454 B.C., Scipio being the first of the Romans—so Pliny says—who shaved daily to the razor. The philosophers, though, as the Greeks, wore the beard, considering it a symbol of

LONG BEARDS.

The Lombards or Longobards (long-bearded) derived their

name from the practice of going unshaved. King Robert of France was remarkable for the possession of one of the longest and whitest beards of his day; but of long beards, the most wonderful was that of a German artist of the name of John Mayo, who was called John the Bearded in consequence. Its length was so great that it reached the ground when he stood up, and he was accustomed to tuck it into his girdle. Some of the portraits of the popes and bishops of the early Church furnish examples of magnificent long beards.

THE CHURCH ON THE BEARD.

Leo III. was the first to present to astonished Christendom the spectacle of a shaved pope. Thirty years later, Gregory IV. fulminated a bull enjoining penalties upon every bearded priest. A writer of the seventh century complains that the morals of the clergy were so bad that they could be distinguished from the laity only by their lack of beards, their actions manifesting no superior sanctity.

In the twelfth century, the proscription which had laid bare the chins of the clergy was extended to the laity. Godefroi, bishop of Amiens, refused the offerings of any one who wore a beard. A preacher directed his eloquence against the hirsute King Henry I. of England, and the obedient monarch gave himself into the hands of the barber. The proud Frederick I., called Barbarossa, proved equally tractable. The reluctant kings of France were at first shaved by the bishops. This reign of terror did not last long. Beards again asserted their privileges, and in the thirteenth century, Pope Honorius III., in order to hide a disfigured lip, allowed his beard to grow and inaugurated anew the fashion. In the reign of Francis I. the right of the clergy to wear their beards was again called in question, and in 1561 the College of Sorbonne decided that a beard was "contrary to sacerdotal modesty."

HOW DUPRAT LOST HIS BISHOPRIC.

It is related that Guillaume Duprat, returning from the Council of Trent to his bishopric of Clermont with a beard that would have done honor to the venerable Priam, reaching down

even to his girdle, was met at the door of the church by the dean of the chapter adequately supported and brandishing a large pair of scissors. There was but one alternative, and Duprat threw off his surplice and departed, declaring that he would save his beard though he should lose his bishopric.

A MODERN BULL AGAINST THE BEARD.

The Roman Catholic clergy in Bavaria—among whom the movement of growing a full beard, as was usual in former centuries, has lately begun to spread—have, through the Roman Nuncio in Munich, received the following intimation from Rome:

“It has come to the ears of the Pope that there are clergymen in some of the dioceses of Bavaria who, led by the spirit of innovation, or rather thoughtlessness, wish to introduce again the antiquated custom of growing the beard, and who, by their example, wish to induce others to do likewise. Whatever might be said with respect to former centuries, it is perfectly well known that the modern Church discipline disapproves of this custom; and if such an innovation were to be allowed, this could only be done by the Supreme Pontiff of the Church. The latter, however, is all the more unwilling to permit the same innovation, as in these sad times but too many were led astray by new things, as one innovation brought on another very easily. The authorities of the dioceses are commanded not only to see that these beards are forthwith removed, but also that the unity of rule and the complete identity within the Roman Church with respect to dress and shaving are not broken again.”

BEARDS CLASSIFIED.

The golden age of the beard in France was the reign of Henry IV., when its various styles were distinguished as

The Pointed Beard;	The Aureole Beard;
The Square Beard;	The Fan-Shaped Beard;
The Round Beard;	The Swallow-Tailed Beard; and
The Artichoke Leaf Beard.	

The dignity of the beard in England at this period may be

inferred from an incident connected with the execution of Sir Thomas More. As that great man was about being beheaded, perceiving that his beard was so placed that it would be injured by the axe of the executioner, he drew it aside, saying, "My beard has not been guilty of treason; it would be an injustice to punish it."

During the reign of Queen Elizabeth, the beard was worn generally by those of higher rank, and was trimmed in a style distinctive more or less of each class. The bishop had his beard cut in a peculiar way, and we find its form still preserved in the bands of lawn now worn by the modern ecclesiastic. The soldier and the judge, too, had each his particular fashion of wearing the beard. As a poet of the day says :

The barbers thus (like tailors) still must be
Acquainted with each cut's variety.

PETER THE GREAT,

on returning from his European tour with a passion for reforms of all kinds, commenced the compulsory civilization of his people by cutting off their beards. They struggled hard against the innovation, but the final result was that shaving became universal. It had previously become so throughout nearly the whole of Europe except the Russian Empire and Turkey.*

THE BEARDS OF TO-DAY.

The return to the custom of wearing the beard is within the memory of most of our readers. The movement was inaugurated in France, where most other fashions originate, and for a while a beard was the distinctive mark of the Frenchman. England, ever tenacious of her old ways, was the last country to reinstate the beard. When the full beard is worn, it is now generally trimmed more or less closely with the scissors; but we occasionally see specimens of the long flowing beard that would do credit to the Grand Turk or one of the Hebrew patriarchs. (Fig. 387.)

* New American Cyclopaedia.

ETHNOLOGY OF THE BEARD.

The Mongolian, Malayan, and aboriginal American races have but little beard; the Caucasians are a well-bearded people, their sub-races differing considerably, however, in this particular, the Teutons, for instance being more heavily bearded than the Slavonians; the negroes have in general a tolerably heavy beard, crisp or woolly like the hair of their heads.

USES OF THE BEARD.

Except that it is an ornament and a sign of masculinity, physiologists teach us little in respect to the uses of the beard. In certain employments, however, as that of the machinist or of the stone-cutter, where an irritating dust and small particles of hard materials are in danger of being inhaled by the lungs, the wearing of the beard is found to be an important safeguard. It is believed to be also in some way conducive to health in other respects. We can not doubt but that this is so, because it is simply allowing Nature to have her own way, which is always the best way.

PHYSIOGNOMICALLY,

the beard indicates the masculine element or the virile forces of our nature. Men in whom it is deficient are generally found to resemble their mothers, and to manifest more or less strongly certain feminine traits of character, though they are not necessarily in any degree what is properly called effeminate or womanish. Women with beards, on the contrary, have certain masculine traits, and resemble their fathers.

BEARDED WOMEN.

According to the old books, Jupiter denied the crowning grace of the beard to women lest, possessing *all* charms, she should draw to herself the adoration due to the gods alone. According to a later but less gallant authority, it was withheld in consequence of the danger she would be in in shaving, when shaving should be in fashion, she not being able to keep herself *still* long enough to undergo the process. We have, however, several examples in history of bearded women, and

such *lusus naturæ* have frequently been exhibited in our public museums and show places.

Hippocrates mentions Phetuna, a woman whose beard took to growing during the absence of her husband in exile. A Swedish grenadier taken prisoner by the Russians in 1724, in the war with Charles XII, turned out to be a woman with a beard a foot and a half long. She was presented to the Czar, Peter the Great. Margaret, Duchess of Parma and regent of the Low Countries under Philip II, was accustomed to wear a long mustache on her upper lip.



Fig 388.—THE BEARDED WOMAN.

Travelers tell us of a race in Ethiopia, the women of which do not differ at all from the men in regard to the hair on the face; but this *we* will not claim as an absolute fact.

Some of our readers may remember Madame Josephine Clofullia, exhibited in this city in 1853. The foregoing woodcut (fig. 388) does her beard no more than justice. From a phrenological character of this remarkable woman, based on a personal examination, and published in the PHRENOLOGICAL JOURNAL for August, 1853, we extract the closing paragraph as illustrative of the physiognomical significance we have attributed to the beard.

“Her organization indicates a predominance of the masculine elements of mind. This she inherits from her maternal grandfather (an example of *atavism*), whom she is said to resemble in person as she probably does in her mental constitution.”

XVIII.

HANDS AND FEET.

"With the hand we demand, we promise, we call, dismiss, threaten, entreat, supplicate, deny, refuse, interrogate, admire, reckon, confess, repent; express fear, express shame, express doubt; we instruct, command, unite, encourage, swear, testify, accuse, condemn, acquit, insult, despise, defy, disdain, flatter, applaud, bless, abuse, ridicule, reconcile, recommend, exalt, regale, gladden, complain, afflict, discomfort, discourage, astonish, exclaim, indicate silence, and what not, with a variety and multiplication that keep pace with the tongue."—MONTAIGNE.

"And her white and dainty feet,
Brush the dew from clover sweet."—ANON.



Fig. 200.—HOLDING A BALL.

Everyone all realize that the hand is a very useful member. It guides the pen of the writer, the pencil of the artist, the tool of the mechanic, the implement of the farmer. It feeds, clothes, and it adorns us. It is the brain's "chief of staff"—the mind's most useful and most honored servant. We feel what a terrible thing it is to lose it, as so many of our brave soldiers have done, in battle. But we do not realize what a wonderful piece of mechanism it is—how beautifully formed, how perfectly co-related with every other part of the body and with the brain, and how expressive of character and feeling; and it is in order that we may do so that we purpose to dwell at some length upon its anatomy and physiology, before speaking of it in its more strictly physiognomical aspects.

STRUCTURE OF THE HAND.

There is a general resemblance between the hand and the foot; but there is this grand characteristic which distinguishes it from the lower member—its first digit (or thumb) stands out apart from the others, and is movable independently of them, so as to be more or less completely opposed to them. Quadrapeds, then, have no hands. In the monkey tribe the thumb is present, and is separate and movable on each of the four limbs, and these animals are therefore called *quad-rumanous* or four-handed (fig. 390). Man, having the movable thumb on each of the two upper limbs only, is *bimanous* or two-handed; and this peculiarity gives a name to the class in which naturalists have placed him alone—the *bimanous*.



Fig. 390.—THE GORILLA.

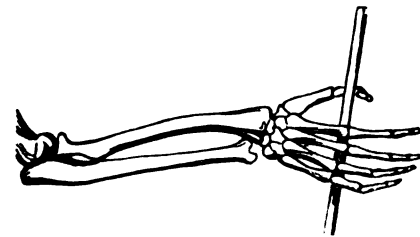


Fig. 391.—HAND AND FOREARM.

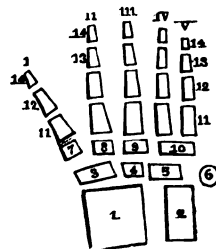


Fig. 392.—DIAGRAM.

with the hand, and in such a manner as to give it play and strength. Fig. 391 illustrates the bony framework of the hand and arm and their connections with each other. The

accompanying diagram (fig. 392) shows how the bones of the hand are arranged in three divisions. Thus the upper row of carpal or wrist bones (3, 4, 5) consists practically of three bones, the fourth (6) being much smaller than the others, and rather an appendage to one of them than a distinct constituent of the wrist. The outer of these carpal bones (3) bears the thumb and the forefinger (I and II), and constitutes with them the outer division of the hand. The inner one (5) bears the ring finger and the little finger (IV and V), and constitutes the inner division of the hand; and the middle one (4) bears the middle finger (III), and forms the middle division of the hand. The diagram shows, too, that the two outer bones (3 and 4) with the two outer divisions of the hand are connected with the radius (1), while the inner bone (5) only with the inner division of the hand is connected with the *ulna* (2).

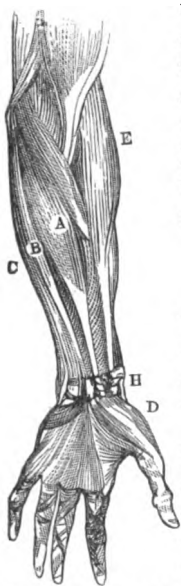


Fig. 393.—MUSCLES OF FOREARM AND HAND.

MANUAL MOVEMENTS.

The hand is wonderfully mobile and flexible. The fingers and thumb are particularly varied and free in their movements, which take place with singular facility and rapidity. We can bend them quite down to the palm, and can turn them back beyond the straight line; we can separate them to a considerable extent, and we can bring them together with some force. To give the reader an idea of some of the muscles concerned in executing

these movements, we quote from an excellent little anatomical treatise* now before us, the following interesting passages with the accompanying illustrations:

"The wrist and hand are bent forward upon the forearm by three muscles (A, B, C, fig. 393). These all pass downward from the inner side of the lower end of the arm-bone. The

* The Human Foot and the Human Hand, by Gall Humphrey, M.D., F.R.S., Cambridge, England, 1861.

outer and inner ones (A and c) are connected, by tendons, with the wrist-bones; and the tendon of the middle one (B) runs over the wrist and becomes spread out in the palm like a fan, so as to support the skin of the palm and to protect the nerves and blood-vessels, which lie beneath it, from injurious pressure, when we grasp any substance firmly in the hand. The fan-like expansion of this tendon in the palm is called the

'palmar fascia.' It is very strong, and is connected below with the ends of the metacarpal bones, and with the sheaths of the fingers. The bundle of muscles near D forms what is called the 'ball of the thumb,' and serves to move the thumb in various directions.

"Beneath these three muscles which bend the wrist and strengthen the palm, lies another set of muscles (A, B, fig. 394) which bend the thumb and fingers. They pass from the bones of the forearm, and end in long tendons or 'leaders' which run over the wrist and palm and along the fingers and are firmly connected with the last phalanges of the fingers. They lie close to the

Fig. 394. — MUSCLES AND TENDONS OF HAND.

bones in their whole course, and are held in their places by sinewy cross bands and sheaths which are seen both at the wrist and in the fingers, in fig. 395.

Fig. 395 represents the muscles on the back of the forearm. The tendons pass from them and run, some to the wrist, and extend or bend backward the wrist upon the forearm, some to the thumb, and extend the several joints of the thumb; and others run to the back of the fingers. These leaders lie



Fig. 395. — MUSCLES AND TENDONS ON BACK OF FOREARM AND HAND.

nearer to the skin than do those on the palmar aspect ; and most of those which go to the thumb and fingers may be distinguished through the skin. The short muscles (A, A) situated upon and between the metacarpal bones pass from them to the sides of the fingers ; some of these serve to spread the fingers out from one another, while others have the effect of drawing them together. There are several such small muscles on both surfaces of the hand, but I must not detain you by a description of them ; and there are other little muscles passing from the flexor tendons to the phalanges, which have been called *fidicinales*, from their assistance in performing the short, quick motions of the fingers, and from their being, accordingly, called into action in playing on the violin and other musical instruments."

WHY THE FINGERS ARE OF DIFFERENT LENGTHS.

"Have you ever wondered what advantage is gained by the fingers and thumb all differing from one another in length ? or don't you take the trouble to reflect on little matters of this sort ? If you have, I would ask you now to remark that there is, in the several fingers, a relation between their shortness, their position near the edge of the hand, and the amount of mobility of their metacarpal bones upon the wrist. Thus the finger which is in the middle of the hand is the longest, and its metacarpal is the most fixed. The forefinger is not quite so long ; and its metacarpal is rather less immovable. The ring finger comes next in shortness and in the mobility of its metacarpal. Then the little finger ; and the thumb, which is much shorter than any other, has also its metacarpal much more movable."

HOW WE HOLD A BALL.

"Observe, further, that, when the fingers and thumb are separated from one another, and then bent, the middle knuckle-bone remains stationary, but the others are advanced a little forward, each to an extent proportionate to its mobility upon the wrist, and to the shortness of the finger. The forefinger is, by this means, advanced a little, the ring and the little fingers more, and the thumb most of all. And the result is,

that the tips of the fingers and the thumb come all to a level, and form with the palm a great hollow in which we can grasp any substance, a cricket-ball, for instance (fig. 389), and hold it very firmly. The length of the several fingers and the thumb is, therefore, just so regulated, in relation to their mobility upon the wrist, as to give us this power.

"You may observe, also, that when the fingers and the thumb are spread out, the space between the thumb and the forefinger is considerably greater than either of the spaces between the other fingers. Then, by a slight movement, the thumb takes up a position in front of, or opposite to, the fingers; and in grasping any substance it has to antagonize the pressure exerted by all the fingers. Hence it needs to be much stronger than they are, and to be wielded by more numerous and more powerful muscles. The forefinger has the greatest range of independent movement. Hence it is used to point with, and is called the 'Index' or 'Indicator' finger."

THE RING FINGER.

The ring finger has less independent movement than either of the others. It can not be bent or straightened much without being accompanied by one or both of those next to it. This is partly because the extensor tendon is connected, by means of a band of fibers, with the tendon on either side. You may discern these connecting bands working up and down under the skin of the back of the hand when you move the fingers to and fro. They are represented in fig. 395. The ring finger is therefore always more or less protected by the other fingers; and it owes to this circumstance a comparative immunity from injury, as well, probably, as the privilege of being especially selected to bear the ring in marriage. The left hand is chosen for a similar reason; a ring placed upon it being less likely to be damaged than it would be upon the right hand.

THE NAILS.

The nails are extensions of the cuticle or false skin. They are formed of compressed scales or plates matted together and are continually being shed or rubbed off on the outside and

supplied on the inside from the layer below, called *rete mucosum*.

“Thus the addition from the rete—in other words, the growth of the nail—takes place at the hinder edge and at the under surface. In consequence of the addition from *behind*, the nail is increased in length and is pushed forward; and as it advances forward, it receives accessions from *beneath*, which increase in thickness and strength. Unless they be cut, or worn down, the nails grow to an indefinite length; and when they extend beyond the tips of the fingers, their edges are bent in toward each other, and they become curved like claws. This tendency to a convex form is shown also if the nail be not properly supported by the pulps of the fingers. For instance, when persons become emaciated, the pulps of the fingers usually participate in the general wasting, and the nails become curved. Hence this shape of the nails has been regarded as an indication of consumption. You will understand, however, from what I have said, that it is not really a symptom of any one particular disease. It simply indicates that, from some cause or other, the nutrition of the body is not properly maintained.

“The Dervishes in some parts of Asia allow the thumb-nail to grow long, and then pare it to a point, so as to be able to write with it. Dr. Wolff, the Eastern traveler, has told me that he has repeatedly seen this done, and that he has in his possession manuscripts written in this way.”

WHY ARE WE RIGHT-HANDED?

This is a question to which no perfectly satisfactory answer has yet been given. The anatomist finds no reason in its structure for the preference usually given to the right hand. There is, it is true, a slight difference discernible in the disposition within the chest between the blood-vessels which supply the right arm and those which supply the left. This is quite insufficient, however, to account for the disparity between the two limbs; besides, the same disposition of the blood-vessels exists in left-handed persons as in others.

Is the superiority of the right hand real and natural—that

is, congenital? or is it merely acquired? We are inclined to the latter opinion, because all men are not right-handed, some being left-handed, and some ambidextrous or both-handed; and in all persons the left hand may be trained to as great expertness and strength as the right.* But though the superiority is acquired, there may be a natural tendency to acquire this superiority, though we are able to find no cause for it.

PHYSIOGNOMY OF THE HAND.

The hand can not be offered as a complete substitute for either the head or the face in the determination of character, but it is a ready aid in the study of those more important parts. A man does not think, reason, and invent because he has hands; but his hands are the necessary result of an organization calculated to think, reason, and invent. The hand is a most admirable piece of work, and most admirably adjusted to the other parts of the limb and to the body; but without the sovereign mind, whose subject and servant it is, it would be useless. It is mind that makes man the lord of creation.

Further, we can not fail to recognize and admire the adaptation of the hand to the mind at all ages, and under various circumstances; in its weakness and suppleness, and in its purposeless and playful movements in infancy and childhood; in its gradually increasing strength and steadiness as the intellect ripens; in the stiffness and shakiness of declining years; in the iron grasp of the artisan; in the light, delicate touch of the lady; in the twirlings, fumbings, and contortions of the idiot; in the stealthy movements of the thief; in the tremulousness of the drunkard; in the open-handedness of the liberal man; and in the close-fistedness of the niggard.

Thus the hand becomes the organ of expression and an index of character. What would not the nervous young gen-

* In the tribe of Benjamin "there were seven hundred chosen men left-handed; every one could sling stones at a hair breadth, and not miss."—*Judges* xx. 16. When David was at Ziklag, there came to him a company of men who "were armed with bows, and could use both the right hand and the left in hurling stones and shooting arrows out of a bow."—1 *Chronicles* xii. 2.

tleman in a morning call give to be quit of these tale-telling members? or what would he do without a hat or a stick to amuse them?

How effective an auxiliary to the orator is a wave of the hand, or even the movement of a finger! Some men, indeed, seem to owe the efficiency of their declamation as much to the hand as the tongue.

HANDS CLASSIFIED.

We have shown in a previous chapter that the various forms of head and body may be naturally arranged in three grand classes, depending upon the predominance in each of one of the three systems of organs composing the physical man—

1. The Motive or Mechanical System;
2. The Vital or Nutritive System; and
3. The Mental or Nervous System;

and that to the first of these belongs the oblong face and the tall bony figure; to the second, the round face and plump body; and to the third, the conical or pyriform face and the slight elegant person.

Now it is a general law governing the human form, in common with the whole animal creation, as also shown in another place, that each part corresponds with every other part and with the whole. It follows that hands are subject to the same classification as heads and faces. Accordingly we have—

1. The Long Bony Hand;
2. The Short Fleshy Hand; and
3. The Small Slender Hand;

with the sub-classes formed by the various combinations of these grand classes with each other.

THE LONG HAND—ACTIVITY.

The first of these (fig. 396) is connected with the predominance of the osseous and muscular systems, the motive temperament, the oblong face, and the tall body, and indicates the physical and mental traits attributed to these conditions in the previous chapter already referred to. Julius Cæsar,

Cromwell, Lord Brougham, Andrew Jackson, and Patrick Henry had hands of this form.

The long hand has a powerful grasp; is adapted to work, and shows a love for it; is distinguished for strength rather than for delicacy; strikes hard blows; is not afraid of getting hurt, and has no very tender scruples about hurting others, if occasion require.



Fig. 396.—THE LONG HAND.

If it give you the clasp of friendship or of love, you may depend upon it to make good to the utmost any promise that clasp implies. If it be lifted in menace, beware! It is true in its affections, terrible in its enmity. Whatever its purpose, whether of love or of hate—whether a caress or a blow—it is not easily turned aside. It is generally better fitted to wield the sword than the pen or pencil; but if it write, it will be in a strong, compact, nervous style; and if it can constrain its action within the limits of one of the fine arts, its pictures, statues, or music will have boldness and originality rather than delicacy and beauty of finish. The long hand is the hand of *Action* and of *Power*.

THE THICK HAND—VIVACITY.

The short, thick, or plump hand (fig. 397) contrasts strongly with the foregoing. It is distinguished for breadth and fullness rather than length. The



Fig. 397.—THE THICK HAND.

The palm is round and soft, the fingers plump and tapering, the veins, arteries, and tendons invisible, and the whole thick and heavy. It is found connected with a corresponding configuration of the other parts of the body—with the round face, the stout trunk, and the plump, tapering limbs. It indicates the vital temperament and the mental organization associated therewith. Its grasp is soft, warm, and hearty, but it

does not always mean so much as the grasp of the long hand. You can not, in all cases, quite so surely trust in the friendship or the love which it seems to betoken. It is lavish of caresses; affects play rather than hard work; loves its ease too well to be fond of giving deadly blows; and is readily turned aside from its aims, especially where turning aside is easier than persistency in its straightforward course. Macaulay, Irving, Wirt, and Browning furnish examples of this kind of hand.

It is better adapted to hold the pen than the sword, and may write with great fervor and brilliancy, but its style will not often be characterized by either great strength or great originality. The short thick hand is the hand of *Vivacity* and *Versatility*.

THE SMALL SLENDER HAND—DELICACY.

This hand (fig. 398) accompanies and indicates the predominance of the nervous system and the mental temperament, and is found conjoined with the conical or pyriform face, the expressive features, and the slight and often graceful form



FIG. 398.—THE SLENDER HAND.

properly attributed to that constitutional condition. Dr. O. W. Holmes has a hand of this sort, as had Joseph C. Neal, Mrs. Hemans, Mrs. Osgood, and the greater number of poets, artists, and literary persons.

This hand is not adapted to heavy labor, but can handle the light tools of the finer mechanic arts with great delicacy of touch and extraordinary skill. In its typical development it is particularly adapted to the pen and pencil. It is the *literary*, and especially the *poetic* and the *artistic* hand; and as it approximates in form to one or the other of the foregoing classes, so will the character of its productions be modified. It has a friendly grasp for a *few*, and a tender loving clasp for *one*. It is somewhat exclusive and aristocratic, and, if possible, avoids getting soiled.

HAND AND HEART.

The temperature of the human hand differs greatly in different individuals, and in the same individual at different times; but its indications are physiological and pathological rather than physiognomical—warmth denoting full vitality and a strong, equalized circulation, and coldness, the reverse. The popular notion that cold hands go with a warm heart is partly correct in a very material or physical sense, since the coldness of the extremities is often an indication of a congestion of the blood (and consequent heat) in some internal organ, oftener the brain, however, than the heart. Hence, where we find the hands and feet habitually cold, we find the head as habitually hot, which indicates imperfect circulation.

THE FOOT.

The human foot, though not enjoying so exalted a position as the hand, is still well worthy of our attention in connection therewith. It furnishes the firm but elastic basis on which the whole grand superstructure of the body securely rests, and presents a structure as wonderful and an adaptation as complete as any other member, as a brief description of its anatomy will demonstrate.

BONES OF THE FOOT.

“There are twenty-six bones in the foot. The hinder seven—called *tarsal* bones—are short and thick; they form the hinder part of the instep. In front of them lie five *meta-tarsal* bones, one passing forward from the fore part of the tarsus to each toe. Behind, these are close together, and are connected with the tarsus. As they run forward they diverge a little from one

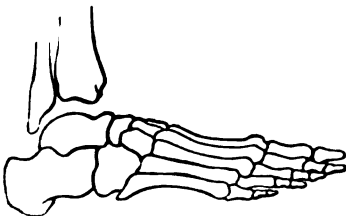


Fig. 399.—BONES OF THE FOOT.

another; and their anterior ends rest upon the ground, and form the ‘balls’ of the toes. They constitute the fore part of the instep. The remaining fourteen bones are the toes. They

are arranged in rows, like soldiers in a phalanx, three feet deep, and are hence called *phalanges*.

"You observe that, although each of the other toes has three bones, the great toe has only two. In this respect, therefore, it is an imperfect, or, rather, an incomplete member. The deficiency does not depend upon a want of length in the great toe, for this is usually as long as the second toe; in some persons it is a good deal longer, and it is always distinctly longer than the outer toes. The reason for their being only two phalanges instead of three, probably is because the great toe is required to be stronger than any of the others, and an additional bone would have tended to weaken it.

"Of the seven tarsal bones the uppermost (fig. 399) is called the *astragalus*, from a supposed resemblance to a die. It is the middle bone of the instep. Above, it is jointed with the leg-bones; behind, it is connected with, and rests upon, the *heel-bone*, which is the largest bone in the foot. The bone which lies immediately in front of the astragalus, and supports it in this direction, is called the *scaphoid*, or boat-like bone. In front of it are three *wedge-bones*, each of which is connected with one of the metatarsal bones of the inner three toes. On the outer side of the wedge-bones, connected with the metatarsals of the two small toes, locked in between them and the heel-bone, is the *cuboid* bone."

THE ARCH OF THE FOOT.

"The seven tarsal and the five metatarsal bones—that is,

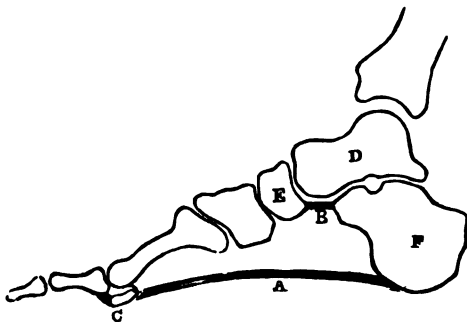


Fig. 400.—THE PLANTAR ARCH.

the twelve bones of the instep—are arranged and jointed together so as to form an arch from the point of the heel to the balls of the toes. This is called the 'plantar arch,' from the

Latin word *planta*, the sole of the foot. The *astragalus* forms the summit, or key-bone, of the arch. It receives the weight from the leg, and transmits it through the hinder pillar of the arch to the heel, and through the front pillar of the arch to the balls of the toes.

“You perceive from the drawing (fig. 400) that there is a great difference between the two pillars of the plantar arch. The hinder pillar is comparatively short and narrow, and descends suddenly, almost in a vertical direction, from the ankle to the ground; and it is composed of only one bone, the heel-bone, which is jointed directly with the astragalus; whereas the fore pillar is longer and broader, is composed of several bones jointed together, and slopes much more gradually to the ground. There is, therefore, far less elasticity in the hinder part of the foot than in the fore part. Hence, when we descend from a height upon the ground, we always alight upon the balls of the toes, and thus gain the advantage which the several bones and joints afford in breaking the shock. If, after going up stairs this evening, you take the trouble to come down again, you will find that you alight upon each stair on the balls of the toes and experience no inconvenience, however quickly the descent is made. But if you change the mode of proceeding, and descend upon the heels, the feeling will be by no means agreeable; and the various organs of the body, being disturbed from their accustomed repose, will raise such remonstrances against your infringement upon nature's ways, that you will scarcely be able to continue the experiment.”

LIGAMENTS OF THE FOOT.

“It is chiefly by means of strong ligaments, or sinewy bands, passing from bone to bone, that the shape of the plantar arch is maintained, and the movements of the bones upon one another are regulated and limited. These ligaments are numerous, but we will mention only two.

“First, the *Plantar Ligament* (A, fig. 400), of great strength, passes from the under surface of the heel-bone, near its extremity, forward, to the ends of the metatarsal bones; in other words, it extends between the lowest points of the two pillars

of the arch, girding or holding them in their places, and preventing their being thrust asunder when pressure is made upon the key-bone (D), just as the 'tie-beam' of a roof resists the tendency to outward yielding of the sides when weight is laid upon the summit. The ligament, however, has an advantage which no tie-beam can ever possess, inasmuch as numerous muscular fibers are attached along the hinder part of its upper surface. These instantly respond to any demand that is made upon them, being thrown into contraction directly the foot touches the ground, and the force of their contraction is proportionate to the degree of pressure which is made upon the foot. Thus they add a living, self-acting, self-regulating power to the passive resistance of the ligament. In addition to its office of binding the bones in their places, the ligament serves the further purpose of protecting from pressure the tender structures—the blood-vessels, nerves, and muscles—that lie above it, in the hollow of the foot, under the shelter of the plantar arch.

"Another very strong ligament (B in the wood-cut) passes from the under and fore part of the heel-bone (F) to the under part of the scaphoid bone (E). It underlies and supports the round head of the astragalus, and has to bear a great deal of the weight which is transmitted to that bone from the leg. It does not derive the same assistance from a close connection with muscular fibers as the ligament just described; but it possesses a quality which that and most other ligaments do not have, viz., elasticity. This is very important, for it allows the head of the key-bone (D) to descend a little, when pressure is made upon it, and forces it up again when the pressure is removed, and so gives very material assistance to the other provisions for preventing jars and for giving ease and elasticity to the step."

MUSCLES OF THE FOOT AND LEG.

"The movements of the three joints between the foot and the leg take place in harmony. The following is the order observed. The raising of the *heel* is accompanied by a rolling of the foot *inward*, and by an increased *flexure* of the plantar

arch; and the raising of the *toes* is accompanied by a rolling of the foot *outward* and a *straightening* of the sole.

“The *first* series of the movements just described is effected, mainly, by three muscles. Of these, one (A, fig. 401) raises the heel, while the other two (B, fig. 401, and c, fig. 402) raise and support the ankle. The muscle which acts upon the heel is one of the largest and most powerful in the body, and well it may be, for in raising the heel it has to raise the whole weight of the body. Its fibers, accumulated at the middle and upper part

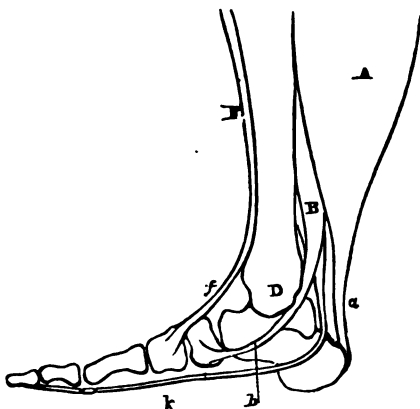


Fig. 401.—THE PRINCIPAL MUSCLES.

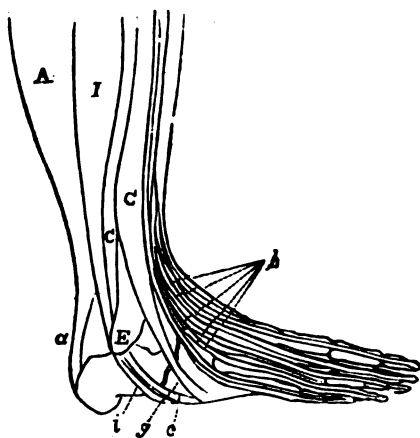


Fig. 402.—MUSCLES OF THE FOOT.

of the leg, form the ‘calf;’ below, they taper into a thick tendon (a) connected with the hinder extremity of the heel-bone, and called the *Tendo Achilles*. The name, it need scarcely be said, refers to the tale of Thetis holding her son Achilles by this part when she dipped him in the river Styx. Her hand prevented the part from coming in contact with

the water, and so it did not partake of the invulnerability which was conferred upon the rest of his body by the immer-

sion. We read, accordingly, he was finally killed by a wound in the heel.*

The other two muscles (b and c) also descend from the leg and terminate in tendons (b and c) which pass, one on either side, behind the projections (d and e) which we call respectively the inner and outer ankle, to the inner and outer edges of the instep. They assist to raise the ankle, and support it so as to prevent its swerving from side to side; and they permit it to play to and fro upon them, like a pulley upon ropes running under it, in a safe and easy manner. The inner (b, fig. 401) of the two tendons passes, as before mentioned, beneath the head of the key-bone, and adds greatly to the strength of the arch. It is, moreover, the chief agent in effecting the two movements which are associated with the elevation of the heel, viz., the turning of the sole inward and the flexion of the foot.

"The *second* series of movements—the raising the toes, the turning the sole downward, and the straightening the foot, is effected by two muscles (f, fig. 401, and g, fig. 402), the tendons (f and g) of which pass, one in front of the inner ankle, and the other in front of the outer ankle, to the respec-

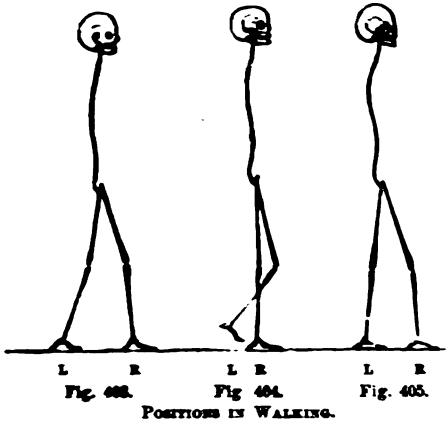
* It does not appear that the legend is based upon any peculiar ideas of susceptibility attached to the heel among Eastern nations; nor can the passages in Scripture, that the serpent shall bruise man's heel (Genesis iii. 15); "For the greatness of thine iniquity are thy heels made bare" (Jeremiah xiii. 22), be adduced as indicating the existence of such an idea. There are some other myths resembling this one of Achilles; but in them a different part of the body missed the protecting influence. Thus, Ajax was wrapped by Hercules in the skin of the Nemean lion, and was thereby rendered invulnerable, except at the pit of the stomach where the edges of the skin did not quite meet, and he killed himself by running his sword in there. In the *Nibelungenlied*, the hero, Siegfried, is represented to have rendered himself invulnerable by smearing himself with the blood of a dragon which he had killed. A leaf, however, adhering to his back, prevented the contact of the fluid with one spot. The secret was unwarily communicated by his wife Krimhild to his enemy Hagan, who took advantage of the information to plunge his sword into the fatal spot while Siegfried was stooping down to drink at a rivulet.

The lessons inculcated by these myths seem to be, that all men, even heroes, have their weak points.

tive edges of the instep. These require much less power than their opponents, and the muscles on the front of the leg are, therefore, smaller and weaker than those behind."

WALKING.

"Let us next consider the part which the foot performs in walking. To understand this it is necessary to consider its positions and movements in the several stages of a step. When first placed upon the ground, the foot (R, fig. 403) is a little



in advance of the body, and the heel comes first (fig. 406) into contact with the ground. The toes quickly follow, and the body then passes vertically over the ankle and the key-bone of the instep. The foot (R, fig. 404, and fig. 407) now rests steadily upon the heel and the balls

of the toes; the other foot (L) leaves the ground, so that the whole weight is borne by one foot, and the plantar arch of that foot expands a little, so as to cause a slight lengthening of the foot under the weight that is laid upon it. Much yielding of the arch is, however, prevented by the ligaments that brace the arch (fig. 400), and by the muscles that are disposed beneath it. Next, the heel (fig. 408) is raised by the action of the calf muscle, and the weight of the body is thrown forward over the balls of the toes, while the other foot (L, fig. 405) is carried onward, and is placed upon the ground ready to receive the weight and commence its carrying work. When



this has been done, the foot is withdrawn from the ground, and in the withdrawal, a final impulse onward is given, so as to throw the weight of the body fairly over to the other foot. The fore part of the foot is then raised, and the knee is bent a little. By these means the toes are kept clear of the ground, while the foot is swung forward, beside the other, so as to be ready again to rest upon the ground and bear the weight of the body.

“In each complete step, therefore, there is a period during which the foot rests upon the ground, and a period in which it is swinging in the air. In walking, the former period is considerably longer than the latter; and at the commencement and at the end of that period (figs. 403 and 405) the other foot is also upon the ground, so that it is only during the middle of the time (fig. 404) in which the foot rests upon the ground that it has to bear the whole weight of the body.”*

FORMS OF THE FEET.

In form, the feet follow the same law as the hands—so far as our tight, ill-formed boots and shoes will permit—are subject to the same classification, and have the same indications.

Small hands and feet are sometimes said to indicate “gentle blood” or an aristocratic lineage. It is true that labor has a tendency to increase the size of the hands, and going barefoot allows the feet to spread, so that the laboring classes—all manual workers—have, for good physiological reasons, larger hands and, in certain cases, feet also, than the idle rich, be they nobly or ignobly born; but the *large* hands, instead of the small, are often the sign of the true nobility—the aristocracy of *usefulness*.

* The Human Foot and the Human Hand, by G. M. Humphrey, M.D., F.R.S. Cambridge, England, 1881.



XIX.

SIGNS OF CHARACTER IN ACTION.

"Suit the action to the word, and the word to the action."—SHAKESPEARE.



Fig. 409.—RALPH WALDO EMERSON.

EACH faculty, sentiment, and propensity of the human mind has its natural language—is capable of being translated into action, the most expressive dialect known to man, and the one most readily and universally understood. It is proverbial that "actions speak louder than words." If the two disagree, the words go to the wall. Emerson says, "The visible carriage or action of the individual, as resulting from his organization and his will combined,

we call manners. What are they but thought entering the hands and feet and controlling the movements of the body, the speech, and the behavior?"

SHAKING HANDS.

There is a significance in the different modes of shaking hands, which indicates, so far as a single act can do, the

SIGNS OF CHARACTER IN ACTION.

~~character~~ of the person. The reader who has observed may recall the ~~various~~ ^{various} of different persons with whom he has shaken hands, and thus note how characteristic was this simple act.

How much do we learn of a man or a woman by the shake of the hand? Who would expect to get a handsome donation or a donation at all—from one who puts out two fingers to be shaken, and keeps the others bent, as upon an “itching thumb”? (Fig. 414.) The hand coldly held out to be shaken, and drawn away again as soon as it decently may be, indicates cold, if not a selfish and heartless character; while the hand which seeks yours and unwillingly relinquishes its warm, hearty clasp, belongs to a person with a genial disposition and ready sympathy with his fellow-men.

In a momentary squeeze of the hand how much of the heart often oozes through the fingers! Who, that ever experienced it, has ever forgotten the feeling conveyed by the eloquent pressure of the hand of a dying friend, when the tongue has ceased to speak.

A right hearty grasp of the hand (fig. 410) indicates warmth, ardor, executiveness, and strength of character; while a soft, lax touch, without the grasp (fig. 411), indicates the opposite characteristics. In the grasp of persons with large-hearted, generous minds, there is a kind of “whole soul” expression, most refreshing and acceptable to kindred spirits.

But when Miss Weakness presents you with a few cold, clammy, lifeless fingers (fig. 413) for *you* to shake, you will naturally think of a hospital, a cemetery, or the tomb. There are persons who think it pretty to have soft, wet, cold hands, when the fact is, it is

an evidence that they are sick; or that, inasmuch as the circulation of the blood is partial and feeble, they are not well; and unless they bring about a change, and induce warm hands by the necessary bodily exercises, they are on their way to the grave—cold hands, cold feet, and a hot head—indications of anything but health.



Fig. 410.



Fig. 411.

Action is life; inaction is death. Life, in the human body, is warm. Death is cold. Vigorous bodily action causes the blood to circulate throughout every part of the body. The want of action causes it, so to speak, to stand still. The blood goes most freely to those parts of the body or brain most exercised. If we swing the sledge-hammer, like the blacksmith, or climb the ropes, like the sailor, we get large and strong arms and hands. If we row a boat or swing a scythe, it is the same. But if we use the brain chiefly to the exclusion of the muscles, we may have more active minds but weaker bodies. The



Fig. 412.



Fig. 413.

better condition in which the entire being—body and brain—is symmetrically developed, requires the harmonious exercise of all the parts, in which case there will be a happy equilibrium, with no excess, no deficiency—no hot headache, no cold feet. Headache is usually caused by a foul stomach, or a pressure of blood on the brain; cold feet by a limited circulation of blood in those extremities.

There is an old adage which says: "Keep the feet warm and the head cool," which was, no doubt, intended to counteract a tendency the other way. Certain it is that those who suffer with hot heads usually have cold feet and hands.



Fig. 414.



Fig. 415.

Time was, in the old country, when aristocracy deigned to extend a single finger, or at most, two, to be shaken by humble democracy. Even now we hear of instances in which "my noble lady" repeats the offense when saluted by a more humble individual. This is an indignity which no true man or woman will either offer or receive. Refinement and true gentility give the whole hand (fig. 415), and respond cordially, if at all. This is equivalent to saying, "You are welcome;" or, when parting, "Adieu! God be with you."

There is a habit, among a rude class, growing out of an over-ardent temperament on the part of those who are more strong and vigorous than delicate or refined, who give your hand a crushing grasp, which is often most painful. In these cases there may be great kindness and "strong" affection, but it is as crude as it is hearty.

Another gives you a cold flabby hand, with no energy or warmth in it, and you feel chilled or repelled by the negative influence imparted, and you are expected to shake the inanimate appendage of a spiritless body.

Is the grasp warm, ardent, and vigorous? so is the disposition. Is it cool, formal, and without emotion? so is the character. Is it magnetic, electrical, and animating? the disposition is the same. As we shake hands, so we feel, and so we are. Much of our true character is revealed in shaking hands.

WHY DO WE SHAKE HANDS?

But why do we shake hands at all? It is a very old-fashioned way of indicating friendship. We read in the Book of books that Jehu said to Jehonadab: "Is thy heart right as my heart is with thine heart? If it be, give me thine hand." And it is not merely an old-fashioned custom. It is a *natural* one as well. It is the contact of sensitive and magnetic surfaces through which there is, in something more than merely a figurative sense, an interchange of feeling. The same principle is illustrated in another of our modes of greeting. When we wish to reciprocate the warmer feelings, we are not content with the contact of the hands—we bring the lips into service. A shake of the hands suffices for friendship, among undemonstrative Anglo-Saxons at least, but a kiss is a token of a more tender affection.

CHARACTER IN THE WALK.

In the walk of a tall, healthy, well-built, perpendicular man (fig. 416), both dignity and firmness may be seen. He rejoices in the consciousness of his "inalienable right to life, liberty, and the pursuit of happiness." He will never die with consumption, for the very good reason that he stands

erect—with chest well forward, and shoulders well thrown back. He breathes freely, lives temperately; his circulation and digestion are perfect, and all the functions of body and brain go on in harmony. Healthy, hearty, joyous, and happy, he is at peace with himself and all mankind. He makes a very dignified bow to you; is free from diffidence or embarrassment, even in the presence of the nobility or of royalty itself.



Fig. 416.

In the walk of one who assumes a stooping posture and has a narrow chest and contracted shoulders (fig. 417), we shall find a



Fig. 417.

character wanting in Self-Esteem, but probably possessing largely developed Benevolence, Veneration, and Cautiousness. He is accustomed to make low bows, remaining a long time in a bent posture, and the words, "Your very humble servant, sir," furnish the key-note of his character. He feels unworthy; frequently "begs pardon;" gets out of everybody's way; though intelligent is unappreciated; and though liberally educated for a learned profession, he has not sufficient confidence in himself to enter upon its practice. He pronounces life a failure. His walk will be timid, irresolute, uncertain, and his step comparatively light.



Fig. 418.

A burly person (fig. 418), with large Destructiveness, Combativeness, Self-Esteem, and moderate Cautiousness, on the contrary, will "go ahead," with a "Get out of the way there! don't you see I'm coming?" And if Firmness be also large, he will step somewhat heavily upon the heel. This is a ponderous, blustering, locomotive nature, that enjoys the luxuries of the table, and provides liberally for himself—frequently quoting the old adage, that "Self-preservation is the first law of nature"—and

acting accordingly. He "bears the market," shaves notes, lends money on the *best* securities—where he can double it, or on bonds and mortgages—and "forecloses" when he can. He is a good judge of roast beef, plum pudding, brown stout, porter, and lager beer; keeps all things snug; sails closely reefed; looks out for squalls and storms, and prophesies "hard times." He is opposed to innovations or internal improvements; don't believe in reforms, and regards it a loss of time and money to educate children beyond "reading, writing, and ciphering." He is exclusively a man of facts, and of the world. His heaven is situated directly under his jacket. He struts, swells, eats, drinks, sleeps, and—looks out for "number one." His walk is more ponderous than light, coming down solid and strong on his heel. When shaking hands he permits *you*, as a special privilege, to do the shaking.

The exquisite (fig. 419) dresses in the height of the fashion; studies the "attitudes" of the ball-room and the stage; repeats lines of poetry—the signification of which he does not comprehend—and "speaks pieces" learned from the young man's book of oratory. He is acquainted with all the "smart" or



Fig. 419.

clever fellows who frequent the play-houses, the saloons, and the races. He has learned the popular games; drinks and smokes at the expense of others; and talks of his "girl," although he is as inconstant as the wind. His brain is small; his mind narrow; his features pinched up; and the whole miserably mean and contracted. Who marries him will get more froth than substance. His walk is simply Miss-Nancyish, and so affected as to be without any distinctive character.



Fig. 420.

Impudence is clearly stamped on fig. 420. He has the *form* of a man, but the mind of a dandy. He can gabble a few words of French, German, and Italian, picked up in barber shops; puts on foreign airs, talks large, and boasts of

"the noble deeds he has done." When introduced, he makes half a bow to you, forward, and a bow and a half to himself, backward. He steps something as a turkey might be supposed to do when walking over hot cinders. He is a bundle of egotism, vanity, deceit, and pride; vulgar, pompous, and bad. He will not work, but lives by his wits and his tricks. There is neither dignity, integrity, humility, gratitude, affection, or devotion here.

If Approbativeness be especially large, with moderate Self-Esteem, there will be a canting to the right and to the left, with a sort of teetering, tiptoe step. The hat will be set upon one side, and, perhaps, the thumbs stuck into the arm-holes of the vest, displaying the jewelry of the fingers, and the accompanying expression will seem to say, "Am I not pretty?" An excess of Approbativeness begets egotism and a love for notoriety, and, in the absence of Self-Esteem, the possessor becomes a clown, exhibits himself on all occasions, "puts on airs," "shows off," and attracts attention to himself by odd speeches and singular remarks. And if there be a want of deference and respect, growing out of moderate or small Veneration, then there will be extravagant language, including profanity, vulgarity, and obscenity.



Fig. 421.

A person with a straightforward, honest, but uneducated mind (fig. 421) will walk in a straightforward manner, turning neither to the right nor the left; but if there be considerable executiveness, the gait will be heavy and



Fig. 422.

more strong than delicate; but if educated and refined, the person will acquire a more refined step, characterized by regularity and time.

A secretive and cunning person will have a stealthy walk, like that of the fox, and though his body may weigh two hundred pounds, his step will be light rather than heavy, and somewhat like that of the Indian (fig. 422), whose feet encased in the buckskin moccasins fall noiselessly upon the ground. He can "play possum," work in the dark, mislead and deceive. It is only by superior intelligence that his thoughts and purposes can be discovered. He steps light, walks on his *toes*, and his motto is—

"Mum, then, and no more proceed."—SHAKESPEARE.

The untrained, blunt, coarse bog-trotter (fig. 423) walks heavily upon his heels in parlor, church, or kitchen, his gait being more like that of a horse on a bridge than like that of the cultivated gentleman. The slow, heavy tramp of the iron-shod "hedger and ditcher" is in keeping with the "don't-care" spirit of the lower ten thousand, be they white or black. When they dance, it may well be called a "jig," or a "break-down." The walk is a hobble, a shuffle, and a sort of "get along." The humble man has a humble



Fig. 423.

walk; the dignified man, a dignified walk; the vain man, a vain walk; the hopeful man, a light, buoyant, hopeful walk; the desponding, hopeless man, a dragging, hopeless step, as though he were going to prison rather than to his duty; the executive man, an executive walk, and the lazy, slothful man, a walk corresponding with his real character.



Fig. 424.

Where there is little executive-ness, propelling power, and small aspiring organs, there will be a slovenly, slouchy step, with one foot dragging lazily after the other (fig. 424). No energy, enterprise, or ambition here, and the person appears like one between "dead and alive," a sort of "froze and thawed" substance, good for nothing. He complains, grunts, whines, finds fault, and doses himself with various quack medicines—for

imaginary ills; he has no friends, never married, and regards his birth a misfortune, in which those who know him fully agree.

Would you know the character of a man by his walk? Fall upon his trail, observe his motions when yourself unobserved; take on his manner and step, and by following him a short distance, you will feel as he feels, and soon become *en rapport* with him. If he put on airs and attempt to show off in the character of a "swell," you will do the same, and for the moment lose your own individuality or identity, and be swallowed up by him; but your second thought will make you heartily disgusted with this false or assumed character, and you will then return to yourself. If he be noble, manly, generous, and dignified, you will take on the same spirit by imitating his walk. If he be a rogue, fleeing from justice, and you closely watch his movements, you will soon get into the same spirit, and feel like the wicked who "flees when no man pursueth." If, on the contrary you are seeking the rogue for the purpose of dealing out justice to him, being actuated by a different motive, your walk will be different. But inasmuch as "it takes a rogue to catch a rogue," or rather, we should say, one who appreciates the language of Secretiveness and understands setting traps, the pursuer may, to a certain extent, exhibit the same general traits in his manner and his walk that are exhibited by the rogue himself.



A thoughtful man has a walk corresponding with this characteristic, while a thoughtless one, a mere looker (fig. 425) instead of thinker, walks in a "sauntering" gait, and carries his head accordingly; the one with his head somewhat bowed forward, the other with his forehead lifted up, his perceptive faculties projecting, as though he were hunting curiosities. The "inquiring mind" of this young man (fig. 425) is apparent in his sauntering, irregular gait; and he has the expression of one recently from the "rural districts." He is evidently in the pursuit of knowledge, and sacrifices manners to gratify the desire

to see, and is suggestive of the question, "Do you see anything green?" His walk is an indefinite hobble, shuffle, or draggles, and is as aimless and meaningless as the vacant stare with which he views all things.

Mr. Cautious Timidity (fig. 426) is afraid he may step on eggs, fall into a ditch, or stumble over a rail.



Fig. 426.

He is a natural caretaker; fussy, particular, and would "trot all day in a peck measure." He gets a living by "saving" what others would waste. His walk is mincing, undecided, gentle, and "gingerly," and so is his character.



Fig. 427.

Mr. Jeremy Jehew (fig. 427) is "always in a hurry," no matter whether he has anything to do or not. When he walks, he "walks all over;" and when he sits, he spreads himself, with one foot here and the other yonder, or doubled up like a jack-knife, which opens and shuts with a snap. He has no time to think, but only to "look;" and always walks in an attitude as though he were facing a regular northeaster, with steam all on.

Observe the walk of children; one is sprightly, nimble, and quick on foot; another is bungling and clumsy, runs against the tables and the chairs, and often stumbles. The character is as different as the walk.

THE WALK OF ANIMALS.

Short men, like ponies or small-wheeled vehicles, go trundling along without any special indication of character, while a body of men who are marked with a build for speed or power exhibit it in their step. What are the peculiarities of a man's walk? Is his step quick and easy, or is it slow and heavy? Is it vigorous and strong, or is it weak and vacillating? Is it firm and fixed, or is it faltering and uncertain? Is

it soft and sly, or is it distinct and emphatic? Is it foxy or cat-like, or is it open and free? As is the walk, so is the character.

The same laws govern the walk of animals. Take two horses for example; the one is a heavy draft-horse, and moves off slowly and heavily; the other is a nimble race-horse, and he steps as though hung on elliptic springs, and seems rather to fly than to walk. So of dogs. The heavy bull-dog hugs the ground and holds on, while the delicately constructed greyhound, so lithe of limb, leaps twice his length at a single bound. So of the character of each. The one is broad-headed and heavily built, with power to hold on; the other is built for speed rather than for strength.

THE VOICE—ITS PHYSIOLOGY.

The principal organ of the voice is the larynx, a complicated apparatus of cartilages, muscles, and ligaments which it would be difficult to describe so as to be understood by the reader unlearned in anatomy, but which may be compared to a reed instrument; the vocal ligaments (two narrow bands of yellow, highly elastic tissue) answering to the vibrating metallic slip called the reed; the sides of the larynx, with their projecting pouches, serving to swell the volume or alter the tone; while the epiglottis, by its opening and closing, performs its part in admitting or checking expiration; and the numerous muscles, by varying the positions of the different parts, provide for a variety of notes far greater than any human mechanism has been able to produce by a contrivance so simple.

The immediate cause of the sound called voice is the vibration of the vocal ligaments, produced by the forcible expiration of the air from the bronchial tubes and trachea, the ligaments having been first rendered more or less tense by the action of the proper muscles. In the low notes the ligaments are lax, and are only rendered tense by the pressure of the air. In the high notes, on the contrary, the muscles are called into full action and the ligaments rendered exceedingly tense. The vocal ligaments in man are longer than those in woman in the proportion of three to two, and from the greater vibrations

consequent upon this, his voice is deeper and heavier, though capable of sounding the highest notes also.

Male voices are classed according to the vibratory power of the vocal chords, as bass, baritone, or tenor, the last being the highest, and dependent upon the inferior length of the vocal chords. Female voices, in a like manner, are classed as contralto and mezzo-soprano. The ordinary compass of the voice in singing is about two octaves; but some eminent singers have been able to extend it to three octaves, or even more. In speaking, the range of the voice is much less, one and a half octaves being the utmost limit with good speakers.

The nasal cavities and the frontal and maxillary sinuses (A and B, fig. 164, p. 144) are also concerned in the voice, and without their full development there can be no strong, deep, heavy, masculine voice. It is for this reason that the voice changes at puberty, at which time these cavities expand, giving prominence to the brows, the nose, and the upper jaw, and the manly form to the face. In the female, the expansion at this period is much less, and the change in the voice correspondingly small.

It is interesting to notice in both boys and birds the peculiar inflections of the voice, when changing from boyhood to manhood, and from the gosling to the goose; but that which interests us most is the indication of character manifested in the voice.

DIFFERENCES IN THE VOICE.

Each class of musical instruments and each individual instrument, be it violin, organ, piano, harp, flute, fife, or drum, has a "tone" peculiar to itself; so it is with every bell in every church steeple, and every whistle on every locomotive, factory, and steamer. One accustomed to the peculiar voice of a particular bell or whistle can detect it in an instant, and state at once to what it belongs—to what church, steamer, or locomotive. The hearer becomes accustomed to different voices or sounds, and knows how to locate and identify them. It is the same with each and every animal. Every lamb knows the voice of its mother, and every sheep knows the voice of

her lamb—though it may be gamboling among hundreds of others. Could not the human mother, who has once heard the cry of her babe, distinguish it from any other? The same rule holds good when applied to all voices, and to all sounds made by the same instrument.

THE VOICE AND CHARACTER.

The voice corresponds precisely with the character of the instrument by which it is made—be it the cooing of a dove, the roaring of the lion, the growl of the tiger, the bellowing of the ox, the bleat of the sheep, the crowing of the cock, the grunt of the pig, the neighing of the horse, or the braying of an ass—each has a voice according to his character.

The voice of civilized man is one thing, that of the savage quite another. The intonations of the one, modified by cultivation and refinement, are very different from that of the other, unmodulated by this cultivation. The savage has a coarse, indistinct guttural voice; while that of the cultivated man is more sonorous and musical. So among the high and the low of the civilized races. For example, notice the voices of two Irishmen; the one educated and refined speaks on a low or modulated key, regulating all his intonations, suiting each thought and emotion with a proper word suitably expressed. He also regulates his temper as well as his voice. The other speaks on a high key, at the top of his voice, without modification or regulation, and flies into a passion on the slightest occasion.

By cultivation, the one has brought the propensities into subjection to the intellect and moral sentiments; while the propensities of the other run riot with the passions as with the voice. Show us a person of either sex who does not modulate the intonations of the voice when speaking, and we will show you a person who does not regulate the passions or the temper.

THE NASAL TWANG.

This peculiarity arises, not from any defect in the vocal organs, but simply from a want of proper culture and training.

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JENNY LIND GOLDSMIDT.

devotional.

will be modified by the subject on which it

Jenny Lind sang the little love song—

"Coming through the rye,"

to the social feelings, and the voice was

"brogues" and "lingoes"
people. In England,
in such favor, we may
as there are counties or
Scotch, the Irish, and
be found in modern books,
by themselves; while all
people speak the same lan-
perhaps, with less purity
in America.

of a few of our uneducated
to the "brogues" of igno-
"lingoes" of untutored Africans. It
culture.

something of his character in all
his talk, walk, and actions.
If the base of the brain in
a cultivated person pre-
dominate, the voice will be
heavy, expressed with vig-
or and force corresponding
with the degree of execu-
tiveness which he possesses.
If the middle range of or-
gans be largest, the tones
will be more musical, ex-
pressing the poetical and
oratorical feelings. If the
top-head predominate, the
voice will be still more sub-
dued, the intonations har-
monizing with the sympa-

lively, rattling, and joyous, and the people all laughed and were merry. But when she sang—

“I know that my Redeemer liveth,”

there was a grandeur and solemnity in her tones which seemed unconsciously to lift her vast audience to their feet, and hold them spell-bound by the magic of her voice. Who that ever heard her in this can forget?

MUSIC AND CHARACTER.

Tell us what sort of music you like best, and you thereby reveal your true character. If it be love songs, which proceed from the social nature, it is in that, that you predominate. If *war* songs, referring to the roar of cannon, the rattle of musketry, to blood and carnage, then *there* is where you “live.” If it be to the more artistic warbling and trilling, which excites Ideality and Imitation, that indicates the predominance of another set of organs. But if it be SACRED, which is the highest of all music, that you like best, it is an evidence that you have an upper story to your brain which, if properly exercised, would enable you to appreciate and practice, more or less, the divine teachings of Christianity.

Thus, the voice indicates character. A passionate man with a heavy base to his brain will have a harsh, gruff voice, and all his gestures will be downward, in the direction of his propensities. A social, domestic, and *loving* nature will have a more tender and flexible voice, corresponding with this disposition. The affections caress much, but say little; real lovers are more silent than talkative, and their words are but whispers.

The actor who assumes to represent human character must have the organs in the upper side-head, including Secretiveness, Imitation, Language, etc., largely developed, and, if adapted to his calling, will give the right expression of voice to suit the character—be it Hamlet, Macbeth, Falstaff, Iago, or Shylock—be it in tragedy or in comedy.

THE VOICE OF DEVOTION.

The devout clergyman, when he appeals to the Throne of Grace, speaks through his moral and religious sentiments, and

his voice is mellow, sweet, and subdued. How welcome to a sin-sick soul is the pleading voice of the good man when he



Fig. 429.—REV. JOHN WESLEY.

asks forgiveness for the penitent wrong-doer, and a blessing on all! If he be a converted man, a true Christian, there will be a grace, a gentleness, and a charm in his voice which will win all hearts to the truth, except, of course, "those who have ears but hear not, and eyes but see not," nor a mind to understand.

Compare any ten clergymen who have devoted themselves half a lifetime to their high calling, with an equal number of boxers of the same age, and notice the tones of their voices. Do you not think you could tell even in the dark "which was which?" Certainly you could. There is something in every voice which attracts or repels. Compare the voice of the gentle lamb with that of the ferocious wolf; of the loving mother and praying father with the ravings of dissipated demons in human form.

REMEMBERING VOICES.

Once accustomed to certain voices, we can remember them for years. Blind men readily recognize a voice they heard twenty years ago. An acute ear is as sensitive to impressions, and almost as retentive of them, as the eye.

There are diseases, obstructions, and physiological defects by which the voice becomes impaired, which would prevent us from judging correctly the character of such persons. Our remarks are intended to apply to those in a normal or healthy state.

STAMMERING.

Impediment in speech called stuttering or stammering is a *nervous* difficulty, rather than organic, and should be treated accordingly. It is quite possible to overcome the difficulty

in all cases without recourse to artificial means.* All the specifics advertised by quack impostors, who charge from \$20 to \$50 for traps to wear in the mouth, which cost fifty cents, are utterly useless. A careful training of the vocal organs from early infancy would secure the child against this infirmity, which is often acquired, and becomes a fixed habit for want of proper care.

Thus the voice indicates character. By cultivating particular faculties of the mind, we thereby cultivate the voice. We speak—as it were—from and through, and from and to, particular organs of the brain, and the intonations of the voice correspond if we are in anger, and speak from the passions. In time, voice and passion assimilate, and this type of character becomes established. If, on the contrary, we live more in the intellect, and in the moral and spiritual sentiments, we become all the more humane, civilized, and spiritual.

DRESS, INDICATIVE OF CHARACTER.

Look at fig. 430; observe how “snugly dressed,” and how “closely” he is buttoned up. He has large Secretiveness.



Fig. 430.

When he opens his purse, he carefully turns away that you may not see or be tempted by its contents. He can *keep* as well as make money. There is—so to speak—a lock and key on his pocket, and none but himself, or death, can unlock it. See how slyly he puts things away! As he grows old, and his memory fails, he forgets where he “hides” his effects. His conversation resembles his manners; he never gives you a frank, categorical answer; but if he does not actually mislead, he leaves



Fig. 431.

you to draw wrong inferences and mislead yourself, which is

* See our treatise on “Stammering, its Causes and Cure on Physiological Principles.” Price, when prepaid by post, 25 cents.

as bad.* Large Secretiveness conceals, assumes a false character, and with other faculties acts it out to the life. It shows itself in dress, in walk, in conversation, in business, in sports, and in all things. Children exhibit it in school and in church, when they become impatient of restraint, and resort to endless tricks for diversion and relief. How closely they watch their teacher, and when his attention is called in another direction, notice their foxy maneuvers, and see how adroitly they cover up their acts. Growing bolder by success, the little rogue is finally caught, when he pleads inadvertence, receives the penalty, and is still more cunning ever after.

It is said that women have the power to conceal in a greater degree than men. Certain it is, they possess the power to set traps and to captivate when and whom they will.

Small Secretiveness is generally prodigal, and goes with open face, loose neck-dress, open bosom, unbuttoned or partially open vest or waistcoat (fig. 431), low-necked dresses—when the fashions will permit—money loose in the pocket, and no pains taken to conceal it. Cautiousness has something to do in the way of taking care of the valuables, but it is Secretiveness which conceals and keeps. Small Secretiveness not only tells all he knows, but is very much annoyed that his neighbor will not do the same.

APPROBATIVENESS shows itself both in following the fashions and in “oddity.” Ladies and gentlemen express their characters in displaying their equipage. The best minds—those which are free from eccentricity—display the best taste in dressing in such a way as not to attract particular attention. Vulgar minds—or those not cultivated—pile on the gewgaws; cheap *jewelry*, frills, flounces, draggling dresses, and “wriggle” themselves through the dirty streets. In all such cases there is far more vanity than common sense. A man may show as much vanity in wearing an old slouched hat, with one

* An anecdote illustrates this non-committal secretive disposition. Three rogues were on trial for some offense, and the attorney put this question to one of them: Where were you last night? *Ans.* I was with John. Where was John? He was with William. Where was William? He was with me. Well, where were you all? We were all together.

boot and one shoe, or other odd "rigging," as the one who is so exact to have every hair exactly in its place. Coarse and ignorant persons, who have the means to do so, often dress in what is called "negro finery," *i. e.*, in highly colored trappings, put on without regard to cost, comfort, or convenience. The brighter the colors, the better; the point to be gained by them is simply to attract attention.

TEMPERAMENTS AND COLORS.

Persons of cultivated taste dress in plain, subdued, or blended colors, corresponding with the complexion, and adapted to the occasion. On the principle that "like likes like," those who prefer blood-red colors are of a sanguine temperament; those who prefer deep blue have something of the bilious; while the lymphatic prefers the yellow, the orange, or the buff. When the temperaments are mixed, and the faculties cultivated, there will be a more correct appreciation of all the colors, and the taste in dress will show itself accordingly. The most distinguished painters are less extreme, and use colors with greater care than those with less practice, taste, and skill.

It is said in Lyons, France, where silks are manufactured for this market, that Americans are more fond of "showy goods" in brilliant colors, than Europeans; and they put in the color and the "gloss" accordingly. Negroes and Indians are delighted with deep, strong colors, and when they can dress to their taste, they do so in the most fantastic style, and thus reveal their characters.



THE DANDE

XX.

PHYSIOGNOMY OF INSANITY.

"We are not ourselves when nature, being oppressed,
Commands the mind to suffer with the body."—SHAKESPEARE.

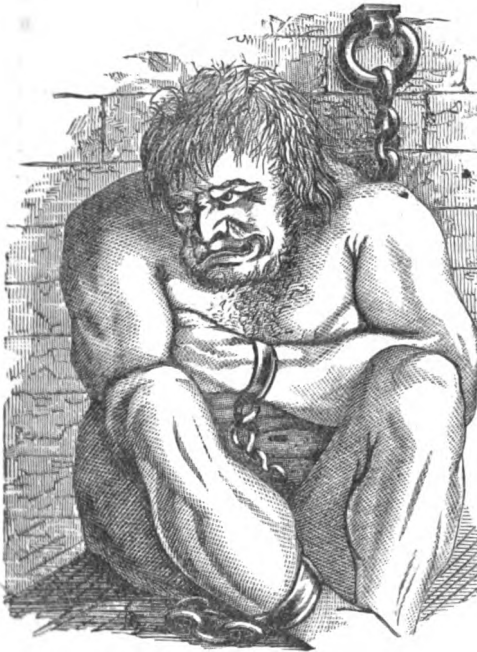


Fig. 482.—THE MANIA.

OUR work would be manifestly imperfect without some attempt, at least, to indicate the "signs of character" exhibited by those unfortunates who, as Shakspeare expresses it, *are not themselves*, but in whom that power to think and act consistently and rationally, which constituted their proper individuality has been lost or impaired; and so important do we consider the subject, that we

make no apology for prefacing our physiognomical remarks with a brief statement of the causes and cure of insanity, drawn mainly from the admirable work of Dr. Spurzheim on the subject.

WHAT IS INSANITY ?

"With respect to the morbid affections of the senses and the errors of the intellectual powers," Dr. Spurzheim says, "we are insane, if we can not distinguish the diseased functions, and do consider them as regular; and in the derangement of any feeling we are insane, either if we can not distinguish the disordered feeling—if, for instance, we really think we are an emperor, king, minister, general, etc., or if we distinguish the deranged feeling, but have lost the influence of the will on our actions; for instance, in a morbid activity of the propensity to destroy. Thus, *insanity*, in my opinion, *is an aberration of any sensation or intellectual power from the healthy state, without being able to distinguish the diseased state; and the aberration of any feeling from the state of health, without being able to distinguish it, or without the influence of the will on the actions of the voluntary instruments.* In other words, *the incapacity of distinguishing the diseased functions of the mind, and the irresistibility of our actions—in short, the loss of moral liberty constitutes insanity.*"

VARIETIES OF INSANITY.

"The examples are not rare that insane people think themselves emperors, kings, ministers, generals, high-priests, bishops, dukes, lords, prophets, God Almighty, or God the Son, etc. Pinel relates that, at the same time, four madmen of Bicêtre believed themselves in possession of the supreme power in the state, and assumed the title of Louis XVI. The hospital was not less richly endowed with divine personages, so that some of the maniacs were called after the provinces, as the God of Brittany, the God of the Low Countries, etc. Many are ambitious, wish to be approved of by others, and to appear as persons of fashion and distinction. They seldom forget to decorate themselves with anything which they consider to be an ornament. They are conceited and ostentatious, singular in gait and phraseology.

Others are thoughtful, gloomy, taciturn, austere, morose, and like to be alone. Some are anxious, fearful, and terrified by the most alarming apprehensions. Some express their

affliction by tears, others sink without a tear into distressing anxiety. Some fear external prosecutions, and the most ridiculous and imaginary things; others think themselves lost to all the comforts of this life, and desire to be buried. Some are also alarmed for the salvation of their souls, or even think themselves abandoned forever by God, and condemned to hell and eternal sufferings. Others are remarkable for good-humor and merriment; they are cheerful, sing from morning till evening, and sometimes express their joy by fits of loud and immoderate laughter. There are others who feel an extraordinary liberality and unbounded generosity. Some are very pious. Dr. Hallaran says: 'I have often known maniacs of the worst class, in whom the faculty of thinking correctly on all other subjects had been entirely suspended, still retain the power of addressing the Deity in a consistent and fervent manner, and to attend the call for devotion with the most regular demeanor.' Some show the most invincible obstinacy, and nothing could shake their intention, though sometimes they blame the keepers for not securing them sufficiently.

"The derangements of the intellectual faculties are not less numerous or singular. Some fancy themselves dead, or to be changed into animals of particular kinds; to be made of glass or wax; to be infected by syphilis, the itch, or other diseases; to be a prey of spirits or devils, or under the influence of magic spells and vows. Sometimes the intellectual faculties are much excited, sometimes diminished or almost suppressed. Sometimes only one intellectual power seems to be under the morbid influence, while the others appear with natural strength. In greater activity sleeplessness is a common symptom; some see external objects in erroneous forms and colors. A maniac took for a legion of devils every assemblage of people whom he saw."

CELEBRATED MANIACS.

Dr. Winslow, in his work on "Obscure Diseases of the Brain," seems inclined to think that many historical characters, "celebrated either for their crimes, brutality, tyranny, or vice, were probably of unsound mind, and that in many, undetected,

unrecognized, unperceived mental disease, in all probability, arose from cerebral irritation or physical ill-health."

Frederick William, the father of Frederick the Great, the debauchee and drunkard, who treated his children with marked cruelty, compelling them to eat the most unwholesome and disgusting food, and crowned his brutality by spitting into it, suffered from hypochondriasis and great mental depression, once attempting suicide.

Judge Jeffreys was tortured by a cruel internal malady, aggravated by intemperance.

Damien persisted in declaring that had he been bled in the morning, as he wished, he never would have attempted the assassination of Louis XV.

Caligula commenced his reign with mildness, and it was after a violent attack of bodily illness he began his career of cruelty, vice, and crime.

Frequently, long before an attack of insanity is clearly defined, the patient admits he is under the influence of certain vague apprehensions, undefinable misgivings, and anxious suspicions as to the sane character of his emotions. Such sad doubts, fearful apprehensions, mysterious, inexplicable forebodings and distressing misgivings as to the healthy condition of the mind often induce the heart-broken sufferer, convulsed with pain and choking with anguish, prayerfully, and in accents of wild and frenzied despair, to ejaculate with King Lear :

"Oh ! let me not be mad, not mad, sweet Heaven ;
Keep me in temper—I would not be mad."

CAUSES OF INSANITY.

All that disturbs, excites, or weakens the organization, and especially the nervous system, has an influence on the manifestation of mind. Early dissipation, habitual enervating luxury, care and anxiety, intense study, loss of sleep, violent passions, excitement, sickly sensibility, intemperance in food and drink—in short, whatever disturbs the mind or deranges the body, may cause insanity. A predisposition to it is often hereditary, and runs in the blood of families for generations.

The proximate cause of insanity is undoubtedly always in the brain. Dr. Spurzheim very pertinently remarks: "If it be proved that the brain is the organ of the mind, and that the manifestations of every primitive faculty of the mind depend on a peculiar part of the brain; and if all primitive powers of the mind and their respective organs be once ascertained, it is evident that the cause of insanity will be looked for in the brain, and the cause of the deranged manifestations of every special faculty in a peculiar part of the brain. I do not say that this knowledge is advanced as far as I wish it to be; but from daily observations, and the most positive facts, I am convinced that the basis of the above-mentioned doctrine is founded in nature. Thus, instead of ascribing insanity, or the disturbed reflecting powers and the feelings, to what is called moral causes, the deranged manifestations of these faculties will always be considered as morbid affections of the cerebral organization."

Whatever occupies the mind too intensely or exclusively is hurtful to the brain and induces a state favorable to insanity, in diminishing the influence of the will. The strong activity of any particular organ may finally become involuntary, and even lead to the derangement of other functions. It is generally the strongest and most active faculties of the mind that become deranged. Amativeness is a most powerful passion, and in many predominates over all others. Such persons are liable to become insane from perverted love. The religious faculties, when perverted or misdirected, furnish a fruitful source of mental derangement; but true religion, rightly understood, tends to quiet and bring into subjection the passions of men.

Stout people, those with large hearts, lungs and stomachs, with all the internal viscera correspondingly large and with moderate-sized brains, seldom or never become quite insane. Neither do fools or idiots go crazy; and it is said that very few uncultivated Africans whose heads are small, become insane. Those who are more highly organized, whose brains predominate over their bodies, or who study to excess, and fail to keep the vital functions in a healthy state, and those who dissipate by

smoking, chewing, snuffing, drinking, etc., are more than any others liable to become subjects for the mad-house.

Dr. Brigham, author of "Remarks on the Influence of Mental Cultivation on Health," in an appendix to the work of Dr. Spurzheim already quoted, thus enumerates the causes of insanity which he considers most operative in this country :

"First, Too constant and too powerful excitement of the mind and feelings, which the strife for wealth, office, political distinction and party success produces in this free country, and the great anxiety and excitement of the mind upon religious subjects, caused by injudicious appeals to the feelings and imagination, and by sectarian controversy.

"Second, The predominance given to the nervous system by too early cultivating the mind and exciting the feelings of children, to the neglect of physical education, or the equal and proper development of all the organs of the body.

"Third, The general and powerful excitement of the female mind. Females, being endowed with quicker and finer sensibilities than men, are more likely to be injured by strong emotion ; but such emotions may have deplorable effects upon their offspring.

"Fourth, Intemperance ; and to this cause, no doubt, a very considerable part of the insanity and idiocy that prevails in this country is to be attributed."

TREATMENT OF INSANITY.

It will be impossible, of course, to go into details in reference to the treatment of mental alienation ; but a few hints revealing the fundamental principles on which it should be conducted will be of interest to the general reader, and of service to those who are so unfortunate as to have friends under home treatment.

1. The first thing to be done is to remove, if possible, the cause of the derangement and to improve the general health by means of bathing, pure air, sufficient bodily exercise, cheerful employments and recreations, plenty of sleep, and abstinence from stimulation and excitement.

2. The principles of mental hygiene must be applied under-

standingly according to the requirements of each particular case. The different characters of the insane should be understood by those who have the care of them. In one, we may appeal to Veneration; in another, to Approbativeness; in a third, to Cautiousness. Some are won by attentions paid to Self-Esteem; many, by gentle manners and kindness. Melancholic, anxious, and fearful patients require the greatest mildness and the most cautious treatment.

The five senses should all be attended to, and, so far as possible, pleasantly excited. Music, in particular, has great influence upon the insane, helping to change the train of thoughts which fosters the disorder and to harmonize the discordant feelings. The occupations and amusements of the patient should be such as are best adapted to divert the mind from the subject of his insanity, and every means should be made use of to restrain the activity of the faculties which are deranged.

PREVENTION.

Right religious training, with a knowledge and observance of the laws of life and health, would secure better balanced brains and lessen the danger of the mind becoming warped or diseased. A thoroughly Christian man will not be so likely to go crazy as one who is without trust in Providence or the hope of immortality. Let a religious conviction become an established principle in one's mind, let him resign himself to the will of Providence and realize the truth of the Lord's prayer, learn to say and to feel the truth of these words, "Thy will be done," and he will not be likely, under any circumstances, to become insane. We repeat, with right physiological living, particularly exercise in the open air a portion of the time, sufficient rest, sleep, and recreation, with well-established Christian principles by which to be guided, and one will be impregnably fortified against this and nearly all other maladies to which poor human nature is subject.

PHYSIOGNOMICAL SIGNS OF INSANITY.

The author of "The Anatomy and Philosophy of Expression," Sir Charles Bell, introduces into his work the very

effective drawing which we have reproduced and placed at the head of this chapter (fig. 432). He designates it as the portrait of "an outrageous maniac, in whom reason is totally dethroned." His theory in regard to the physiognomical signs of madness, which the drawing is intended to illustrate, is that in the peculiar look of ferocity manifested amid the utter wreck of intellect, the expression of mental energy is lacking, and that those facial muscles whose office is to indicate sentiment are dormant. He says: "I believe this to be true to nature, because I have observed (contrary to my expectation) that there is not that energy, that knitting of the brows, that indignant brooding and thoughtfulness in the face of madmen which is generally imagined to characterize their expression, and which is often given to them in painting. There is a vacancy in their laugh and a want of meaning in their ferociousness."

According to this theory, which, if applied merely to such cases of *total* madness as he has in view, we conceive to be entirely correct, we must, in order to learn the character of countenance when devoid of human expression and reduced to a state of brutality, have recourse to the lower animals and study their looks of timidity, of watchfulness, of excitement, and of ferocity. If these expressions be conveyed to the human face, they will irresistibly convey the idea of madness, vacancy of mind, and mere animal passion.

It will be readily seen that a careful study of the physiognomy of the insane must be of the greatest importance to those engaged in the treatment or care of those unfortunates whose reason has become deranged. The subject has not received the attention it deserves, but several medical writers have devoted considerable labor to its elucidation. Among the rest, Dr. Laurent, of France, has published an interesting paper on the subject in the *Annales Medico-Psychologiques* of Paris, some extracts from which, translated into English, we now proceed to lay before our readers, interspersing such notes and illustrations as seem to be required. The article is well written, and, though the writer's views are superficial, quite suggestive.

INSANITY IS DISCORDANCE.

"Lavater, whom I can not avoid invoking on such a subject, proposes the following experiment: Three different portraits are to be taken. The face of each is to be divided into three horizontal portions: the first to contain the forehead, the second the nose, the third and lowest portion from the nose to the chin. The next operation is to adjust the nasal portion of the second to the frontal part of the first portrait, as well as the inferior section of the third. By this arrangement we infallibly obtain the physiognomy of an insane person (fig. 433). Hence he concluded that there was a manifest defect of harmony in the countenance of the alienated. This proposition is perfectly true, and the proof thus furnished by the illustrious physiognomist is, in our mind, the foundation of that which I shall endeavor to explain in this work."



Fig. 433.—DISCORDANCE.

CRANIAL DEFORMITIES.

"I am inclined to allow that deformities of the head indicate an intellectual defect, or at least irregularity. The works of M.M. Foville, Lunier, Gosse, Morel, Baillarger, etc., and those of a great number of anthropologists, as well as the researches which I have myself made on this subject, afford proof sufficient of what I advance.

"1st. These deformities may be congenital, the sad effects of heritage, and allied to primitive intellectual debilities, as idiocy, imbecility, and cretinism.

"2d. Artificial deformities, resulting from injuries or erroneous practices which stop the free development of the intellect in a direct or indirect manner, and producing convulsive affections which almost necessarily induce mental trouble.*

"3d. Lastly, subjective acquired deformities, proceeding

* True, for insanity is a *diseased* condition, and could not occur in a perfectly sound body. "A sound mind in a sound body," is the rule.

from a perversion of the natural dynamic law under the influence of pathological causes, from want of symmetry in the activity of the individual. This absence of symmetry, which is of common occurrence, is always accompanied by an irregularity of the mental faculties, a peculiarity of character, an originality, without necessarily producing mental alienation. In some exceptional individuals, a greater development of one cerebral hemisphere has been found united with a very large psychical capacity. (Bichat, Napoleon I.)

"But although deformity of the cranium generally indicates an anomaly of intellectual actions, it does not follow that insanity is always associated with an ill-shapen skull. To maintain this would be a grave error. Many lunatics have the cranium well formed and perfectly symmetrical."

THE HAIR.

"Important elements are furnished to symptomatologists by the hairy system. Although asserted by Esquirol, the color of the hair and beard has not appeared to us allied to one kind of insanity more than another. The popular saying that the head of an idiot never becomes gray, appears to us undeserving of confidence. [But what are the facts? We accept the 'saying,' and considered it based on physiological principles. Where there is total idiocy, there will be too little mentality to cause the hair to become gray.] But it is the condition of these products of secretion that should be considered. The softness or roughness of the hair and beard, their brittleness, dryness, or humidity, their smoothness or erection, their entanglement, agglutination, and length, their more or less complete change of color, their neat or dirty condition, always accompanying special periods of the malady, should not escape the eye of the observer. The scarcity or abundance, the mode of distribution, the premature appearance,* more or less loss of these protecting organs, have a not

* My worthy colleague and friend, Dr. Bulard, has noticed the appearance in women, at the epoch of commencing lunacy, of a larger or smaller number of bristles in the face, which had completely disappeared with the malady.

less intimate relation with phrenopathic phenomena, and are very often allied with a primitive alteration (idiotcy, etc.).”

THE SKIN.

“The condition and color of the skin have a great value in the eyes of the alienist physician. I think it right expressly to insist on the symptoms furnished by this organ. I have noticed some very curious morbid phenomena. Professor Trousseau has specified in his clinical lectures some very important peculiarities in the functions of the skin manifesting themselves during head [brain] affections. After the example of this learned man, I must insist on this point. Color furnishes signs well worthy attention. The skin of the face, and it is of this part alone I speak, may be dry and arid, the seat of herpetic scurvy and scaly eruptions, or may be moist with perspiration, or a liquid secretion of a more or less oily nature and of variable odor. Its color is susceptible of numerous general or partial modifications. It may be pale. This pallor has divers shades, from pure white to the slightly yellow tinge (compared to that of straw or wax), or earthy, brown, and bronzed. It may be of every shade of red, from rosy to vermilion, violet, and purple. But season and exposure to the sun’s rays should always be taken into consideration.

“The skin may have a greater or less tonicity, and the subcutaneous, subcellular tissue be more or less elastic. It also is marked by lines and furrows, which are of importance as indicating the amount of activity of the subjacent muscles. At first, during infancy and adolescence, few in number, their formation becomes fecund in proportion as age advances, which must be attributed to the thinning of the face or the loss of the mobile parts by age, sickness, passion, and deep emotion of soul. I think it unnecessary to describe these furrows, which may assume different forms—horizontal, vertical, oblique, sinuous, and more or less close or parallel.”*

THE EYES.

“The organ of sight offers for consideration its form, move-

* All of which have a deep meaning, and may be interpreted.

ments, and expression. The eyes may be more or less prominent or depressed in the orbit; the aperture between the lids smaller or greater; the sclerotic, very apparent around the pupil, exhibits a variable bluish, yellowish, or red tinge; the dilatation of the vessels very evident. Little livid or black veins may be perceived on it. The conjunctival surface may be dry, humid, or moistened with tears; the pupils may be deformed by being equally or unequally dilated or contracted. Strabismus may be observed, a distortion of the eyes by which they look crosswise, either above, below, or to the side, twisting even during sleep. In the normal state, the ocular globe is susceptible, under the influence of the will, of numberless motions in every sense, and these motions may have a longer or shorter duration; but in the morbid state, and without their owner's control, a sort of trembling, oscillation, or vacillation of the globe may be manifested, a kind of continual or permanent convulsion, in consequence of which, most frequently, little lateral, sometimes, though rarely, up and down, movements are given to the globe of the eye.

"The expression of the eye calls for special attention. The



Fig. 434.—DESERTED.

eyes are sometimes lively and brilliant,* sometimes sad and glazed. Often they have a soft, dreaming look, expressive of vacuity, uncertainty, or nonchalant calmness; at other times they become animated from the slightest cause,



Fig. 435.—MALICE.

* Fig. 434, which represents a woman who became insane on account of the unfaithfulness of her lover, who deserted her, shows the lively, brilliant eyes mentioned by Dr. Laurent. She still loves; and in her mental aberration adorns her disheveled hair with flowers, and with parted lips and "hungry devouring glances" awaits the coming of her heart's idol, whom she never ceases to expect. What a blessing to her it would be could she be weaned from the faithless lover! And this would be the remedy in such a case.

have a lightning glance, are haggard, insolent, full of audacity, fixed and inquisitive. Each of these expressions has a different intensity and duration, and responds to very different situations.*



Fig. 436.—RAVING.

the ciliary margin may be the seat of inflammation due to nervous excitation.

“In accordance with the protrusion or sinking of the globe of the eye, the eyelids take shape—they are swollen or edematous; have at times a very pallid color, at others become red or blue; and exhibit wrinkles of diverse shape and in variable number. They may likewise be agitated by convulsion, or show a very significant immobility. Each lid may differ in length and abundance of its lashes;

THE EYEBROWS.

“Occasionally the eyebrows are of fantastic shape. Sometimes little noticeable, sometimes strongly marked, they stand up on the forehead, or fall back on the eyes, curling after the style of mustaches.”†



Fig. 437.—Lost.

THE NOSE.

“The shape of the nose has also a pathological signification which should not be passed over in silence. Besides the color

* In fig. 435 the eyes gleam with some relentless purpose of vengeance. Such a character as the one here represented is dangerous in his alienation; for he combines the cunning of the fox with the ferocity of the tiger. Fig. 436 is a woman of the Cassandra order. The eyes, abandoned to the action of the involuntary muscles (see Chapter XIII., p. 233), are rolled upward with a wild look which is indescribable. She is giving utterance to what she deems prophetic warnings of the most solemn and awful character.

† The doctor states the facts correctly here, but seems to get no glimpse of the physiognomical principle involved. Intense thought, habitual reflection, and searching inquiry of any kind cause a drawing down of the

and swelling or thinness of the fleshy parts of the proboscis, a careful examination should be made of the more or less easy dilatation of the nostrils, their mobility or fixedness, the tension or the retraction of their walls. Dr. Hofling* attaches much more importance to the signs furnished by the nose than to those given by the eye."

THE MOUTH.

"The mouth presents for examination the state of the lips, with their relative situation during repose, their volume, color, dryness, or humidity. The motion of the mouth has a very important signification, and leads to a notable modification of the commissure of the lips. Permanent contractions, alternations of tension or relaxation, partial or general tremor, the diverse forms of spasm, deserve much attention. These manifestations have a very decided meaning.

"What we have just said relative to the motion of the mouth and lips is applicable to all the locomotive system of the face. Tension or relaxation, continual or alternate movements, immobility, may appear in various grades in each of the facial muscles.†

"To facial symptomatology must be added also an examination of the parotid and auricular regions. We should carefully note the pallor, redness, and swelling of the cheeks; the color, swelling, mobility, or immobility of the ears, as well as the appearance of sanguineous tumors of the auricle. Dr. Morel attaches much importance to the way in which the ears are fixed, and makes this one of the characteristic signs of his types of degeneracy.

eyebrows, as shown in Chapter XIII. (p. 249). Persons who have become insane through hard study or the too close application of the mind to a particular subject will exhibit this characteristic, as shown in fig. 437, while maniacs of a different class, like figs. 434 and 436, present a fantastic turning up of the eyebrows. They have become insane through *feeling* rather than from thinking.

* "Memoir on the Semiotic Indications furnished by the External Nose." (*Journal de Cooper*, 1834.)

† The same is true of many who are *not* insane. Look at the mouths of dissipated "old toppers," gross, fat persons, etc.



Fig. 488.—DER NARRENHAUS—A GERMAN INSANE ASYLUM.



"It is of some importance to let this physiognomical survey embrace the carriage of the head, which is often noticed to be variable, according as the individual has a more or less favorable opinion of his personality, and from numerous other causes."

THE MAD-HOUSE.

We engrave the accompanying from Kaulbach's celebrated picture, representing a group of crazy people. This picture is one of the most interesting and in every way the most remarkable of its kind which has ever yet appeared. It was painted, life-size, by an artist who thoroughly understands human nature in both its normal and abnormal condition, and is able to depict it true to the life.

There are, as has already been stated, almost as many phases of insanity as there are organs and faculties of the human mind. One is slightly warped in the affections, another in love of money, another in Self-Esteem or Approbativeness, another in the intellectual faculties, another in the religious or devotional.

We are liable to become more or less warped in all directions; and there are few indeed who can claim to be perfectly sane and without bias on any subject. A religious idolater or bigot is warped in his judgment; so is a miser, a thief, a glutton, a gambler, a libertine, or one who goes to extremes in any direction. And it is an exceedingly interesting study to observe the various idiosyncrasies or phases and shades of excess or deficiency which may be seen in almost every one we meet.

But it is painfully interesting to note the peculiarities of those who are totally insane—who completely lose their balance and the power of self-regulation. Such is the condition of those in the group before us. Observe the poor forlorn woman, in the lower right-hand corner of the picture, with such a woe-begone look. She has lost her babe and her reason at the same time. The poor creature has picked up and dressed a billet of wood, and is trying to persuade herself that it is her real child. Fig. 439 represents a similar case, in which some terrible bereavement has crushed the heart and dethroned the reason. The head is bowed, and the eyes closed to shut out

the view of a world from which, to the poor desolate one, every ray of brightness seems to have departed.

The first figure above, with the bunch of herbs in one hand and tearing his hair with the other, seems to be exhausted by dyspepsia or other bodily complaint, and he has an impression that the herbs may cure him. The one next to him fancies there is something the matter with one of his eyes, and this is the seat of his infirmity. The woman just above, at the right, in the attitude of prayer, with her hands clasped and her head bowed, has become insane on religion. Her Veneration is large, as represented in the picture, and no doubt has become unduly inflamed, if not diseased, and so warped as to lead all the other organs captive. She has been taught to believe that it is her duty to "pray without ceasing," and she interprets it literally, devoting herself almost exclusively to it.



Fig. 439.—CHILDLESS.

The man at her left, with a cross in one hand, and pointing with the other to his breast, imagines himself to be the Saviour, the great "I Am." His Self-Esteem and Approbativeness have become diseased.

The young man at his right, with his head inclined upon one side, has lost his sweetheart, and his affections have become inflamed and dis-



Fig. 440.—LOVE-SICK.

eased. He is "love-sick." Fig. 440 is the victim of a false fair one who won his heart but to break it and cast it from her. The expression is sim-



Fig. 441.—AMBITION.

ilar to that of the love-sick youth in the picture, and fig. 434.

The one just below, with the paper crown upon his head and a scepter in his hand, believes himself to be a real emperor,

whose office it is to rule a nation. In fig. 441 we have another illustration of diseased and alienated Self-Esteem and Approbativeness. Observe the self-complacent look of the man! He imagines himself some great nobleman or commander, and expects to be looked up to and admired.

The one below, with an open letter in one hand, resting his head upon the other, is a poet whose vivid imagination has completely evaporated, and his body seems to be without a spirit. The oil of life in him has become well-nigh exhausted.

The one near the center of the group, cross-legged, resting his chin upon his hand, with a sword by his side, is an insane soldier returned from the wars. His chief happiness consists in relating the noble deeds he has done, and exhibiting his sword, the blade of which is all hacked, to show what execution he has done while in the service.

The one a little below, and in front, with spectacles and with a pile of books before him, supposes himself to be a philosopher and a scholar. He is now attempting to solve some problem, but is in a maze, and his mind refuses to work.

The group directly above, with a man in the center, and two women clinging to him, represents a miser who has lost his money, and he thinks of nothing else. He has evidently no social feelings, or the happy trust which comes from the moral sentiments. Money, money, money is his bane. Fig. 442 is another portrait of him. The women have lost their husbands, and they seek consolation here, but find it not. The man notices not their embraces, and pays no attention to either, but still they cling to him. The one before him is a loving but a jealous creature, and is trying to fight the other one away, but she heeds it not. Her affection absorbs her; having a voluptuous nature, she craves companionship with the other sex.



Fig. 442.—A Miser.

The one still farther to the left, with her knitting in her hands, is looking upon the scene, wondering what it all means, not knowing that she herself is also crazy, and in the same

boat with all the rest. The one still farther to the left represents a misanthrope who has nothing to console her. She is perfectly miserable, without hope, and looks coldly upon all things. Fig. 443 is her



443.—MISANTHROPIC.

counterpart, with a touch of bitterness and perhaps malignancy; while fig. 444, in her jolly craziness is her opposite, both in natural organization and in the nature



444.—LIGHT-HEADED.

of her malady. Fig. 445 seems to be tormented with frightful visions. Fear is depicted on every feature of his face. He has perhaps committed some terrible crime, and imagines that the ghost of his victim continually haunts him. Fig. 446 stares wildly and with a stupid sort of wonder at some imaginary apparition—some creature of the crazed brain—but he is evidently rather amazed than alarmed, and thinks it good fun. Insanity in this case, and also in that of fig. 444, seems to border upon idiocy.

The one at the extreme right-hand of the reader, in the picture, represents the keeper; and here is an interesting physio-



Fig. 445.—FEAR.

logical problem which may be explained in this connection. He is a stoutly-built person, with a moderate-sized head and a large-sized body. He eats his beef, drinks his beer, and smokes his pipe, and is at peace with himself and all mankind.



Fig. 446.—WONDER.

Nothing disturbs his equanimity, nothing excites him. His brain is too small to incline him to trouble himself about metaphysical questions, and he takes life as it comes, supplying his common wants and simply existing. He is too dull, too slow, too lazy to become insane. Such an organization has too little of the nervous system to cause the mind to get the ascendancy over the body.

A STRETCH OF INSANE THOUGHT.

A student, in consequence of too close application to study, and neglect of proper diet and exercise, became partially deranged; but being very harmless, it was thought best that he should go and come when and where he pleased, in hope of facilitating his restoration. One Saturday afternoon he went out through the gardens and fields, and gathered every variety of flowers, from the modest violet to the gaudy sunflower—with which he adorned himself from head to foot in the most fantastical manner, in which condition he was displaying his imaginary kingly power on a hillock in the college green just as the president and one of the professors were going up to attend chapel prayer; when the former observed to the latter, "What a great pity that such a noble mind should be thus in ruins!" The maniac, hearing what he said, rose majestically upon his throne, and with a most piercing look and voice exclaimed: "What is that you say, old president? *you* presume to talk *thus* about *me*? *Solomon*, in all his *glory*, was not arrayed as *I* am. You old *sinner*, come *here*! and I will tear you *limb* from *limb*, and scatter you through infinite *space*, where *Omniscience* can not *find* you, nor *Omnipotence* put you *together* again."



XXI.

IDIOCY.

"Alas! poor fool!"—SHAKESPEARE.

"Spurn him not; the blemished part
Had better be the head than heart."—ELIZA COOK.

THERE are two distinct classes of idiots. In the first, which may be called natural idiots, there is a deficiency in the size of the brain, indicated by the external development of the head; while in the second, idiocy results



Fig. 447.*

from disease, and is generally not distinguishable by form or size. In the last case, however, anatomy shows that the texture of the brain (as well as of the hair, the skin, the muscle, and the bone) is unlike that of a person of sound mind. Sometimes it appears to have wasted away or to have been absorbed. Esquirol mentions a case in which nearly all the gray cortical substance of both hemispheres was found wanting. In the place of the usual convolutions were small irregular granulations.



Fig. 448.*

* Fig. 447 represents total idiocy; fig. 448, a sound mind in a sound body. See how body and mind correspond in each!

In natural idiots, the brain is sometimes found to be very small, even when the external appearance of the head is not bad. Dr. Brigham mentions the case of an idiot boy whose skull was *three fourths of an inch in thickness*, which is not far from three times that of an ordinary skull. Sometimes the anterior and upper parts of the brain are not formed. M. Payen, of the Hospital des Enfants in Paris, in 1825, found in the head of an idiot only the lower convolutions of the brain. Sometimes the deficiency is limited to one region of the brain and one department of the mind, or even to a single faculty and its organ. In some idiots, for example, the frontal region of the head is low and compressed, and consequently the intellectual faculties extremely limited, while the organs of the sentiments and the propensities being pretty well developed, considerable tact and correctness of feeling and acting in simple matters may be observed. The deficiency becomes obvious only when the individual is thrown into situations requiring the exercise of intellect. In the same way, but a single organ may be defective or deficient, as that of Time, Tune, Color, or Calculation. One may have love for home, but no affection for the opposite sex; or Benevolence, but no Veneration; or Constructiveness, but no Causality—in which case he would, perhaps, attempt to make a perpetual motion. There are, however, very few persons, otherwise well organized, but what have *all* the organs and faculties in a greater or less degree of development. Where a faculty is totally wanting, however, be it Time, Tune, Order, or Number, the person will be idiotic to that extent, and on that point. When, therefore, a person informs you that he can not distinguish one tune from another, he simply tells you that he is, to this extent, at least, idiotic.

In total idiocy there is a complete eclipse of all the mental faculties. In such a case there is not enough mind to enable the person to feed himself. He is even lower than the brutes, who have all the animal instincts, if not reason, to guide them.

"Occasionally," Dr. Andrew Combe says, "a single mental organ and faculty are possessed in considerable endowment, all the rest being deficient. Among the Cretins in Switzer-

land, examples of this kind are not uncommon. Many of them imitate or play on musical instruments with considerable success, and some are employed by the watchmakers of Geneva to construct the simpler parts of the machinery, which they do with neatness and dexterity, and yet in every other respect are purely idiotic. I am indebted to the kindness of a friend for two prints of drawings, made some years ago by a Cretin named *Mind*, which are curious, as having been cleverly executed by a being extremely deficient in every intellectual power. Instances have occurred of individuals who excelled in the acquisition of languages, and could tell the equivalent of any word in five or six different tongues, and yet were so sparingly endowed with general intellectual talent, that they could not put two ideas together, or trace the most obvious logical sequence offered to their notice.*

"Sometimes the largely developed organ is one of those appropriated to the manifestations of the moral sentiments; in which case, instead of an intellectual talent, some strong feeling or sentiment marks the character. Dr. Rush gives an excellent example of this in his *Medical Inquiries*. 'I once saw a man,' he says, 'who discovered no one mark of reason, and yet possessed the moral sense or faculty in so high a degree, that he spent his whole life in acts of benevolence. He was not only inoffensive (which is not always the case with idiots), but he was kind and affectionate to everybody.'"

As a general rule, however, we may add, idiots are even more deficient in moral sentiments than in intellect. They seldom have any appreciation of sacred subjects, or any consciousness of responsibility for their acts.

* A case is mentioned of an idiot—doubtless a natural clairvoyant, who possessed the mysterious faculty of telling the time of day or night to the second, without watch or clock, and yet was an absolute idiot, in all other respects being incapable of the least improvement. Ask him at any time, whether having been awake for hours or aroused from a sound sleep, "What time is it?" and he instantly replies, "Thirteen minutes and a half past four," or whatever the time might be. Scientific men have visited him, but have been unable to account for the possession of this singular faculty; which is not at all strange, for "scientific men" who reject phrenology are unable to account for many other simple and natural phenomena.

CAUSES OF IDIOCY.

The causes of idiocy are as numerous as those of other infirmities: intemperate parents; a debilitated condition of the body; anxiety; grief; habitual melancholy; dyspepsia; fear; abuse of the physical system, or inattention thereto; unbridled passion; hereditary predisposition to imbecility; neglect of the mother on the part of the father, at critical periods; insanity, etc. But far the most prolific cause of idiocy is in the intemperate use of alcoholic stimulants, by one or both of the—to become—parents. Excessive medication, or wrong medical treatment, is also a cause of idiocy, imbecility, malformations, dwarfs, and other imperfect organizations. Temperate habits, right living, and careful conformity to the laws of our being—physical, mental, and spiritual—would be a preventive against this calamity. Our Creator established certain laws, the obedience to which always results in good to his creatures; but the violation of which, be it in ignorance or otherwise, brings the certain penalty.



Fig. 449.

EDUCATION OF IDIOTS.

Partial idiots are capable of considerable culture and improvement. For this class each state ought to open suitable schools and asylums, where they could be trained and employed. If fully occupied, according to their capacity, they could do something toward self-support.

Some are quick to perceive, but thoughtless; others can imitate, but lack originality; they can learn to work after a pattern, but can not construct; others can do very simple work, like that of propelling a wheel by turning a crank, but could not adjust the machinery.

Improvement, in all cases, must be a matter of time and



Fig. 450

training. Medicine can have no effect. The way to begin is by teaching the pupil how to use his hands and his feet, to stand, to walk, and to *act*. First bring his *body* into subjection to your will; and then you may act on the mental faculties. If the patient has Imitation, you may induce him to use his voice, in barking like a dog, or crowing like a rooster, mewing like a cat, etc. Then go on, day after day, step after step, until you develop and call out all there is in him. Then put him to some employment to which he may be suited. Partial idiots may be greatly improved and made self-supporting; but total idiocy can not.



Fig. 451.

Where there are even the rudiments of faculties to build upon, you may effect something; but where the organs are totally deficient, it would be as hopeless a task to develop them as it would be to enable a totally blind man to see.

SIGNS OF IDIOCY.

In cases of natural idiocy, the size and shape of the head generally furnish a sure index of its degree and kind, though we must make allowance for a greater thickness of skull than in persons of ordinary mental endowment. The character of such heads as figs. 449 and 450 can not be mistaken. Idiocy alone is possible with cerebral conformations like these.

The most obvious physiognomical traits of the natural idiot are a low, retreating forehead, a receding chin, and projecting jaws, which configuration gives an unmistakable look of animalism to the face. The nose and mouth generally approach each other (like those of the lower animals), and the former, though sometimes well shaped, is often deformed and always thrown



Fig. 452.

into a line approximating more or less closely to the horizontal (fig. 451). A lack of expression in the features, and a wandering, vacant, meaningless stare complete the picture.

Figs. 452 and 453 represent cases of idiocy from hydrocephalus, or dropsy of the head, in which, it will be observed, the cranium is unnaturally expanded.

In figs. 454 and 455 we have two imbeciles whose mental status is evident enough from their countenances, but who have brain enough, were it of the proper texture and in a healthy condition, to give them a respectable standing in society. These cases are characterized by a general weakness of the mind involving all the faculties equally. The condition is technically called *dementia*. It is sometimes the result of mania of long



Fig. 453



Fig. 454.



Fig. 455.

standing, or of that form of insanity which is complicated with paralysis or epilepsy; sometimes it appears as the sequel of a fever; and oftener still, its cause may be found in dissolute habits and practices ruinous to the health of both the physical and the mental organizations.

Our initial cuts (figs. 447 and 448) represent so strikingly the contrast between the awkward attitude, the vacant stare,

and the purposeless movements of an idiot, and the firm, graceful position, dignified step, and clear, thoughtful glance of one blessed with intellect and culture, that they need no detailed description. On the one hand, there is the promise of a man ; on the other, something in the human form manifesting a lower degree of intelligence than a brute.



Soft-Head.

XXII.

FIGHTING PHYSIOGNOMIES.

"Lastly stood War, in glittering arms yelad,
With visage grim, stern looks, and blackly beard."—DORSET.



FIG. 456.—GENERAL GRANT.

well as another for any particular soul, and *vice versa*.

IF preachers and prize-fighters look alike; if there be no difference in personal appearance between a true minister of the gospel of peace and a great military commander; if the shape of the head and the lines of the face be the same in the artist or the poet as in the soldier, then there is no truth in either physiognomy or phrenology, and no determinate relation between the internal and the external of man—in other words, one body would do just as

FIGHTING PREACHERS.

We refer, of course, in these remarks, to classes and to individuals who, having chosen their profession or pursuit from the love of it, and fitness for it, represent a class. There are preachers who might, with more propriety, have been military men, lawyers, or doctors; and there are military men who are better fitted for the lawyer's office or the clergymen's desk

than for the tented field. Some men combine in a large degree two characters, seemingly almost directly opposed to each



Fig. 457.—JONATHAN EDWARDS.



Fig. 458.—GENERAL BUTLER.

other. "Stonewall" Jackson could lead in a prayer-meeting with as good acceptance as in the field. The late rebel general, Bishop Polk, who was educated in a military school, could preach a sermon or command an army, though not a very great man in either place. Parson Brownlow, of Tennessee, whose Combativeness is excessively large, can exhort and fight with equal unction; and that grand old reformer, Martin Luther, with his immense Destructiveness, would, under other circumstances, and with a different training, have been one of the greatest boxers or the most fearless warriors of his age. But these are exceptions, and merely show the versatility and the wonderful power of adaptation of which the elastic natures of some men are capable. It still remains true that certain men are



Fig. 459.—MARTIN LUTHER.

THE COURAGE OF THE NARROW HEADS. 361

naturally adapted to the field, and certain others to the pulpit, and that the signs of this adaptation are imprinted on their organization. We propose here, as of special interest in these times of war, and not out of place at any time, to illustrate briefly the physiognomy of the fighter.

BROAD HEADS.

The first and most obvious indication of the natural fighter is broadness of head just above and backward from the ears.



Fig. 460.—GENERAL HANCOCK.



Fig. 461.—REV. DR. TYNG.

This is universal with the true fighters, whether they be warriors, gladiators, pugilists, reformers, or controversial religionists. A heavy base and a broad brain, with large Destructiveness, Combativeness—and usually large Secretiveness and Alimentiveness—in fact, largely developed propensities generally, are common to fighting men and carnivorous animals, such as the lion, tiger, etc. Observe this trait in portraits of Charles XII., Peter the Great, Napoleon, Wellington, Putnam, Grant, Thomas, Hooker, Black Hawk, Martin Luther, Parson Brownlow, and others, and contrast them in this particular with those of Drs. Tyng, Bond, and Edwards, naturally men of peace, and living the peaceful lives of ministers of the Gospel. Luther and our fighting East Tennessee parson are seen to be as truly men of war as Charles XII. or Joe Hooker, though their warfare may be spiritual rather than carnal.

THE COURAGE OF THE NARROW HEADS.

We are aware, of course, that narrow-headed men can fight,

coolly braving death at the cannon's mouth; but they need the strong motive of some noble purpose—the enthusiasm born of a holy cause, or what they deem such, to lead them to the front. Once there, they do their duty as brave men should—Firmness, Self-Esteem, and Approbateness stimulating their naturally weak Combaticiveness and Destructiveness, or standing in their place, and Patriotism or Love of Country and Home, Conscientiousness, and even Benevolence, giving their aid. But such men do not adopt arms as a profession, and, under ordinary circumstances, shrink from the



Fig. 462.—GENERAL NAPIER.

very thought of battle and bloodshed. Narrow-headed animals, like the deer, the sheep, etc., will fight in self defense or in defense of their young, but they never seek an opportunity to fight from a love of it.



Fig. 463.—PARSON BROWNLOW.

Cæsar, Wellington, Blucher, Napier, Hancock, Butler, and Black Hawk, portraits of all of whom we give in this work.

FIGHTING NOSES.

The next fighting feature to which we shall call attention is the nose. This in great military men is always strong and prominent, and generally aquiline, Roman, or Jewish in form. Observe this trait particularly in

Napoleon understood the meaning of a prominent nasal protuberance, and chose for posts requiring energy and courage, men with large noses.

STRONG JAWS.

Corresponding with the broad base of the brain, we find in the fighter a wide, rather straight, and very firm mouth. The



Fig. 464.—GENERAL BUFORD.

mostache in some of our military portraits partially conceals this feature, but it is evident enough in those of Grant, Hooker, and Brownlow, as well as in Cæsar, Wellington, Napoleon, Heenan, Sullivan, and Black Hawk, elsewhere given. It indicates a good development of the osseous system, and especially of the jaws, and the great masticatory power which allies such men to the carnivora, and makes them naturally not averse to blood.

PROMINENT TEMPLES.

Between the wide mouth and large jaws just noticed, and a prominent *zygoma* or arch-bone of the temple, there is a necessary physiological connection, since large jaws necessitate powerful temporal muscles to operate them, and these powerful muscles being attached to the zygomatic arch, require that to be large and strong; so we find in fighting men a marked degree of breadth through the temples or in front of the ear. Our wood-cuts show this quite imperfectly, but it is very observable in casts of the heads of persons noticed for their courage and love of fighting.



Fig. 465.—GENERAL HOOKER.

DECIDED CHINS.

Next we come to the chin. This is almost always prominent

in great warriors and other fighters (indicating the fullness of vital force which goes with the large cerebellum), and always *deep* or having great vertical extent, which is the sign of will-power, or the ability to control not only other men and external circumstances, but one's self. Mark this feature particularly in Cæsar, Cromwell, Wellington, Napoleon, Butler, Hooker, and Hancock. In nearly every case the cerebellum will be found equally prominent, and the man thus constituted will manifest the same ardor in love as in war.

"None but the brave deserve the fair," the poet says, and none know so well how to win and wear them.



Fig. 466.—GENERAL THOMAS.

THE SIGN OF COMMAND.

One other sign may be noticed here, though it does not belong exclusively or even necessarily to military men or fighters.

In great commanders, and in other men born to rule or habituated to the exercise of authority, there will be noticed a certain drawing down of the brows at the inner corners next the nose, and one or more horizontal lines across the nose at the root. These signs are the result of a muscular movement accompanying the exercise of authority, and become a permanent trait in those naturally fitted to command, or placed in positions requiring them to rule. The lowering of the brows is shown, to a greater or less extent, in most of our portraits (see that of Napier particularly), and the horizontal line across the nose, so clearly represented in that of Hooker, appears in the photographs (when taken from life) of nearly all the others, but the engravers (knowing nothing of its significance) have not thought it necessary to reproduce it. For the same reason wood-cuts fail in many other respects to furnish us with reliable indications of character. We are compelled, in many cases, to refer to photographs, painted portraits, and casts.

XXIII.

EFFECTS OF CLIMATE ON CHARACTER.

"The relations in which our bodies stand to the inorganic elements and forces of nature is closer than we may at first be inclined to admit."—*Phil. of Human Beauty.*



Fig. 467.—THE LIGHT AND THE DARK.

CLIMATE, temperature, and locality, with the other external conditions, such as food, clothing, and habitation, which depend upon them, have a marked effect upon character, and consequently upon configuration and expression. These conditions greatly modify the temperaments, qualities, textures, and tissues of individuals, nations, and tribes. They also bring about more or less change in the complexion, and in the contour of each and every feature; nor are the effects of these conditions more apparent on man than on the lower animals, and on trees, vines, shrubs, and plants.

THE TEMPERATE ZONES BEST.

Cold contracts and heat expands. In warm countries nature seems more prodigal in the abundance and luxurious-

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ness with which she produces. Look at the rich flora of the tropics, and compare this with that of the Arctic regions.



Fig. 468.—DR. KANT.

tual, and moral nature is called out most fully; where he is most civilized.

Compare, for a moment, the Hottentot and the Esquimaux with the Caucasian! What a difference! Do you say the difference may be accounted for on the ground of difference in origin or of race? Granting this, we should claim that by a change of situation to more favorable climates, you might look for a favorable change in the physiology and character of individual and people.

THE MAN OF THE TROPICS.

In warm countries, where nature furnishes in abundance all the necessities of mere animal existence, we find the people lazy, indolent, and without enterprise, industry, or

It is on a middle line between these extremes of heat and cold that plants, trees, and man attain the highest degree of perfection. Mere existence is possible in both extremes, as has been proved by our explorers; but to develop and improve the race requires more favorable conditions. It is in the temperate zones that we find the highest types of man; where his social, intellec-



Fig. 469.—THE HOTTENTOT.

ingenuity. Look again at the Hottentot, one of the lowest varieties of the human race. He has no necessity to think, to work, to invent, or to do anything but eat, drink, and sleep. His food is furnished without effort on his part, and he lives and dies little else than an animal.

Now go with me to our own "sunny South." What do we see? The black man is there in his element. He basks in the warm sunshine, which wilts the white man, and compels him to seek the shade. Instead of becoming stout and stocky, the white man gets thin and cadaverous, and his progeny grow up slim and attenuated. Thus much in regard to the physiology. What of the mind and character? Is not



FIG. 470.—A SOUTHERN NEGRO.

the true Southerner noted at home and abroad, yea, the world over, for his hospitality, generosity, liberality, and even for his excessive prodigality? Who is it that risks his fortune, yea, his last dollar, at a game of chance? Who patronizes, bets on, and encourages horse-races? Is it the close-fisted, thrifty Northerner? Or is it the improvident and careless Southerner? It is said that a Southern lady considers her table not well set unless provided with several extra plates and seats for chance visitors who may happen to call, and who, being agreeable, are always made most welcome. Indeed, the Southern people are even lavish in the manifestation of their generosity.

MAN ON THE ICE.

Then look once more at the poor Esquimaux, who stands shivering on the ice, watching from morning till night, and night till morning, over a seal hole; or spends the days in traversing frozen regions in quest of game, which affords, at best, but a scanty pittance, scarcely enough, at times, to save

him from utter starvation. He must needs work nearly all the time; and with him the price of life is eternal vigilance. He invents traps, makes nets, fashions spears and harpoons from bone and wood, builds sledges and boats, and makes



Fig. 471.—SEAL HUNTING.

clothes of hair and skins, and exhibits a moderate degree of mechanical skill in manufacturing utensils, and providing for the real wants of his body. But he is neither a philosopher, a poet, a statesman, nor great in anything. At best, he is little more than a simple child in mind. But how very different his temperament from that of the Hottentot!

THE MEN OF TEMPERATE CLIMATES.

Now if we direct our attention to the people occupying the middle line between these extremes, we shall see human nature under more favorable conditions. Here man lives in a more favored climate and country, and attains a higher degree of development in all respects. Here he must labor a portion

of his time to provide the means of subsistence. Working more than is necessary for this purpose, he may obtain riches



Fig. 472.—AN ESQUIMAUX.

and luxuries, neither of which is known to either Hottentot or Esquimaux. Here reason reigns, and man rises in the scale out of mere instinct—perceptive intellect, passions, and propensities—and stands forth the full measure of a man, in all his functions and faculties. Nor can we admit that these differences are merely those of race. On the contrary, we claim that these inferior races would be speedily and materially improved by transplant-

ing to the more favored countries. And it is equally true that one of the finest races would soon degenerate to the level of the lowest should his lot be cast amid Arctic frosts or under scorching equatorial suns. The differences which we see among men are thermal and temperamental, accompanied, of course, by physiological, phrenological, and physiognomical peculiarities easily distinguished.

CLIMATE AND CRANIA.

The people who inhabit cold or temperate zones have broader heads, bodies, and faces than the dwellers in southern climates. They also have Acquisitiveness—moderate, full, large, or very large; while those of tropical countries are usually more tall, spare, and thin, with *narrow* heads, and moderate, small, or very small Acquisitiveness. It is small in the negro, his head being long and narrow rather than broad; and, as a race, he is prodigal, if not improvident and wasteful. That there are exceptions to the rule is conceded, but it is claimed to be the rule, nevertheless. Why, it is a fact, that even the squirrels of the South, where the winters are open and mild, have narrow heads, Acquisitiveness being small;

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while in the North, where the winters are long and cold, they have that organ large, and in the autumn lay up stores of nuts and corn for use in winter. In the South, where there is little or no snow, they have neither the desire nor the occasion to be so economical.

EXAMPLES.

Take, then, the people of all northern countries, and compare them with those of all southern countries, and this fact will appear. Is not the Scot of North Britain more economical than he of the south? The Highlander of Inverness, Aberdeen, etc., is organized somewhat differently from a Londoner. A Belfast Irishman need not be confounded with a Cork or a Limerick Irishman. So it will be found in all countries. An Englishman in New Zealand becomes one thing; remove him to India or to Newfoundland, and he becomes a very different person. His complexion changes, and so does his temperament. Light-haired, blue-eyed, and fair Anglo-Saxons who settle in tropical India or America become the parents of dark-eyed and dark-haired children. And in the second generation we find only black eyes and black hair, with temperament and quality corresponding.

In the extreme north we find—as in the Greenlanders, Norwegians, Shetland Islanders, Newfoundlanders, etc.—short, thick people, with broad heads; and in the south, long and slim people, with narrow heads, and all other characteristics corresponding.

PLANTS AND ANIMALS.

Nor is this climatic influence confined to man. It is equally apparent, as we have already shown in part, in animals, plants, and trees. For example, compare a Shetland pony with a Lancashire horse. Then look at the trees. In the middle lines of latitude they grow to the height of sixty feet, “without a limb.” Farther north, they are smaller; and that which was a gigantic specimen in Tennessee, becomes but a miserable shrub in Labrador. It has suffered, in the last case, from “arrested development,” and is only a dwarf.

In further illustration of some of the foregoing remarks we

can not refrain from here introducing some extracts from the interesting work of Charles Victor Bonstetten, entitled "The Man of the North and the Man of the South." This work was written forty years ago, and had no special reference to this country, but it contains some most suggestive facts bearing upon the general subject of climate and race.

SOUTHERN IMPROVIDENCE.

"Indifference to the future," M. Bonstetten says, "is a remarkable trait of the Southern character." How can precaution be generated in a climate producing a harvest almost every month of the year? It is as true to-day as when this author wrote, that throughout Italy, for instance, it is customary to consume the whole day's provisions, even in hotels and well-regulated families; such a thing as keeping a stock of any article in store is almost unknown; literally from hand to mouth is the manner of life. In the North, on the other side, the necessities of life and the means of providing for them are as far apart as if separated by an immense abyss during the season when the fountains of Nature are sealed by the cold of winter. Accordingly, there is for the man of the North a season consecrated to forethought and reflection; the necessities of life stimulate his thinking faculties; he must construct houses for protection against coming cold, and must lay in supplies of food against the season of famine. In the South, continual crops, the unfading luxuriance of foliage and flowers, and the ever-bountiful present, keep out of mind and out of sight the future."

This is in perfect harmony with what we have already said of the tropical man, and with the phrenological and physiological developments of the two classes referred to, which are quite unlike each other in the particular organs brought into play in acquiring, saving, and providing for the future. In the former, Acquisitiveness, Constructiveness, Cautiousness, Secretiveness, and the Reflective Faculties are only moderate, while in the latter they are large; but in the perfection of the senses, in imagination, affection, and passion, the Southerner is pre-eminent.

NORTHERN AND SOUTHERN CIVILIZATION.

The central point in M. Bonstetten's theory, it will be seen, is the modification of organization, and consequently of character, by climate. The result is thus summed up:

"The man of the North turns his thoughts within himself, and reflects; the man of the South opens his whole soul and body to the external world, and feels. The man of the South will sooner attain a high degree of civilization than the man of the North; but the latter, advancing slowly, fixes himself on sure principles of reason. The man of the North, neglecting his education, degenerates faster than the man of the South; for the latter has always the education of the outward world and of the passions. In the South, civilization ebbs and flows rapidly; that of the North, based on principle, is slower in its march, but infinite in its flight.

"From these habits of reflection in the man of the North results a tenacity of feeling which is valuable when carried into love and friendship; but when carried into the somber side of human life it is a great misfortune. Take the matter of suicide; it is a disease among northerly nations, while in the South it is an explosion of violent passion. When traveling in Denmark, M. Bonstetten heard that the number of suicides in that kingdom was over one hundred and twenty a year, and just then it was the custom for every one committing suicide to cast himself out of a window.* In the South there is that exuberance of life, that emotional need which keeps every organ in perpetual excitement, and gives a constant disposition to enjoy impressions obtained through outward things.

CLIMATE AND POETRY.

"One might be tempted to believe that in a southern climate there was more of poesy than is found under the glacial skies of the North. History, however, seems to demonstrate the contrary. Poesy supposes two things: the sentiment which gives it birth, called inspiration, and language adapted

* This may have been a kind of epidemic, as it once was with suicides to cast themselves off from the London Bridge into the river, and also from the top of a very high monument.

to the expression of this sentiment. With the man of the North, sentiment is more concentrated than with the man of the South, and therefore nearer inspiration. In the South, sentiment, confined to exterior objects, evaporates in enjoyment; in the North, it is self-concentrated—deeper. The man of the South has an advantage in a more harmonious language, but the sentiment is diffuse, the expression wordy.

THOUGHT VS. FEELING.

“While the fine arts are native to the sunny skies of the South, *moral beauty*, by way of compensation, is native to the North. The transport of the senses under the burning sky of the South often renders the inward thought dead, and it thus happens that the man of the South, under the dominion of external nature, does not, like the man of the North, know how to rule this life by stringent principles. In northern climes, not to suffer is to be happy; the absence of pain there is enjoyment. In the South, on the contrary, the demand is for something more positive; there, gratification comes not from ideal, but from sensual sources. In a word, the man of the South is destined never to live with himself and enjoy the benefits of self-communion; the man of the North, on the other hand, proves that human dignity, as well as power and happiness, resides in thought and reflection far more than to any other agency that ministers to the progress of the race.”

SUMMING UP.

The conclusions to which we arrive, and in which we concur in the main with M. Bonstetten, may be summed up as follows: The North man is more cautious, considerate, thoughtful, calculating, and economical; the South man more venturesome, impulsive, reckless, generous, improvident, and revengeful. The Southerner has more Self-Esteem, Approbativeness, Benevolence, Combativeness, and Destructiveness: the Northerner more Conscientiousness, Firmness, Constructiveness, Acquisitiveness, Causality, and Comparison.

HOW FAR IS MAN COSMOPOLITAN?

In a recently published volume of the British Ethnological

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Society, the question "How far is man cosmopolitan?" is discussed by several writers, but more particularly by Mr. Hunt, who adduces facts to show the limited power of the races of man to adapt themselves to foreign climates. He mentions the testimony of Sir Ronald Martin, that a third generation of unmixed Europeans is nowhere to be found in Bengal; from which fact it would appear that if the constant recruiting of adults from Great Britain were to cease, the English dominance in India would quickly come to an end.

The number of European children raised in British India is so small that the oldest English regiment in that country, the Bombay "Toughs," notwithstanding that marriages with British women are encouraged, have never been able, from the time of Charles II. to this day, to raise boys enough to supply drummers and fifiers for the regiment.

Captain Hall's Esquimaux suffered intolerably from a New York summer, showing that those Arctic people could not bear transplanting even to this temperate region; and whoever has had the ill luck to double the Cape of Good Hope with a crew of Hindoo or Lascar sailors knows, to his sorrow, that the first touch of cool weather turns these brave and nimble fellows into as very cowards as a pack of helpless curs. Let the Esquimaux and the Hindoo change places, and neither would long survive the transportation.

Dr. Kane believed that he could have lived with the natives in the Arctic regions; but he died soon after his return, from the effects of his hardships and exposure, together with the influences of the great changes of climate to which he had been subjected.

PER CONTRA.

The Jews, the Gipsies, and the Chinese live and flourish in all climates, becoming acclimatized everywhere. This power of adaptation or natural cosmopolitanism is ascribed to the fact that they are *pure races*. All pure races support the influence of change better than mixed races, Mr. Hunt says; and he cites among other interesting examples the fact that the statistics of disease and death among the Jews and other

colonists in Algeria show that the former are less injuriously influenced by the climate than any other strangers.

COMPLEXION.

To what extent the color of the skin, hair, and eyes depends upon climate is a mooted question. Some attribute it entirely to this cause, while others claim that it is almost entirely a matter of race. We will not attempt to settle this question here; but content ourselves with recording a few facts which may throw light upon it.

As a general rule, the dark races are found in hot climates, and the light in temperate climates. It is also true, as we have before remarked, that individuals belonging to the fair races grow darker under a tropical sun, and that their children are born with brown or black eyes and have darker hair than their parents. It is so in India, in South America, and, to some extent, in our Southern States, where, however, it may be due quite as much to the mixture of French and Spanish blood as to climate. It must be admitted, too, that there are light-skinned races even in tropical Africa, and that our North American Indians have the same dark skin and black hair and eyes in Canada as in Florida. Even the Esquimaux who hunts the seal amid the icebergs of the polar seas shows no signs of becoming a blonde.

These facts seem to indicate that, while climate affects the color of the skin, hair, and eyes, in the Caucasian at least, to a certain extent, it is powerless to eradicate the distinctive characteristics of a race.

THE BLONDES DISAPPEARING.

It is a curious fact that, among the Caucasians of Europe and America, the blonde or blue-eyed and fair-haired type is gradually being supplanted by the darker-hued class. Less than two thousand years ago, according to the concurrent testimony of the Roman authors, the inhabitants of Great Britain and France, as well as of Germany, Celts and Saxons alike, were blue-eyed, and had red, yellow, or flaxen hair. Now the Celts are more generally dark, and even the Anglo-Saxons

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are fast becoming so ; and this change seems to be far more rapid in America than in Europe. Dark eyes—black, brown, and dark-gray—predominate to-day in the streets of the Anglo-Saxon city of New York, and we, as a nation, are fast becoming *melanic*.* How much of this is due to climate ? We can not tell. Food, clothing, modes of life, and other physical conditions also have their effect, and must be taken into the account.

A THEORY.

A writer in the *Anthropological Review* argues that fair-haired women are getting rarer in England than they were formerly, and that this change is the result of "conjugal selection," the men having a decided preference for dark hair. Mrs. Somerville remarked upon this fact some years ago, in her valuable work on "Physical Geography." She was of opinion that fair hair was then much less common among her countrymen and countrywomen than she remembered in her youth.

Dr. John Beddoe took pains some time ago to collect some statistics on this subject in England. He gives particulars respecting the color of the hair and the social condition of 737 women who have come under his observation, in his capacity of physician to the British Royal Infirmary. Of these 737 women the hair of 22 was "red," that of 95 was "fair," that of 240 was "brown," that of 336 was "dark-brown," and that of 33 was "black." Reckoning all the "red," the "fair," and the "brown" as "fair," and only the "dark-brown" and the "black" as "dark," the respective totals were thus nearly equal, being 367 "fair" and 369 "dark." Of the 367 fair-haired women, however, 32 per cent. were single, while of the 369 dark-haired women only 21.5 per cent. were single. It would thus appear that a greater proportion of fair-haired women than of dark-haired women "live and die unmarried and without offspring," and that the increasing prevalence of dark hair in England is due to what—slightly varying the phrase which Dr. Darwin has rendered so familiar—Dr. Beddoe calls "conjugal selection." It should be noted, too, that

* Dark, from the Greek *melan*.

Dr. Beddow's figures establish not only that, speaking generally, a dark-haired woman has (at least in the west of England) a much better chance of getting married than a fair-haired woman—the proportion of fair-haired women who fail to find husbands being to that of dark-haired women who similarly fail as three to two—but also that, among dark-haired women themselves, the chances of marriage are in proportion to the degree of the darkness of the hair. Thus, of the women with dark-brown hair who came under his observation, 22 per cent. were single, while of the women with black hair, only 18 per cent. were so.



XXIV.

ETHNOLOGY, OR TYPES OF MANKIND.

"O the difference of man and man."—SHAKESPEARE.

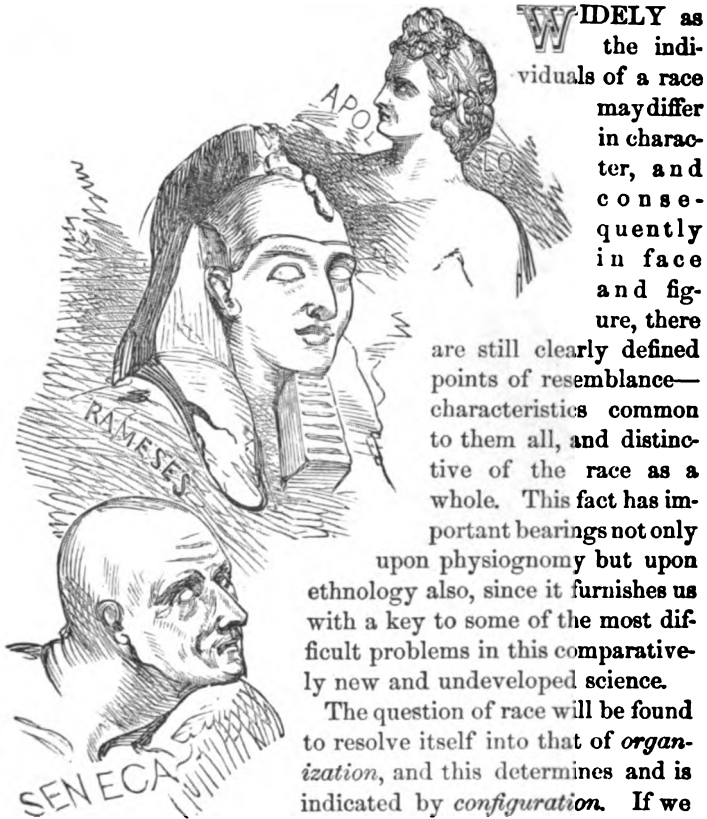


Fig. 473.

individual, a tribe, or a nation may belong, we must study the character of that individual, tribe, or nation through its

WIDELY as the individuals of a race may differ in character, and consequently in face and figure, there

are still clearly defined points of resemblance—characteristics common to them all, and distinctive of the race as a whole. This fact has important bearings not only upon physiognomy but upon ethnology also, since it furnishes us with a key to some of the most difficult problems in this comparatively new and undeveloped science.

The question of race will be found to resolve itself into that of *organization*, and this determines and is indicated by *configuration*. If we desire to ascertain to what race an

signs in the physical system. Would we determine the status of a race or a nation, we shall find the measure of its mental power in the size and quality of its average brain, and the index of its civilization and culture in its prevailing style of face and figure.

In so new a field of inquiry as the one upon which we are now entering, we can not hope to push our explorations into



Fig. 474.—THE CAUCASIAN TYPE.—DANIEL WEBSTER.

every part, or to investigate thoroughly every point that we may touch upon. We are, to some extent, pioneers, and as such shall do as well as we can the work assigned to us, trusting that those who follow will find their progress facilitated by our labors.

THE RACES CLASSIFIED.

We shall adopt here, as best known and most generally

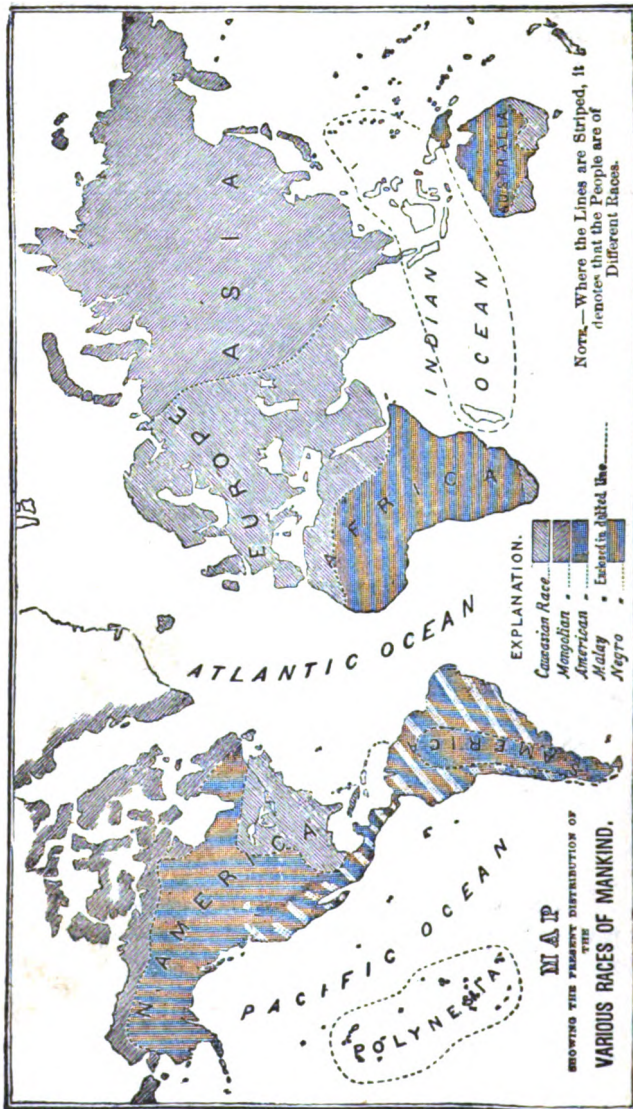


Fig. 418.—THE GEOGRAPHY OF ETHNOLOGY.

ceived, though not perhaps most scientific, the classification of Blumenbach. This arrangement will serve the purposes we have in view as well as any other yet proposed, and whether it be accepted by the reader or set aside in favor of a more recent one, the value of the facts we shall here throw together will not be lessened.

Blumenbach recognizes five races—

- I. The Caucasian Race,
- II. The Mongolian Race;
- III. The Malayan Race;
- IV. The American Race; and
- V. The Ethiopian Race.

Of these five races, or groups of races, if the reader choose to so consider them, we now purpose to give a general view, after which, in another chapter, we shall glance at some of the sub-races and nationalities into which they are divided. First, then, we will take up—

I. THE CAUCASIAN RACE.

This race embraces most of the ancient and modern inhabitants of Europe and their descendants in America and other



Fig. 478.—THE CAUCASIAN RACE.

parts of the world; the inhabitants of western Asia, as far as the river Ganges; the Africans who live on the shores of the Mediterranean; the Egyptians; the Abyssinians; the Copts; and the Arabs. It is spoken of as the white race, though the complexion of its various branches comprises every shade, from that of the blonde Teuton of Europe to that of the swarthy Moor of northern Africa. Their hair also varies from the deepest black to the lightest flaxen, but is always long, and never crisp or woolly like that of the negro.

The basis of Blumenbach's classification is the form of the skull. That of the Caucasian is represented in the following cuts. In the side view (fig. 477) it will be seen that the fore-

THE CAUCASIAN SKULL.

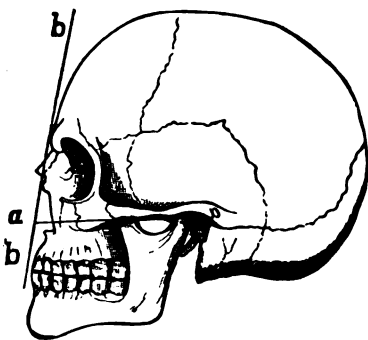


FIG. 477.—SIDE VIEW.

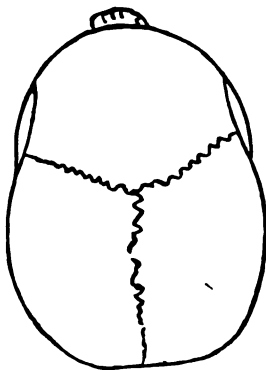


FIG. 478.—VERTICAL VIEW.

head is prominent and high, the coronal region elevated, and the back-head moderately projected. The facial angle, measured according to Camper's method,* and represented by the lines *a, a* and *b, b*, fig. 477 (not quite correctly drawn), is about 80° . It indicates great intellectual power, strong moral or spiritual sentiments, and a comparatively moderate development of the propensities.

Seen from above, as in fig. 478, the Caucasian skull is distinguished by the symmetry and beauty of all its parts. The rounded outline of the well-developed forehead hides the jaws and malar bones, and the zygoma are elegantly contracted and barely visible. In the entire outline there are no projecting angular parts, and the whole forms a beautiful oval, or rather ellipse, varying somewhat in the proportion of its two diameters, some nations having rounder and others more elongated heads.

* We make use of Camper's lines without by any means admitting his preposterous claims in regard to their sufficiency as a measure of intellectual power and a means of distinguishing the races. They are useful helps in observing the outlines of the skull in the lateral view, and we give them for that purpose alone.

The front view (fig. 479) shows still more satisfactorily the beautiful proportions of a well-formed Caucasian skull, with its magnificent intellectual and moral developments. It will be seen, farther on, how widely the crania of the other races differ from this in every aspect.



Fig. 479.—CAUCASIAN SKULL. The average internal capacity (corresponding with the size of the brain) of the Caucasian cranium, according to the accurate measurements of Prof. Morton, is 93.5 cubic inches, while that of the Mongolian is 85, and that of the Ethiopian 82.25; but the superiority of this race consists still more in the form than in the size of the brain. The special organs in which the Caucasian brain most excels, and which distinguish it from those of all less advanced races, are Causality, Mirthfulness, Ideality, and Conscientiousness; the organs of these faculties being invariably small in savage and barbarous tribes. The head, as a whole, in this race is commonly of the most symmetrical shape, and almost round; the forehead well developed; the cheek-bones rather narrow, without any projection; the face straight and oval, with the features distinct; the nose narrow, and generally slightly arched; the mouth comparatively small, with the lips a little turned out, especially the lower one; and the chin full and rounded. The eyes are of various colors—black, brown, hazel, gray, blue, etc.



Fig. 480.—THE MONGOLIAN RACE.

II. THE MONGOLIAN RACE.

This race embraces the tribes and nations which occupy the central, east, north, and

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southeast parts of Asia; the people of China and Japan, of Tibet, Bootan, and Indo-China, the Laplanders of Europe, and the Esquimaux on the shores of the Arctic Ocean. A portion of this family is distinguished for a considerable degree of culture, especially the Chinese and Japanese, but owing to their exclusive social system, which has separated them from the rest of mankind, they have made but little progress for ages.



Fig. 481.—A CHINESE.

The skull of the Mongolian shows in the side view (fig. 482) a larger proportion of its bulk back of the opening of the ear, and less prominence and elevation of the forehead than that of the Caucasian. Observed from above, as in fig. 483,



Fig. 482.—MONGOLIAN SKULL.

it will be seen that the forehead is flattened, and the facial bones, and especially the zygomatic arches, enormously expanded laterally. The malar or cheek-bones and the upper jaw are exposed to view, partly because of their greater projection than in the Caucasian cranium, but mainly on account of the recession of the forehead. Viewed in front, it presents, in a greater or less degree, a pyramidal appearance,

of which form fig. 484 is an extreme example. Breadth at the base and narrowness at the top distinguish the Mongolian head.

THE MONGOLIAN SKULL.

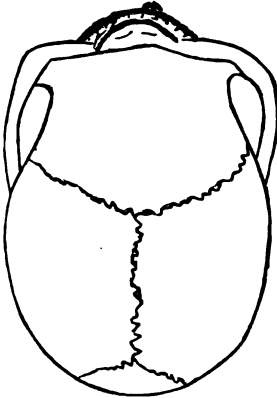


Fig. 483.—VERTICAL VIEW.

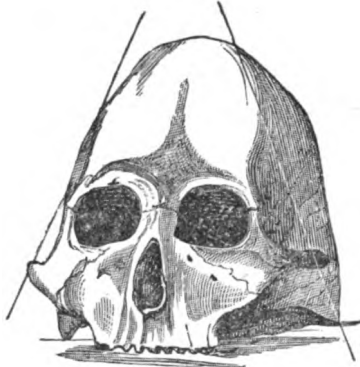


Fig. 484.—FRONT VIEW.

Combativeness, Destructiveness, Acquisitiveness, Secretiveness, Cautiousness, and Constructiveness are all generally full or large, while Ideality, Mirthfulness, and Causality are more or less deficient; and we herein see the organic cause of the half-blind but persistent mechanical activity, the tireless, patient industry and the energetic, though instinctive rather than intelligent, pursuit of material ends, which distinguish the race.

Physiognomically, the distinctive traits of the Mongolian are a broad flat face, with the parts imperfectly distinguished; a short, thick, and generally concave nose; small black eyes, the orbits of which rise in an oblique line from the nose to the temple; eyebrows scarcely perceptible; hair coarse, straight, black, and not abundant; beard slight or entirely wanting; and a complexion of tawny olive

III. THE MALAYAN RACE.

This division is generally made to embrace the principal tribes of the Indian Archipelago and all the island of the Pacific, except those which belong to the Ethiopian race. In the form of his cranium, the Malayan shows some of the characteristics of the Caucasian combined with traits w h

belong more properly to races of a lower type. He has less breadth and more height of skull than the Mongolian, and



Fig. 485.—A MALAY.

sometimes presents a facial angle that would do no discredit to the Caucasian; but he generally has the projecting jaws which seem to ally him to the Negro type. He is believed by some to be a cross between the three races named—the Caucasian, the Mongolian, and the Ethiopian—and not to form a distinct race. The skull represented by our cut (fig.

487) is not a fair specimen of the Malayan cranium, showing a smaller facial angle than is common with the race, together with a predominance of back-head and a projection of jaws which indicate a low order of development. The top of the head is slightly narrowed, the face, though narrower than that of the Mongolian, is wider than that of the negro; the features are generally prominent; the eyes are black and their orbits oblique; the hair is black; the color



Fig. 486.—THE MALAYAN RACE.

of the skin is tawny, sometimes approaching to that of mahogany. In character, the typical Malayan is active, enter-

prising, subtle, excitable, crafty, unprincipled, cruel, and sensual. "He is at once," it has been aptly said, "the tiger and the serpent of the East."

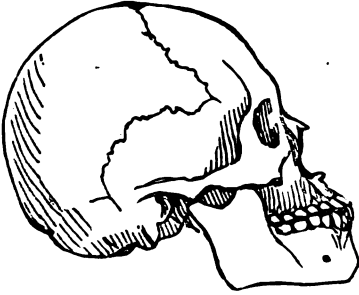


Fig. 487.—MALAY SKULL.

in this class. One of the most distinctive traits of the aboriginal American cranium is *roundness*. This quality is very

manifest in every aspect, but especially so in the vertical and the back views, as shown in figs. 491 and 492. The vertical or coronal view in our drawing, which is from Morton's "Crania Americana," shows less roundness, however, than the specimens in our cabinet now before

IV. THE AMERICAN RACE.

All the native American nations and tribes except the Esquimaux are included



Fig. 488.—A NORTH AMERICAN INDIAN.

us. Great breadth immediately above the ears and in the

region of Cautiousness and Secretiveness, and a lofty coronal region are also prominent characteristics. The forehead is



Fig. 489.—THE AMERICAN RACE.

broad and very prominent at the lower part, but retreating, and not high. The back-head in the region of the affections is, in general, only moderately developed, but there is almost always a large and sharply defined occipital protuberance.

The head and the face taken together are, in the front view, lozenge-shaped, as shown in fig. 488; the nose prominent, and

frequently of the form known as Jewish, or approximating that form; and the jaws strong and angular. The eyes are dark-brown or black, and the orbits have little or no obliquity; the mouth is straight, and the teeth nearly vertical. The hair is black and straight, and there is generally little or no beard. The

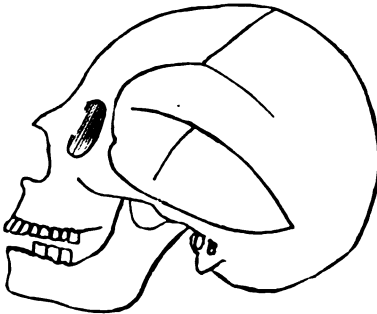


Fig. 490.—SIUX INDIAN SKULL.

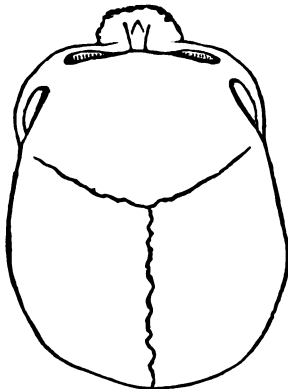


Fig. 491.—SEMINOLE SKULL.

natural complexion is brown rather than copper-colored, as generally described. The chest is broad, the abdomen moderate, and the limbs muscular and well proportioned.

In character, the American Indian, as his organization indicates, is active, energetic, brave, dignified, grave, firm, cautious, cunning, stern, cruel, revengeful, and unrelenting. His perceptive faculties are largely developed, but his powers of abstract reasoning are small, and the range of his mind very limited.*

V. THE ETHIOPIAN RACE.

The nations of this race are widely dispersed. They occupy all Africa south of the Great Desert, and Abyssinia, Australia, the greater part of Borneo, and several

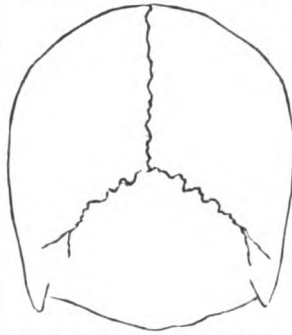


Fig. 492.—SEMINOLE SKULL—POSTERIOR VIEW.

other islands in the Indian Archipelago. To this race belong also the negroes in America, who were originally brought from Africa, and who have multiplied in the New World to a vast extent, numbering at present several millions.

There are, perhaps, in Africa, even a greater number of different tribes and families than among the Indians of North and



Fig. 493.—A NEGRO.—“SAM.”

* In this description we have taken the North American Indian as the type of the American race. The South American tribes have smaller heads and are inferior to those of the North, but are distinguished by the same general character.

South America; and they are as different in grade of intelligence and in disposition.

The best examples of this race are the negroes south of the Sahara, in Upper and Lower Guinea, Soudan, and Nubia. The natives of Senegambia and the Kaffres of the southeastern part of Africa resemble others of this race in their jet-black color and some of their features, but they are taller, more slender, and better proportioned than the rest.



Fig. 494.—THE ETHIOPIAN RACE.

The negro cranium is long and narrow. This is equally apparent whether it be viewed from the side, as in fig. 495, or from above, as in fig. 496. Comparing these drawings with those representing the Caucasian skull in the same positions (figs. 477 and 478), the difference is seen to be striking. In the side view of the former, the frontal region is seen to be less

THE ETHIOPIAN SKULL.

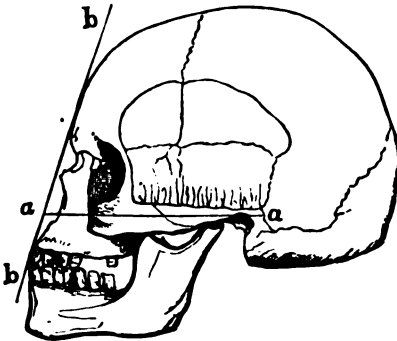


Fig. 495.—SIDE VIEW.

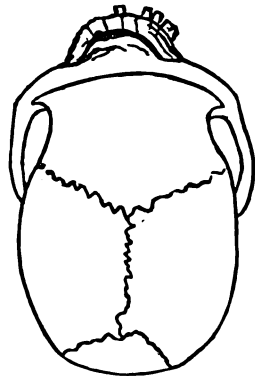


Fig. 496.—VERTICAL VIEW.

capacious than in the latter, the forehead more retreating, and the occiput comparatively more full. The facial angle ($a a, b b$, fig. 495) is about 70° , the jaws being large and projecting,

and forming what is called the prognathous type. Here the animal feelings predominate over both the intellect and the moral sentiments. The top view shows the facial bones compressed laterally, but projecting enormously in front.

The Ethiopian race is characterized physiognomically by a comparatively narrow face; cheek-bones projecting forward; a flat nose, with wide nostrils; thick lips; projecting jaws; deep-seated black eyes; black woolly hair and beard; and a black skin.

The Ethiopian race, as we have said, is made up of a great many sub-races and tribes, varying widely in configuration and character; but we may say of the typical negro, that from temperament he is slow and indolent, but persistent and capable of great endurance; and from cerebral development sensuous, passionate, affectionate, benevolent, docile, imitative, devotional, superstitious, excitable, impulsive, vain, improvident, cunning, politic, and unprincipled. He lives in the real rather than the ideal, and enjoys the present without thinking much of either the past or the future. He is a child in mental development, has the virtues and faults of a child, and like the child is capable of being controlled, disciplined, educated, and developed.



XXV.

NATIONAL TYPES.

"On their crania and on their faces are emblazoned the symbols of their nation or tribe, and the signs of their physical and mental status."—ANON.



Fig. 497.—HUMBOLDT.

IN the preceding chapter we have given a brief but comprehensive sketch of the most generally recognized grand divisions of mankind — the five races of Blumenbach — as they appear from the common standpoint of Phrenology and Physiognomy. We now purpose, in further illustration of this branch of our subject, to describe, more or less in detail, some of the principal nations and tribes comprised in the various races, with a view to

show how, in each, the common type is modified without being lost, and how, in all, configuration and character correspond. The Englishman, the Scotchman, the Irishman, the German, the Frenchman, and the American differ widely from each other, but they all have common traits which enable us to group them together under the general head of Caucasians. The same may be said of the relations of the various aboriginal American and native African tribes to the general types under which we have already described them. In all, particular differences are conjoined with general resemblances.

Our plan does not contemplate a complete treatise on Ethnology, and even a brief description of all nations and tribes would fill a large volume. We shall confine ourselves to such as will best serve the purpose we have in view—the exposition and illustration of Ethnological Physiognomy and Phrenology.

THE TEUTON.

Foremost among the races, by right of the largest and best-formed brain, stands the Caucasian. This is made plain in the preceding chapter, and the facts there stated need not be repeated.

The great Caucasian stem separates into many branches—Teutonic, Celtic, Slavonic, Semitic, Indostanic, etc. Taking, again, the size of the brain as the measure of power, we find the Teutonic branch entitled to the first place on the list. Professor Morton, who measured more skulls during his life than any other man before or since his day, sets down the average internal capacity (size of the brain) of the Teutonic cranium at 93.5 cubic inches. This gives the Teuton a massive intellect, which is generally well supported by a large, strong, well-proportioned body.

In his typical form, the Teuton has blue eyes, light hair, a blooming complexion, a strong frame, plump hard muscles, a full high forehead, and a lofty coronal region, with breadth of base enough to give him the courage and energy for which he is noted. He is the philosopher, the theologian, the statesman, the thinker of the modern world.

The German is at present the best representative of the Teutonic element, but the Norwegian, the Swede, the Dane, the Anglo-Saxon, and the Anglo-American are generally understood to be embraced in this division. We will take Baron Humboldt (fig. 497) as the representative of the combined Teutonic nationalities.

THE GERMAN.

In describing the Teuton in the preceding paragraphs, we sketched the German of to-day. We have only to fill up the outlines already presented.

Prof. Morton found the mean internal capacity of fifteen German skulls measured by him to be 95 cubic inches. The



Fig. 498.—GOETHE.

German head is well described by Dr. Vimont in his "*Traite de Phrenologie*" (tome iii., p. 470). He says: "The regions of the reflective faculties, of Cautiousness, and of the moral sentiments are all largely developed; Veneration and Benevolence [and Conscientiousness, he should have added], in particular, are well marked. The perceptive faculties, considered generally, are only moderately developed; but Time and Tune are exceptions, being almost always large. The organs of Ideality, Constructiveness, and Gustativeness [Alimentiveness] are often very prominent. Secretiveness and Self-Esteem are also very conspicuously large." In general form, we may add, the German head differs from the English in its greater angularity or squareness. The skull of Spurzheim (fig. 499) is a correct but favorable specimen of the German crania. The facial bones are broad, the chin wide and square, the nose rather broad and moderately prominent, the lips full, the eyes blue, the hair and beard light, and the complexion florid. The temperament

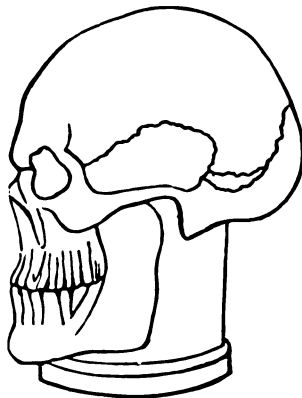


Fig. 499.—GERMAN SKULL.

is sanguine or vital, with a strong tendency toward the lymphatic.

The German is by organization a scholar, a metaphysician, a poet, an inventor, an investigator, an experimenter, a critic, a protestant, a doubter. He is slow but industrious, patient, and persevering. No mental task is too formidable for him to undertake, no problem too profound for him to attempt the solution; and while he discovers many new truths, he generally leaves it to others to make a practical application of them. In music, he occupies, unquestionably, the first place among the men of all nations and all times, as the names of Handel, Haydn, Mozart, Beethoven, and Mendelsohn sufficiently attest. A Goethe, a Schiller, a Humboldt, a Kant, and a Fichte speak for him in other departments. A people so prolific in really great men should, it would seem, form a great nation; but here they have failed. After centuries of civilization they have not been able to coalesce into a political unity, and present to the world, at this day, but a feeble confederation, instead of a great and powerful unitary nationality.

This is no doubt, in part at least, owing to the speculative tendencies of the German mind, which are carried into politics as well as into philosophy, and present a bar to practical plans for an efficient union of all who speak the language of the "fatherland."

THE SCANDINAVIAN.

The Scandinavian branch of the great Teutonic family has been truly called the most



Fig. 500.—ERIKSON.

Gothic of all the Goths—"the culminating point of the tall, fair-haired, blue-eyed, and muscular race of northern and west-

ern Europe." We have before us no specimens or drawings of Scandinavian crania, but a cast of a Norwegian skull in the Mortonian Collection is thus described by Dr. Meigs:

"This cast is remarkable for its great size. It belongs to the dolichocephalic variety of Retzius. The fronto-parietal



Fig. 501.—SWEDENBORG.

convexity is regular from side to side. The occipital region, as a whole, is quite prominent; but the basal portion of the occiput is flat and parallel with the horizon when the head rests squarely upon the lower jaw. The glabella, superciliary ridges, and external angular processes of the os frontis are very rough and prominent, overhanging the orbits and inter-orbital space in such a manner as to give a very harsh and forbidding expression to the face. The semicircular ridges

passing back from the external angular process are quite elevated and sharp. The nasal bones are high and rather sharp at a line of junction; orbits spacious; malar bones of moderate size, and flattened antero-laterally; superior maxilla rather small in comparison with the inferior, which is quite large, and much flared out at the angles. The facial angle is good, and the whole head strongly marked."



Fig. 502.—LINNAEUS.

The Danish and Swedish forms of skull bear a family



Fig. 503.—FREDERICA BREMER.

resemblance to the Norwegian, and in several respects are not unlike the Anglo-Saxon; the chin, however, is less acuminate

and the maxillary rami are shorter. The mean internal capacity of the skulls of this branch of the Teutonic race, measured by Prof. Morton, is 93.

The Scandinavian differs from the German in being of a more active temperament and a more practical turn of mind. His frame is larger and taller, his muscles more dense, his features more prominent, his perceptive faculties more fully developed, and his Causality less prominent, though by no means deficient. He has quite as high a top-head as the German, and his grand mythology indicates the mystic sublimity of his ideas; and with all his practicality he has given us Swedenborg, the greatest and purest as well as the most learned and scientific of all the mystics. In war, Scandinavia boasts her Charles XII.; in natural science, her Linnæus; in song, her Jenny Lind; and in literature, her Frederica Bremer. To us she has given her Ericsson, with his caloric engine and his Monitor, who may fitly represent the practical phase of Scandinavian character.

THE ENGLISHMAN.

The Anglo-Saxon of England is the product of a very extensive and complete amalgamation of ethnic elements, in which the Teutonic or Gothic predominates. The ancient Britons were undoubtedly of the Celtic race and formed the basis of the national type; but the superstructure is mainly Gothic—Belgic, Saxon, Anglic, Norman, Danish, etc. We of course find Englishmen in whom the Celtic element largely predominates, but these are not the true representatives of the English nationality. The typical Englishman is a Teuton—a modified Teuton, it is true, but essentially Gothic in his organization and character.

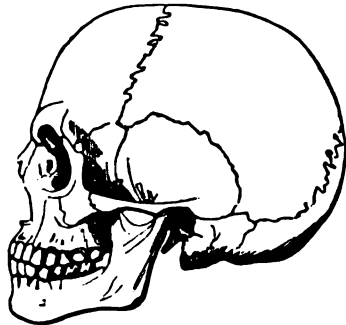


Fig. 504.—THE ENGLISH SKULL.

The English cranium is large. The result of Prof. Morton's

measurements, the number of which, however, is small, is to give it the first place in point of size among all the nations and tribes of the earth. The largest English skull in his collection was found to have an internal capacity of 105 cubic inches, and the smallest 91. The mean is 96. Add to this the fact that the English head is well developed in the region of the reflective faculties (fig. 504); broad over the ear (Executiveness), and prominent at Cautiousness, Self-Esteem, and Firmness, and you have the secret of the domination of English race in the four quarters of the globe. Brain is power; and the more you have of it the better, provided it be in the right place and you have a physical system to sustain it (as the Englishman has) correspondingly developed.

Physically, the Englishman is broadly built, stout, and amply developed throughout. He has a full chest, a good stomach,



Fig. 505.—WILLIAM COBBETT.

an active liver, a large heart. His digestion, circulation, and nutrition are perfect; and the supply of vitality is always equal to the demand. He is hale, rosy, and rotund.

Mentally, he is proud self-sufficient, combative, ambitious, energetic, aggressive, persevering, practical, acquisitive, economical, cautious, secretive, firm, affectionate, benevolent, and religious.

He is often rough in his manners and bluff in his speech, but is at heart kind and tender. He is noted for sound common sense rather than for metaphysical acuteness, abstract reasoning, imagination, or sentimentality.

In the profile of our typical John Bull (fig. 505) here presented, we get but a partial view of his phrenological developments. A front and back view would exhibit great breadth

between the ears, indicating large **Combativeness** and **Destructiveness**; a full cerebellum; an ample development of all the social organs; large **Acquisitiveness**, **Alimentiveness**, **Cautiousness**, **Secretiveness**, **Firmness**, **Conscientiousness**, **Benevolence**, and **Veneration**. It is a practical working head—not the head of a philosopher, an artist, or genius of any sort, but of a *doer*. A man with such a brain may be an engineer,

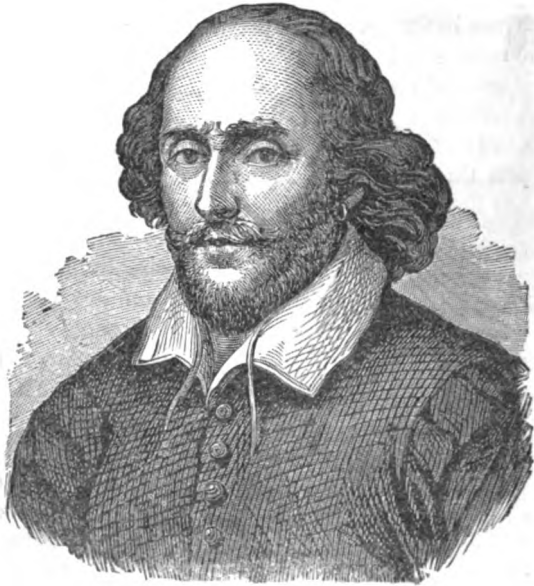


Fig. 506.—SHAKESPEARE.

a builder, an agriculturist, a trader, a financier—a man of affairs (as the French say), in almost any department, and can hardly fail to be a successful one. He will also greatly enjoy society and the family relations.

There is evidently a lack of the delicate sensibilities, the elegant tastes, and the refinement which belong to organizations of finer texture; but practical sense, self-appreciation, self-protection, hatred of injustice, wrong, and *sham*, warmth

of heart, and genuine kindliness are clearly and strongly indicated.

Practical and matter-of-fact as the English mind generally is, there is not lacking a poetical and speculative vein. Englishmen have done something else besides manufacture, trade, and fight. They are justified in boasting of such names as Shakspeare, Milton, Byron, Wordsworth, Bacon, Locke, Tennyson, Newton, Watt, Stephenson, Whitney, Bolton, Herschel, and Davy.



Fig. 507.—WHITNEY.

of types of which we have spoken has been measurably inoperative, the mass of the inhabitants having continued in the spots where they originally settled, and their intermixture with the people of other parts of the kingdom not being sufficiently extensive to obliterate the traces of their derivation. The circumstances in which they have been placed have not, moreover, been of a nature calculated to change their character since the time they emigrated from the Continent; and as distinct dialects still linger in different districts, so peculiarities of complexion, form of head, face, body, and mental disposition have been preserved to an extent sufficient to arrest the attention of the careful observer. As in the variety of dialect, so in temperament.

ANCIENT TYPES PRESERVED.

In many of the rural districts of England and Wales, the amalgamation



Fig. 508.—GARLIC WOMAN.

In the proceedings of the British Ethnological Society we find a paper giving the results of a series of observations made in England and Wales during the last ten years by Mr. Mackintosh, together with the remarks which it drew forth from various members in reference to its general subject. We condense the more important portions, and give engravings from the portraits used by Mr. Mackintosh to illustrate his remarks.

The author of the paper just referred to uses the terms Gaelic, Cymbrian, Frisian, Jutian, Saxon, Norse, and Danish as a means of convenient classification, and not as dogmatically implying that these terms could now be safely coupled with predominating types in various parts of England and Wales. No reasons have been assigned for believing



Fig. 509.—GAELIC MAN.



Fig. 510.—CYMBRIAN.

that any of these races have become extinct; and whether there are any districts in England where they have had a chance of persistence, must be determined by observation and inquiries relative to hereditary descent such as the author of the paper has been making, and by a comparison of the number of persons born in the districts where they are found at the times when the decennial census is taken. He inclined to the opinion that the types still traceable in what he called ethnographical areas are the effects of lineal descent combined with a law antagonistic to amalgamation—a law, however, not imply-

ing a difference of origin. He did not see why principles may not have been originally implanted in the human constitution admitting of the rise of varieties, or rather securing the appearance of certain types at certain periods—these types being intended to subserve great moral purposes, and to continue, as in the undoubted case of the Jews, until these purposes were fulfilled. The author concluded by remarking that the analogy of space and time, as revealed by astronomy and geology, favored the belief that nothing could spring up by chance; but that fixed principles, established and guided by an unseen hand, pervaded every interstice of the organic and inorganic creations. The chairman of the meeting, Mr. John Crawford, expressed the belief that



FIG. 511.—CYMBRIAN.

the great mass of the people of England were British, and not Teutonic.

Dr. Knox defended his well-known theory, that in ethnology race is everything. He was convinced that an element not mentioned by the author of the paper—the Phœnician element—was very prevalent in Cornwall, Devon, and the south of Ireland.

Mr. Robert Chambers supported the views of the author of the paper by stating instances in which physical peculiarities have been perpetuated in families—the lip of the



FIG. 512.—JULIAN MAN.

house of Hapsburg, for instance. He referred to his own

family and to the descendants of the brother of Sir William Wallace. He believed that types, after being apparently lost, frequently re-emerge.

Mr. Wright pointed out the great necessity for caution in making a minute classification of types. He believed that the customs of the middle ages favored the perpetuation of family characteristics in certain districts.

Mr. Luke Burke fully admitted the existence of the various types so ably described by the author of the paper, but contended that these types were not the result of lineal descent from Celtic and Teutonic tribes, but were produced through a combination of organic and social laws by which types adapted to certain pursuits sprung



Fig. 513.—JUTIAN WOMAN.



Fig. 514.—SAXON WOMAN.

up in every civilized country—these types distinct from either varieties or species. He likewise referred to the necessity of being careful not to confound representation with affinity, or to suppose that mere typical resemblance indicated a common origin.

1. THE GAELIC TYPE.—The Gaels (figs. 508 and 509), as is evident from the names of rivers, mountains, etc., were among the first inhabitants of the British Isles. They still constitute a considerable part of the population of England as well as Ireland and Scotland. Physical characteristics: Head elongated backward, oblique eyebrows, flat nose, frequently turned up;

great distance from the nose to the mouth, jaws and mouth projecting forward, retreating chin, complexion and stature



Fig. 515.—SAXON MAN.

various. Mental characteristics : Quickness of perception, deficient reasoning power and foresight, impulsive and combative, extreme sensibility. The state of society in a Gaelic country may be compared to an arch—if one stone falls, the whole tumbles to the ground. *Localities* : Many parts of France, Dorsetshire, Somersetshire, Devon, Cornwall—the midland and north-western counties of England ; Connaught, and other parts of Ireland ; the West Highlands of Scotland.

2. THE CYMBRIAN TYPE.—The Cymbri (figs. 510 and 511) have a rather square, broad head ; face wide at the upper part, and narrowing off downward ; eyes much sunk and half closed ; chest and shoulders very broad ;* mental character more analytical than inductive, more critical than comprehensive, very musical, religious, and disposed to trace back ancestry. *Localities* : The central and bordering districts of Wales, Cumberland, and part of Cornwall, etc.



Fig 516.—NORSE MAN.

3. THE JUTIAN TYPE.—In this class (figs. 512 and 513) we observe a convex profile, narrow head, narrow shoulders and chest, springing gait, rather tall person, and a character more practical than imaginative. *Localities* : Central Kent, the

* 1,000 Welshmen, in course of being drilled in Cardiganshire, once took up as much ground as 1,200 midland county men.—*Archdeacon Williams*.

eastern part of the Isle of Wight, and Jutland, especially the neighborhood of the Lime Fiord.

4. THE SAXON TYPE.—The Saxon (figs. 514 and 515) is characterized by a semicircular forehead and eyebrows, prominent blue or bluish gray eyes, low cheek-bones; rather short, broad face, free from angles, short fingers and limbs, tendency to obesity, adapted to occupations in general rather than to one in particular, simple-hearted and truthful, slow in perception, sound in judgment, union of meekness and self-reliance, great individuality of character. The state of society in a Saxon country may be compared to a building, each part of which rests on its own foundation. *Localities:*



Fig. 517.—DANISH MAN.

Interior of the Isle of Thanet, east of Sussex; neighborhood of Chichester, Romsey, and Salisbury; some parts of Dorsetshire, Somerset, and Devon; some parts of Essex, Cambridge-shire, and Herts; southeast of Scotland, Hanover, some parts of Holstein, etc.*

THE SCANDINAVIAN TYPE.†—Here we see (figs. 516 and 517) a rather square head; a straight profile; a long nose,

* The Saxons are supposed to be derived from the Sakai or Sacæ, a Scythian horde described by Herodotus. It seems probable that they were among the earliest of the Teutonic tribes that passed from Asia into Europe. The early exploits of the Saxons were chiefly at sea. Their depredations upon the Roman colonies and commerce were so severely felt that a special fleet was appointed to act against them, and the southern coast of Britain was placed under an officer styled *comes littoris Saxonica*. They, finally, as is well known, established themselves in Britain and on the Continent, attacked the Upper Rhine, and extended the scene of their spoils far inland, making Gaul (France), Italy, and eastern Germany tremble at their approach. Their aggressive power was finally destroyed by Charlemagne, after a most obstinate and destructive war.

† Scandinavian is a general term applied to the ancient inhabitants of

high cheek-bones; a prominent chest; and a strong, energetic, ambitious, enterprising character, with a disposition to travel and find a congenial home on the ocean. *Localities:* Cumberland, some parts of Yorkshire, Lincolnshire, northeast coast of England; northeast of Caithness, the East Highlands of Scotland; Orkney, Shetland, Hebrides; east coast of Ireland, Iceland, west coast of Norway, the islands of Denmark, the east coast of Jutland, etc.*

THE ANGLO-AMERICAN.

We use this term in an ethnological rather than in a national sense. We designate by it those inhabitants of America in whom the English blood predominates. A large majority of the people of the United States and the British Provinces are of this class. Our remarks, however, will refer mainly to the

Denmark, Norway, and Sweden. They were also known as Northmen. A portion of them conquered Normandy, and, remaining permanently there, were designated Normans.

* Ancient Scandinavia, though probably not very populous, held a larger population than it could well employ or feed. This state of things caused incessant filibustering or piratical excursions abroad led by commanders called "sea-kings." There was, in fact, a law of ancient Scandinavia which ordained that certain members of each family should, by lot, annually seek their fortunes abroad. The father drove forth his sons, on attaining manhood, with the exception of the eldest, who was heir to the estate.

As early as 787, the Danes from Scandinavia made excursions along the English coast. In 835 they were vanquished by the Anglo-Saxon King Egbert; but forty years afterward, in the reign of Ethelred, a foothold was obtained by them, and Northumberland and other districts mastered. They were temporarily held in check by Alfred the Great, but finally overcame all resistance, and became lords of the soil. This happened about the year 991, and during the next fifty years four Danish kings reigned in England.

The discovery of America by the Northmen, in the early part of the eleventh century, can hardly be doubted. It may even be true that traces of them were found by the Jesuit missionaries among the Indians of Gaspé, at the mouth of the St. Lawrence, as asserted by Charlevoix, who says of a tribe located there, that they not only revered the symbol of the cross before the arrival of the missionaries, but possessed many physical peculiarities and customs which pointed to a European descent.

former, and may therefore be considered as being practically descriptive of a national type—the American of the Great Republic.

The basis of our national character is Anglo-Saxon or English. We have hardly had time to develop a national character or a national type of skull; but as the Anglo-Saxon element predominates, so does the Anglo-Saxon form of head. Climate and the admixture of Celtic blood, however, are gradually modifying this form. Our heads are already somewhat more elongated than those of the English, and our facial bones narrower. The mean size of the American skull nearly accords with that of the collective Teutonic race, having an internal capacity of

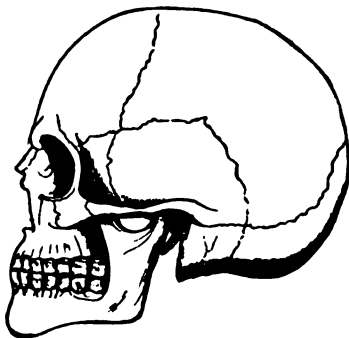


Fig. 518.—AMERICAN SKULL.

93.5 cubic inches. We already differ somewhat, as we have said, in the general form of the head from our English ancestors. In temperament and in the minuter shades of character the difference is far more striking. The Englishman is sanguine, the American bilious. The vital system predominates in the former, the motive (osseous and muscular) and the nervous or mental in the latter. John Bull has more Self-Esteem, Cautiousness, Destructiveness, and Reverence than Jonathan; the latter excels him in Hope, Benevolence, Ideality, Combative-ness, and Approbateness. We are the more active, keen-sighted, intuitive, impulsive, and generous; the English the more cool, considerate, prudent, persistent, and steady.

The American is tall rather than short; has a well-developed frame-work, covered with only moderately full but very dense and wiry muscle; strongly marked if not prominent features; a Greco-Roman nose; rather high cheek-bones; strong jaws; a prominent chin; and a moderately large mouth. The average complexion among us is much darker than among the English, and each generation is darker than

the preceding one. **FIG. 519. PRESIDENT LINCOLN** and 520 (Cornelius Vanderbilt may be considered as fairly representing the typical American of to-day

ARE WE INTERMIXING?

It is the custom of Europeans to answer this question in the affirmative. It will be well for us to look the problem involved squarely in the face. Is the Caucasian race deteriorating in America? When the fresh blood of Europe ceases to be poured into our national veins, shall we die out and leave the red man to resume possession of his native domains? These are merely different forms of the same great physiological and ethnological question—a question which is now forcing itself upon public attention



Fig. 519.—PRESIDENT LINCOLN.

and getting discussed with more or less intelligence (and generally *less*!), both in the newspapers and out of them. In our opinion, those European cousins of ours who discuss these questions so flippantly and doom us to extinction with such philosophic nonchalance, know very little of the subject they are talking about. History contradicts and will in the end utterly refute them.

But while we do not believe that the white man is going to die out here, or even become merged in the red or the black, there are certain physiological facts in reference to the Caucasian race in America which no intelligent observer can ignore, and which we do not desire to conceal, as they have

important practical bearings. In the first place, there is observable in us a decrease of the cellular tissues and a shrinking of the muscles, causing us to exhibit less plumpness of body than the European stocks from which we are descended. Bone seems to thrive with us better than muscle. But what flesh we have is dense, tough, and wiry ; and because we



Fig. 590.—CORNELIUS VANDERBILT.

abound in solids more than in fluids, they think we are *withering*—drying up, root and branch, and shall perchance be blown away by some strong north wind. They had better not count too surely upon that. If any of our European cousins have serious doubts about our physical stamina—if they think we are feeble-kneed and weak in the arms because our bellies are not so big as theirs, let them come over and

try a bayonet charge against the "boys" who hurled back Lee's serried columns at Gettysburg and stormed Mission Ridge, or even against the men who were defeated on those occasions.

Another marked difference between us and the people of all other countries is our intense activity. This is another effect of our dry, stimulating atmosphere. We seem to be constantly inhaling an extra proportion of oxygen, or to be overcharged with electricity. Our motions are rapid; we walk fast and are always in a hurry. We live fast (if our feverish, hurried existence can be called life), and it is not to be wondered at if we get sooner to the end of our life-journey than slower people. Even our pleasures, our luxuries, are of the fast order. We have few quiet, easy, relaxing enjoyments, but make haste to be happy as we do to get rich.

We might mention and illustrate other physical and mental peculiarities which are becoming distinctive American traits, and are doubtless due, in part at least, to climatic influences, but these will indicate the physiological tendencies observable among us, which, though far from indicating decay or even deterioration, should rather be held in check than encouraged by our voluntary habits. Our activity, though a fine thing within reasonable limits, may become excessive, and the physical conditions which accompany and indicate it are liable to degenerate into a raw-boned angularity and stiffness; and it is desirable that we encourage counteracting influences. We may with profit cultivate an easy, careless good-humor—may "laugh and grow fat," if we can without danger of uncomfortable obesity—and need not fear to adopt quieter and more soothing modes of enjoyment. We should not be harmed by being made to feel a little lazy at times, and disposed to exclaim with the poet:

"How dainty sweet it were in careless sort to lie,
Nor of the busier scenes we left behind
Aught envying."

THE FUTURE AMERICAN.

Some late writers, accepting the doctrine that the American climate is unsuited to the pure Caucasian, find a refuge against

According to the theory of the blending of the races, white and black, and red, the offspring of which—the future monarch—will be the composite and cosmopolitan *brown* man—the true monarch of the world.

The ideal or type man of the future," we are told in a recent publication, "will blend in himself all that is passionate and generous in the darker races, all that is imaginative and poetic in the Asiatic races, and all that is intellectual and scientific in the white races. He will also be composite as regards color. The purest miscegen [mixed man] will be brown, with reddish cheeks, curly and waving hair, dark eyes, and a richness and suppleness of form not now dreamed of by any individual people. Of course the old races will not be entirely lost sight of. Nature abhors uniformity, and while the highest and purest type will be such as we have described, there will be all shades of color, from white to black."

The God-given instincts of every properly constituted white man and woman furnish a sufficient refutation of the theory of miscegenation, so far at least as it relates to two races so widely separated as the negro and the Caucasian, and we may spare all argument. We may remark, however, that whether a mixture of blood shall result in a compound superior to either of the ingredients, or inferior, depends upon the adaptation of the one to the other. Some mixed races are more powerful than their progenitors on either side; but everybody knows or ought to know, that this is not the case with the offspring of a union between the black and the white races. The mulatto, though superior to the negro in intellect, is inferior to both the black and the white man in physical strength and endurance; and the mixed race always either becomes absorbed in one or the other of the pure races, or else speedily dies out.

There is still another and in our view a more reasonable theory in regard to the much discussed American of the future. The effects of climate in modifying plants, animals, and men are obvious and universally recognized, though the extent to which this modification may be carried is not well settled. Now it is contended that the aboriginal red man possesses

just the physical constitution, conformation, complexion, and mental character that the American climate is calculated to produce and perpetuate; and that any other race transplanted to this continent must accommodate itself to this climatic condition by such a change in constitution and configuration as will approximate it to the aborigines. A perceptible modification in that direction is said to be already observable. A late writer says: "Thus it is that the genuine Yankee, in whatever he differs from his Anglo-Saxon ancestor, does so by a slow, yet very perceptible approximation to the Indian organization. This, or extinction, is indeed the unavoidable fate of all colonial populations widely separated by geographical and climatic intervals from their mother country."

We are convinced that there is some truth in the foregoing remark, but at the same time we are far from believing that the Caucasian of America will ever either be changed into a red Indian or lapse into decay and barrenness and thus die out. The changes now admitted to be going on in the white race on this continent are the effects of new external conditions, and simply indicate the process of acclimatization and adaptation. When this process shall have been completed, we shall behold the true American of the future, and in him, we firmly believe, "the foremost man of all the world."

LOWLAND SCOTCH SKULL.

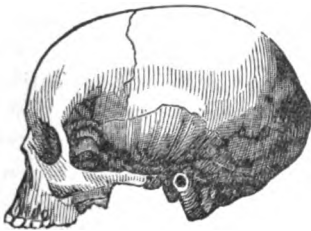


Fig. 521.—SIDE VIEW.

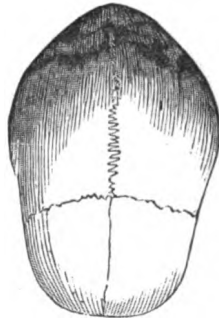


Fig. 522.—VERTICAL VIEW.

THE LOWLAND SCOT.

The Scotchmen of the Lowlands is of a mixed Celto-Saxon

race, and his cranium is longer and proportionally narrower anteriorly than that of the English. It is very full, however, at the base, in the region of Cautiousness, Destructiveness, Combativeness, Acquisitiveness, and Secretiveness. Firmness, Self-Esteem, and Love of Approbation and Veneration are also large. Causality, Comparison, and the perceptive faculties generally, are, as a rule, well developed; but there is a deficiency in Ideality and Imitation. The organs of the domestic and social affections are very prominent. The malar and maxillary bones are not so broad as in the English cranium.



Fig. 523.—A LOWLANDER.

The physiognomy of the Lowland Scot is strongly marked, as the accompanying portraits (figs. 523 and 524) clearly show. The face is narrower than that of the Englishman, and less smoothly rounded. The nose is prominent, the cheek-bones rather high, the jaws large, the mouth firm and rather straight, the upper lip long, and the chin full. The complexion is generally light, the eyes blue or gray, and the hair light brown, sandy, or red. He is generally tall, has a sinewy frame and a direct, steady, and firm manner of walking.



Fig. 524.—GEO. COMBE.

As a result of the organization we have noted, the Lowland Scot is observing, executive, persevering, set in his own way, quick to resist, economical, secretive, cautious, reserved, religious, and polite. He is not deficient in Benevolence, but that sentiment is too much under the control of Acquisitiveness, Cautiousness, and the reflective intellect to be generally evidenced by acts which involve pecuniary cost. He is shrewd in business; patient and accurate in practical science; and pro-

foundly discriminating in the abstract philosophical inquiries in which he delights. He lacks imagination and the finer sensibilities of the poet and the artist. He will never give us an epic or paint us a great picture.

THE HIGHLANDER.

There appear to be, ethnologically as well socially, two quite distinct classes of Highlanders. The higher class are of Gothic—principally Norwegian—origin, and are taller, larger-bodied, and finer looking men than the common people who are in the main Celtic.

Sir Walter Scott seems to have observed this difference, though perhaps not the reason for it. Describing the Highlanders on Flodden Field, in “Marmion,” he says:

Their leg below the knee was bare ;
Their form was sinewy, short, and spare,
 And hardened to the blast ;
Of taller race their chiefs they own,
 And by the eagle's plumage known.

These chiefs were and are at this day of a light complexion, with blue eyes and sandy or red hair, and resemble in organization and character their Scandinavian ancestors whom we have already described. Fig. 526 illustrates this cultivated and better class, to which also Hugh Miller the celebrated geologist seems to have belonged.*

* Hugh Miller was born in Cromarty, on the northeast coast of Scotland, October 10. 1802. and died at Portobello, near Edinburgh, December 26, 1856. He belonged to that half Scandinavian population inhabiting the



Fig. 525.—SIR WALTER SCOTT.

The Celtic Highlander is a man of quite another type, and affords a striking contrast with the preceding. He is rather small in stature, spare, tough, wiry, strong, and active. The features are rather sharp, but not disagreeable; the eyes and hair black; and the expression keen, resolute, and intelligent. "A walking Highlander," McCulloch says, "will perform his fifty or sixty miles a day, and when it is done will probably be found



Fig. 526.—A HIGHLANDER.

lounging about among his friends instead of resting himself." It is this class that comprises the great mass of the people of the Highlands, though there is, of course, considerable intermixture, in some places, with the Gothic element, producing the happiest results, both physically and mentally.

The Highlander is almost the reverse of the Lowlander in mental character. He is impulsive, warm-hearted, urbane, sensitive, passionate, irritable, uncalculating, enterprising, adventurous, generous, hospitable, open, vivacious, and imaginative. He may or may not write, but he is naturally a poet. It was probably that high imagining that his Highland mother gave to Byron that made him what he was as a writer; and wherever we find manifestations of the poetic element in the

shores of the German Ocean, from Fife to Caithness. On his father's side he was the fourth descent in a line of sailors from John Feddes, one of the last of the buccaneers of the Spanish main, who returned to Cromarty to enjoy his money. He built the "long low house" in which his distinguished great-grandson passed his youth. His mother was of Highland blood and the fifth in descent from Donald Roy, of Rosshire, famed for his piety and his second-sight.—*New American Cyclopaedia*.

Scottish character, we may infer a cropping out of Highland blood.

THE WELSHMAN.

Nearly the whole of North Wales and a part of South Wales is occupied by a light-haired, blue-eyed Gothic people, probably of Belgic origin. In South Wales the light eye ceases to be general, and the dark prevails, showing the Celtic origin of the people. Here we find the typical Welshman, who very nearly resembles the Breton of the opposite shores of



Fig. 527.—HUGH MILLER.

France Fig. 528 is a fair representation of this class, which has been briefly described on page 405, under the head of "The Cymbrian Type." His most striking physical characteristics are a broad, square, and not very high head; a face wide at the upper part and narrowing off downward; deep-set dark eyes; projecting eyebrows; prominent nose; strong jaws; a well-developed chin; and broad chest and shoulders. He is tough, rugged, and enduring. He is clannish, like the Scot; social, strong in his attachments, very willful and tenacious, and was never conquered. He is imaginative, poetical, inventive,—not so imitative,—practical, and very persevering. He excels in literature, science, history, theology, and in all the industrial arts. He has great integrity, a high sense of honor, and is honest, manly, respectful, and dig-



Fig. 528.—A WELSHMAN.

nified. He makes an excellent navigator, explorer, engineer, builder, manufacturer, merchant, or professional man.

THE IRISHMAN.



Fig. 529.—THE IRISHMAN OF THE NORTH.

In the south of Ireland we find the dark-haired Irish, with black, gray, or bluish eyes. Here the Celtic blood predominates, and we have a cast of features more like fig. 530. It is in this class that we must look for the representative Hibernian. Physically, the typical Irishman is well made and muscular, but lacks the rounded outlines which characterize the Englishman. In quality, his organization is wiry, tense, and tough. His lungs are more largely developed than his stomach, and he has great strength in his arms and hands. His features are generally strongly marked and prominent. He is sanguine,



Fig. 530.—THE IRISHMAN OF THE SOUTH.

nervous, and very impulsive; and lacks that calm, cool, self-possessed manner which distinguishes the more philosophic and phlegmatic German, as well as the wily cautiousness of the Frenchman and the Scot.

In character, the Irishman is ardent, enthusiastic, patriotic, religious, social, sympathetic, full of feeling, fond of sport, witty, lively, sensitive, and kind-hearted. He excels in ora-



Fig. 581.—FATHER MATHEW.*

tory and in lyric poetry, especially love-songs, of which the best ever written have been produced by Irishmen, at the head of whom, in that department, stands Thomas Moore (fig. 107, p. 96).

The true Irishman is more combative but less destructive than his English neighbor. He is religious, but not free from superstition. In disposition he is more generous than judicious, and more impetuous than persistent. He is transparent and

open-hearted by nature, and succeeds but poorly if he attempts to deceive. He may have the prudence which results from the exercise of his judgment, but is not cautious, cunning, or foxy, and is a better fighter than strategist.

The Irishman has far less Acquisitiveness than the Englishman or the Scotchman, and hence is more prodigal and less economical. He is fond of stimulants, and is very liable to allow his appetites to lead him into various excesses. Self-Esteem not being large, he permits himself to be governed too much by others, and when ignorant, becomes the ready tool of any demagogue who knows his weak points. Adhesiveness is less developed in him, as a race, than in most others, and he affiliates as readily with strangers as with his

* This likeness was taken by Brady, in New York, and was copied on the marble monument, which now stands over his grave, in Cork, Ireland.

own kin. Like the American, he acts on the go-ahead principle, and his going ahead is not always under the control of the self-regulating part of the mental machinery.

Perhaps one of the best specimens of the moral, religious, and philanthropic Irishman may be found in Father Mathew, the great temperance apostle (fig. 531). This good man worked chiefly through his Benevolence, which was one of the largest organs of his brain. When asked how it was that he induced so many of his fellow-countrymen to take the pledge—twenty thousand in a day—his reply was, "The human heart has many strings, and if one only knows how to touch them aright, he may obtain a ready response." The good priest spoke *from the heart to the heart*—Benevolence—and led his people for their good. His name will go down to posterity among the benefactors of his race. Observe the shape of the head and the kindly expression of his face. It is one of the strongest confirmations of the truth of Phrenology and of Physiognomy in our extensive collection.

THE FRENCHMAN.

We have already spoken of some of the peculiarities of the Celt in describing the Irishman, the Highlander, and the Welshman. We may add here that the crania of the Celtic race are considerably less in volume than those of the Teutons, but no measurements have been made which are at all conclusive as to the mean internal capacity. A comparison of living heads, however, inclined us to think that the size of the Celtic brain is, in the average, less by some six or eight cubic inches than the Teutonic. The French head, which may be considered as best representing the civilized Celt, is thus described by Dr. Vimont, himself a Frenchman and a phrenologist.

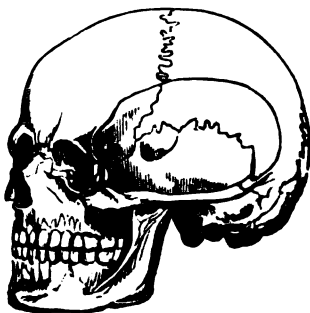


Fig. 562.—FRENCH SKULL.

"The French head (fig. 553) is smaller than the German. The region of the perceptive faculties, as a whole, is larger and that of the reflectives smaller in the French than in the German head. The organs of Time, Tune, and Number, however, are larger in the German head. The French are generally deficient in the organ of Cautiousness. Individuality, and Form are generally large, as are also those of Comparison, Wit, Wonder, Sublimity, and Poetry (*Talent Poétique*, according to Gall, whom Vimont here follows). Constructiveness, Imitation, and Sense of the Beautiful [Ideality] are large, especially the last two. Love of Approbation is generally predominant, while Self-Esteem and Firmness are moderate or small. Veneration is deficient, but Benevolence is well developed."



Fig. 532.—LAS CASAS.

This description appears to us to be generally correct so far as it goes, but Dr. Vimont might have added that Amativeness, Combativeness, Secretiveness, and Language (see fig. 534) are generally particularly well developed, and that the moral sentiments, as a group, are rather deficient, and have too little influence on the French character. In the temperament of the Frenchman, the motive and mental, or, according to the old classification, bilious and nervous, elements predominate, giving great activity and intensity to the mental operations.

The stature of the Frenchman is medium; his body slender rather than stout; his limbs muscular, but not large; his

features strongly marked; his complexion dark; his hair and beard black or dark brown; his eyebrows projecting and heavy; his eyes dark and piercing; and his nose approximating the Grecian type.

The perfect correspondence between this organization and the actual character of the French people must strike every observer. We find the Frenchman a close and accurate observer; delicate and precise in mechanical and philosophical manipulations; tasteful in dress and in the production of ornaments and decorations; an admirable colorist; a model of politeness; a master in finesse and diplomacy; a lively and witty conversationalist; a good actor; and a fearless and dashing soldier. He is clear, acute, vigorous, and discriminating, but not profound; subtile, ingenious, and penetrating, but not so original or inventive; brilliant and clever, but neither solid nor wise; friendly and loving, but fickle and inconstant.* He is secretive in regard to his intentions and plans, but confiding and communicative in reference to his loves or other emotions. He is more energetic than persistent, and loses much by failing to follow up his first success. His dominant passion is the love of novelty. Cæsar's terse description of their ancestors—*cupidi novarum rerum*, eager for something new—applies with the same force to the Frenchman of to-day. In war, the courage of the Frenchman has been too often demonstrated to be a matter of doubt. His

* "The extreme lightness of the French, arising in part from the small development of Cautiousness, has been signalized by Jean Jacques Rousseau. 'The French,' says this great writer, 'have a manner of interesting themselves about you which deceives more than words. The fulsome compliments of the Swiss can impose only on blockheads; the manners of the French are more seductive, because they are more simple. One would believe that they do not tell you all that they would wish to do for you, in order to cause you the more agreeable surprise. I shall say more: they are not false in their demonstrations; they are naturally officious, humane, benevolent, and even, whatever may be said on the subject, more true than any other nation; but they are volatile and light; they really feel the sentiment which they express, but that sentiment goes as it came. In the act of speaking to you they are full of interest about you. When they see you no more—they forget you. Nothing is permanent in their affections; everything with them is the work of the moment.'—*Confessions*."

first charge in battle is almost irresistible ; but if it fail, and his lines be broken, he becomes discouraged, and can not immediately regain his former spirit. His excessive Approbativeness makes him vain, fond of show, praise, and fame, and ready to fight and to die for the glory of France. As a writer, he is animated, dramatic, and rich in images and illustration, but often verbose and tedious. He is not deficient in ideas, but his many words sometimes serve to conceal rather than to express them. He excels in descriptive writing and in fiction, especially that



FIG. 584.—BARON CUVIER.*

in which there is room for the display of his dramatic talent.



FIG. 585.—FOURNIER.

In spite of his mental deficiencies — his lack of breadth, depth, and solidity of character—the Frenchman is to-day the foremost man of Europe, and no one but the Slavonic Russ can claim even a rivalry with him. In literature and science, few countries can boast a more numerous or brighter galaxy. Montaigne (fig. 81), Rousseau,

* It should be mentioned here that Cuvier, though classed as a Frenchman, was ethnologically a Goth, being of German origin. His head was one of the most massive on record, weighing 4 lbs. 18½ oz., and conforming nearly to the Teutonic type.

Voltaire, Montesquieu, St. Pierre, Molière, Chateaubriand, De Stael, Dudevant, Lamartine, Dumas, Hugo, Las Casas (fig. 533), Buffon, Cuvier (fig. 534), Bichat, Broussais, Fourier (fig. 535), Comte, Cousin, and Michelet are among the French names which will go down to the latest posterity.

THE ITALIAN.

The Italians are far from being a homogeneous people. The diversity of race is greater in Italy than almost anywhere else. Brace, in his "Races of the Old World," says:

"The Teutonic blood—the Lombard—according to Mariotti, can be observed in the population of Piedmont, Lombardy, Parma, Modena, Bologna, Romagna, even as far as Ravenna and Rimini.

"The *physique* is distinguished by light hair and fair complexion, elongated skull, large eyes, and by tall and portly but seldom elegant forms. The temperament is sanguine, and in old age, lymphatic. This race has always displayed especial talent in agriculture, commerce, and manufactures. They possess the German truth and constancy, as well as something of the German slowness and phlegm. Travelers describe them as a generous and hospitable people, with much simplicity and credulity. They send forth the best soldiers of Italy.

"The Genoese show their descent from the ancient Ligurians, in their proud, independent characters and hardy habits; they are an extremely enduring and indefatigable people, and produce the best sailors among the Italians. They are distinguished by their sharp but keen features, their small black eyes, and their short agile stature.



Fig. 536.—MAZZINI.

"Above Genoa, along the whole chain of the Apennines, down to Abruzzo and Calabria, lives a primitive race, always hardy and independent, says the authority quoted above, too poor for taxation and too independent for conscription. From them come the smugglers and banditti of Italy. They may be direct descendants of the ancient Italian tribes.

"The physical type in Venice is a square, heavy frame, bulky and fleshy; head short and Slavonian in form; face rather oblong than oval, with full cheeks and heavy jaws; the nose is rarely arched.

"In Tuscany, observers believe that many Etruscan features may be clearly beheld, such as small eyes, thick under-lip, pointed chin, and a long and narrow head with large forehead, and a sharp-pointed and arched nose, though no doubt Celtic ele-



Fig. 537.—RAPHAEL.

ments, as well as Teutonic, are mingled in the people. The art and poetry of Italy have found their greatest impulse from the genius of this population. The ancient Etruscan valor is still shown by the inhabitants of the mountains, though those of the cities are much degenerated. The physical type is refined—the form being slender and graceful, and the features elegant and effeminate.

"The Transteverini, in Rome, are thought to have preserved the pure classic type. The common Roman type, still seen among the peasantry, according to Dr. Wiseman, is a large, flat head, a low wide forehead, a face broad and square, short thick neck, and a short broad figure, such as is found in

many of the antique representations of the Roman soldier. The Sabinian shepherds are a model, now, for sculptors, when they would represent the ancient Romans. After a thousand years of priestly rule, says Gajani, the Romans are still the most warlike of Italian peoples.

"The Neapolitans still manifest their early Greek origin in their levity and playfulness, their taste for sophisms and specious argument, and their dances and festivals. A very intelligent observer, Signor Gajani, has informed us that he has visited districts in the Neapolitan States where the peasants have preserved, in their costume, almost the exact ancient classic style. In both these and the Roman States the mountaineers and the lower class of the cities are a purer race, as well as a superior one, in courage and capacity, to the upper class.

"The Neapolitan population has no doubt also received large Semitic mixtures from early Phœnician and modern Arabian colonization and conquest. The Norman element seems to have been very slight.

"Sicily, Sardinia, and Corsica show traces of the Moor, in the dark olive complexion, the pale, bilious countenance, and guttural accent of the people. Almost all the races which in ancient times have passed over Europe, mingle in the inhabitants of these islands. They are described as showing the Semitic fanaticism and vindictiveness with the Teutonic ambition; they are generally more given to mental than bodily exercise, and are fond of meditation and solitude."



Fig. 538.—MICHAEL ANGELO.

The Italians of the higher classes, lineal descendants of Greek, Roman, and Goth, and inheriting the results of so



Fig. 539.—GALILEO.

many centuries of civilization, possess some of the noblest traits of character that ever pertained to humanity. From these classes have come the great men who have made Italy illustrious. In Raphael (fig. 537) we have the artistic talent and faultless taste of the Greek; in Dante, the dreamy idealism of the Goth; in Petrarch and Tasso (fig. 318, p. 220), Gothic volume of brain with the Greek form of cranial contour and physiognomical out-

line. The grand head and face of Michael Angelo (fig. 538) seem to indicate a combination of the best elements of the Grecian, the Roman, and the Gothic mind—the refined artistic taste and constructive talent of the first; the indomitable energy and an unbending will of the second; and the grand scope of thought and creative power of the last.

Columbus and Galileo (fig. 539) were of Gothic blood, as is Garibaldi (fig. 540); Mazzini (fig. 536) is Greco-Roman, while Cavour was probably Etruscan. The Great Napoleon—the idol of France—a Corsican by birth, was Italian by descent and of Greco-Roman blood. With “the unity of Italy” will come prosperity and power.



Fig. 540.—GARIBALDI.

THE SPANIARD.

In Spain, as in Italy, we find the results of the mingling of many ethnical elements. The basis of the Spanish nationality, however, is Celt-Iberian—the two elements of this compound being so fused together that we are unable to separate them. The Iberians were, so far as we have any means of knowing, the original inhabitants of the Spanish peninsula. With these people a Celtic population became mingled at a very early



Fig. 541.—CORTÉZ.

day. Into this Celt-Iberian current has been poured, at different periods, lesser streams of Phœnician, Greek, Roman, Gothic, Moorish, and Jewish blood, the whole forming the strongly individualized Spaniard of to-day.

“Of the modern evidences of race in the different provinces,” to quote again from Mr. Brace’s entertaining volume, “travelers tell us that in Valencia the people resemble both their Celtiberian and Carthaginian ancestors, being cunning, perfidious, vindictive, and sullen. The burning sun has tanned their skin dark and aided to form in them an excitable and

nervous temperament; they have, too, the superstitious tendencies that characterize the people of a hot climate. The costume is both Asiatic and antique. The men wear sandals, and leave their legs naked, or cover them with leggings, such as were worn by the ancient Greeks. A many-colored plaid is worn over the shoulders, and on the long red hair, a silken band like a turban. The Valencian women are of fairer complexion than the men, and are conspicuous for their beauty of form. They wear the hair and the ornaments of the head after the old Roman style.

"The Andalusian, with his lively and sparkling semi-Moorish temper, is a great contrast to the gravity and decorum of the Roman Castilian.

"The Catalan is rude, active, and industrious, a good soldier, and fond of independence, resembling both Celts and Iberians in his covetous, bold, cruel, and warlike character. The Aragonese are true children of the Goths in their force of will, their attachment to constitutional liberties, and their opposition to arbitrary power.

"Mr. Borrow speaks of a cross of the Moors and the Goths, who are well known as the merchants of the country—the Maragatos. Their dress and customs are peculiar, and they never intermarry with the Spaniards. Their figures and faces are essentially Gothic; they are strong, athletic, heavy men, slow and plain of speech, using a much coarser pronunciation than do the other Spaniards. Like their Teutonic ancestors, they are very fond of spirituous liquors and rich meats.

"As an instance, also, of the permanency of old oppositions of race, the same author relates that there are two villages now in Spain—Villa Seca and Vargas—the former of which is inhabited by a dark-complexioned people of Moorish origin, and the latter by a fair race of Gothic blood, which are always in hostility with each other, the inhabitants refusing to intermarry, or even to speak to one another."

Physically, the Spaniard is moderate in stature; rather stout than spare; well-formed, firm, compact, muscular, and hardy. His cranium is proportionally broader than that of the Frenchman, and higher in the crown, and his face rounder and more

free from angularity. His complexion is swarthy, his hair generally black, and his eyes black or brown. His temperament is generally bilious-sanguine.

In character the Spaniard is less intellectual than the Italian as well as less refined and susceptible; but he has more Firmness and Self-Esteem, and the moral region, as a whole, is



Fig. 542.—THE MAID OF SARAGOSSA.*

more largely developed, and the sentiments are noble, the principles exalted, and the character dignified. The forehead is high, but generally not broad. Destructiveness, Secretiveness, and the organs in the base of the brain generally are full; and the Spaniard is grave, courteous, affable, gallant,

proud, firm, persistent, passionate, fiery, brave, secretive, politic, devotional, superstitious, fanatical, cruel, revengeful, and relentless.

Mr. Brace says: "The peculiar characteristics of the Spaniard can, with much apparent directness, be traced to his various ancestors. In his gallantry and courtesy, his stiffness of pride, his indomitable spirit of nationality, and his skill as a guerrilla-warrior, we behold the precise image of the ancient Iberian. In his fatal intolerance and bigotry—intensified, it is true, by centuries of warfare with the Mohammedan Arab—we see the West-Goth,† a race conspicuous beyond all other

* The Spanish girl known as "The Maid of Saragossa" was a lady of illustrious blood by the name of Agostina, through whose heroism her native city was saved from the French, under General Le Fevre, in 1808.

† "Montesquieu says that we owe all the principles and views of the

Teutonic branches for its bloody and bitter persecutions of those of a different faith. In his attachment to religious externalism and kingly power, he is Roman; in his tough individualism and the high respect always paid to woman, German; in his love of martial display and costume, Celtic. Yet with all these, and other elements of race, the Spanish race is one, and a new race among modern peoples."

The Spanish race has its great names in art, science, literature and war—its Francis Xavier, its Calderon, its Lopez de Vega, its Cervantes, its Murillo, its (Portuguese) Camoens, its Cortez, and, we may add, its "Maid of Saragossa."

THE SCLAVON.

A Slavonic skull (fig. 543) in the Mortonian collection is thus described by Dr. Meigs: "General form of the head globular, though wanting in symmetry, in consequence of the posterior portion of the right parietal bone being more fully developed than the corresponding portion of the left; the calvaria quite large in proportion to the face, and broadest posteriorly between the parietal

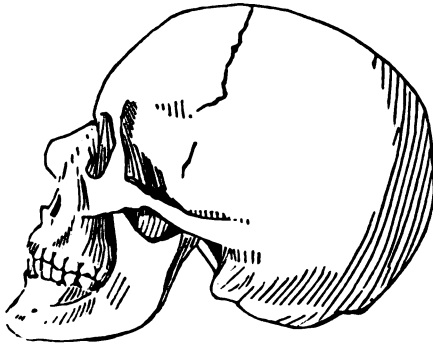


FIG. 543.—SCLAVONIC SKULL.

protuberances; the forehead is high and moderately broad; the vertex presents a somewhat flattened appearance, in consequence of sloping downward and backward toward the occiput; the occipital region is also flat, and the breadth between the mastoid processes very great. The face is small and delicate, the nasal bones prominent, the orbits of moderate size, the malar bones flat and delicately rounded, and the zygomatic processes small and slender. The lower jaw is

present Inquisition to the West-Gothic kingdom, and that the monks only copied the laws of the West-Gothic bishops against the Jews."

rather small, rounded at the angles, and quite acuminate at the symphysis. If classified according to its form, this head would find its place near to, if not between, the Calmuck and Turkish types."

A late ethnological writer characterizes the Slavon as, morally, the connecting link between the East and the West—the point of transition between the Turanian and the Caucasian races. Broad and thick-set, with great amplitude of chest, accompanied with shortness yet muscularity of limb; with flat feet, low in the instep, and a head more distinguished for circumference than for any other admeasurement, his general appearance is that of an Iranian arrested at an early or imperfect stage of mental development.



Fig. 544.—A SLAVONIC NOBLE.

THE RUSSIAN.

No other empire in the world contains within its borders so great a number of distinct races and tribes as Russia. There are believed to be at least *one hundred* of them, speaking more than *forty* different languages. The Russian, politically speaking, may be a German, a Pole, a Finn, a Calmuck, an Armenian, a Greek, or a Circassian as well as a Muscovite proper, but our remarks will refer only to the last-named, who may be considered not only the national type, but the type of the Slavonian race.

One of the most striking physical characteristics of the

Russian is *breadth*. He is broad-headed, broad-shouldered, broad-chested, thick-set, short-limbed, and muscular. In organic vigor, toughness, and endurance he has no superior and perhaps no equal. His respiration and circulation are perfect; his digestion, when not impaired by strong drink, equal to anything; and his muscles exceedingly firm and tough.



Fig. 545.—GENERAL TODLEBEN.

In complexion, the northern Russians are fair, with light hair. Farther south, where there is a mixture of Croatish and Servian blood, they are darker.

The Slavonic race has not, apparently, reached the maturity of its powers. The Russian is just developing into the lusty strength of early manhood, and we must judge him, not by what he has accomplished, but by the inherent capabilities

which his organization indicates. Mentally, as well as physically, he is distinguished by his self-poise, solidity, soundness, and capacity for persistent effort. The heavy basilar region betokens the immense animal power and executiveness which underlie an intellect of no mean order, and, in the higher classes, a full development of the moral sentiments. He has not yet developed any great originality, but he is an apt scholar, and not ashamed to take lessons even of his enemies. He will yet *teach* in his turn. He is naturally inclined to peace, and to the peaceful pursuit of agriculture, but when called upon to do it, fights with cool courage and unconquerable persistence. Our portrait of Todleben (fig. 545), the distinguished military engineer—whose science and skill, displayed in the planning and constructions of the earth-works which so long held the allied armies of France, England, Italy, and Turkey at bay before Sebastopol, were the admiration of his country's foes—will serve to illustrate the principal physical and mental characteristics of his nation. See also the likenesses of Menschikoff (fig. 123, p. 116) and of the present emperor, Alexander (fig. 546).

The sentiment of race is stronger perhaps among the Slavonians than among any other branch of the human family. It everywhere manifests itself in the form of a powerful national instinct, which alone is a sufficient pledge of the future of the race. A late writer, speaking of this racial unity of feeling, says:

“From the Adriatic to the mouth of the Amoor on the Pacific, from Poland to the borders of Persia, under countless varieties of climate and situation, this deep sentiment upholds a race whose grand part is only beginning to be played in the drama of history. *Seventy or eighty millions* of human beings are welded together by this mysterious instinct into an almost homogeneous mass, to act directly on surrounding peoples.”

The Poles, to the same general characteristics which we have pointed out in the Russians, add greater activity, ardor, and impulsiveness, with some of the refining results of a more ancient civilization. Many of them have dark hair and eyes,

and tall, well-made figures. Their courage and endurance have been tried on a thousand battle-fields in Europe and America. Monuments to one of their nobles—the heroic Pulaski—adorn the grounds of West Point and one of the



Fig. 546.—EMPEROR ALEXANDER.

public squares of the city of Savannah, Georgia, where he fell fighting for liberty in our Revolutionary struggle.

THE FINN.

The Finnish skull (fig. 547) has a square or angular appearance. The anterior posterior diameter is comparatively short. The forehead is broad though less expansive than in the Germanic type. The face is longer and less broad than in the Mongolian head, while the lower jaw is larger, and the chin more prominent. Hence, the lower part of the face is ad-

vanced, somewhat in the manner of the Slavonian face. The whole head is rather massive and rude in structure, the bony prominences being strongly characterized and the sutures well defined. The general configuration of the head is European, bearing certain resemblances, however, to the Mongolian on the one hand, and the Slavonian on the other.

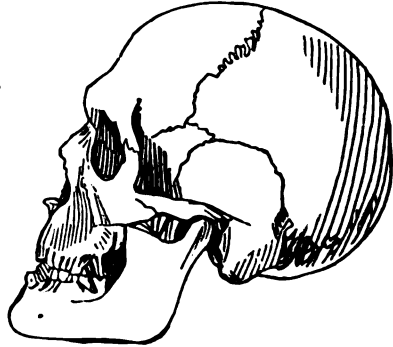


Fig. 547.—FINNISH SKULL.

THE MAGYAR.

The Magyars of Hungary, though far superior to all other branches of that race, are probably of Finnish origin. They may owe their high position to an admixture of Gothic and Slavonic blood. It



Fig. 548.—KOSSUTH.

is certain that they have won an enviable position among civilized nations by their progress in literature and science; their abilities in self-government under liberal constitutional forms; and the courage and patriotism with which they have struggled for the preservation of their liberties. They have well-formed heads; striking and often handsome features; and are dignified, courteous,

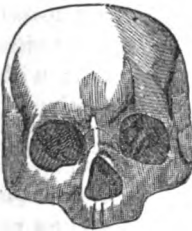
hospitable, generous, intelligent, moral, imaginative, and eloquent. Kossuth, one of the most gifted orators of modern times, and one of the purest and most unfortunate of heroic patriots, is of this race.

THE ANCIENT GREEK.

The Greek belongs to what has been called the Pelasgic or ancient Caucasian group. The Pelasgic or ancient Caucasian skull was not so large as that of the modern Gothic Teutonic race, but was fine-grained and (especially in the Greek) symmetrically formed. They indicate more beauty but less power than most modern Caucasian skulls. The craniological collections of the world contain but few Greek skulls. Prof. Morton had but the cast of one in his very extensive collection. It is thus described by Dr. Meigs: "The calvarial region is well developed; the frontal expansive and prominent; the facial line departs but slightly from the perpendicular, and the facial angle consequently approaches a right angle. A small and regularly-formed face, devoid of asperities, harmonizes well with the general intellectual character of the head proper. The malar bones are small, flat, and smooth, with just enough lateral prominence to give to the face an oval outline; the alveolar margins of the maxillæ are regularly arched, and the teeth perpendicular."



Fig. 549.—GREEK SKULL.



Blumenbach describes a Greek skull—with one exception the most beautiful in his collection—in the following terms: "The form of the calvaria is sub-globular, the forehead most nobly arched; the superior maxillary bones, just beneath the nasal aperture, joined in a plane almost perpendicular; the malar bones even, and sloping moderately downward." Fig. 549 is borrowed from Prichard's "Researches," and represents the skull of a modern Greek, for a long time a teacher of his native language at Oxford, England. It resembles the one described by Dr. Meigs, and together with the front view of a different skull (fig. 550, from Combe's Phrenology), will convey a fair idea of the Greek cranium. The one figured by Combe is

described as being large, and exhibiting a favorable development of the coronal region and the intellect, combined with large organs of the propensities. Constructiveness and Ideality are large; and in all Greek skulls that we have seen figured or described, great breadth is observable in the region of these two faculties. Both the perceptive and reflective faculties are largely developed and well balanced, so that the



Fig. 531.—*DEMOSTHENES.*

forehead projects as a whole, and gives the nearly perpendicular facial line observable in the Grecian statues. The texture of the bone is very fine, indicating the mental temperament and a high quality of organization throughout. The posterior portion of the coronal region—the seat of the governing or restraining principles of Firmness, Conscientiousness, and Caution—was not full, and the domestic affections were only moderately developed.

Such was the Greek head; what was the Grecian character? History shows that it combined the highest gifts of intellect and unequalled artistic and poetic powers with strong impulses, imperfectly controlled by moral sentiment, and not greatly influenced by either friendship or kinship. The gifts of the Greek were pre-eminently intellectual, his defects essentially moral. He was a philosopher, a writer, a poet, an artist, a genius, but lacked principle, steadiness of purpose, devotion, fidelity, and affection.

Large Size, Form, Constructiveness, and Ideality, united with his perfect balance of mental power, made the ancient Greek pre-eminent in sculpture and architecture; and here he remains not only unsurpassed but unequalled; but the beauty he created was merely physical, lacking spiritual significance, as his life lacked a spiritual purpose.

THE GRÆCO-EGYPTIAN.

Among the heads discovered in the tombs of Egypt are some of undoubted Caucasian configuration. They belonged probably to Greeks, or persons in whom the Greek blood predominated. At any rate, they conform to the Caucasian type,

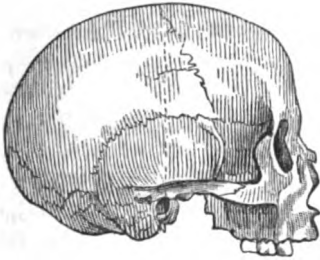


Fig. 552.—GRÆCO-EGYPTIAN SKULL.

and have many of the characteristics of the ancient Hellenic head. Fig. 552 is from Dr. Meigs' catalogue of the Mortonian collection, and represents the cranium of a woman. The facial angle is 80° , and the internal capacity 82 inches. Prof

Morton says: "Of twenty-three Græco-Egyptian heads, the highest internal measurement is 97 cubic inches, the lowest 73, and the mean 86.11, which is about 7 cubic inches above that of the pure Egyptian race, and but three inches less than the average I have assumed for the Teutonic nations. * * * Some of these present the most beautiful Caucasian proportions, while others merge by degrees into the Egyptian type; and I am free to admit that in various instances I have been at a loss in my attempts to classify these two great divisions of the Nilotic series."

THE ROMAN.

Phrenology and Physiognomy enable us to comprehend and analyze Roman character and Roman civilization. With a Roman skull and a few authentic portraits or busts before us, we could write a commentary on Roman history that would clear up many an obscure point; but at present we must confine ourselves to a less pretentious work. Dr. Thurnam, in *Crania Britannica*, gives a drawing and minute description of the skull of Theodosianus, found in a Roman sarcophagus at York, England, erected probably during the third century. Fig. 553 is a reduced copy from Dr. Thurnam's plate. He describes the cranium as unusually capacious, its dimensions

being much above the average in almost every direction. "The forehead," he says, "though not very high, is remarkable for breadth; the coronal surface presents an oval outline, and is notable for its great transverse diameter; the parietal region (side-head) is full and rounded; the temporal

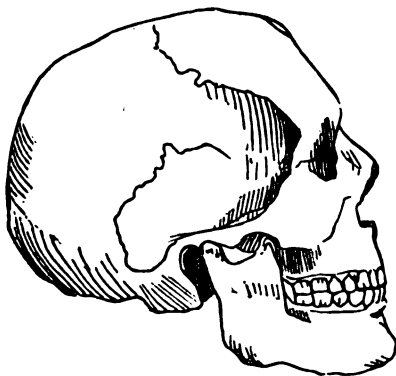


Fig. 558.—ROMAN SKULL.

fossæ, large; the mastoid process, unusually large, broad, and prominent; the occiput (back-head), full and prominent, especially in its upper half; the frontal sinuses, and the glabella (space between the eyebrows), full and large; the nasal bones large and broad, with a finely aquiline profile; and the face square and broad."

This rude outline of a skull, together with the accompanying description, furnish the key to the character of the ancient Roman. Speaking of the cause of Roman supremacy, a late ethnological writer says:

"The Roman organization, like the Roman mind, was powerful rather than harmonious, and more distinguished by vigor than refinement. The brain was above the average in volume, and especially developed in the region of Cautiousness, Conscientiousness, Firmness, and Self-Esteem, which decidedly preponderated over Hope, Veneration, and Benevolence. The domestic affections were well developed; and as the basilar region was large, the passions possessed considerable power, although in most instances subjected to restraint by the controlling influence of the moral sentiments. Appius Claudius, however, and some of the Cæsars, show whither this tended under circumstances conducive to indulgence. Nor are the Julias and Messalinas of the empire devoid of interest in this regard, as indicative of racial proclivity, when social corruption had weakened the nobler incentives to virtue. The forehead was

broad and massive, but rather low, the head sloping down from Firmness, which was its apex. The perceptive powers were vigorously but not harmoniously developed, indicative of accurate observation for practical purposes, rather than an artistic eye for the beauties of nature. The reflective faculties preponderated over Wonder [Spirituality] and Ideality, showing a tendency to thought rather than imagination, and an aptitude for the exercise of good sense and sound judgment in the management of actual affairs, together with a considerable amount of logical acumen, rather than refined taste, or a capacity for acquiring the more brilliant accomplishments.



Fig. 551.—JULIUS CAESAR.

"The temperament was intensely fibrous, and must have effectually reinvigorated the tendencies arising from organization. Indeed, the stern endurance, unswerving fixity of purpose, and dauntless moral courage of the ancient Roman were due almost as much to the former as the latter. He was a man of iron mold, both in body and mind, and in the path of duty unsusceptible of the softer emotions and inaccessible to the gentler feelings. Patriotism was his master passion, and obedience to the law his highest virtue. He preferred precedent to principle, and was governed by authority rather than reason. And how accurately is all this mirrored in those high, proud, angular features, constituting that stern, expressive, and commanding countenance! And how forcibly is it indicated to the ethnological and physiological eye, in that compact and muscular frame, with the broad and powerful chest, surmounted by a head and neck so eminently indicative of energy and self-reliance—of the power that marches slowly but invincibly to its

purpose, that accomplishes its most important objects with the greatest deliberation, and is not in haste even for the conquest of a world!

"Rome, indeed, needed no Sibylline books. Her destiny was written in that surest of all prophecies, the cerebral organization of her people. They were born for the imperial supremacy of ancient civilization, and were heirs by nature of the imperial wealth and political power of all their predecessors. Neither poets nor prophets, they were not vocationed to the altar either of intellect or faith. It was their mission to be the lords of human affairs, to subdue with the outstretched arm and rule with the strong right hand, and so gather to a focus all the vast resources of heathen antiquity preparatory to the final disappearance of Pagan and the rise of Christian culture."*

Comparing the Roman head with the Greek, we find in the former more Executiveness, Firmness, Self-Esteem, Cautiousness, and Conscientiousness; and less Ideality, Marvelousness, Constructiveness, Form, Color, Order, and Causality. In temperament the difference is equally great. The Greek was fine in texture, with the delicate perceptions and intense activity of thought and feeling belonging to the mental constitution; while the Roman, on the contrary, was bony, muscular, strongly framed, and rather coarse, the motive temperament predominating. To the one was given the mission of art, to the other that of arms. The first was the philosopher and the poet, the latter the energetic, practical man of the world. The Greek gave us architecture and sculpture; the Roman, jurisprudence and military science. Each accomplished his work and passed away. It will be well for the future if *we* do ours as effectually. All that is material and of the earth will pass away; all that is spiritual and of God will be immortal.

THE SEMITE.

The Semitic or Syro-Arabian race comprises the Arabians, the Assyrians, the Chaldeans, the Hebrews and cognate tribes,

* Jackson; "Phrenology and Ethnology."

among all of whom the same general form of cranium prevails. The head is smaller than that of the European races, and less developed in the region of the reflective faculties. The forehead is retreating but remarkably lofty, and, above all, the coronal region is grandly elevated and finely arched, the central developments throughout predominating over the lateral. The base of the skull, however, is not deficient, and is particularly full in the region of Acquisitiveness; but the dominating influence lies in the moral or spiritual part of the brain. The Semite, whether Arab, Syrian, or Jew, is essentially a religious enthusiast—a devotee. He is a theosopher rather than a philosopher. His first and strongest impulse is to worship and to propagate his faith; the second, to



Fig. 535.—ASSYRIAN SKULL.

trade. History shows how successfully he has done both. Judaism, Islamism, and the sublime and spiritual faith of Christ are all outgrowths from the original monotheism of the pre-Abrahamic Assyrian; and the men of the same race have been among the greatest merchants and bankers of the world in all ages. It was their ships which "brought silver from Tarshish" in the days of Solomon (Jer. x. 9); and they to-day hold the purse-strings of Europe. It is enough to name the Rothschilds. A late writer speaking of them says:

"Arabs in the desert, Chaldeans on the Euphrates, Syrians at Damascus, Phœnicians at Tyre, Israelites at Jerusalem, Saracens at Bagdad, and we may add, Moors at Cordova, the Semitic tribes, though wild and unsubduable by the softening influences of civilization in the remoter fastnesses of their native habitat, have, nevertheless, shown considerable aptitude both for literature and science, when subjected to culture at the great urban centers of intellectual activity and refinement. Everywhere merchants, and always religious enthusiasts, they have also occasionally approved themselves as scholars and

philosophers, physical and metaphysical, of no mean order. More robust, but less subtle in their mental constitution than the Hindoos—more prone to emotion and less qualified for speculation—active, enterprising, energetic, chivalrous, and devout, they furnish a providential link between the dreamily meditative theosophy of the farther East, and the almost rude practicality of the extreme West. By commerce they united India with Britain in ages which we now term pre-historic. By conquest they joined Spain with Persia in one vast empire under the early Caliphs. And by proselytism, as Nazarenes, they laid the foundation of that Christendom which now holds the fortunes of the world in its imperial grasp."

We may add that all the Semitic peoples are brave, warlike, energetic, enterprising, and, when their passions are aroused, cruel and relentless. How perfectly all these traits correspond with the form of skull characteristic of the race, with its lofty coronal arch, its breadth above the ears, and its broad, arched, and prominent nasal bone! History but repeats the legend previously written by the finger of God upon the cranium.

THE ARAB.

In the Arab of the desert we have the pure wild Semitic stock of which the Jew, the Syrian, and the Saracen are cultivated varieties. The genuine Arab skull is thus described by

Baron Larry: "It indicates a most perfect development of all the internal organs as well as those which belong to the senses. Independently of the elevation of the vault of the cranium, and its almost spherical form, the surface of the jaws is of great extent, and lies in a straight or perpendicular line. The orbits are wider than they usually seem in the crania of



Fig. 556.—AN ARAB.

Europeans, and they are somewhat less inclined backward. We are convinced that the bones of the cranium are thinner in the Arab than in other races, and more dense in texture, which is proved by their greater transparency."

The Arab has undoubtedly the finest brain and the best formed head of any nomadic and uncultivated man, indicating the nobility and purity of his blood. He is swarthy but handsome, with black eyes, hair, and beard; an arched nose, a firm mouth, a prominent chin, rather spare but muscular limbs, and dignified and courteous bearing.

THE JEW.

The Jew has a larger head than the Arab, and at present undoubtedly stands at the head of the Semitic sub-races. He is the civilized and cultivated Arabian—the nomad changed into the dweller in towns and cities, the keeper of herds turned merchant or banker.*

All that we have said of the Semitic race in general is true of him. He is religious; he is fond of trade; he is thrifty; he is unconquerably true to his racial proclivities; he is persistent in everything he undertakes. He is the type of stability and permanence—the model of steadfastness; but at the same time he is prejudiced, bigoted, stern, stubborn, irascible, exacting, secretive, and unrelenting. He is conscientious, in his way, but his ideas of right and wrong are based on the Law of Moses, and his justice does not admit the modifying influences of mercy. He will have the pound of flesh, if it be "so nominated in the bond," no matter who suffers for it.

"Careful investigation," Mr. Brace says, in his "Races of

* Our illustrative portrait represents one of the best specimens of the modern Israelite—an eminent merchant of London and one of the leading members of the Jewish community of Great Britain. An English paper thus speaks of him: "Sir Moses Montefiore, now in his seventy-ninth or eightieth year, has, by a long course of social usefulness and beneficence, done much to uphold and enhance the respectability of his people, who are justly esteemed as inferior to no other class in England in the virtues of private life, in their character for commercial integrity, and in their zeal for the public welfare consistently with their belief in the future destinies of their own religion and race."

the Old World," "seems to show two physical types among the Jews: one dark, with black hair and eyes, and the well-known hooked nose; another, with very regular profile and beautiful features, but blonde, with light hair and blue eyes.*



FIG. 557.—SIR MOSES MONTEFIORE.

This latter type is seen a great deal in the East, especially in Constantinople and Africa; even red hair being often met with. The blonde type is the one from which the traditional representations of the Saviour are made, and is not improbably very ancient among the Jews. The relation of the Jew-

* This type has been seen by the learned travelers of New York, Dr. E. S. Smith and Dr. W. H. Thompson.

ish type to climate, of which so much is made by Prichard, does not seem to bear the test of closer investigation. (See Dr. Beddoe, *Ethnol. Trans.*, London, 1861.*) A peculiar physiological fact in regard to this people should be noticed here, that they are able to live and multiply in almost all latitudes. Their increase in Sweden is said to be greater than that of the Christian population; in the towns of Algeria, they are, according to Boudin, the only race able to maintain its numbers, and 'in Cochin China and Aden, the latter, one of the hottest places in the world, they succeed in rearing children and in forming permanent communities.'"

THE ASSYRIAN.

The Assyrian is probably the most intellectual branch of the Semitic race, but perhaps less gifted with physical power and executive ability than the Jewish. Fig. 555 is from an ancient Assyrian skull in the British Museum, remarkable for its size and beauty. The forehead is more prominent superiorly than in the Arab and Jewish crania. It is probably a favorable specimen of the race, but we have no others with which to compare it.

THE ANCIENT EGYPTIAN.

Their own monuments show that the builders of the pyramids were a mixed race, in which the Semitic element largely predominated. Prof. Morton distinguishes three distinct forms or varieties of Egyptian heads, exclusive of the negroid types—the Egyptian proper, the Pelasgic, and the Semitic. "The Egyptian form," he says, "differs from the Pelasgic in having a narrow and more receding forehead, while, the face being more prominent, the facial angle is consequently less. The nose is straight or aquiline, the face angular, the features often sharp, and the hair uniformly long, soft, and curling.

* It has been claimed that the complexion and hair of the Jew vary according to climate, being blonde and light in the northern countries and dark in the southern; but later researches show that the two types above described are found under all climates. Climate *modifies* individuals and nations, but ethnological types are permanent.

* * * * The cut (fig. 558) illustrates a remarkable head, which may serve as a type of the genuine Egyptian conformation. The long oval cranium, the receding [we should call it comparatively prominent] forehead, the gently aquiline nose, and the retracted chin, together with the marked distance between the nose and the mouth, and the long, smooth hair are all characteristic of the monumental Egyptian."



Fig. 558.—EGYPTIAN HEAD.

It seems probable that the ancient Phœnicians were a branch of the Semitic family, though they apparently approximated the European character and configuration. In them the commercial and manufacturing spirit predominated. They were the adventurous mariners of Tyre and Sidon, and the merchant princes of Carthage, and formed the connecting link, as it were, between the Oriental and the Occidental types. Our illustration (fig. 559) is borrowed from the Mortonian catalogue. It is a very singular skull, and is interesting on account of its associations as well as of its antiquity. Prof. Morton says:

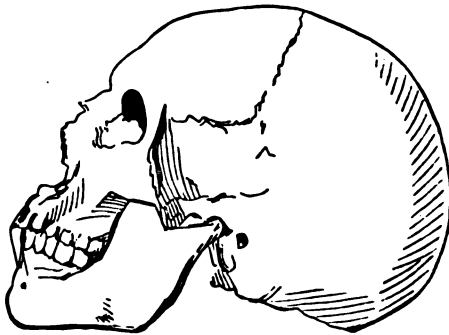


Fig. 559.—PHŒNICIAN SKULL.

"I received this highly interesting relic from M. F. Fresnel, the distinguished French archæologist and traveler, with the following memorandum, A.D. 1847:

'Crâne provenant des caves sépulchrales de Ben-Djemma, dans, l'île de Malte. Ce crâne paraît avoir appartenu à un individu de la race qui dans les temps les plus anciens,

occupait la côte septentrionale de l'Afrique, et les îles adjacentes.'”*

THE HINDOO.

The term Hindoo is often applied in a loose way to tribes having little if any affinity with the true Aryan or dominant



Fig. 560.



Fig. 561.

race of whom alone we purpose to speak under this head. The cranium of the true high caste Hindoo is small but beautifully formed and fine in texture, and indicates an organization allied to the noblest races of Europe. Figs. 560 to 563 inclusive are accurate views of a genuine high caste Hindoo skull in our collection. It is a fair specimen



Fig. 562.

in every way, showing the prominent traits of the race in excellent relief. It is small, fine-grained, and symmetrical.

“Of refined and delicate structure,” says Dr. Jackson, “with a highly nervous

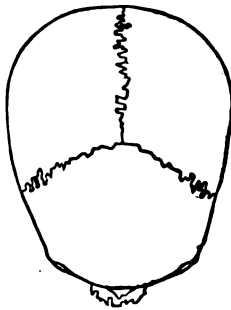


Fig. 563.

temperament and well-chiseled features, indicative of gentleness rather than energy, the true Hindoo is manifestly the

* Cranium found in the sepulchral caves of Ben-Djemma, in the island of Malta. It probably belonged to an individual of the race which in the most ancient times occupied the northern coast of Africa and the adjacent islands.

product of a long-existent but decadent civilization. He bears the stamp of its culture, but suffers somewhat from the decrepitude consequent upon its exhaustion. An illustrious example of the great Oriental branch of the Aryan stock, he presents the grand characteristic by which they are distinguished from their Western brethren in considerable force—the predominance of the moral and imaginative over the intellectual nature—and manifests this more especially in the magnificent development of his Veneration. Hence his whole life is a series of religious acts, and the gods and their service are never absent from his mind. His rivers are sacred, his mountains are holy, his heroes are incarnations, and his sages are prophets. To his reverential gaze the divinity of nature is revealed, not as a myth but as a reality. * * * Thus persons, places, things, and institutions are alike the objects of his reverence.”

The fact that one hundred thousand Britons hold in subjection one hundred millions of Hindoos would, without the light thrown upon the subject by Phrenology, be entirely unaccountable; but when we consider that size—other things being equal—is the measure of power, and that the English head is



Fig. 564.—NENA SAHIB.

nearly a third larger than the Hindoo, the case seems less astonishing. The difference in size, however, is not the only

or even the greatest difference to be taken into account here. The Hindoo head is narrow at the base, indicating deficient Destructiveness and Combateness, and he lacks courage, force of character, and energy; while the head of the Briton is broad at the base, and he is full of executive power and destructive vigor. Phrenology therefore makes it plain why a handful of the latter dominate so easily over the multitudes of the latter. The fierce Nena Sahib* (fig. 564) and other individuals of similar character, who were nominally Hindoo, had other blood in their veins and broader bases to their skulls. Fig. 565 represents an individual in whom all the weakness and effeminacy of the true Hindoo is combined with all the grossness and animality of a lower and more sensual race. Voluptuousness and vanity are his leading traits of character. To gratify his propensities would be the first impulse of the man; the second—one degree higher—would be to indulge his love of display. His temperament, the build of his body, the shape of his head, and the expression of his face, all tell the same story. His head is round, his physiology coarse, all of the basilar organs large, and he is, most decidedly, a man of *this* world. His luxurious mode of living contributes much to render a naturally gross nature still more so.

THE SIOUX INDIANS.

In addition to what we have said of the North American Indians as a race, it will be useful to glance at one of the

* Dhundoo Punt, Nena Sahib (the latter being his title), was a Hindoo chieftain and the leader of the Sepoy rebellion in 1857. He was the son of a Brahmin of Deccan, and was born in 1824 or 1825. When a little more than a year old he was brought to Bittoor, where he was soon after adopted by Bagee Row, the chief of the Mahrattas. On the death of Bagee without natural heirs, the East India Company refused to acknowledge the right of his adopted child to his principal estate which had been conditionally bestowed on the former by the company. The Nena sent an agent to England to advocate his claims, but without success. This wrong he never forgave. He had still much wealth and influence, and when the insurrection broke out, was ready to devote both to the cause of the rebels, and to put himself at their head. Of his terrible cruelties perpetrated during the war which followed, everybody has heard.

most prominent and powerful of their tribes by way of illustration of our more general remarks.

The Sioux proper, who call themselves *Dakota* and sometimes the "Seven-Fires," are divided into seven tribes. They



Fig. 565.—KING OF OUDE.*

occupy extensive tracts on the Upper Mississippi, and on St. Peter's River, Minnesota; and some extending as far to the westward as the Missouri. The four most eastern tribes of the Dakotas are called "Gens du Lac," and "People of the Leaves." The first of these cultivate the land in a coun-

* This portrait came to us with only the *title* of its subject; but we infer from the agreement of the character it indicates with that recorded of Wajid Ali, the last king of Oude, that he is the person represented. Of this prince it is said: "He was more profligate and imbecile than almost any of his predecessors," which is saying a great deal. He was deposed by the English in 1856.

try eastward of the Mississippi, extending from Prairie du Chien to the Spirit Lake, a tract extending through three degrees of north latitude, viz. from 43° to 46° . The western tribes are the Yanktons, Yanktoanans, and the Teton. It was estimated twenty years ago that the whole Sioux nation amounted to about 20,000 souls. They have since decreased in numbers.



Fig. 566.—LITTLE CROW.

The Sioux are a people of singular and interesting character, and they preserve the original habits of the North American aborigines much more than the eastern races. Carver, who traveled in their country a hundred years ago, drew a lively picture of their manners. Figs. 566 and 567 were made from photographs taken from life, and convey as correct an idea as wood-cuts can of the true aboriginal American physiognomy. See also fig. 488, p. 387.

The atrocities committed by these savages during the outbreak of 1862-3 almost surpass belief; and we are tempted, at the first view, to question their claim to be considered partakers with us of a common humanity.*



Fig. 567.—SIOUX WOMAN.

* A glance nearer home, however, humbles our pride, covers us with

As a specimen of the peculiar eloquence of the American Indian we insert the following.

AN INDIAN WAR-TALK.

On the occasion of the imprisonment of Red Iron (*Maza-sha*), one of the Sioux chiefs, Lean Bear, gathering the braves together on an eminence, which had been a famous battle-ground, thus addressed them :

“ ‘Dakotas, the big men are here; they have got Maza-sha in a pen like a wolf. They mean to kill him for not letting the big men cheat us out of our lands and the money our Great Father sent us.’

“ ‘Ho, ho,’ frequently repeated the auditors. The orator continued :

“ ‘Dakotas, must we starve like buffaloes in the snow? Shall we let our blood freeze like the little streams? Or shall we make the snow red with the blood of the white braves?’

“ ‘Ho, ho,’ repeated by almost every voice with savage ferocity, and the war-whoop was yelled by the whole band.

“ ‘Dakotas, the blood of your fathers talks to you from the graves where we stand. Their spirits come up into your arms and make you strong. I am glad of it. To-night the blood

shame, and makes even an Indian massacre, with all its horrors, seem possible. The barbaric blood still betrays itself even in our most civilized communities. It is a matter of history that enlightened and Christian Englishmen were wont, during the Indian rebellion in the East, to blow Hindoo insurgents from the cannon's mouth, when taken with arms in their hands. A still darker page in their national story will record the late shelling and burning, by a British admiral, without a word of warning, of a Japanese city full of innocent women and children, thousands of whom were horribly mutilated, torn into bloody fragments by the bursting bombs, or roasted to death in the rapidly spreading flames! And the same lingering barbarism shows itself on this side of the water. We have hardly ceased to shudder at the ferocious deeds lately done under our eyes in the very streets of New York, where, during the riots of July, 1863, asylums were plundered and burned, and unoffending men, women, and children hung or beaten to death, and dragged, torn and bleeding, through the streets by an infuriated mob. If the Sioux savages exceed those of Mackerelville in the diabolical ingenuity of their cruelties, it is perhaps merely because they have had more experience in the art of tormenting.

of the white man shall run like water in the rain, and Maza-sha shall be with his people. ['Ho, ho.']

"'Dakotas, when the moon goes down behind the hills, be ready ['Ho'], and I will lead you against the Long Knives and the big men who have come to cheat us, and take away our lands, and put us in a pen for not helping them to rob our women and children.

"'Dakotas, be not afraid; we have many more braves than the whites. When the moon goes down, be ready, and I will lead you to their tepees.' ['Ho, ho.']"

SIOUX SKULLS.

Fig. 568 represents a Dakota skull in the Mortonian collection. It is a type of the true savage cranium. It is low and narrow in front, and broad and high in the back-head and immediately above the ears. Figs. 569 and 570 were photographed from a skull in our cabinet, procured for us in Wisconsin in 1858. It is that of a Yankton Sioux warrior killed



Fig. 568.—DAKOTA OR SIOUX SKULL.

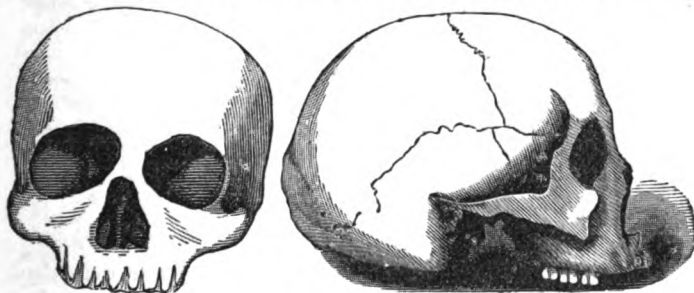


Fig. 569.—YANKTON SIOUX INDIAN. Fig. 570.—YANKTON SIOUX INDIAN—SIDE VIEW. at Spirit Lake, in 1857, on the occasion of a bloody massacre of the whites by the Indians.

The skull is decidedly large, very strongly marked, and

must have belonged to a large-sized man. It is not different from other North American Indian heads, save that it is *larger* than the average, and we infer that it belonged to a chief. The usual distinguishing marks of the Indian—such as large Destructiveness, Cautiousness, Secretiveness, Veneration, and the perceptive faculties—are prominent, while Conscientiousness, Hope, Spirituality, Ideality, Constructiveness, and Acquisitiveness are moderate or small.*

THE ESQUIMAUX.

These singular people are not included in what is generally designated as the American race, but possess characteristics which seem to ally them with the Mongols of Asia and Europe. They occupy the whole American coast north of 60°, and from the Atlantic Ocean to Bhering Strait, ranging through a tract of some 3,500 miles.

The Esquimaux skull is long, narrow, and pyramidal, as may be seen in figs. 571 and 572; in fact, it presents, in a greater

ESQUIMAUX SKULL.

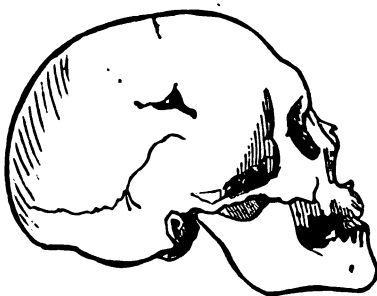


Fig. 571.—SIDE VIEW.

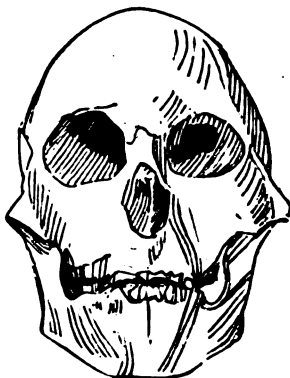


Fig. 572.—FRONT VIEW.

or less degree, most of the characteristics we have described to the Mongolic cranium, and leaves little doubt in our mind in regard to the origin of the people to whom it belongs.

* This skull now forms a part of a large private collection of crania, in Salisbury, England

How and when they made their appearance on the Western Continent is a question which it would be unprofitable to discuss here. Fig. 472 (p. 369) is a correct portrait of one of these American Mongols.

THE TSCHUKTSCHI.

Crossing to the northeastern coast of Asia, we find various tribes who speak a dialect of the language of the American Esquimaux, and who have all the marks of a common origin with them. "It is difficult to determine," Dr. Prichard says, "from accessible evidence, what was the original country of this race; whether they proceeded in the first place from the northeastern extremity of the old continent to America, or came from the latter in an opposite direction."



Fig. 573.—A TSCHUKTSCHI.

The most powerful of these northeastern Asiatic tribes is the Tschuktschi, of whom Saner says: "They are a tall, stout people, and hold little men in the utmost contempt," which, however, does not fully agree with the account given by the more observant Cochrane, who says: "The persons of the Tschuktschi are not particularly large, though their dress, which is clean but of enormous size, gives them an almost gigantic appearance. They have fair or clear skins, but ordinary though masculine features. In conduct they are wild and rude. They have no diseases, and live to a great age. Their language bears no affinity to the Asiatic idioms, though it is understood by the Koriaks. The features of the Tschuktschi, their manners and customs, pronounce them of American origin, of which the shaving of their heads, painting of their

bodies, wearing large ear-rings, their independent and swaggering way of walking, their dress and superstitious ideas, are also evident proofs; nor is it less than probable that the Esquimaux and other tribes of Arctic Americans may have descended from them, for several words of their languages are alike, and their dress is perfectly similar."

THE KAMTSCHIATKANS.

The Kamtschatkans, or Kamtschadales, are a people long well known to the navigators of the northern Pacific. They



Fig. 574.—A KAMTSCHATKAN.

call themselves *Itelman*, and are described as "a people of short stature, swarthy complexion, black hair, little beard, broad faces, short flat noses, small sunken eyes, small eyebrows, protuberant bellies, and small legs." They are probably a mixed race in which the Mongolian blood predominates.

THE SAMOIEDES.

"Of all the tribes of Siberia," Latham says, "the Samoiedes are nearest to the Esquimaux or Greenlanders in their physical appearance." This testimony is confirmed by the form of the skull, a specimen of which is figured in Blumen-



Fig. 575.—A SAMOIEDE.

bach's "Decades" (fig. 576). Pallas describes the Samoiedes of the Obi, who may be considered as a fair specimen of their race, as follows :

Ils ont le visage plat, rond, et large : ce qui rend les jeunes femmes très agréables. Ils ont de larges lèvres rétroussées, le nez large et ouvert, peu de barbe, et les cheveux noirs et rudes. La plupart sont plutôt petits que de taille médiocre, mais bien proportionnés, plus trapus, et plus gros que les Ostiaks. Ils sont en revanche plus sauvages et plus rémuans que ce peuple."^a

^a They have large, round, flat faces, which render the young women

Our portrait shows great breadth of head and face and a fullness of the cheek-bones, which is characteristic. It indicates a good deal of rude strength, endurance, and courage,



Fig. 576.—SAMOIAN SKULL.

and an unconquerable tenacity. Of brain there is in this specimen (a very favorable one) no lack, but it is of coarse texture and inactive. Education and the influences of civilized life would have worked wonders with this semi-savage, provided his love of independence and of a wild, roving life could have been brought into subjection to social restraints, and

his mind impressed with a sense of the advantages of civilization and the value of knowledge.

The Samoiedes are a wandering race who inhabit the great northern promontory of the Siberian coast, and are spread on both sides from along the shores of the Icy Sea, where they live chiefly by fishing and the produce of the chase. They are said to be divided into numerous tribes, who reach almost from the Dwina and the neighborhood of Archangel, where some hordes of Samoiedes were found by Le Bruyn, to the Lena, in Eastern Siberia. Their name is said to mean "salmon-eaters." It occurs in the Russian chronicles as early as 1096; and they are mentioned by Jean du Plan de Carpin in the account of his journey to the court of the Great Khan, in the beginning of the thirteenth century. The Samoiedes were at that time among the subjects of the Mongolian emperor

THE CALMUCK.

Of the Calmucks, Pallas says: "They are generally of a moderate height. We find them small rather than large. They

very agreeable; large rolling lips; large noses, with wide nostrils; little beard; and coarse black hair. They are generally below the medium in stature, but well proportioned, and more stout and fleshy than the Ostiaks. They are, on the other hand, more wild and roving [in their habits] than that people.

are well made. I do not remember to have seen a deformed person among them. They entirely abandon their children to nature; hence they are all healthy, and have their bodies well proportioned. They are generally slender and delicate in their limbs and figure. I never saw a single man among them who was very fat.

"The characteristic traits in all the countenances of the Calmucks are, eyes of which the great angle, placed obliquely and downward toward the nose, is but little open, and fleshy; eyebrows black, scanty, and forming a low arch; a



Fig. 577.—A CALMUCK.

particular conformation of the nose, which is generally short, and flattened toward the forehead; the bones of the cheek large; the head and face very round. They have also the transparent cornea of the eye very brown; lips thick and fleshy; the chin short; the teeth very white: they preserve them fine and sound until old age. They have all enormous ears, rather detached from the head. All these characteristics are observed, more or less, in every individual, and often united in the same person."

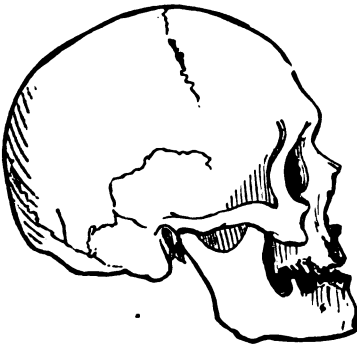


Fig. 578.—CALMUCK SKULL.

Fig. 578 represents a Calmuck cranium in the Mortonian collection. Dr. Meigs says of it: "This cranium is nearly globular, while the forehead is broad-flat, and less receding than in the Esquimaux and Kamtschatkan. Without being ridged or keel-like, the

median line of the cranium forms a regular arch, the most prominent point of which is at the junction of the coronal and saggital sutures. Behind and above the meatus [opening of the ear] the head swells out into a globe or sphere instead of tapering away postero-laterally toward the median line, as in Esquimaux crania. This appearance is also well seen in the head figured by Blumenbach."

THE PATAGONIANS.

The Patagonian tribes of South America are the nomades of the New World. Ever erratic, since the horse has been



Fig. 579.—A PATAGONIAN.

naturalized in America, these nations have become equestrian wanderers, living under tents of skin, or in huts of straw or bark. They are all fierce, untamable warriors, averse to agriculture and all the arts of civilization.

"The complexion of these nations," Prichard says, "is darker than that of most other South Americans. It has nothing of the red or copper-color, but is an olive-brown. M. d'Orbigny compares it to the color of mulattoes. The natives of Chaco are all, according to that writer,

equally dark with the Patagonians: the Charrua and the Puelche are of the deepest tint. Among the tribes of this stock are the tallest, more powerful, and athletic forms. The Patagonians and the Abipones are celebrated in this point of view. The stature of the most southern of the stock is great

est; it diminishes as we go northward toward Chaco, in the middle part of the continent. In these tribes generally the trunk of the body is large and robust; the breast strongly arched; the limbs massive and round; but the hands and feet are small. The women are stout and vigorous, and without feminine grace or comeliness. The heads of the Patagonians are large; their faces broad and flat; their cheek-bones prominent." These characteristics are tolerably well represented in our portrait (fig. 579). The drawing of the Patagonian cranium (fig. 580) shows a more favorable development,



Fig. 580.—PATAGONIAN SKULL.

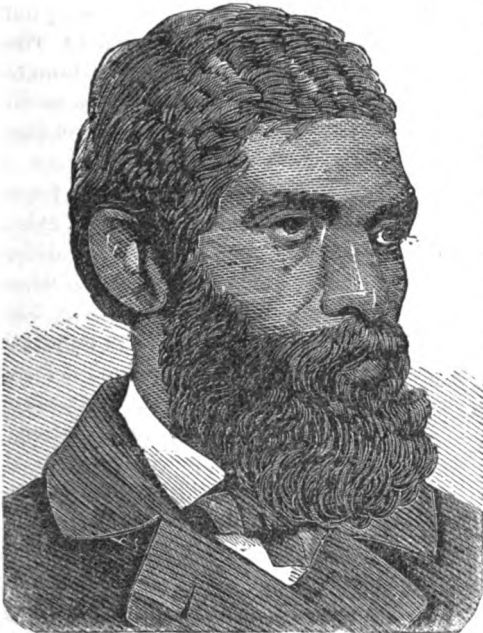


Fig. 581.—JOHN H. ROCK, ESQ.

modifying, and must necessarily modify, the shape of the

able development, though still a low one. The breadth of the base of the head and the predominance of the back-head over the frontal or intellectual regions, indicate more animal power and bodily vigor than either intelligence or moral feeling.

THE NEGRO IN AMERICA.

Climate, occupation, education, and other extraneous conditions are capable of

cranium and the configuration of the body, but the changes thus produced are confined within comparatively narrow limits and are incapable of obliterating racial distinctions. The negro of to-day, as we see him in New York or New Orleans, does not differ essentially from the negro known to



Fig. 582.

and figured by the pyramid builders of Egypt, more than three thousand years ago. Compare, by way of illustration, the accompanying Egyptian drawing of a negro head (fig. 582), made during the reign of Rameses III., thirteen centuries before Christ, with that of any living "contraband" of your acquaintance. There can hardly be a better argument for the permanence of racial physiognomies. Here (fig. 583) is a drawing from a

mummied negro head, probably about fifteen hundred years old, taken from an ancient tumulus on the sacred isle of Beghe, and now in the Mortonian collection. It will be seen to differ



Fig. 583.

little from our typical Ethiopian cranium represented on p. 390 (fig. 495), or from the annexed outline (fig. 584), which is from another specimen in the collection of the late Prof. Morton.

This persistence of the racial form of skull is perfectly consistent with any degree of improvement which civilization and Christian influences may have a tendency to produce. The negro improves *as* a negro. He does not necessarily become any more like a white man, nor was it intended that he should. It is so with all other races. A Chinese may become highly

educated, refined, accomplished, and religious; may be a scholar, a gentleman, and a Christian; but he will not cease

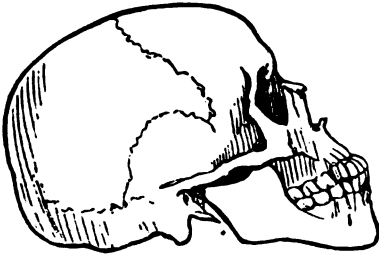


Fig. 584.—NEGRO SKULL.

to be a Mongolian. The character of his mind and the shape of his cranium will still differ almost as widely as before from those of a Christian gentleman of the Caucasian race. The African may be quite as susceptible of a high degree of civiliza-

tion as the Anglo-Saxon; but African civilization must necessarily differ in its character from Anglo-Saxon civilization, though, both existing in the same community, they must necessarily modify each other. The Negro comes to resemble the Caucasian by the process of *miscegenation*—by a mixing of blood—and by no other means.

To what extent the imperfect civilization and Christianizing of the black race, which has taken place in the United States, has modified the configuration of the skull, can not be determined by any means now at our command. Doubtless, however, a comparison of a large number of crania of American negroes with the same number of native African skulls would show a decided improvement. The new era of freedom which has just opened to the enslaved race will give it new incentives and new means for mental culture and general development. The ethnologist, as well as the philanthropist, will watch the grand experiment now being tried with the most intense interest. Our faith in MAN, irrespective of nation, race, or color, enables us to take a most hopeful view of the future of the Africo-American.

People of mixed Caucasian and Ethiopian blood are of course numerous among us, both at the North and in the late slave States, and some of them have shown great natural ability, especially as speakers. The following portrait represents a favorable specimen of this class—Rev. H. M. Turner, a colored preacher of South Carolina. He is probably half

white and half negro, indicated by the dark yellow skin of the African and the sharp features of the American. Then there is life, spirit, and calm, cool resolution in the whole expression. Observe the eye, the well-formed nose, chin, mouth, and the large perceptive faculties. The head is high in the center—at Veneration, and very high at Firmness and Self-Esteem, which give the love of liberty. Destructiveness, Combativeness, and Secretiveness, which give executiveness, force, propelling power, and restraint, are large. With the opportunities which most white men have, he would equal, if he did not surpass them in energy, enterprise, quick, shrewd, practical common sense, and real efficiency.*

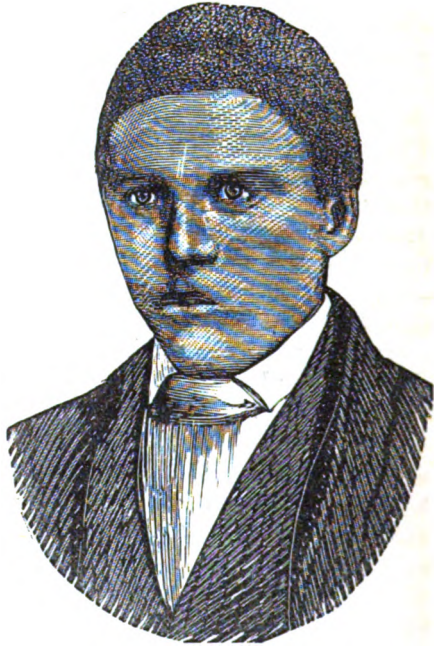


Fig. 585.—REV. H. M. TURNER.

Fig. 581 (p. 463) is the portrait of a still finer specimen of the *miscegen* (mixed man). The subject is John H. Rock,

* The Rev. H. M. Turner is a native of South Carolina, and is now near thirty-one years of age. He was born in the vicinity of Newberry Court House, grew up to a good-sized boy on the cotton-fields with the slaves, and learned to read by his own efforts. His mother, marrying in Abbeville village, carried him there, where he waited on some lawyers, who became so much impressed with his talent, that, in defiance of the prohibition of the law, they took pleasure in instructing him. He would hear them talk and speak, and then go into the woods and repeat what he had heard. Thus his mind developed, and in his seventeenth year he became a member of the Methodist Church. He was licensed to preach in

Esq., a lawyer of Boston, and a gentleman of fine education and good talents.

There are those, as we have said, who rest their hopes for the future of this country upon a mixed race, growing out of a union between the black and the white races, with such an intermingling of aboriginal American and Mongolian blood as may be attainable. These theorists show little respect for the God-ordained laws of nature. Facts are against them. The mulatto is often highly gifted intellectually, but he is not generally robust in body, and marriages between persons of this class are not apt to be fruitful, certainly not prolific. Their children are less so, if not entirely barren, as mulattoes of the third degree, we believe, always are. Ethnological science has settled the question in advance of the political theorist. There can be no permanent mulatto race.

THE PAPUANS.

The term Papuan is generally applied to a race or people widely diffused among the islands of the Indian Archipelago, whose most striking peculiarity consists in their frizzled or half-woolly hair, which does not spread over the surface of the head, as is usual with the negro, but grows in small tufts, each of which keeps separate from the rest; and the hairs, if permitted to grow, twist around each other and form spiral ringlets. This tufted hair is sometimes cut close to the head, and in other cases is dressed in various fanciful ways, as our illustrations will show.

The complexion of the Papuans is a dark chocolate, often approaching to black, or having a purplish tinge. The features resemble those of the negro, but their noses are more prominent and their foreheads less retreating.

his twentieth year, and displayed such intelligence in his first sermon that he made quite a sensation. From this time forth he attracted great crowds wherever he went. He now resides in Washington, where he has charge of the large colored church known as the Israel Bethel Church. He is a man of great personal courage—he fears no man and nothing. In large assemblies he can command attention when few others could. His size is ordinary, and he has a yellow complexion and very sharp features.

Pickering* sets down the Papuans as a distinct race, but Prichard and others contend that they afford an example of

PAPUAN MEN.



Fig. 586.



Fig. 587.



Fig. 588.

a permanent mixed race, formed by the union of the Ethiopian and the Malay. Their features, complexion, and hair seem to favor the latter theory, but we must consider the question still an open one. According to Pickering, the Papuan skull

PAPUAN WOMEN.



Fig. 589.



Fig. 590.



Fig. 591.

bears considerable resemblance, in general outline, to that of the negro, but differs materially in some respects from all other crania. Our portraits show a good deal of energy of

character and a fair share of intellectual ability. Benevolence, Veneration, Ideality, Mirthfulness, and Constructiveness are more fully developed than is common among uncivilized people; and there are physiognomical signs of strong passions, and especially great voluptuousness. We regret that we have no crania from which to determine more accurately the origin and status of this singular and interesting people.

THE SANDWICH ISLANDERS.

According to Blumenbach, the natives of the Sandwich Islands belong to the Malayan race; and in Dr. Prichard's



Fig. 592.—A SANDWICH ISLAND MAN.

classification they form the Polynesian branch of the Malayo-Polynesian race. Desmoulins and Pickering also class them with the Malaysans. The shape of their crania hardly justifies these opinions, as figs. 593 and 594 will show. Both of these,

like all other specimens we have seen figured, differ widely from the Malayan type. Compare them, and especially fig.

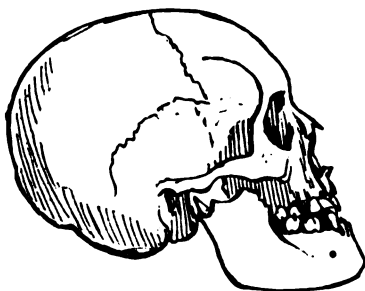


Fig. 593.

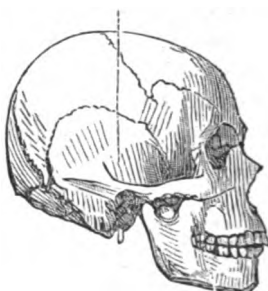


Fig. 594.

594, with the Malay skull represented on p. 387 (fig. 487). It will be seen that the departure from the Caucasian type is far less in the former than in the latter, which, it must be confessed, however, is not a favorable specimen. We must leave it for future investigators to assign these people their true place among the races. Phrenology and Physiognomy will help greatly in this work. When travelers and ethnologists shall understand and apply these sciences, we shall have clearer and more reliable descriptions of the different races, sub-races, and nations on which to base our opinions.*

The complexion of the Sandwich islanders is described as tawny, approaching to brown in some individuals, and to white in others. Some of the women are very beautiful and elegantly formed. Their features are often regular; their noses long and straight or aquiline; and their lips full and handsomely curved. Their hair is black and often curly or bushy, but sometimes smooth and straight. Great disparity exists, however, between the plebeians and the aristocratic class, as respects stature, features, and complexion, the privileged order being much fairer and taller than the common

* We beg to suggest, in this connection, that American explorers, sea captains, and others, may render essential service to science by procuring crania in all parts of the world for ethnological study. We shall try to establish a suitable place in New York—a craniological or ethnological museum—where such a collection may be placed on free exhibition.

people, and having better-shaped heads and more regular features. Some of the latter can hardly be distinguished from Europeans, and perhaps are not naturally inferior to them.



FIG. 595.—QUEEN OF THE SANDWICH ISLANDS.

THE TAHITIAN.

Closely related to the Sandwich islanders, but still higher in the scale of mental development, are the natives of the Society Islands, of whom the Tahitians may be taken as the type. Fig. 596 represents a not very favorable specimen of these people. The skull, a drawing of which is herewith also presented (fig. 597), will give a more correct idea of their mental status. It is the cranium of a woman, and represents, according to Dr. Meigs, from whose work we borrow it, "the cranial type of the Society Islands." It may be seen that, except in the greater projection of the jaws and teeth, it differs

little from the Caucasian form. The intellectual and moral developments are both excellent.

The Tahitians are considered by Lesson as the type of the Polynesian tribes. He says that all the Tahitians, almost without exception, are very handsome men; their limbs are of graceful proportions, but at the same time robust; the



Fig. 596.—A TAHITIAN.

muscular parts are everywhere covered with a thick cellular tissue, which softens the contour of their projecting lines. Their physiognomy has generally a mild, and gentle, and frank expression. The head of the Tahitian would be European, were it not for the spreading out of the nostrils (*l'épatement des narines*), and the too great thickness of the lips.

Their complexion is light brown, varying toward white—a really fine brunette in many cases—their hair black, brown, and even red; and a scanty curling beard.

Blumenbach has figured the skull of a Tahitian, and one of a native of the Marquesas, who are very nearly related to the Tahitians. He remarks that the former is somewhat narrow in form, but remarkably prominent at the summit, the upper jaw somewhat prominent—a ridge extending from the middle of the forehead over the vertex. The forms of these skulls illustrated in Blumenbach's plates are among the finest in his "Decades," and differ very little from those of Europeans.



Fig. 597.—A TAHITIAN SKULL.

OTHER POLYNESIANS.

Fig. 598 represents a woman and child of Espiritu Santo,



Fig. 598.—NATIVES OF ESPIRITU SANTO.

one of the group of islands generally known as the New Hebrides. We have no skulls or cranial drawings of these

people, and no information that will help us much in arriving at a correct conclusion in regard to their ethnological relations. Their physiognomy reminds us of the Sandwich island-



Fig. 599.—HARAWAUKY.

ers, but indicates a lower degree of development and an approach to the African type.

Pedro Fernandes de Quiros, a Portuguese navigator in the service of Spain, who discovered the island of Espiritu Santo in 1605, has left an admirable picture of that fertile and delightful spot. He says: "The rivers Jordan and Salvador

give no small beauty to their shores, for they are full of odoriferous flowers and plants. Pleasant and agreeable groves front the sea in every part: we mounted to the tops of mountains and perceived fertile valleys and rivers winding among green meadows. The whole is a country which, without doubt, has the advantage over those of America, and the best of the European will be well if it is equal. It is plenteous of various and delicious fruits, potatoes, yams, plantains, oranges, limes, sweet basil, nutmegs, and ebony, all of which, without the help of sickle, plow, or other artifice, it yields in every season. There are also cattle, birds of many kinds and of charming notes, honey-bees, parrots, doves, and partridges. The houses wherein the Indians live are thatched and low, and they of a black complexion. There are earthquakes—sign of a mainland.” The Spaniards found it impossible to make peace with the natives, and the few days which they spent there were passed in wrangling and bloodshed.

Harawauky, the New Zealand chief, whose portrait (fig. 599) is here presented, will serve as a representative of another branch of the great Polynesian family, though a more favorable specimen might be selected. The likeness indicates great animal power and endurance coupled with indolence of body and obtuseness of intellect—a brutal sensualist. With such a specimen of humanity before him, no one need doubt the possibility of cannibalism. Another portrait, presented on p. 219 (fig. 317), shows us the New Zealander in a more favorable light. There we have



Fig. 600.—SOLOMON ISLANDER.

a fine development of the intellectual and moral powers conjoined with great physical strength and a fierce energy of character which would have done no discredit to an ancient Roman.

Here is evidently a type of skull differing considerably from that of the tropical Polynesians, but whether this difference is owing merely to a difference in climate and other geograph-

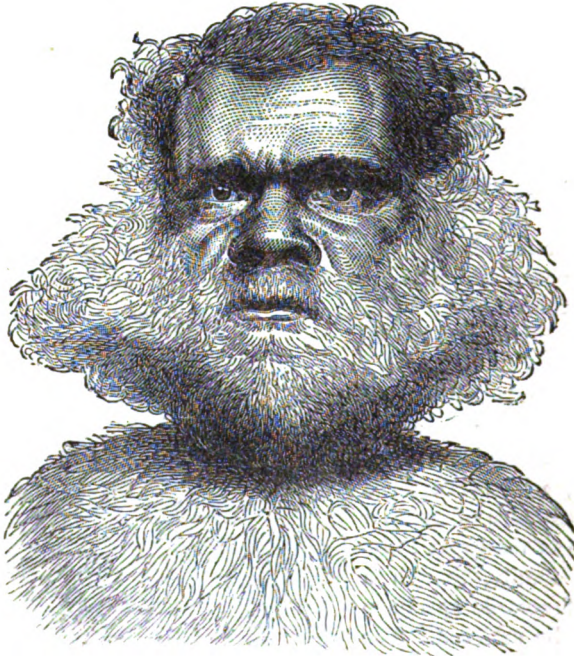


Fig. 601.—MAN OF NORTH AUSTRALIA.

ical conditions or to a mixture of blood, we are not at present able to determine.

Of the Solomon islanders, of one of whom fig. 600 is a representation, we have no reliable description. Our sketch suggests an approach to the Australian type, to which it may serve as a transition.

THE AUSTRALIANS.

In the native Australian we have an exceedingly low and

degraded type of humanity. Fig. 603, from a cranium in the Mortonian collection, seems scarcely human. The skull is that of a native of Port St. Philip, New South Wales. "This skull," Dr. Morton says, "is the nearest approach to the orang type that I have seen." "It is," adds Dr. Meigs, "a truly animal head. The forehead is exceedingly flat and recedent,



Fig. 602.—A WOMAN OF NORTH AUSTRALIA.

while the prognathism of the superior maxillary almost degenerates into a muzzle. The alveolar arch, instead of being round or oval in outline, is nearly square. The whole head is elongated and depressed along the coronal region, the basis cranii flat, and the mastoid processes very large and roughly formed. The immense orbits are overhung by ponderous superciliary ridges. This latter feature is still more evident

in No. 1,451 of the collection, which, though varying somewhat in type, presents in general the same brutal appearance."

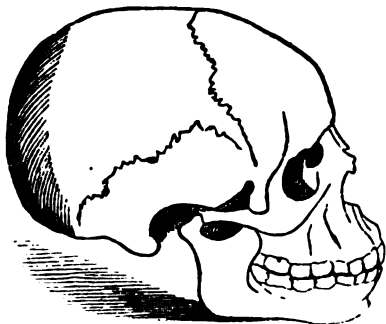


Fig. 603.—AUSTRALIAN SKULL.

In justice to the Australian, it should be noted that skulls of a somewhat better form are not uncommon, though the type is low in all.

Capt. Wilkes says "the cast of the [Australian] face is between the African and the Malay; the forehead unusually narrow and high [it is not really high, though its narrowness sometimes makes it appear so]; the eyes small, black, and deep-set; the nose much depressed at the upper part between the eyes and widened at the base, which is done by the mother in infancy, the natural shape being of an aquiline form; the cheek-bones high; the mouth large, and furnished with strong, well-set teeth; the chin frequently retreating; and the neck thin and short."



Fig. 604.



Fig. 605.



Fig. 606.

Our grouped cuts represent natives of North Australia, as scrawny, weak, and miserable a set as can be found on the globe. In fig. 607 there are indications of more reflective intellect than is common among them. The expression of these countenances, so far as they have any expression, is one

of mingled ill-nature, spitefulness, and obstinacy. They are apparently as deficient in vital as in mental power. Our



Fig. 607.



Fig. 608.



Fig. 609.

larger portraits, which are from photographs, exhibit a somewhat better development, and represent favorable specimens of the natives of South Australia. Their features, however, are not pleasing, and their organization is very coarse. Their



Fig. 610.



Fig. 611.



Fig. 612.

lips are thick, their noses flat, and their foreheads low and receding. In person they are neither tall, well-made, nor strong. We gladly dismiss them for the present.

THE SIAMESE.

The Siamese are pronounced by Pickering to be undoubtedly Malays. They are represented in this country by the

celebrated twins, who certainly have strongly marked Malay physiognomies. We present accurate portraits of these singularly united brothers, with two of their children.*

Other authorities inform us that the bulk of the population



FIG. 613.—THE SIAMESE TWINS AND THEIR CHILDREN.

° The Siamese Twins have been lost from public view for the last few years. It was well-known of them that they had married two sisters, and settled down near Salisbury, in North Carolina, on a well-stocked plantation. The brothers are now, it seems, about fifty years of age, but one, we believe, the smaller and feebler of the two, looks, it is said, now fully ten years older than the other. They can turn back to back or face to face, but that is as far as the remarkable bonds that unite them permits. It is almost certain that should either die, the other could not survive even for more than a few minutes, as there is an artery as large as the femoral artery that connects them. It is said that "their respiration and circulation are generally synchronous in the calm state, and their hours of sleeping and waking, their joys and sorrows, anger and pain, *ideas* and desires, are the same. They realize the idea of perfect friendship, the two

of Siam—the Siamese proper—are Mongolians. They are described as olive-colored, and of medium height. The face is broad, the forehead low, the cheek-bones prominent, the chin retreating, the mouth large, the lips thick, the nose heavy, the eyes black, and the beard scanty. In character we are told that they are indolent, improvident, greedy, intemperate, servile, cruel, vain, inquisitive, superstitious, and cowardly; but, it is added, they are polite, decorous in public, respectful to the aged, and affectionate to their kindred.



Fig. 614.—KING OF SIAM.*

Marriage among the Siamese takes place as early as eighteen for the males and fourteen for the females. The number of wives is according to rank and wealth, but the mass of the people have but one. Woman is generally treated with affection. The bodies of the dead are disposed of by burning, and the badges of mourning are white robes and an entire shaving of the head.

being one, and each one two in thought and act." As to *ideas* being the same, this is by no means more necessarily so than their similar education and habits would occasion. There are in fact marked differences of character and disposition indicated by the development of their phrenological organs and manifested in their conduct.

* Fig. 614 represents the present king of Siam. Our engraving is from a photograph kindly furnished by Captain Thomas King.

XXVI.

THE PHYSIOGNOMY OF CLASSES.

"Each profession and occupation has a tendency to impress its peculiar lines upon the physical system of those habitually exercising it; so that we may generally know a man's trade by the cut of his features."—*PHYSICAL PERFECTION.*

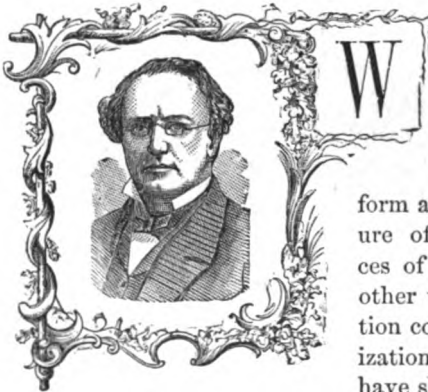


Fig. 615.—REV. D. W. CLARK, D.D.

WE have laid down and illustrated in Chapter III. the general principle that differences of external form are the result and measure of pre-existing differences of internal character—in other words, that configuration corresponds with organization and function; and have shown how this general law is modified by the sup-

plementary one of special development, according to which exercise (within certain limits), by attracting the vital currents, strengthens and increases the size of the organs or parts exercised. It follows that a person whom nature has set apart as it were for a certain calling, by giving him the organization best fitted for it, will have the impress of that calling stamped upon him from the beginning; though if he disregard the indications of nature and devote himself, or be devoted, to some other pursuit, he may partially obliterate the original signs and acquire those of his actual calling.

Thus the born clergyman—the pre-ordained minister of religion—who understands the natural bias of his organization and accepts humbly and prayerfully the sacred calling, grows day by day more truly a priest of God, both in character and in looks. In the same way the lawyer, the physician, the artist, etc., assimilate mentally and bodily to their peculiar type.

European society furnishes even more striking illustrations of this truth than can be found among us. Classes there are permanent, and trades and professions comparatively so, the son generally adopting the business of his father, and thus perpetuating and strengthening the peculiar organization and physiognomical traits which it is calculated to promote. The workmen at the quiet and noiseless trades are readily distinguished from those who pursue noisy, boisterous, and more active occupations. The tailor gets one form of head and expression of face, and the blacksmith quite another. The weaver and the stone-cutter do not look alike, nor the miner like either. Each trade has its peculiar condition of mind, and each condition of mind its cast of head and face. A Vulcan looks like Vulcan—an acrobat like an acrobat.

In illustration of these facts we will now introduce a large number of grouped portraits of leading men and women in some of the various professions and pursuits of life. They might almost be left to tell their own story, so admirably do they represent the ideas for which they stand; but a few remarks may not unprofitably be introduced.

As a class, the clergy have the best heads in the world. It is a fact in Physiology, that those parts most exercised get most blood, and become largest and strongest. A true clergyman attends much to his devotions, lives constantly in its atmosphere, and he thereby cultivates the organs in the top-head—Veneration, Spirituality, Hope, Benevolence, and Conscientiousness. In consequence, the clergy, as a body, have *high* heads, full in the coronal region, but comparatively narrow at the base. Their pursuits at the same time developing the intellect as well as the sentiments and emotions, tend to give them those fine foreheads and side-heads, and that expression of intelligence and culture which our portraits



Figs. 616 to 625.

EMANUEL SWEDENBORG, a "seer," and the founder of the New Jerusalem Church, was born at Stockholm, Jan. 29th, 1688, and died in London, March 29th, 1772.

PHILIP MELANCTHON, was born at Bretten, February 16th, 1497, and died at Wittenberg, Germany, April 19th, 1568. He was a man of great classical erudition, and associated with Martin Luther.

JOHN WESLEY, the founder of the Arminian Methodist denomination, was born at Epworth, England, on the 17th of June, 1703; died at the age of 88, Mar. 2d, 1791.

JONATHAN EDWARDS, D.D., LL.D., born 5th of October, 1703, at Windsor, Connecticut, celebrated as a metaphysician and speculative philosopher of the Calvinistic school; died at Princeton, New Jersey, March 22d, 1768, aged 64.

THOMAS CHALMERS, D.D., an eloquent Scottish pulpit orator and the first institut-

ed moderator of the "free church of Scotland;" born at Anstruther, Mar. 17th, 1780, and died at Morningside, May 31st, 1847.

STEPHEN H. TYNG, D.D., an eminent American Episcopalian minister, born at Newburyport, Mass., March 1st, 1800.

JOHN HUGHES, D.D., an American Roman Catholic prelate, born in the north of Ireland, 1798; died January 3d, 1864.

RICHARD S. STORRES, JR., D.D., author and editor, a prominent divine of the American Congregational Church, born at Braintree, Massachusetts, August 21st, 1821.

LYMAN BEECHER, D.D., an American Presbyterian clergyman, born at New Haven, Ct., October 12, 1775; died in Brooklyn, January 10, 1863, aged 87 years.

WILLIAM E. CHANNING, D.D., a distinguished preacher of the Unitarian persuasion, born at Newport, R. I., April 7, 1780; died at Bennington, Vt., Oct. 2d, 1842.

so well illustrate. From Swedenborg to Beecher, and from Wesley to Channing, they all, though differing widely in other particulars, agree in indicating a predominance of the higher intellectual faculties and the moral sentiments over the animal propensities which lie in the base of the brain.

A contemplation of the foregoing group of heads is suggestive of hopeful views of humanity. "What man has done, man may do." What man has been and is, man may be; and more. These men of lofty moral sentiments and clear, far-reaching intellect are merely human, like the rest of us; and even they can not be supposed to have shown us the full measure of human capacity, for wisdom or goodness. They may not only be equaled but even excelled. When all the laws of our being, physical and mental, shall be universally obeyed—when all children shall be born of healthy, intellectually cultivated, spiritually disposed, and habitually religious parents, and under all the conditions required by the physical and the moral as well as the civil law, and shall be integrally educated—symmetrically developed in body and brain—in the senses, in perception, in reflection, in taste, in justice, in mercy, in reverence, and in spirituality—then we shall behold a generation of men and women, the humblest of whom will be the equals of our Wesleys and our Channings.

It is not desirable, of course, that all men should be ministers of the Gospel, or developed wholly like them; but all men, and all women too, should be fully and symmetrically developed throughout—should be healthy and beautiful in person, clear, and strong in intellect, warm and tender in the affections, and pure and elevated in the moral or spiritual sentiments; and this is clearly within the range of human capability. All will never be alike or in any sense equal, for without difference there can be no harmony, but all may be wise and good, each in his degree.

We have reason to thank God for such men as those whose likenesses are before us, not only for what they have done and are doing for their fellow-men in the line of their duty as ministers of Christ, but also for what their organizations and lives suggest and prove in reference to humanity in general. "Be

ye perfect," is an injunction which, if we can never fully obey it, suggests an object which should always be set before us to be continually approached.

Swedenborg's intellectual and benevolent countenance speaks for itself. His head may be regarded as a model for size, quality, and proportion. It is lofty in the crown, full in the forehead, and well rounded out at the sides. It is the head of a philosopher, as well as that of a seer and spiritually-minded Christian.

The head of Melancthon is particularly lofty in the coronal region as well as prominent in the intellectual lobe. He worked through his very large Benevolence, guided by Causality and properly restrained by Conscientiousness and Cautioness.

In President Edwards we have the true type of the New England clergyman of other days, and at the same time one of the best specimens of metaphysical intellect that America has produced. He had a clear, sharp, logical mind; high moral endowments; and strong social qualities. Exact and almost severe in his justice, his motives were high and holy, and his works are monuments which testify to his industry, his sincerity, and his earnestness.

The grand Washingtonian head and face of the great Dr. Chalmers, of Scotland, speak the character he was. Broad, comprehensive, logical, and profound, he would of necessity occupy a leading place among men. His intellect was Websterian; his percepts and reflectives both large; and he was no less receptive than communicative. With his great intellect and large Language, his words flowed freely, and were always freighted with thought.

Our artist has failed to give a due degree of fullness to the crown of the head in the likeness of Dr. Tyng. In other respects it is nearly perfect, and shows a beautifully modeled cranium. If he fails anywhere, it will be in vitality. The wick is too large for the lamp—or the brain for the body—and it is in danger of premature exhaustion. With a fine, clear, highly trained, thoroughly educated, and available intellect; a resolute self-relying will; the most indomitable persever-

ance; thorough-going patriotism—large Self-Esteem, Firmness, and Combativeness—he is bound to stand his ground, defend the right, and put down the wrong. He is a fair representative of that large body of most intelligent, refined, and elegant worshipers—the Episcopalians.

The late Archbishop Hughes had a large brain, well-formed body, and a mind stored with the largest experience. He combined, in a remarkable degree, all the qualities of the politician, the preacher, the business man, the scholar, and the orator. He was a fine writer, a forcible speaker, a capital debater, and a good metaphysical reasoner. Had he devoted himself to civil affairs, he would have taken a prominent place among the leading statesmen of the day. As it was, he more than once made his influence felt in the halls of legislation.

Rev. Dr. R. S. Storrs, though young and less conspicuous at present than some of his cotemporaries, is one of our most scholarly, discriminating, just, gentle, sympathetic, and affectionate divines. Highly educated, an excellent historian, a great lover of art, an elegant writer, and one of our most eloquent orators; modest and unassuming, meek and humble, he is, when preaching, the personification of a man of God.

Next we have the veritable head, front, and foundation of the Beecher brotherhood—and, we should add, “sisterhood.” And what a head! who would not take off his hat when in his presence? He was a regular son of thunder. His head was long, broad, and high, made for utility rather than show, the reflective faculties predominating, with large Benevolence, Causality, Mirthfulness, Conscientiousness, Hope, and Combativeness. He was both a philanthropist, a philosopher, a wit, a critic, a debater, and a just man.

If there was ever an unselfish, unperverted, pure-minded, large-hearted man in the world, William Ellery Channing was one. His temperament was of the finest kind, his brain large, even, and healthy, and the superior portions predominating. Benevolence was most conspicuous, and he was a very Howard in kindness; while Veneration, Conscientiousness, and Spirituality were also large. His was a face beaming with benignity, full of sympathy, and overflowing with good-will to man.



Figs. 626 to 633.

BON TRAVERS, a negro, noted for his "science" and success in boxing; born in England, June 21st, 1832. Height, 5 feet 6 inches. "Fighting weight" about 145 lbs. He is still the champion negro pugilist of England.

RICHARD SHAW, an old London sporting man and a disciple of Tom Cribb. Now retired from active participation in the pleasures of "Fistiana," enjoying, we suppose, the hard-won honors of the ring.

TOM SAYERS, one of the "champions of England;" born at Pimlico, England, May 17, 1836. Height, 5 feet 8 inches. Weight about 152 lbs. He is notorious as the competitor with Heenan in the great "international" sparring match, which terminated, so "ingloriously" for both principals, without definite result.

TOM KING, also one of the "champions of England;" a "heavy weight;" born at

Stepney, England, Aug. 14, 1836. Height, 6 feet 2½ inches. Usual weight 180 lbs.

JOHN C. HEENAN, was born at West Troy, New York, May 1, 1834. He is of Irish descent. Height, 6 feet 1½ inches. Weight usually about 180 lbs.

JAMES MACE, "the champion of the middle weights," was born in Norfolk, England, April, 1831. Height, 5 feet 10 inches. Weight 158 lbs.

JAMES SULLIVAN, generally known as "Yankee" Sullivan, was born near Cork, Ireland, April 12, 1813. Committed suicide in San Francisco, California, May 31, 1856. Height, 5 feet 10 inches. Weight about 160 lbs. He was remarkable for his powers of endurance and great strength.

DAN COLLINS, an English boxer of the old school, born in London. Has been living apart from the prize ring some years, reposing on his laurels.

In striking contrast with the expanded foreheads and lofty top-heads represented in the preceding group, are the low centers and broad, heavy basilar regions so conspicuous in the heads of the devotees of pugilism. Here we see how opposite conditions, including both original proclivities and subsequent training, result in opposite external characteristics. The boxer's education is almost exclusively physical. The development of the brain is sacrificed to the growth of muscle and bone; and the cerebral organs mainly called into action are those most closely related to the animal life and most intimately connected with the body. The head is therefore broad at the base, especially immediately above and behind the ears, in the region of Destructiveness and Combativeness. The low forehead, narrow at the top and generally retreating, shows plainly enough the lack of intellectual development and moral culture. The features differ from those of the divines as widely as the heads. Here, everything is coarse and animal; there, all the parts are fine, delicate, and human. In the one case, all is gross and sensual, and has a downward or earthward tendency; in the other, there is refinement, spirituality, and a heavenward aspiration. In both cases the indwelling mind, which is above and before its earthly tenement, has built up an organization corresponding with itself.

In the head of the boxer, ambition—Approbativeness—con-sorts with the propelling organs of Destructiveness and Combativeness; and Self-Esteem is gratified on this lower plane. The noses of practiced boxers are usually broken at the bridge; and in the likenesses of several groups before us, there are not more than half a dozen, in some thirty, whose noses have not been thus broken and whose faces are not in some way disfigured. The faces of this class of persons are usually larger and coarser than those of other

Of Yankee Sullivan it may be said, that he had one of the hardest and toughest of organizations. The bony system was remarkably strong, and his muscles were almost as tough as whalebone; he could bear more pounding than any other man we have ever met. When undergoing an examination at our rooms some years ago, he remarked that he had fre-

quently permitted young men (not practiced boxers) to strike him on the forehead with the fist as hard as they could, and we actually witnessed the experiment. One of our clerks after striking three times, he said as hard as he could, upon the naked forehead, and apparently getting the worst of it, failed to make any impression. Sullivan only laughed at the young man's weakness. His head was extremely broad between the ears, Destructiveness, Combativeness, and Cautiousness were all large. He was naturally a good-natured fellow, but utterly without dignity, devotion, or spirituality. He seemed like many of his race, always ready to "fight for fun," or for a wager, and he was exceedingly plucky or courageous in the lower sense, but sadly deficient in true bravery. He took his own life, while in prison awaiting trial, which no one but the most consummate coward or maniac would do, fearing to face the justice which his acts had outraged. He was only a tool in the hands of more wicked and designing men, as is the case with many ignorant brutal creatures in human form.

Jem Mace is an Englishman, and like other boxers has an immense chest, large strong muscles, and a well-knit and compactly built organization throughout. Intellectually, he is no better nor worse than others of his class. Of his moral or religious character, if he has any, nothing is known.

Dan Collins is another English boxer, with immense perceptive, moderate reflectives, great Firmness, and large Self-Esteem. The head is specially broad between the ears, in the region of Destructiveness, but short back of the ears, in the region of the affections—a man of prodigious strength and iron will, with powers to resist and overcome all physical obstacles.

Tom Sayers, too, is strongly built; his head is broad and long, and specially developed in the perceptive faculties and in the crown. He is somewhat wanting in the reflectives, deficient in devotion, integrity, and sense of honor, and essentially low in all his sympathies and aspirations.

With a better early education than he received, with higher associations and moral influences, Tom King would have taken

a position much above that of a boxer. He is a man of immense bodily power, with a prodigious chest and a monstrous fist, with shoulders set in such a way as to indicate the greatest possible strength. He became champion of the ring, as he might have been a champion in any better work. His head is not so low nor his face so gross as that of his associates, and this mode of life we infer was rather forced upon him than chosen by himself. He is both by nature and organization worthy a better place.

Heenan would pass anywhere for a "bully boy," and yet he has the appearance of a gentleman. Our portrait does him injustice; it represents him more coarse than he is; the neck especially is monstrous, though the necks of all successful boxers must necessarily be large, for, be it remembered, a large neck goes with a powerful vital apparatus—lungs, heart, stomach, etc.; and these were well-nigh perfect in Heenan. He, too, if educated, could have become a first-rate man, and if under right religious influences, a prominent and trustworthy citizen; like Tom King, he is one of the better class of sporting men. But we deplore that one so capable should be thus lost to the community and to himself.

Of Shaw we may simply remark that he was a gamy, impetuous, tenacious man; he would fire up quickly, and burn brightly if not long. There would be no give up, however, while strength lasted, though appeals to his sympathy would be responded to. His Benevolence was evidently well developed, but his associations and his habits were those which degraded rather than elevated him.

The general build or make-up of Travers indicates the same toughness, quickness, and powers of endurance that distinguish the class to which he belongs. A large neck, a very deep chest, a prominent chin, and large pointed nose, compressed lips, and large perceptive faculties give the physiological indications of his "gamy" character, while the general shape or contour of the head is that of a willful, determined, plucky, unyielding spirit.

We have selected likenesses of those persons which best represent this class of sporting men.



Figs. 634 to 644.

JULIUS CAESAR, the greatest military commander of antiquity; born July 12, 100 B.C.; assassinated by Brutus, Mar. 15, 44 B.C.

HANNIBAL, an illustrious Carthaginian general, renowned for his successes in Italy, against the Romans; born 247 B.C.; died in exile, self-poisoned, 183 B.C.

RICHARD I. of England, surnamed the "Lion-hearted," born Sept., 1157; died from an arrow wound in France, April 6, 1199.

HENRI DE LA TOUR D'AUVERGNE, VIOUX DE TURENNE, a distinguished marshal of France; born at Sedan, September 16, 1611; died from a cannon-shot wound, July 27, 1675.

FRANCISCO PIZARRO, the conqueror of Peru; born at Truxillo, Spain, about 1471; assassinated in Lima, Peru, June 26, 1541.

NAPOLEON BONAPARTE, born at Ajaccio, island of Corsica, Feb. 8, 1768. Died on the island of St. Helena, May 5, 1821.

OLIVER CROMWELL, the "Protector," and one of the most able of the English generals; born at Huntingdon, April 25, 1599; died September 3, 1659.

ARTHUR WELLESLEY, DUKE OF WELLINGTON, celebrated as the conqueror of Napoleon; born in Ireland, June 20, 1760; died in London, Sept. 18, 1852.

WINFIELD SCOTT, one of the first of American military leaders; born at Petersburg, Va., June 13, 1796; retired from active service in 1861.

CHARLES XII. of Sweden, renowned for his victories over the Danes, Poles, and Russians; born at Stockholm, June 17, 1682; killed at Frederickshald, Norway, November 30, 1718.

FREDERICK THE GREAT, of Prussia; born in Berlin, Jan. 24, 1712; was distinguished for his brilliant military career; died August 17, 1756.

We have grouped together on the opposite page portraits of some of the most noted military men of various nations and all ages. These are typical personages—men who truly represent their class—and it hardly needed the emblematic sword to indicate the warrior in any one of them. They bear about with them, on their faces, the signs of their profession and their rank. The traits of character which they all possessed in common, and without which they would not have been great warriors, are deeply and clearly impressed upon their features. Here we behold the signs of that sound health, and that ample physical vigor which must lie at the foundation of true greatness in every department of human effort; of that tireless energy which no obstacles can withstand; of a ceaseless activity which is never behind time in striking a blow; of the steady coolness and presence of mind which is prepared for every emergency; and of an indomitable “pluck” which shrinks from no danger and can face unmoved the cannon’s mouth. These qualities made them great fighters. To be also the great commanders—the able and successful generals—which they were, they needed large, well-proportioned brains, and their magnificent heads show that they were none of them lacking in mental endowment.

Looking at the above faces somewhat in detail, we shall observe the following characteristics as common to them all:

1. **BROADNESS OF HEAD** just above and backward from the ears. This indicates a large development of Combativeness and Destructiveness, which give the physical courage and energy essential to the warrior. Self-Esteem, Firmness, Approbativeness, Alimentiveness, Secretiveness, and the animal propensities generally, are also largely developed.

2. **STRONG JAWS.**—Corresponding with the broad base of the brain, we observe in all of them massive jaws and a large and prominent chin, indications of a powerful osseous system, a strong circulation, and a large cerebellum. Observe these signs in Cæsar, Napoleon, Wellington, and Scott particularly.

3. **A WIDE, RATHER STRAIGHT, AND VERY FIRM MOUTH,** indicative of the masculine executiveness and energy which has its seat in Destructiveness, and allies man to the carnivora.

PHYSIOGNOMY OF CLASSES.

~~These~~ ~~are~~ physiologically the necessary ~~features~~ jaws, and are observable in all these

~~The~~ nose is strong and prominent in ~~and~~ generally either Roman or Jewish in ~~the~~ feature particularly in Hannibal, Caesar, ~~and~~ XII, Wellington, and Scott.

~~The~~ eyebrows.—A certain drawing down of the ~~at~~ the inner corners next the nose, and ~~horizontal~~ lines across the nose at the root, may ~~be~~ correct portraits of all great commanders and ~~is~~ indicated to the exercise of authority. The ~~is~~ noticeable in most of these faces, but the ~~is~~ regarded by the artist in our designs.

~~The~~ FOREHEAD.—The executive abilities ~~of~~ the base of the brain and the facial signs we have ~~observed~~, in all these men, by the strong, clear ~~lines~~ of which are so evident to the phrenologist ~~developed~~ if not massive foreheads of all these men. ~~His~~ was pronounced, by Shakspeare, to be "the ~~of~~ all the world," and he is to-day regarded as ~~the~~ of all past time. His head must have been ~~large~~ and his temperament perfect, combining great ~~endurance~~ and activity. He evidently had a ~~as~~ a theoretical intellect.

~~He~~ had a broad head, very high at the crown. ~~His~~ executiveness and a strong motive temperament. ~~He~~ of the voluptuous in his nature, but force, ~~and~~ executiveness were his leading traits.

~~He~~ must have had a large brain and a quick, strong ~~temperament~~. There are no signs of fear in his face, but a ~~expression~~ of force and pluck.

~~He~~ has something of the artist in his expression, but ~~his~~ broad and the temperament strong, with sharp ~~indicative~~ of activity, energy, toughness, tenacity, ~~and~~ of endurance. But the head seems high in ~~and~~ and he was not wanting in moral courage. ~~He~~ has the look of an adventurer and brigand—a look

akin to cruelty, or at least expressing the absence of sympathy. One would scarcely hope for mercy from a man with such a face.

In Cromwell there was a kind of Bunyan-like spirit—something more of moral principle than of mere fight; still, he had a broad brain as well as a broad, deep-chested body, and he was the concentration of will and energy.

Napoleon had a very large head, prominent in the temples, broad between the ears, high and long on top; he had great mathematical talent, great Constructiveness, large Causality, and very large Comparison, with Human Nature conspicuous above all the rest; and whatever his religious character may have been, his head—a cast of which we have in our collection—indicates great spiritual intuition as well as prominent Veneration.

Wellington's face speaks for itself; his temperament was motive-mental; and though not a large man, all the features were conspicuous, well-defined, clearly cut, and strongly marked. His face is as easily read as large print. The nose is most conspicuous; it was, perhaps, one of the best specimens of the Roman type seen in modern times. The perceptive faculties were decidedly large. The love of command is also distinctly indicated, as it was in Cromwell and Napoleon.

Charles XII. was, all things considered, one of the most soldierly of soldiers in the group. If he lacked anything it was Cautiousness; it was certainly not courage. There was large Destructiveness with evidently a large intellect, and the whole surmounted with Firmness and Self-Esteem. He was brave, gentle, courageous, and courteous.

In Frederick the Great there was evidently great natural capacity, added to which he had the largest experience in a time the most favorable for the fullest development of character. The head was both broad and high.

Our General Scott was a soldier by education if not by natural inclination, and though eminently successful in this his chosen field, we should never have selected him for a fighting man. He is not intellectually great, but his name will go down to posterity among the honored ones of his nation.





Figs. 645 to 651.

WILLIAM HARVEY, the discoverer of the circulation of the blood, was born in Kent, England, April 1, 1578, and died in London, June 3, 1657. He is the author of several works on Physiology, which rank high as authorities in the medical profession.

JOHN HUNTER, one of the most eminent of the English anatomists, and distinguished also as a zoologist, was born at Long Calderwood, England, February 13, 1728, and died in London, October 16, 1792.

JOHN ABERNETHY, the first surgeon who attempted the operation of tying the carotid artery and the external iliac artery, which he performed successfully, was born, of Irish parents, in London, 1768, and died there in April, 1831.

SIR ASTLEY COOPER, eminent as the most successful practitioner of surgery in England, was born in Norfolk, August 23,

1768, and died in London, February 12, 1841.

EDWARD JENNER, the discoverer of vaccination, was born at Berkley, England, May 17, 1749, and died January 26, 1823.

VALENTINE MOTT, a distinguished American surgeon, was born at Glen Cove, Long Island, New York, August 20, 1785, and died in New York city, April 26, 1823. He is said to have performed successfully the most difficult and delicate operations, many of which had never been attempted before.

JOHN M. CARNOCHAN, a celebrated American surgeon, especially known for his successful removal of the entire trunk of the second branch of the fifth pair nerves from the infra-orbital foramen, was born at Savannah, Georgia, in 1817. He is also an eminent author, and is now in full practice in New York.

Here we have a group of heads resembling the previous one in some respects, but differing very widely in others. Courage, resolution, coolness, and steadiness of nerve are here as imperatively required as in the warrior, and, accordingly, we see them as clearly indicated; but in other respects the profession of the surgeon brings into exercise and develops into prominence faculties not so actively called out in the warrior. Here we have one of the secrets of the differences we behold between classes and professions, as well as between individuals.

To be a good surgeon, one should be a complete man. He should have a strong intellect, to give him judgment and enable him to understand the case to be operated on in all its bearings. He needs strong perceptive faculties, especially through which to render him practical to enable him not only to know and remember all parts, but to use instruments and tools successfully; also, large Constructiveness, to give him a mechanical cast of mind. More than this; he must have inventive power to discover and apply the necessary mechanical means for the performance of the duties of his profession. He must have large Firmness, Destructiveness, and Benevolence, to give stability, fortitude, and kindness. He must have enough of Cautiousness to make him careful where he cuts, but not so much as to make him timid, irresolute, and hesitating; Self-Esteem, to give assurance; Hope, to inspire in his patients confidence; and genial good-nature, to make him liked at the bedside. He ought to possess a healthy, strong, and vigorous muscle, a calm nerve to guide the hand, and to enable him to hold the knife or other instrument firmly and steadily. Then if he combines high moral and religious principle, if he feels that he is simply an instrument in the hands of Divine Providence to do a beneficent work, he will not only do great good, but rise to be at the head of his profession.

The surgeon and the physician are recipients of the fullest confidences. They must be honorable, and keep these confidences inviolable, which, to the honor of the profession be it said, they generally do. A true physician is no gossip.

To "heal the sick," in body and in mind, requires not only the best judgment, but a high moral character, and the gen-

tlest sympathies with perfect self-control. There should also be a natural aptitude for the calling.*

In Harvey, we have the large perceptive of the observer and discoverer. He was pre-eminently practical in all things. He had very large Form, Order, and Comparison, with a natural crown to his head. His temperament was the mental-motive.

In Abernethy, there is naturally more of the author and physician than of the surgeon, and you feel that he would be more likely to give you advice than to apply the knife. He was a great talker, full of wit and humor—like the rest of

* The earliest surgeons of whom there is any record were the Egyptian priests. Of their skill in embalming the bodies of the dead there is ample evidence, and Kenrick says, that "on the wall of the ruined temple at Thebes, basso-relievos have been found displaying surgical operations and instruments not far different from some in use in modern times." According to Herodotus, we owe to them the use of the moxa and the adaptation of artificial limbs.

Among the Jews, in their early history, there is but little evidence of surgical skill, and that little is confined to the priests. Circumcision was indeed skillfully performed, but this required little surgical ability; and in the treatment of wounds and fractures, even at a late period (2 Kings i. 2), the more skillful Phœnician priests seem to have been preferred.

In Greece, surgery is as ancient as the mythic period of its history. Chiron, the centaur, born in Thessaly, and skillful in the application of soothing herbs to wounds and bruises, is the legendary father of Greek surgery; but Æsculapius, the son of Apollo, said by some to have been the pupil of Chiron, though others call him his superior and predecessor, won the highest fame in that early time for surgical skill. He is said to have been deified on account of his wonderful successes, about fifty years before the Trojan war. Temples were reared for his worship, which became the repositories of surgical knowledge, at Epidaurus, Cnidus, Cos, and Pergamus. Homer has immortalized his two sons, Podalirius and Machaon, the companions of Agamemnon in the Trojan war (about 1192 B.C.), where they rendered essential service in healing the wounds of the Grecian heroes. Venesection was practiced by Podalirius, while Machaon possessed the greater skill in the treatment of wounds. Their knowledge seems, however, to have been limited to simple operations, like the removal of darts, the checking of hemorrhage, and the assuaging of pain by soothing applications. Of the treatment of fractures they appear to have been entirely ignorant, for in these Homer invokes Apollo only, never calling on the surgeons for aid.

his race. He had large Language—see how full the eye!—large Individuality, Causality, and Comparison; a prominent nose, a good mouth, large chin, and attractive features throughout.

In Hunter we see the signs of strong, practical common sense, with great Constructiveness predominating. See how broad the head between the ears! His expression indicates "business." He was cool and courageous, strong and resolute, kind and affectionate, and these were among his leading traits. His was an expressive face, and a marked character.

Sir Astley Cooper looks the scholar, the operator, and the very dignified gentleman which he was. He would pursue his profession for the very love of it. If he were invited to perform an operation, he would go about it with that calm, cool, self-possession which would inspire the fullest confidence on the part of the patient. It is a splendid head and a fine face, indicative of intelligence and all the graces.

Carnochan, the resolute, the prompt, the expert, is large in intellect, high in the crown, and broad at the base; he has perhaps the best natural endowment, and by education is the one best fitted for his profession among ten thousand. He is, in all respects, as a surgeon, "the right man in the right place." He has large percepts, well-developed reflectives, not much caution, large Constructiveness, and strong social feelings, and is fond of good living. He is in all things exactly what he seems.

Dr. Mott, the Quaker surgeon, had a large brain, strong body with the vital-motive temperament, good mechanical skill, and great self-control, resolution, and courage. He had Order, ambition, love of money, and a very high appreciation of his own abilities. He performed some very remarkable operations, and charged accordingly. His face, especially the nose, has something of the Hebrew contour in it.

Jenner, the thoughtful, the kindly, the sympathetical, and scholarly, though last named, is not least among the worthies. His face speaks for itself, and is an interesting study. See the high, broad forehead and the thoughtful, considerate look, inclining to the serious! Causality, Comparison, and the entire intellectual lobe were large.



Figs. 652 to 662.

ARCHIMEDES, the most distinguished of the ancient mathematicians and engineers, was born at Syracuse, in Sicily, about 291 B.C., and died in 212 B.C. He demonstrated the properties of the lever.

JOHN GUTTENBERG, the inventor of printing by the application of movable wooden types, was born at Sulzlock, near Mentz, Germany, in 1400; died Feb. 24, 1468.

ROBERT FULTON, an American engineer, and the first successful experimenter in steam navigation; born in Pennsylvania, 1765; died at New York, Feb. 24, 1815.

GEORGE STEPHENSON, the projector of the railway system and inventor of the locomotive, was born at Wylam, England, April, 1787; died August 12, 1843.

SIR HUMPHREY DAVY, celebrated as a chemist, and inventor of the safety-lamp, born at Penzance, Eng., Dec. 17, 1778; died at Geneva, Switzerland, May 29, 1829.

L. J. M. DAGUERRE, inventor of the process of daguerreotyping, was born at Cornelle, France, 1789; died July 12, 1851.

SAMUEL F. B. MORSE, distinguished as an artist, and especially as the projector of the electric telegraph, born at Charlestown, Mass., April 27, 1791.

JAMES WATT, the improver and constructor of the first successful steam-engine, born at Greenock, Scotland, January 19, 1736, and died at Birmingham, August 25, 1819.

ELI WHITNEY, inventor of the cotton-gin, born at Westborough, Massachusetts, December 8, 1765; died at New Haven, Connecticut, January 8, 1825.

SIR RICHARD ARKRIGHT, inventor of the spinning frame, which has revolutionized the industry of the world, was born at Preston, England, December 23, 1732, and died August 3, 1792.

Look at the foregoing group! What heads! what faces! Do you see anything narrow, weak, or pinched up? On the contrary, each one is a man; and what is the most creditable of all, is the fact that they were "self-made men." They may have read books, to learn what others taught, but they went beyond. They may have imitated others when learning, but they surpassed their teachers. Some men never rise above mere "imitation," while original minds strike out into new and untried seas and fields, bringing home as the reward of their toils and discoveries the richest treasures. Mere imitators and plagiarists get neither credit, reward, nor honor. But real inventors, discoverers, artists, authors, workers, and others, who help to lift the people up and to set the world ahead, will earn and obtain both remuneration, and all the honors the world can give. It is to inventors, engineers, architects, and workers the world is indebted for much of its material progress in the industrial arts and in civilization. It is through the organ of Constructiveness that we learn to apply the elements of water, wind, and electricity to lessen human labor, and thus to free the world from the drudgery of perpetual bodily toil. This gives us time for study and growth in mind and soul. And if they add that goodness of heart, that gentleness and meekness of spirit, that justice and kindness, that faith, hope, and devotion which puts one into right relations with his God, *they* will obtain, in addition to these worldly profits and honors, "that peace of mind which passeth understanding."

There are several points, it will be seen, in which all these heads resemble each other. There are in all signs of those distinctive traits of character without which they could not have been great inventors.

1. We observe in all well-developed heads. Each had a brain above the average size, and of good quality.
2. The intellectual lobe is particularly prominent, both in the lower or perceptive region, and in the superior parts assigned to the reflective faculties. An inventor must necessarily be both a good observer and a clear thinker.
3. Those parts of the head lying above and backward from

the outer angle of the super-orbital ridge (at *, fig. 662) are full in all, indicating large Constructiveness, which, though it does not always accompany planning or inventing talent, is necessary to its practical application, be it in mechanism, music, poetry, or art.



FIG. 662.

4. The large Firmness and Concentrativeness so essential where steady perseverance and application are required, as it generally is in perfecting an invention, is strongly indicated in all.

In the grouping of this galaxy of worthies, our artist has placed the immortal Fulton—inventor of the steamboat—with his high, long, and wide head, in the center. He had a motive-mental temperament, and a face indicating work, intelligence, originality, activity, and perseverance. He had large Constructiveness, Imitation, Firmness, and Concentrativeness.

Fulton is supported on his right by the great Stephenson, inventor of the locomotive, whose head was as great as his mind was comprehensive. That is a grand head and a splendid face. He could think and work. Those features stamp him the man he was.

Archimedes—the inventor of the hydraulic screw, or spiral pump, who said that with the lever he could lift the world, if a foundation for his fulcrum and a standing-place could be obtained—may be seen on the right. Observe how large are his perceptive faculties!

On the left of Fulton see the strongly marked face of Davy, the inventor of the safety lamp, by means of which the miner is enabled, without danger, to enter and work in mines filled with explosive gas, and which has saved the lives of thousands.

By his side is Guttenburg, the inventor of movable type, for printing books. Here, too, may be seen an original face and an original character. Because of his inventions—being in advance of the age in which he lived—he was charged with being possessed of the devil, and persecuted accordingly.

Below Stephenson you have Daguerre, inventor of that beautiful, that incomparable art of making pictures by simple chemicals and sun-light. He is large in Ideality and Con-

structiveness, and has an every way well-developed head. The French lead the world in chemistry—as in the fashions—and this is one of the leaders of the leaders.

Below Davy, we have—with his clear, active, mental temperament and finely-formed brain—our Morse, one of the inventors of the electric telegraph, the most wonderful conception of the present century. He is also an artist of merit. A cast from his head, now in our collection, taken years ago, represents him as thin, wiry, clear, and very tenacious.

Below the center, as one of the foundation stones which is expected to endure always, and on which all mechanical interests more or less depend, we place the great Watt, inventor, or rather improver, of the steam-engine, which is revolutionizing the work of the world. It is a thoughtful face, with the expression of “I can and I will” upon it. Those are strongly marked features, indicating a strong mind backed by a large brain and a strong body.

On his left stands Arkwright, whose memory must go down to the latest posterity as the inventor of the improved cotton-spinning machine. A vital-motive temperament, with a wish and a will to do. His features are most expressive.

On his right is our Whitney, through the fruits of whose cotton-gin our whole country reaps her richest harvest of gold, of ambition, and of blood! Slave lords waxed fat and unscrupulous on their ill-gotten gains through the services of the bondsman and the use of this machine. The cotton-masters of Mother England realized a few cool hundred millions a year on the manufacture of this staple. But Mr. Whitney is not to blame for this. His invention was the means, indirectly, of shaking the world from center to circumference. His head, it will be seen, is Napoleonic, very long, and very high and broad. We should place a man with such an organization among statesmen.*

* Among the world's great inventors we may also name, Elias How, of the sewing-machine; Charles Goodyear, of the vulcanized india-rubber; Horace Wells, of the ether or nitrous oxyd; McCormick, of the reaper; Ericsson, of the monitor; and Colt, of the revolver.



Figs. 663 to 672.

CHRISTOPHER COLUMBUS, the discoverer of America: born in Genoa, Italy, about 1435; died at Valladolid, Spain, May 20, 1506.

AMERIGO VESPUCCI, from whom America received its name; born in Florence, Italy, March 9, 1451, and died on the island of Terceira, 1514.

SEBASTIAN CABOT, the discoverer of the continent of America in 1497, was born at Bristol, England, in 1477; died upward of seventy years of age.

GIOVANNI VERAZZANO, a Florentine, under the patronage of Francis I. of France, explored the eastern coast of North America, from Labrador to South Carolina. He was born about 1490, and is supposed to have been killed by the Indians, about 1525.

JAMES COOK, the first circumnavigator of the world; born in Yorkshire, Eng., Oct. 27, 1728; was killed by the natives on one of the Sandwich Islands, Feb. 14, 1779.

HERNANDO DE SOTO, the discoverer of the Mississippi River, was born in Villa Nueva de Barcarota, Spain, in 1501, and died in Louisiana, 1542.

HENRY HUDSON, the discoverer and explorer of the Hudson River, and Hudson's Bay, North America, born about 1555, in England; abandoned by a mutinous crew while in Hudson's Straits, Nov., 1610.

SIR JOHN FRANKLIN, a distinguished Arctic explorer, born at Spillaby, England, April 16, 1796; supposed to have perished in his third expedition, which sailed from England, May 19, 1845.

ELISHA KENT KANE, M.D., an American Arctic explorer and discoverer of "the open Polar Sea;" born at Philadelphia, Feb. 3, 1820; died at Havana, Feb. 16, 1857.

JOHN C. FREMONT, distinguished for his explorations in California and the Rocky Mountains, was born in Savannah, Ga., January 21, 1813.

The organization of the true discoverer must combine largely the qualities of faith, hope, and perseverance. He must be a good believer in the unseen, with a skylight, as it were, to his mind through the faculties above the intellect, properly so called, which put him in relation to the great beyond. In spirit and disposition he is akin to the best religious worshiper who goes forth on his mission with that devotion and perfect trust in Providence which sustains him amid all his trials and privations. He believes in the all-seeing Omnipotent who protects and cares for all who trust in Him.

Observe in the foregoing group the spiritual expression on the face of each! It amounts to a look of wonder or surprise, as though they were peering into fathomless space rather than inspecting any particular object; and this is in harmony with their character. Without this faith there would be no launching of the bark on untried seas, no putting out on voyages of exploration in Arctic seas, barred by almost impassable barrier.

In the heads composing our group will be observed, first, great length from the front to the back; secondly, great height from the ear to the top; and thirdly, a predominance of the perceptive intellect. Vespucci, Captain Cook, Dr. Kane, and General Fremont are marked examples.

Columbus had a high, long, and large head, the perceptive and reflectives being both large, while Self-Esteem, Firmness, Veneration, and Spirituality were all prominent. We infer that he had the motive-mental temperament, which gives clearness, susceptibility, and endurance.

In Cabot we have the same hardy, tough, wiry, persevering, and enduring temperament combined with great clearness and executiveness. The mental temperament evidently predominated in him.

In Vespucci we have a strongly marked motive-vital temperament, with a powerful constitution. Observe the prominent perceptive faculties, the Roman nose, the projecting chin, and the head high in the center and broad between the ears. He would be distinguished for his descriptive powers as well as for his force, persistency, tenacity, and love of conquest.

In Verazzano the bilious or motive temperament predominated. He had a dark skin, black curly hair, and a strong, muscular system, and was self-relying, persevering, and tenacious. There is evidently no fear or timidity in his composition.

Captain Cook had large Locality, Comparison, Human Nature, Firmness, Self-Esteem, Benevolence, and Veneration. He exhibits an anxious look with a resolute will and an evident desire to achieve success. We infer that his Cautiousness was active though not large, and that he had broad and clear conceptions of geographical lines. He was a natural-born navigator, and pursued his profession from the very love of it.

De Soto presents a grand and commanding aspect. There is comprehension, power, breadth, and understanding evinced in this head and face. It is almost colossal in its proportions, and he evidently knew what he was about when pursuing his dangerous calling. His is one of the grandest physiognomies in the group.*

Hudson was something of a philosopher as well as navigator, and he has a Baconian head and face. He was an original thinker, a good planner, and a great observer. Large Cautiousness made him watchful, guarded, and prudent; large Hope led him on; and large Firmness held him to his work—the intellect opening and leading the way. He would have passed for a man of mark everywhere.

General Fremont is a natural pioneer, an engineer, a surveyor, and an explorer. With a very active mind, great am-

* How well De Soto's lofty poetical head and half-prophetic expression of countenance correspond with his romantic career, his almost superhuman courage, and his never-failing faith! and if his life was grand, his death was more—it was sublime. "His soldiers," Bancroft says, "pronounced his eulogy by grieving over his loss; and the priests chanted over his body the first requiems ever heard on the waters of the Mississippi. His body was wrapped in a mantle, and in the stillness of midnight was silently sunk in the middle of the stream. The wanderer had crossed a large part of the continent in search for gold and found nothing so remarkable as his burial-place." For more than three centuries the waters of the great river which he discovered have flowed over his remains, and few nobler men have ever been borne on their bosom.

bition, and indomitable will he pursued his calling accordingly. Without that breadth and that comprehensiveness by which such men as De Soto and Hudson were characterized, he is, nevertheless, a most persevering and energetic explorer. His mistakes may be charitably charged to his youth, when there would naturally be more zeal than judgment, but this would be corrected by age and experience. In this head Approbativeness and Firmness are prominent; Self-Esteem is not wanting. In his intellect the perceptive faculties are conspicuous. There is also large Constructiveness, and a fair development of Language. He can write better than he can talk.

Dr. Kane had one of the most strongly marked nervous or mental temperaments which we have ever met. He was literally a perpetual motion—he was all alive from top to toe. Highly educated, exceedingly ambitious, very resolute, but moderately developed in Cautiousness, he was prompt, off-hand, open, and free, and exceedingly tenacious and persevering; he would leave no stone unturned to secure success. His was one of the most enthusiastic organizations to be met with. What he did, he did with all his might, and thus broke down prematurely.

Sir John Franklin had a splendid body and brain. There was nothing narrow or contracted, nothing little or mean; with one of the best constitutions, made up of good materials, he was the picture of perfect health. A profound thinker, a quick and correct observer, all his faculties worked together in perfect harmony. He had large Constructiveness, which enabled him to appreciate the mechanical. Where he failed, we should doubt the success of any man. The loss of one like him would be felt by the nation to which he belonged, and by the world, which looks on. Observe his features—that splendid forehead, almost Shakspearian in mold, with the large reflectives and the very large perpectives; that beautiful mouth, indicating affection, joyousness, mirthfulness, and decision; that prominent chin, corresponding with a large cerebellum; that well-formed nose; and those large and intelligent eyes. The moral sentiments, including Benevolence, Veneration, Hope, and Spirituality, were large



Figs. 673 to 681.

SOCRATES, the greatest heathen philosopher of antiquity, who maintained the existence of one Supreme Intelligence, was born in Attica, Greece, 470 B.C., and died 400 B.C., in Athens, from poison, under the unjust condemnation of the Athenian council.

ARISTOTLE, the founder of the "peripatetic" or walking sect of philosophers, was born at Stagira, Thrace, 384 B.C., and died at Chalcis, Eubœa, 323 B.C.

PLATO, the father of speculative philosophers; born on the island of Ægina, 430 B.C., and died at the age of eighty-one, at Athens, 348 B.C.

GALILEO GALILEI, the demonstrator of the solar system, and the inventor of the telescope; born at Pisa, July 15, 1564; died at Florence, January 8, 1642.

FRANCIS BACON, Lord Chancellor of England under James I., author of the "in-

ductive" method of philosophic investigation; born in London, Jan. 22, 1560; died April 9, 1626.

JOHN LOCKE, one of the most celebrated English philosophers, author of "Essay Concerning the Human Understanding;" born at Wrington, Aug. 29, 1632; died at Oates, in Essex, Oct. 28, 1704.

BENJAMIN FRANKLIN, distinguished as the most eminent of American political economists and the inventor of the lightning-rod; born in Boston, Mass., Jan. 6, 1706; died April 17, 1790.

SIR ISAAC NEWTON, the discoverer of the law of gravitation and author of the "Principia;" born in Lincolnshire, Eng., Dec. 25, 1642; died March 20, 1727.

ADAM SMITH, the greatest of the Scotch moralists and the projector of industrial freedom; born in Fifeshire, June 5, 1723; died in Edinburgh, July 8, 1790.

To become a philosopher requires a large brain and a high order of intellect. We are not aware of any very distinguished philosophers in whom these conditions are not fulfilled. Persons may become celebrated for rare gifts and powers of mind in certain directions, but to comprehend principles, to trace facts and events back to their origin, requires something more than the sense of sight and hearing. To find out the "why and the wherefore" of things is something beyond the reach of the common intellect. It is not a profane expression to apply the term "godlike" to one who stands so immeasurably above his fellows as to be enabled to interpret the laws of matter and of mind. It is one thing to observe, but quite another thing to think. It is easy to write and talk, but to work out philosophical problems, and to discover the laws of motion, of growth, and of development requires a combination of the higher intellectual powers, or, phrenologically speaking, of Causality and Comparison, together with the perceptive faculties. Indeed, the entire well-developed intellect is required by the complete philosopher.

We place Aristotle at the head of the philosophers, although Socrates is before him in point of time. From all that can be learned from his writings, and from the busts and portraits which have been handed down, it is evident that Aristotle had a large brain, a very active temperament, and a rare combination of the intellectual faculties. He was both a great observer and a great thinker, most of his inferences were drawn from experimental facts, and to this day his teachings on many points are accepted by our scholars and scientific men. He was the first physiologist whose works have been transmitted to modern times. He even seemed to have a forecast in regard to Phrenology and Physiognomy. Among his works we may name "*Physiognomika*" and "*Natura Animalium*."

Socrates had a splendid head with an ugly face. The worst feature, however, was a broken or deformed nose which greatly disfigured him, and which would prevent a satisfactory analysis of his character from the features. But his head was large and well formed, high above the ears, long on top, and well filled out at the sides. He was not wanting in

vitality or constitution, and was remarkable for his perseverance and powers of endurance. His greatness grew out of his originality and his comprehensive intellect.

Plato was different. His features were more symmetrical—nearly perfect. Calm, cool, and courageous, he took the lead and followed his own inspirations. He was more intellectual than social, more philosophical than emotional, and held all his impulses in the strictest subjection to his spiritual judgment. His religion was that of kindness and justice, with evidently high Hope and strong Faith.

Galileo must ever occupy a prominent place in the respect and admiration of all generations. He discovered a great foundation principle which completely revolutionized the whole system of astronomy. His physiognomy indicates the highest intellectuality with depth and breadth of mind. His nose was prominent, his eyes well placed and expressive, his lips full but firm, his chin prominent, and all the features indicative of originality, strength, and power. Like other discoverers who were in advance of their time, he suffered mental martyrdom for enunciating his convictions. His history is well known to all.

Lord Bacon had a massive brain and a conspicuous face. The various busts, masks, casts, and portraits accessible, indicate originality, comprehensiveness, and clearness of mental perception. He was capable of putting facts together and drawing from them correct conclusions. His nose approaches the Roman type, his features, comparatively thin, indicating point and activity. His organization, both phrenologically and physiologically, is in perfect keeping with his well-known character.

To Locke we are indebted for the earliest and best discussions on the human mind. He was definite and direct, without that poetic etherealism found in many other philosophical writers. There is no display, but an honest, straightforward, plain-spoken statement of his principles. He looks the frankness he felt and expressed. There is nothing hidden, nothing sly or cunning in his composition, but a most fully illuminated intellect, which was freely and fully expressed.

Adam Smith had something of the reverential manner and bearing of the Howard in his aspect, and was also clear and definite, with an honest, straightforward course in keeping with his high and holy purposes. His reasoning was under the sanction of his religion, and he had both the courage and the power to express it. There was a splendid delivery and a fine development of Language, and a resolution quite above fear or timidity.

Sir Isaac Newton had also a magnificent head, and a face corresponding. Compare this head with that of an imbecile, and see how vast the difference! That is, a fine forehead, eyes speaking and far apart, the nose prominent and well formed, the mouth well cut and expressive, with Individuality, Form, Size, Order—all the percepts, in fact—large, and the temperament happily blended.

Benjamin Franklin was one of the most illustrious of Americans. In point of philosophy and understanding he was one of the foremost men of his time. Indeed, he had no superiors, and few, if any, equals. He was not only a scientific scholar, but a profound philosopher, and was also a moralist, lacking only that essential ingredient which we call "faith" to make him one of the most circumspect Christian worshippers. His power was that of the intellect rather than that of the spiritual sentiments, and he rested there. His features are in keeping with his well-known wisdom, integrity, economy, and mechanical invention. Who can ever recall to mind the couplet—

"He who by the plow would thrive,
Himself must either hold or drive;"

or this,

"Early to bed, and early to rise,
Makes a man healthy, wealthy, and wise"—

without thinking simultaneously of their author? His nose was prominent and broad at the bridge, indicating Acquisitiveness—and he was charged with parsimony. His nostrils were also large, indicating breathing power. His mouth was slightly inclined upward at the corners, indicating wit and mirthfulness, which he possessed in a high degree. His chin was full and double—another indication of economy and vitality.



Figs. 689 to 699.

CHARLES MAURICE DE TALLEYRAND PÉRIGORD, "the prince of diplomatists," was born in Paris, France, January 13, 1754; died there May 20, 1838.

PRINCE CLEMENS, W. N. L. METTERNICH, the most eminent of Austrian statesmen, was born in Coblenz, May 15, 1773; died in Vienna, June 11, 1859. He controlled the movements of the allied powers in their opposition to Napoleon I.

DE WITT CLINTON, one of the most eminent of American statesmen and the institutor of the Erie Canal, was born at Little Britain, Orange County, New York, Mar. 2, 1769; died in Albany, Feb. 11, 1828.

SIR ROBERT PEEL, an English minister of the first eminence, and foremost in inaugurating the "free-trade" policy, was born in Lancashire, Feb. 5, 1788; died in London, July 2, 1850.

COUNT CAMILLO DI CAVOUR, a distinguished diplomatist of Sardinia, late Presi-

dent of the Council, was born in Turin, July 14, 1809; died in Turin, June 6, 1861.

THOMAS JEFFERSON, third President of the United States, a distinguished political author and the writer of the Declaration of Independence, was born at Shadwell, Virginia, April 2, 1743; died at Monticello, July 4, 1826.

DANIEL WEBSTER, distinguished among the first of orators and statesmen, was born at Salisbury, New Hampshire, Jan. 18, 1782; died at Marshfield, Massachusetts, October 24, 1852.

DANIEL O'CONNELL, celebrated as an Irish politician and reformer, was born in the county of Kerry, Ireland, August 6, 1775; died in Genoa, May 15, 1847.

LORD JOHN RUSSELL, prime minister, and a vigorous promoter of reform measures in the British Parliament, was born in London, August 19, 1792. He is also a voluminous author.

A statesman requires a large brain, well supported by a healthy body. He should be well developed in the intellect, to enable him to take a broad and comprehensive view of public questions, and to suggest such measures as may be necessary for the improvement of the people and the development of the country. He should also have a high moral brain, in order to work for the public good instead of for selfish ends. A mere pettifogger who quibbles and quarrels is one thing, a broad and comprehensive intellect without an active sense of justice is quite another, but both are unfitted for statesmanship. It requires a well-balanced mind to draw nice distinctions, to come to correct conclusions, and to see that justice is done by nations and by individuals. Without an active sense of justice and an appeal to the law of God there will be no perfect agreement; and we affirm that he who has the highest moral sense with a fair intellect will make the best statesman. Unfortunately, both in monarchies and in republics, selfish ambition has too much to do with the selection of men to fill positions which require statesmen, and there is not a sufficient regard for that truthfulness and that consideration for the welfare of others which should animate these servants of the state.

Metternich was a man of consummate intellect and great ambition and force. His clearness, comprehensiveness, and executiveness placed him at the head of European affairs. The leader even of crowned heads, he had all the blandness of the Frenchman and all the dignity of the Austrian, with an intellect equal to the best in any nation. He had a handsome face, a splendid forehead, a full and expressive eye, a well formed nose, a beautiful mouth, and a perfect chin. It is perhaps the most symmetrical face and head in the group.

Talleyrand had a strong body, a large brain, especially heavy in the base, with large perceptive faculties. He was also well developed in Secretiveness, but not so largely in Cautiousness. He had not so broad and so comprehensive a mind as some other statesmen, but he was nevertheless a power in diplomacy. Destructiveness, Combativeness, Self-Esteem, and Firmness were among his largest organs.

De Witt Clinton well deserves a place in the group. He was less distinguished, however, for his legal acquirements and acumen than for his great constructive ability. He was a projector in its largest and most comprehensive sense. His head was broad through Constructiveness, high in the center and in the crown, as well as full in the base. His temperament was vital-motive and mental, the vital predominating, and it was through his appetite that he gave way to his propensities and became dissipated. But nature dealt liberally with him in giving him a body rarely equaled in strength and powers of endurance.

Peel looks the conspicuous character he was. That is a bold and noble front, with all the marks of independence and love of liberty indelibly impressed upon it. Observe the height and length of his head. He was perhaps one of the finest specimens of the Anglo-Saxon race.

Webster had a large brain and a large body. The temperament was vital-mental, or lymphatic and nervous combined, with something of the bilious. He had dark-brown hair, with eyes almost black, a strong frame, and a capacious chest. Intellectually he was highly gifted, and he had the best education the country could afford, with all the opportunities to call forth his best gifts. He rose to a prominent position as an American statesman, but he did not reach the top round in the ladder of promotion. It is not improper to state that Mr. Webster, though called "the godlike," lacked the chief element to make him so, viz., the spiritual nature—the devotional disposition. He was not morally that model of excellence which his grand intellect and splendid opportunities should have made him. He did not live above his appetite and other propensities. His associations and the customs of the times may have had something to do with the letting down of that character which many denominated "godlike." With all his faults, he will ever stand conspicuous, especially as an orator and debater, on the pages of American history.

Jefferson had an elevated brain, a conspicuous face, and a well-formed body. There was Firmness, Self-Esteem, Approbateness, Hope, supported by strong propelling powers and

warm, social feelings. He was acute, discriminating, and clear-headed, and will ever be remembered as the author of the Declaration of Independence. His hair was reddish, his eyes hazel, and his skin fresh and rosy.

Cavour was, doubtless, one of the ablest men of his time. Intellectually he may be said to have had no superior. Morally, we can not say so much, for he was notoriously fond of games of chance; but as a statesman he was enabled to discriminate, to comprehend, and to decide on questions which puzzled most men, nor were his decisions often reversed or disregarded. His was a calm, cool, deliberate, and well-balanced mind, full in the intellect, full in Cautiousness and Secretiveness, and high in Firmness and Self-Esteem.

Daniel O'Connell was the intellectual giant of Ireland, the Webster of his country, with a brain of immense dimensions, and a body corresponding. He had an ardent and "feelingful" disposition and a massive intellect—a mind of immense caliber. When he spoke, his words went booming through the nations, and everywhere aroused the minds of men. Daniel O'Connell was heard the world over, and yet he was not the finest type of his nation. There were none built on a larger plan, nor more comprehensive in intellect, but there were those of finer qualities, more beautiful in face and form, and more perfect in organization. We may here state that in all our travels we have never met more beautiful heads and faces than among the cultivated Irish; as fine skins, fine silky hair, and the most symmetrical and exquisitely chiseled countenances are to be met with in Ireland as can be seen anywhere among mankind.

Earl Russell has a fairly-shaped head. His intellect is imaginative, and even poetical. His scholarship, perseverance, and generally good judgment, and his circumspect life have attained for him one of the foremost positions among modern statesmen. But we think Palmerston better entitled to the place we have given to Russell, as he is in every way the greater man. Palmerston "is the power behind the throne," and he has had the direction more than any other man of the affairs of his nation. Earl Russell is less stable but more wily, and yet not so sagacious as others we might name.



Figs. 691 to 701.

DEMOSTHENES, the most illustrious of ancient orators, born in Peania, near Athens, 385 B.C.; died from poison, taken to avoid falling into the hands of the Macedonians, who tortured their prisoners, 322 B.C.

ESCHINES, the principal political opponent of Demosthenes, was born at Athens, 389 B.C.; died at Samos, 317 B.C.

MARCUS TULLIUS CICERO, a Roman senator and advocate of highest repute, was born at Arpinum, Jan. 3, 106 B.C.; assassinated by order of Antony, one of the Triumvirate, December 7, 43 B.C.

ALESSANDRO GAVAZZI, an Italian preacher and revolutionist, was born in Bologna, in 1800.

EDMUND BURKE, one of the most eloquent of British orators, born in Dublin, Jan. 1, 1730; died at Beaconsfield, July 9, 1797.

WILLIAM PITT, EARL OF CHATHAM, America's advocate in the British Parlia-

ment in 1776; born in Westminster, Nov. 15, 1708; died at Hayes, May 11, 1778.

GEORGE WHITFIELD, or **WHITEFIELD**, the founder of the Calvinistic Methodists; born in Gloucester, Eng., Dec. 16, 1714; died in Newburyport, Mass., Sept. 30, 1770.

HENRY CLAY, one of the most celebrated of American politicians, was born near Richmond, Virginia, April 12, 1777; died at Washington, June 29, 1852.

WILLIAM WIRT, an able lawyer and writer; born at Bladensburg, Nov. 6, 1772; died at Washington, Feb. 11, 1835.

GABRIEL H. DE RIQUETTE, COMTE DE MIRABEAU, a most noted French political leader; born at Bignon, near Sens, Mar. 9, 1749; died in Paris, April 2, 1791.

PATRICK HENRY, one of the leaders in establishing American Independence, was born at Studley, Va., May 29, 1736; died June 6, 1792.

The orator requires the mental and vital temperaments. He must be feelingful, emotional, frank and open, and be largely endowed with Language, as an outlet for his thoughts and feelings. He must have a vivid imagination to give its charm to his ideas, and Ideality to adorn his style. He should have strong affections, to warm up and animate his nature. The more highly educated, the better he can use his faculties. Still, the Indian of the forest may possess all the natural oratorical qualities and become celebrated, although untaught. And we have had very fine specimens of native orators even among backwoodsmen who were unlettered.

One may excel as a debater without rising into the sphere of the true orator. He may preach a most excellent sermon without any oratorical display. It may be purely of the intellectual sort, and, as a speaker, he may earn some degree of reputation; but if he combine something of the poet and actor, with real devotion, his power will be proportionately increased. Truth should be a crowning principle, and he who speaks should speak *from the heart to the heart*, if he would *move* the heart. He is the best orator who knows most of the human mind. Would he awaken the affections, he knows what chord to touch. Would he excite the passions, he knows where to strike. Would he stimulate the sympathies or develop the most reverential emotions, he must appeal to them through Benevolence and Veneration. Would he touch our sense of honor, our manliness, he must appeal to those faculties on which these sentiments depend, and he must feel and express these sentiments if he would work on the feelings of those who hear. This is the secret of oratory. A man with a bad cause, and knowing himself to be in the wrong, can make but a weak appeal compared with him who is actuated by the consciousness of being in the right, and of serving God as well as man. Take the case of Patrick Henry on that memorable occasion when he exclaimed, "*I know not what course others may take, but as for my single self, GIVE ME LIBERTY OR GIVE ME DEATH!*" Think you he did not feel what he said? and who could have heard and remained unmoved? So it is with the good man when he appeals to the

THE PHYSIOGNOMY OF CLASSES.

Throne of Grace—to the Father of mercies; no heart is so hard that it may not be softened by the soothing influences of a speech breathing the matchless eloquence of prayer.

Demosthenes is properly placed at the head of our group. Through the most persevering efforts, which finally overcame natural obstacles, seemingly irremediable, he attained the foremost position among the orators of classic times. His brain was evidently large and his mind highly cultivated. Language, Individuality, Eventuality, Causality, Comparison, and Ideality must have been prominent, as were his features. Observe the nose, mouth, and chin—they are strikingly conspicuous.

Cicero had the mental-motive temperament in a high degree, with a large brain, prominent features, a clear, expressive eye, and a highly cultivated intellect.

Eschines had a broad rather than a high brain. He was more of the politician than of the statesman, but had all the qualities of a great orator.

Gavazzi, the Italian, is an emotional man. The temperaments, vital-motive and mental, seem to be almost equally blended. Highly educated, and endowed by nature with a most ardent and susceptible mind, he became one of the moving spirits of the day.

Burke inherited a temperament the most susceptible and a nature the most ardent. He was full of mental fire, was sharp and emphatic. His words came like hot shot, and went home with the fullest force.

Pitt, Earl of Chatham, was more mild and yet scarcely less pointed and emphatic than Burke. His brain was full in all its parts, and he was both a reasoner and an orator.

Whitfield had the vital-mental temperament, was full of enthusiasm, and his feelings poured forth like a volcanic shower. Conscious of the righteousness of his cause, he went forth without restraint to battle for the truth. His Language was large, his sympathies and affections were strong, and his executive power was almost without bounds.

Henry Clay had a high though not so broad a brain. The perceptive faculties were the more prominent, and his Lan-

guage decidedly large. His general contour was not unlike that of Brougham. In Clay, Ideality, Sublimity, Individuality, Comparison, and Imitation were large, so were Self-Esteem and Approbativeness. Always dignified, yet polite and affable, always frank and open, yet possessed of a fair degree of Cautiousness, he became the mouth-piece of an immense constituency. His hair was light, his eyes gray, and his skin florid.

William Wirt had a finely balanced brain, a conspicuous face, and a well-arranged organization throughout. Indeed, he may be said to have been in most every respect a model man; but a single drawback—his convivial habits, induced by the customs of the times in which he lived—served to lessen his usefulness and diminish the esteem in which he was held. He was organized for a statesman, and he became an author and an orator. His chaste and elegant productions were but the expressions of the classical mind which presided over and gave sharpness to his symmetrical features. He had a fine forehead, an elegant nose, a splendid eye, a handsome mouth, and a well-formed chin. His head was covered with fine dark-brown hair, not unlike that of Byron the poet.

Mirabeau was also emotional and sensational in spirit. He took fire at the touch, and became ecstatic when fully aroused. Sublimity and Ideality, which give a vivid imagination, and large Language, with a practical intellect, enabled him to give expression to his imagery, and the whole was warmed up by strong affections and equally strong passions.

Patrick Henry was less fiery, if not less flowery, but as honest and earnest. It was his frankness and freedom, his love of liberty and sense of manly independence, that spoke. Naturally somewhat indolent, always patient and plodding, he moved when he felt compelled to move; but when he spoke, the very earth resounded with the echoes of his voice. Was it not his magnetism that stirred the heart of the nation and awoke the first war-cry of the Revolution? Though others thought, wrote, and worked, it was the words spoken by this consummate orator that welded into one all their patriotism and love of life and liberty, and which induced our fathers to go forth to battle and to victory.



Figs. 702 to 714.

GEORGE F. COOKE, one of the greatest tragedians of the eighteenth century, was born in Westminster, April 17, 1756; died in New York city in 1812.

EDMUND KEAN, unsurpassed in tragedy, was born in London, March 17, 1790; died there May 15, 1833.

EDWIN FORREST, one of the most celebrated of American actors, was born at Philadelphia, March 9, 1806.

JOHN P. KEMBLE, famed for his rendering of Hamlet, was born in Lancashire, February, 1757; died in Switzerland, February 26, 1823.

JUNIUS BRUTUS BOOTH, great in his personation of Richard III.; born in London, May 1, 1796; died in December, 1852.

WILLIAM C. MACREADY, one of the first of dramatic actors, was born in London, March 3, 1793.

DAVID GARRECK, the wonderful "Lear,"

was born at Hereford, England, February 20, 1716; died January 20, 1779.

THOMAS HAMBLIN was born at Pentonville, near Islington, London, May 14, 1800; came to New York 1826; died Jan. 8, 1853. He was connected with the Bowery Theater for many years.

E. L. DAVENPORT was born in Philadelphia, about 1815, and is now on the stage.

JULIA DEAN HAYNE, a popular American comedienne, was born in Pleasant Valley, New York, July 22, 1830.

SARAH SIDDON, regarded as the most powerful actress of passion; born in South Wales, July 5, 1753; died June 8, 1831.

CHARLOTTE S. CUSHMAN, one of the most celebrated of tragic actresses, was born in Boston, Mass., July 23, 1816.

ANNA CORA MOWATT RITCHIE, authoress and actress, born in Bordeaux, France, of American parents, in 1821.

The actor must be capable of personating human nature in all its phases and shades of manifestation. He must be something more than a mere imitator of actions; he must also imitate and express the spirit of each character as well. Indeed, he must, as it were, lose his own individuality, or, rather, sink it for the time being and take on that of another. The *best* actor will play all parts, the comic and the tragic, successfully. An indifferent actor may play a single part and play it well, but fail in all the others. And here, as in the arts of sculpture, painting, and poetry, his reputation will greatly depend on the medium through which his mind acts. If well balanced, well developed, if a complete specimen of humanity, he will be not only an actor, but a scholar, an artist, and a man. But how is it with many, nay, most, of those who strut upon the stage? who and what are they but miserable abortions of humanity? Worse than that, the weakest of sinners, perverting their fine natural talents and living degraded lives. Do they not chiefly delight in catering to the low and the sensual? Do they not delight in glorifying the animal rather than the spiritual? Write out a list of a hundred play-actors now on the stage, and see how many, or rather how few, would pass for good citizens, much less for circumspect Christians. Would it be too much to say that nine out of ten would be counted out? Would it not be perfectly truthful to say that a large majority are living dissipated lives? Is this the fault of the profession, or is it the result of a wicked perversion? What religious father would encourage his son to go upon the stage? What pious mother would consent to have her daughter become an actress, even under the most favorable auspices? Would he not much prefer almost any other calling? and would she not live in constant fear and solicitude lest misfortune might overtake her child?

But this is not the place to discuss the merits, or rather the demerits, of the theater. Rational amusements are necessary, and should be more encouraged at home; but no amusement which would not admit the presence of our spiritual teachers, and on which a blessing may not be asked, should be encouraged.

Our group embraces perhaps those whom the world would

pronounce the most conspicuous in the catalogue of those who have "trod the boards."

Than Garrick, perhaps, no one ever better played the part he chose; than Macready, we know of none who stood higher or attained a more enviable reputation as a tragedian; than Booth, there were few so much, none more, devoted to his art.

Miss Cushman represents the intellectual and more masculine of lady actors; Julia Dean, the coquettish phase; while Mrs. Mowatt is the type of the more ethereal and spiritual class. It may be said of the latter that she is almost faultless. We are not aware that any one ever breathed an unkind criticism upon her character. Her features would be pronounced elegant—even charming. We need not analyze them. Suffice it to say that the head was beautifully molded, the temperament exquisitely fine, and the mind highly cultivated. Had she been born to wealth and position, she would have graced any situation, from that of empress to that of the artist, the teacher, or simply the wife and the mother.

The features of Miss Cushman are more massive and strong, and she delights to represent those characters which are more striking and masculine and admit of the freest and strongest action.

Mrs. Siddons was highly artistic, and entered into the spirit of the play. She also exhibited something of a creative fancy, and impressed herself upon all.

Julia Dean is lively, lithe of limb, full of imagery and mental resources, and both creates and echoes almost any thought and sentiment. Her features are purely feminine.

The features of Macready were bold and rugged; the temperament mental-motive; the brain large; and the body well formed. His figure was good and his person commanding. But he was ambitious and vain. There is no doubt but that he fully appreciated the characters he personated.

Garrick also had a large brain and a very active mental temperament, with the vital well represented. Action, emotion, and feeling were as natural to him as breathing, and he could control them as he liked. He had a frank and open countenance, a finely formed face, with a very intelligent ex-

pression. He would have passed anywhere for a strongly marked character.

Hamblin was somewhat eccentric. His brain was very large and his figure tall and full. He had a strong, bilious temperament, and was something of a power in his way, but he did not possess those finer and more exquisite tastes manifested by Macready.

Booth had also a strongly marked physiognomy. He had a large brain, an active mind, and was capable of expressing almost any phase of character, especially the deep and impassioned.

Davenport has a strong motive-mental temperament, with a hatchet face, clearly defined features, and is a strong character.

Kemble had something of a wild expression, which probably was both natural and acquired. His features indicate boldness and strength

Kean was a successful player, and held a foremost position among the actors of his time. His head and face represent and express the sensuous and the ambitious.

Cooke had a broad and capacious brain and an active mind. He was capable of something more than he ever attained for himself as an actor. He was not exactly "the right man in the right place" on the stage. He should have been a statesman.

Forrest has a massive body, a large brain, and a strong rather than a fine temperament, and excels in that which requires lusty lungs, powerful muscle, and strong passions. If he were not made for his celebrated play, "Metamora," the play was certainly made for him. It was in this he achieved his greatest success, and in other similar characters, such as "Spartacus," in the "Gladiator," which is quite in his line. A cast in our collection, taken from his head more than twenty years ago, indicates a brain large at the base, particularly between the ears. The head is also high in the crown and full in the intellect, but small in Veneration and Spirituality. He has little of the feeling of deference, humility, or devotion, but much pride, self-will, and ambition. In his sphere or line of acting he may be said to be the most marked and conspicuous character on the American stage.



Figs. 716 to 725.

HOMER, the most ancient and greatest of the Greek heroic poets, called the "Father of Song," was born about 1000 B.C.; the exact period of his death is not known.

JOHN MILTON, the first of modern poets in the department of sacred verse, the author of "Paradise Lost;" born in London, Dec. 9, 1608; died Nov. 8, 1673.

WILLIAM SHAKESPEARE, the greatest of dramatists, and the most voluminous, was born at Stratford-upon-Avon, England, in April, 1564; died April 23, 1616.

DANTE ALIGHIERI, the most eminent of Italian imaginative writers; born in 1265, at Florence; died at Ravenna, in 1321.

PUBLIUS VIRGILIUS MARO, the greatest of the Latin epic poets, author of the "Æneid;" born near Mantua, October 15, 70 B.C.; died September 23, 19 B.C.

GEORGE GORDON, LORD BYRON, one of the most imaginative of modern poets, was

born in London, Jan. 22, 1788; died at Missolonghi, Greece, April 19, 1824.

ELIZABETH BARRETT BROWNING, an English poetess, eminent for her tenderness and descriptive power; born in London, 1809; died in Florence, July 29, 1861.

FRIEDRICH SCHILLER, one of the greatest German dramatists, born Nov. 10, 1759, at Marbach; died in Weimar, May 9, 1805.

THOMAS MOORE, a romantic poet, eminent for the richness and refinement of his fancy; born in Dublin, May 28, 1779; died in Wiltshire, February 26, 1829.

ROBERT BURNS, the greatest pastoral poet in English literature; born in Ayrshire, Scotland, January 25, 1759; died in Dumfries, July 21, 1796.

EDGAR A. POE, distinguished for the wildness of his imagination and for the rhetorical merit of his verse; born in Baltimore, Jan., 1811; died there Oct. 7, 1849.

One of the essential physical qualities of a poet is a susceptible mental temperament. This must be of a clear and fine—even of an exquisite—tone, to insure perfection in the art. There are all degrees of poets, from the lowest to the highest, just as there are different classes of musicians, painters, sculptors, etc.; but to excel, and to inscribe one's name on the roll of great bards, one must be not only every inch a man, but must have "genius" as well. It has been said by an ancient author, "*poeta nascitur, non fit*"—the poet is born, not made; yet we maintain that every well-organized human being should be able to write poetry, just as he should be able to make music, or invent and use tools; for has not nature given to each a like number of faculties, the same in function, and differing only in degree and combination? And it is this variety of organs and different degrees of development which make the difference in the kind of poetry produced. One is simply a rhymers, giving a sort of mechanical jingle to words; another may be a rhymers through the affections; another through wit; another through Ideality and Sublimity; another through the devotional feelings; and as it is in music, so in poetry—the highest order is the most sacred. The poetry of the passions may be energetic, the poetry of the intellect may be scholarly, but the poetry of the spiritual sentiments is something above the reason—it is inspired.

Considering the productions of different writers, that of Homer was heroic, embracing a wide range in the field of fancy; that of Virgil was of a descriptive character, though not so highly toned and imaginative; that of Dante was grand and terrific, appealing to the fears and sympathies; that of Schiller was dramatic, representing human life in its varied phases, especially the social; that of Byron was more or less amorous and sensual, and combined both; that of Burns was both social and sympathetic; that of Moore was also more social and sensuous than devotional; that of Poe was almost purely imaginative; that of Mrs. Browning was affectionate, sympathetic, and devotional as well as imaginative; that of Shakspeare was passionate, imaginative, and intellectual; that of Milton was more purely descriptive and devotional.

The face of Homer has an open and a lofty aspect, and is in keeping with his presumed character, but of its authenticity or absolute correctness we can not speak. It is taken from a bust handed down from ancient times. The features were evidently strongly marked and very conspicuous; but we can not particularize on a likeness which may or may not be true to the life.

The face of Dante expresses great energy, force, and resolution. He had a large brain, a Roman nose, a prominent chin, a firm mouth, and a very expressive eye.

That of Virgil was more mild and less massive and masculine; indeed, it has something of a feminine expression; it is well defined, and has a very receptive intellect.

Schiller's face is still more strongly marked. The features were large and pointed. There was no mud in his brain or beef in his face—it was all nerve, bone, and muscle, and an intellect broad, high, and well developed. It is, altogether, a most marked head and face.

That of Byron has a dreamy and voluptuous look, approaching the sensual. His was a large brain, broad in the temples, high in the crown, full in the back, and very symmetrical throughout. His was a very highly organized temperament, but it lacked that fineness, that exquisiteness seen in Shakespeare and in Poe.

The head of Mrs. Browning is a model of its kind, especially in the center at Veneration and forward in Benevolence, and she was full in Spirituality and Hope, also fully developed in the affections. She was most loving and lovable. Combined in her were a fine intellectual lobe, with broad and full Ideality, Sublimity, and Imitation, and she was no less worthy of admiration as a wife, as a friend, and a Christian than as a scholar and a poetess. Hers is a feminine face, combining no doubt the stronger qualities of her father, whom she resembled in disposition.

Thomas Moore is a fine representative of a poetical head and face. There was a vivid imagination, growing out of large Ideality and Sublimity, a well-balanced intellect, large Language, with a full, expressive eye, a loving mouth, and a

somewhat voluptuous chin. He is the picture of his poetry, which was chiefly the expression of the affections and the fancy.

Burns also had a somewhat voluptuous nature, indicated in his mouth and chin, with a large cerebellum and a high coronal region, especially in Benevolence. Under more circumspect influences, educated on a higher social plane, he would evidently have developed a higher order of poetry; but he was pre-eminently kind-hearted, sympathetic, and loving.

Poe was the child of peculiar circumstances, born of an actress, inheriting in a high degree a temperament peculiarly fine and exquisite, with Ideality so large as to be almost a deformity in his personal appearance, with a nature so susceptible that he was easily influenced against his interest, and wanting in that moral and religious support which comes from the coronal region. His Veneration was small; his Benevolence and Approbativeness enormously large; his temper was quick and strong, and he was as sensitive as a girl. His complexion was fair, his hair silky and light brown.

In Shakspeare we have one of the finest-modeled heads and faces which the human imagination can conceive of for fineness of texture, fullness of expression, and exquisiteness of temperament. There is but one element wanting to place him head and shoulders above all the poets, viz., Christian spirituality. With less of the worldly and the wayward, and with more of the meek and the humble, he would have been well-nigh faultless. Intellectually, he may be said to have no equal, and in imagination, intuitions, and appreciation of human character, no superior.

Milton was cast in a different mold, and he lived under different influences. His was a religious mind, and this principle predominated even over his intellect; and though he had high Ideality, and could soar to unknown heights of fancy, still it was more in the devotional than in the intellectual or passional domains that he dwelt. He had a splendid development of Language, and was copious in delivery. In all his afflictions he always found refuge in religious principles, in his unbounded faith and hope; and though sorely afflicted, it increased rather than diminished his faith in the goodness of God.



Figs. 726 to 733.

FRANCIS JOSEPH HAYDN, the first of modern composers in the department of sacred music and the author of the oratorio of "The Creation," was born at Rohrau, Austria, March 31, 1732; died at Vienna, May 31, 1809.

JOHANN C. W. G. MOZART, a composer of music at the early age of five years and one of the greatest masters in the opera, was born at Salzburg, January 25, 1756; died December 5, 1792.

GEORGE FREDERICK HANDEL, the most voluminous of musical composers of sacred music and among the first in excellence, was born at Halle, in Saxony, February 24, 1684; died in London, April 13, 1759.

LUDWIG VAN BEETHOVEN, celebrated as an instrumentalist and author, was born at Bonn, Prussia, December 17, 1770; died at Vienna, March 26, 1827. He was the author of the opera of "Leonora."

FELIX B. MENDELSSOHN, author of "Elijah," "Songs without Words," and other esteemed compositions, was born at Hamburg, February 3, 1809; died in Switzerland, November 7, 1847.

FRANZ LISZT, one of the greatest of pianists; born at Raiding, Hungary, October 22, 1811; resided in Weimar, Germany, and was director of the court opera there several years. About the beginning of 1864 he entered a monastery at Rome, and is attached to the Pope's household. He still spends much of his time in musical compositions of a religious character.

CHRISTOPH W. GLUCK, celebrated as a composer of operas, among which his "Iphigénie," founded on Racine's work "Iphigénie en Aulide," is the most admired, was born at Weidenwang, Germany, July 2, 1714; died at Vienna, Austria, November 15, 1787.

The musical composer, like the poet, gives expression to his own personal character in his compositions. One in whom the devotional and spiritual faculties predominate will give us sacred music; while another, in whom the ideal and the imaginative faculties predominate, will give us something more fanciful and light. The social affections predominating, give us love songs; the executive or propelling faculties in the ascendancy, lead to war-songs and martial music. So with those who listen: one appreciates most the sacred, another the sentimental, another the sympathetic, another the social, and another the martial. A person with all the faculties harmoniously developed would appreciate the serious, sacred, sentimental, and the energetic. One with Mirthfulness predominant, without the devotional element, would prefer the comic, and so throughout the catalogue.

We place Haydn at the top of our group, as being one of the most worthy among the great composers. There are no evidences of excessive or deficient development here. It seems an even and well-formed head, with expressive features, indicating clearness and definiteness with height and breadth. He evidently had large Sublimity, Ideality, Imitation, Benevolence, and Devotion, and he doubtless drew from a kind of inspiration the strains he manifested. He was evidently "his mother's son," inheriting her great susceptibility and intuitions. He was both devotional and emotional, and a fine specimen of humanity.

Mozart was energetic, emphatic, enthusiastic, and all alive to sounds and harmonies. He had the mental-motive temperament. From that strongly marked profile one would look for action, emphasis, and directness. It is not the subdued passive look of a mere worshiper, but rather of the soldier who would lead his troops to the fray and with his spirit animate them to achieve victory and honor. Had he lived to middle age he would, probably, have accomplished still greater works than his comparative youth enabled him to compose.

Handel had a predominance of the vital temperament. He was stout, even corpulent, and this must have had some influence on his mental manifestations. He was fond of the soft,

the subdued, and sacred, rather than the bold. His was what would be denominated the sympathetic and affectional nature, easily moved through Benevolence, Veneration, and the social feelings. He had high moral sentiments, including Faith, Hope, and Integrity; together with Ideality and Sublimity. Hence he would discover and echo the majesty of the heavens, the greatness and the goodness of God, the humility, meekness, and sympathy of the Saviour, and would fascinate the listener with appeals to his gentler nature. The phrenological faculty of Tune seems to be especially large, bulging out above and back of the eyes, and through the temples in the region of Constructiveness, which must also be used by the composer, for there is a mental as well as a physical manifestation to this inventive and mechanical faculty. There were large perceptive and large reflectives; and in the moral, intellectual, and imaginative, Handel's head seems only less conspicuous than the immortal Shakspeare's, who made poetry as Handel made music. There was large Language, giving freedom of expression; and strong affection, giving warmth and enthusiasm to the whole.

In Beethoven there is energy, activity, earnestness, and force expressed. The head is broad and full in the sides and temples rather than in the top—something like that of Julien. There was evidently large Destructiveness, Ideality, and Sublimity, with moderate Secretiveness and Cautiousness. There were also Imitation and Comparison. He was analytical, critical, pointed, and definite. The nose was something like that of Mozart, and the entire contour indicates a high degree of mentality, combined with bodily vigor. The mental and motive temperaments were in the ascendant here, with the vital somewhat deficient. We should look for martial music—for that which stirs one up to the bottom of the soul—rather than for the plaintive and tender. Observe the features! The cheeks are thin, the nose and chin sharp, the lower forehead prominent, the eyes moderately full and very expressive, the mouth regular but fixed, lips indicating firmness, decision, and that cool self-possession which comes from a full development of the crown.

Gluck, not so well known in America, was an original thinker, with a strong imagination, a high order of intellect, and an active emotional temperament. There seems to have been a fair blending of the vital, mental, and motive, and our artist represents him in a position indicating receptivity. He seems to be drinking in musical inspirations, and when filled would give them full and free expression. It is a good forehead, a well-formed nose, a fine chin, and a mouth denoting decision and dignity. Language was evidently large. Gluck was a musical reformer. Real musical expression was something hardly recognized before his efforts were published, and to this new feature in music boldly enunciated by him he chiefly owes his fame.

Liszt has a strongly marked mental-motive temperament. Observe the length of the face. His would pass for a three-story brain, including a high order of instinct, reason, and devotion. There was clearness, openness, and freedom, with sympathy overflowing, and an evidently highly cultivated brain. He could have developed into a first-class scholar, and have become either a statesman or a divine. But he chose the department of music, and became distinguished.

The head and face of Mendelssohn is not unlike that of our Edgar A. Poe; indeed, there is a striking resemblance, and we should look for something of the kind of mind which the author of "The Raven" manifested. There is here, however, a more even and well-developed moral brain, which would fortify and hold in check the strong propensities. Such an intellect would subordinate all the lower feelings to the higher and give free play to the spiritual and the sentimental. This face simply looks the musician. One would scarcely expect anything else from such a head and face. Had he been put at the plow-tail, or into a blacksmith's shop, or into a ship-yard, or set to build bridges or railroads, what sort of a hand would he have made at such employment? When he took up music he found his right sphere. Being sensible, and favored with a liberal education, he might have succeeded in authorship, in medicine, or in the ministry, but music, poetry, or some department of art was more to his taste.



Figs. 733 to 744.

SALVATOR ROSA, an Italian historical and scenic painter, born near Naples, June 20, 1615; died in Rome, March 15, 1673.

NICHOLAS POUSSIN, a French painter of celebrity, born in Normandy, June 19, 1594; died in Rome, November 19, 1665.

LEONARDO DA VINCI, painter of the "Last Supper," born at Vinci, in 1452; died at Cloux, in France, May 2, 1519.

SANTI RAPHAEL, the greatest of scenic artists, was born in Urbino, Italy, April 6, 1483. He died April 6, 1520.

VERCELLI TITIAN, "the prince of colorists and portrait painters," born in Venice, 1477, and died in Venice, 1576.

MICHAEL ANGELO BUONARROTI, a sculptor and fresco painter, and the chief architect of St. Peter's at Rome, born in Tuscany, Italy, Mar. 6, 1475; died Feb. 17, 1564.

ANTONY VANDYCK, a portrait painter, and the most distinguished disciple of

Rubens, was born at Antwerp, March 22, 1599; died in London, December 9, 1641.

PETER PAUL RUBENS, the greatest of portrait painters, born at Cologne, June 29, 1577; died at Antwerp, May 30, 1640.

SIR JOSHUA REYNOLDS, a portrait painter, born at Plympton, England, July 16, 1723; died in London, Feb. 23, 1792.

WASHINGTON ALLSTON, the most eminent of American artists, born in Charleston, S. C., Nov. 5, 1779. He died near Boston, Mass., July 9, 1843.

BENJAMIN WEST, an eminent American portrait painter, was born at Springfield, Penn., Oct. 10, 1738, and died in London, March 11, 1820.

THOMAS COLE, a distinguished imaginative painter, author of "The Voyage of Life," born in Lancashire, Eng., Feb. 1, 1801; died at Catskill, on the North River, N. Y., February 11, 1843.

To excel as an artist, and especially as a painter, one needs a well-nigh perfect organization. The brain must be of even build, the temperaments well blended, and all the functions in harmonious action. A coarse, unrefined nature would scarcely appreciate high art, nor could one so organized express an artistic sentiment.

It is interesting to notice the difference in taste manifested by different persons and by different classes. The ignorant, the low, and the gross prefer strong colors. A cultivated and refined taste prefers the soft and the blended hues. The untutored African selects for his or her adornment the most gaudy colors, and they are fond of "rigging themselves out" in showy finery. The same characteristic is true of the Indian, and to some extent of the low white man or woman.

In painting, the lower the nature the deeper the colors, and in music the louder the noise. The higher and more refined the nature the more subdued the tones and the tints. Were we to discuss this subject at length, for which we have not here the necessary space, we could show that the character of an individual will be found to correspond with the colors preferred. Those who prefer a deep red or crimson have the ardent and executive elements predominating. Those who prefer blue, have more of the ethereal nature. Violet corresponds to the poetical. Yellow corresponds with the sentimental; green, with the youthful and hilarious; drab, which is the most subdued of colors, with the passive and meek.

Painting is a higher art than sculpture. It brings into action a greater number of faculties, although an artist may be both a painter and a sculptor. The more perfect the organization of the artist, the more perfect will be his production. It is essential that an artist have all the faculties in a full degree of development and in a high state of cultivation in order to reach the topmost round in the ladder of art.

Michael Angelo was a power, not only as a painter, but also as a sculptor and architect. He had a strong, original mind, capable of the broadest and the deepest reach. We may say it was well-nigh perfect in all its parts; Causality, Comparison, Constructiveness, and Imitation were large, while Individual-

ity, Form, Size, Weight, Color, Order, Ideality, and Sublimity were immense, amounting almost to a deformity.* There was energy, ambition, perseverance, and application, with a strong intellect and a high moral brain.

Rubens had a more even and symmetrical face and head, and his character was more gentle and his taste more exquisite and refined. The works of Michael Angelo impress one with their power and sublimity. Those of Rubens with their delicate taste and beauty. In the latter there was less executiveness, less force, and resolution, but an equally strong imagination, with the same mechanical skill and high artistic inspiration. The face of Rubens was beautiful, that of Michael Angelo majestic. In Rubens the hair was fine and silky, the skin delicate and soft. In Michael Angelo these were not coarse, but less fine. So of the osseous or bony system, so of the temperaments; Michael Angelo had the mental and motive predominating—or, in the late nomenclature, the nervous and bilious; while Rubens had a blending of the nervous and the sanguine, or the mental and vital combined.

Vandyck expresses openness and freedom with something of the dashing in his composition. In him we have a fine illustration of the mental temperament. There was large Ideality, Constructiveness, Imitation, Form, Size, Weight, Color, etc. As between painting and composing we should scarcely be able to draw the line in his case, so we think he had a high order of poetical talent, and could have excelled in any branch of art.

Reynolds was an Englishman in build and temperament, with the refined taste of the Italian. He was evidently original in his line. In the features we discover nothing peculiar save a fine intellect in both the perceptive and reflective departments, with large Ideality, Constructiveness, and Imitation. He was manifestly a worshiper of art.

Raphael, Titian, Da Vinci, Poussin, and Salvator Rosa stood each at the head in his peculiar department. Raphael's face presents a striking contrast to that of Reynolds, and is

* These developments are more apparent in the cast from his head in our collection than in the accompanying portrait.

Grecian in its contour. He was, perhaps, the greatest scenic painter in the world. Observe the length of the features; there was breadth as well. His conceptions were something like those of his great co-laborer, Michael Angelo, but expressed with less power. He had a fine nose, a beautiful chin, a well-formed mouth, a splendid forehead, with face, brain, and body corresponding. The face of Titian represents strength and boldness; Da Vinci's, originality and comprehension; Poussin's, strength, force, and clearness; Salvador Rosa's, practical, descriptive common sense, with considerable energy and activity.

Washington Allston had a fine head and face. He was dignified, gentle, and gentlemanly, a man of exquisite taste and high artistic skill. He was absorbed in his art, and devoted himself soul and body to it. His organization was such as would have adapted him equally to literature and science, or even to statesmanship. Observe the features, the shape of the head, its evenness and symmetrical proportion to the face.

Thomas Cole had a face no less beautiful than his spirit. Modest and almost feminine in his general bearing and manner, he had nevertheless a masculine reach in his comprehensive and original mind. The only living representative of art who seems to have imbibed his spirit is his pupil and our countryman, Church. The author of "The Voyage of Life" will live always in the kindest estimation of a people made better by his pictures.

Benjamin West, the Quaker artist, was born to his profession; and though well informed on other subjects, devoted himself from infancy to old age to his loved pursuit. The most noticeable feature in this grand character is the full development of the intellect and the spiritual sentiments. It was a happy, amiable nature, such as might be looked for in the devout worshiper. He was as kind and affectionate as a woman, and, like the great Walter Scott, seemed to take his impressions directly from above, as it were, rather than through the senses. There was an apparent want of Acquisitiveness, and not large Constructiveness, but the perceptive faculties were very prominent. It is altogether a remarkable organization.

XXVII.

CONTRASTED FACES.

"Look on this picture, and then on that."—SHAKESPEARE.

"COMPARISONS are odious," undoubtedly, to the party not flattered thereby, and should not be indulged in to the disparagement of good manners; but where no rule of politeness and no moral obligation may be sinned against, it is certainly allowable to make use of the comparing faculty for the purpose of conveying useful instruction.



Fig. 745.—PRINCESS ALEXANDRA.



Fig. 746.—SALLY MUGGINS.

Beauty is made to appear still more lovely by setting it side by side with ugliness; and virtue seems to shine with its greatest effulgence in contrast with vice.

As are characters, so are heads and faces. This is one of the fundamental doctrines of this book, and we purpose now to illustrate it, and, incidentally, other important truths, by means of some contrasted physiognomies.

That there are marked differences in the physiognomies of different persons is self-evident; and yet all human beings are

somewhat alike. Each—white, black, and red—has precisely the same number of organs of body and brain. The difference is in *quality*, in *size*, and in *degree of cultivation*. The Creator bestowed the same number of organs and faculties on Bridget McBruiser that he did on Florence Nightingale. Nor has the beautiful Princess Alexandra any more bones, muscles, or nerves than the plain, good-natured, uncultured Sally Muggins. Each one sees with two eyes, hears with two ears, and walks on two feet. Each has affections—love for the young, love of home, love of friends, and—if properly married—each



Fig. 747.—FLORENCE NIGHTINGALE.



Fig. 748.—BRIDGET MCBRUISER.

would, no doubt, have love for her husband. The points for the physiologist, phrenologist, and physiognomist to decide are the natural disposition of each, and wherein they differ. He observes the temperaments; the forms of body; learns what parts of body and brain predominate; judges of the degree of culture each has received; compares the quality of one with that of the other, and draws the lines of demarkation. Both are loving; both are kindly; both are cautious. Here we trace a resemblance; but, on the other hand, the one is bright, intellectual, and spiritual; the other opaque, dull, and sensual.

Florence Nightingale, as will readily be seen, is developed in the "upper story," while the feminine "McBruiser," whom we have placed by her side, lives in the basement mentally as well as bodily. The former would be governed by high moral

principles, the latter by the lower or animal passions; the one is a natural friend and philanthropist; the other is at war with everybody; the one is forgiving, the other is vindictive; the one is, by sympathy, attracted toward the heavenly and the good; the other is of the earth, earthy, seeking her chief pleasure from things physical and animal; the one has reasoning intellect to comprehend causes and relations; the other, with simple instinct, knows what she sees and feels, but can have no clear conceptions beyond the reach of the senses; the one is esthetical and refined; the other is gross in taste, and sees no beauty in that which can not be eaten or used for the gratification of the bodily appetites or passions. The two are as wide apart as are the wild-crab apple and the imperial pip-pin; the one is refined by the culture inherited from generation to generation, as well as by personal education; the other is rude, rough, unpolished, ignorant, and brutish, yet capable of all sorts of virtues and knowledge under the benign influence of long and persistent social, intellectual, and Christian culture.

Such contrasts as the foregoing strike every observer. Scarcely less obvious, though perhaps not so much observed,

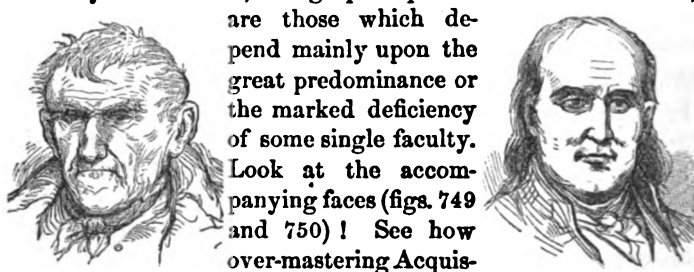


Fig. 749.—A MISER.

Fig. 750.—A LIBERAL.

are those which depend mainly upon the great predominance or the marked deficiency of some single faculty. Look at the accompanying faces (figs. 749 and 750)! See how over-mastering Acquisitiveness in the one compresses the lips, corrugates the forehead with irregular furrows, and pinches and purses up every feature; and how in the other large Benevolence, associated with small Acquisitiveness, gives an open, frank, liberal, and kind expression to the whole face.

The reader's observation will enable him to carry out these general comparisons indefinitely; and we will now turn our

attention to a few more strictly individual cases with a view to give a practical turn to our remarks.

SIZE VS. QUALITY.

The importance of taking quality as well as size into the account in reading character by means of its physical signs can hardly be more strikingly illustrated than it is in the two heads and faces presented on the next two pages. The first (fig. 751) is that of a big-headed, coarse-grained, stupid boor. He had brain enough (making a large allowance, too, for extraordinary thickness of skull) to fill the cranium of a Webster, his head measuring more than twenty-four inches in circumference, but his skull might almost as well have been stuffed with mud. It is evidently of the poorest, coarsest quality, and the faculties whose organs it was intended to supply are mainly in the most dormant condition. The features and the body correspond with the head. See how dull and spiritless the eye, how flat and blunt the features! There is no expression—no point—no character. Organized on so low a key, the quality being so flabby, so coarse, and so poor, the enjoyments of this man necessarily have been on the same low plane, and he must have lived in his propensities instead of in the intellect or moral sentiments. He was necessarily oblivious to all the finer feelings of poetry, music, literature, the fine arts, or to philosophy. A nation peopled with such beings only, would not be self-supporting. Persons of this class fill our poor-houses; and, when pinched by want, failing to obtain by honest industry the means of support, they fall into vice and crime, and end their career in prison or on the gallows.

Compare the head and face of which we have been speaking with that on the opposite page (fig. 752)! See how clearly cut and definite are the features in the latter, and how full of expression! The head is smaller than the preceding, but is in proportion with the body, and both are of the best quality and the finest texture. There are evidences of life, spirit, and action in every line and in every lineament. In this case the mind has an excellent medium through which to act, and all

the emanations are clear and luminous. In the other, they are thick, muddy, and opaque. One is sensible, the other almost senseless. One is bright and clear as crystal, the other



Fig. 751.—HARRY STIFF*

* Harry Stiff was the illegitimate son of Henry Rohrer, of Lancaster County, Pa., a man endowed with but a moderate amount of brains. Harry showed no aptness or taste for anything in particular until he arrived at about the age of thirty years, when he evinced a passion for grave-digging, and so strong was his love of it that he would dig one for nothing rather than lose the job. Wherever he heard that any one was dangerously ill, he would call and solicit the job of digging the grave, informing them that fifty cents was his price, but if they thought that too high, he would take twenty-five! On one occasion, a man who had two sons lost one of them by death, and Harry dug his grave. The day after the funeral the gentleman asked Harry what was his bill. Harry answered, "No matter about that now; wait till the other one is buried;" and as the other was well, and has remained so ever since, Harry never received his pay. This mania lasted him till death. From about thirty to fifty years of age, when he died, Harry was both a glutton and a drunkard; and being exceedingly loathsome in his person, he was an occupant of out-houses, dog-

is dull and "soggy." One has the clear ring of perfect steel, the other is more like pewter.

Reader, never fall into the very common error of making



Fig. 752.—EARL OF SHAFTESBURY.*

size alone, and unconditionally, the measure of power. Remember the qualifying clause—*other things being equal*. Here, evidently, the "other things" or conditions are as far as possible from being equal, and the mental status of the two men hinges mainly on quality and temperament, though education has widened the gulf between them.

kennels, poor-house, and lock-up for nearly half of his life. At last he lay down in a stable at night, and was discovered next morning dead.

* Anthony Ashley Cooper, Earl of Shaftesbury, was born in Grosvenor Square, London, April 28, 1801, received his early education at Harrow, and graduated at Christ's Church, Oxford, in 1822. He is noted for his philanthropic efforts for alleviating the condition of the working-classes, and in behalf of religion and other reforms.

THE IGNORANT AND THE CULTIVATED.

Compare these two heads and faces—that of a witch-doctor with that of a philosopher. The one scholarly, intellectual, and great, the other a low pretender; the one highly



Fig 753.—JAMES TUNNICLIFFE *

cultivated, the other developed only in the passions. Examine their features in detail. Each has a nose, but what a difference! each has eyes, but how different the expressions! each has a forehead, but the one shows cultivation, while the other is simply that which nature gave him, without cultivation.

So of the brain, the greatest difference exists between them in regard to quality and culture. Each, however, has the same number of faculties. Probably the quack had the larger body and the smaller brain; but our design is simply to show the effects of culture on the features, and the illustrations answer our purpose.

Would you have further proofs of the correctness of our statement? look about among the men you meet in all the various pursuits and conditions of life. If in England, go into the coal-pits, where children are born of parents who seldom see the sunlight; indeed, where they remain months and years, seeing little, hearing little, and knowing almost nothing of life above ground. Men and women from the force of circumstances live thousands of feet below the surface of the

* A noted English quack or witch-doctor of the lowest type.

ground, and there work, breathe, sleep, and stay. Occasionally, for a holiday, they come to the surface, but their homes are in these deep, dark, dismal caverns of earth. As a diversion they sometimes have an explosion, when few or many are killed, several hundred, indeed, in the course of a year. Those who are able to live above ground fare far better. But look at the children bred amid such scenes! What vague, stupid faces, with skulls coarse and thick, and brains of small power! What opportunity is there here for moral or intellectual culture and development? Absolutely none of a high order. It is pick, drill, shovel, push, and pull. How little above the animal is humanity in the very best of European coal-pits!



FIG. 754.—EMANUEL KANT.*

And how is it with the dissipated, the debauched, and the criminal, who have just enough cunning to escape the penalties of the law? These may be found in the slums, around the wharves, and in the alleys of the larger cities of all countries. On comparing the features of this class with those in

* Emanuel Kant was born in Königsberg, Prussia, April 22, 1724. He was of Scotch descent, his grandfather having emigrated from Scotland in the latter part of the seventeenth century, and settled in Prussia. He was the fourth of eleven children, and was destined by his parents for a theological career, but his first attempts at preaching were so unsuccessful that he withdrew from it and applied himself to the study of physical science. In this he became eminent as a teacher and lecturer. He afterwards lectured and wrote with great success on metaphysical subjects. As a metaphysician he is regarded the boldest and profoundest of the German speculative thinkers. He died in Königsberg, February 12, 1804.

the higher walks, the character and disposition of each would be apparent to the most careless observer.

Returning to the children of the coal-pit, take a lad of ten, twelve, or fourteen years of age, who has thus lived under



Fig. 755.—CHARLES FLEMING.*

ground, take his likeness, and then wash him, dress him, and send him to school. Put him under a course of social, intellectual, and moral training, and see what a change will come over his countenance in the course of a few months! Continue him under instruction for two or three years, and then compare him with his elder brothers and sisters, who kept on in their former walks, and see the difference!

He would scarcely be recognized as one of the same family, and this difference has been brought about by the changed circumstances of the boy. Education creates no new faculties, it develops those we have, and improves the whole.

CRUELTY VS. BENEVOLENCE.

John Howard had very large Benevolence, Conscientious-

* Mr. Fleming is thus described by the author of "The Autobiography of a Phrenologist:" "I can truly say that he was one of the worst characters I ever knew, and ignorant to a degree that perfectly amazed me. He could neither read nor write, was a most profane swearer and a vile drunkard, but, withal, he had great plausibility, so that he could and did impose upon almost all with whom he came in contact. . . . In person this man, my master [the author was bound to him as an apprentice], was about five feet and six inches high, and had a small head, which swelled out above and behind the ears. His forehead was 'villainously low,' and retreating, and the vertex of the head was very high, but rapidly declined toward the forehead, and also sloped downward toward the parietal bones. His harshness and cruelty almost exceeded belief."

ness, and Combativeness, with a well-developed intellect. He was kind and courageous, just and generous, humble and devout, afraid of nothing. He had high Hope and perfect trust. His motives were good, and when duty called him he went



Fig. 756.—JOHN HOWARD.*

forth regardless of consequences. He has a Washingtonian expression. Our portrait fails to do justice to a character so grand; still, poor as it is, the outline indicates strength, boldness, good judgment, practical sense, great decision, and perseverance, and the qualities which would have made him a successful leader in any high and holy cause. He was an excellent type, moral,

intellectual, and social, of the better class of men.

The head and face of Fleming require no comment. Such a spirit as they clearly indicate would repel Satan himself, and attract none but the low and bad. What woman would select such a man to be her husband and the father of her children?

THE TWO POETS.

There are perhaps more points of resemblance than of contrast between the two heads here presented. There are evidences enough of the poetic organization in both. Thought and feeling, imagination and reflection, affection and spirituality are combined in each. But there are contrasted qualities.

* John Howard, the world-renowned philanthropist, was born at Hackney, England, in 1729, and died at Cherson, a Russian settlement on the Black Sea, January 20, 1790, in the sixty-fifth year of his age. He spent the greater part of his life in works of benevolence, and especially in visiting prisons and alleviating the condition of prisoners. He manifested the greatest energy, courage, and perseverance in the pursuit of his philanthropic objects. His name is synonymous with philanthropy.



Fig. 757.—BERANGER.*

• **o** Pierre Jean de Béranger was born in Paris, August 19, 1780, and died in his native city, July 16, 1857, at the age of 77. Béranger was a child of the people, his father, though claiming to have "gentle blood" in his veins, being a poor book-keeper, and his mother a milliner. He received a common French education, and was apprenticed to a printer, but did not remain long at his trade, being taken home by his father who had engaged in business on his own account, in which, however, he soon failed, plunging his family into the deepest poverty. Young Pierre now took to verses and politics, neither of which were at first pecuniarily profitable, and he was reduced to absolute penury; but finally attracting the attention of Lucien Bonaparte, he found in him an influential friend, and was placed in a way to become known and appreciated as a poet. His genius was unmistakable, and his songs soon became immensely popular. They were circulated and sung everywhere, even before they were printed, and became a



Fig. 758.—TENNYSON.

political power in France, where their sturdy republicanism did not please the government. Beranger was several times imprisoned and fined, but his songs were in the mouths and in the hearts of the people, whose idol he was, and no human power could suppress them. They were largely instrumental in promoting the revolution of 1830.

When the revolution of 1848 broke out, the name of Beranger was still among the brightest in the eyes of the people, who elected him, contrary to his desire, to the Constituent Assembly; but he at once resigned, refusing to hold any political office. He was satisfied with being the greatest song-writer of the age. Well might he be. No man, probably, except Napoleon I, was ever so universally popular in France as Beranger. His songs are familiar even to those who can not read, and they have been published in every possible form, millions of copies being circulated among the people. Partial translations and imitations have been published in En-

Beranger is familiar and democratic; Tennyson more dignified and exclusive. Both are educated, but the one, a child of the people, had only a popular education; the other, inheriting the culture of generations, has the classic training of the higher classes. These differences are strikingly manifest in the faces of the two.

Beranger's head is magnificent. High and long, full in the temples, and large in Benevolence and in the affections. What Rosa Bonheur has become as a painter; what Burns was as a poet, in Scotland, and Goethe, in Germany, Beranger was, as a poet, in a still higher degree in France.

The face at once bespeaks intelligence, humor, imagination, and a keen perception of human nature. He was not only imaginative but creative; nor this only, he was almost Shakspearian in his descriptive powers. With a splendid intellect, large Language, and a joyous, playful nature he gave expression to the popular sentiment in his lyrics and won the popular heart. If he lacked anything it was dignity and self-reliance. He was evidently modest and extremely sensitive, declining any position other than that of the poet, though competent intellectually to occupy a prominent post under the government. He had the vital and mental temperaments predominating, and loved quiet and repose too well to engage in the bustle and activity of rough out-door life.

Tennyson has a magnificent face and a grand "dome of thought." It is at once massive and clear, full of thought, emotion, and sentiment. The hair is dark, silky, and fine, a little inclined to curl; the skin clear and white; the eyes dark and full; the forehead high and broad; the nose prominent, and of the Roman type; the lips long and full; the chin somewhat projecting; the cheeks well rounded; and the expression that of a scholar and a gentleman. He may be taken as one of the best types of modern civilization, com-

gland and America, the best of which is the collection of William Young, of New York.

Beranger's poems are as noted for their beauty of diction and their pure idiomatic French as they are for their simplicity, earnestness, pathos, and the fidelity with which they give expression to popular feeling.

binning the blood of the leading and hardiest races. His head is not unlike that of Shakspeare. Indeed, it is more like it, perhaps, than any other within our knowledge. Tennyson is still a rising man, and, if he lives, will probably produce greater works than those already given to the world, and will be counted among the immortals, otherwise his head and face are not a true index of the man. Our likeness is from life, and accords perfectly with what we already know of the original.*

HISTORY IN THE HUMAN FACE.

One of the most prominent lessons of this book is the dominance of mind over body, and the consequent power of the former to modify in various ways the organization and configuration of the latter. We have shown that the features, as well as the cranium, change with the character, so that the correspondence between the two is never wholly lost. The

* Alfred Tennyson was born at Somersby, Lincolnshire, England, in 1810. He was the third of the eleven or twelve children of Dr. George Clayton Tennyson, a Lincolnshire clergyman, remarkable for energy and physical stature. The family is of Norman descent. The first volume bearing the name of Alfred Tennyson was "Poems, chiefly Lyrical," published in London in 1830. Among its pieces were "Claribel;" "Madelaine;" and the "Dying Swan." It met with little favor either with the critics or the public, though Professor Wilson recognized it as a work of genius. In "The Miller's Daughter" and "The May Queen," which formed a part of his second volume (London, 1833), he touched the public heart, and won popular appreciation and applause. His third series (two volumes published in 1842) contained, besides some of his former pieces, considerably changed, various new poems, which are still among the most admirable illustrations of his power. Among the latter were "Mort d'Arthur;" "Godiva;" "The Gardener's Daughter," and "Laksley Hall." The last-named is one of the finest pieces of versification in any language. Since 1842 he has published "The Princess, a Medley;" "In Memoriam;" "Maude, and Other Poems;" "Idyls of the King;" and "Enoch Arden." "Guinevra," one of the four poems comprising the "Idyls," has been pronounced his finest effort. "Enoch Arden," though in a different way, is, we think, fully equal to it. Either would alone establish the fame of any poet. He was appointed to the office of poet-laureate on the death of Wordsworth. He receives from the crown, in addition to his salary as laureate, a pension of £200 (\$1,000) a year. He has lived rather a retired life for many years.

history of our lives is written on our faces. We have here an example in portraits of ex-President Lincoln, though our woodcuts show but imperfectly what photographs make so clear.

The first (fig. 759) was taken about the time he came up from



Fig. 759.
ABRAHAM LINCOLN.

Springfield on his way to Washington, comparatively an obscure man, but with premonitions of the burdens, the anxieties, and possibly of the glories that were before him. This photograph of 1860 shows, not the face of a great man, but of one whose



Fig. 760.
ABRAHAM LINCOLN.

elements were so molded that stormy and eventful times might easily stamp him with the seal of greatness. The face is distinctively a Western face. The backwoodsman, the hard work and the broad humor of the country lawyer traveling his circuit, the unaffected manhood of one whose early years had passed in a hand-to-hand contest with nature in her plainest and rudest guises, the strong sense and uncouth but telling delivery of the Western stump orator—these all can be read in the first picture, and these are the principal as well as the patent records in that face except that which appears equally in both faces, and shines as brightly in that of the mature statesman, ready for his martyr crown, as in the less imposing developments of the earlier face. And this is the essential, ineradicable *goodness* of the man—a goodness which no disaster had power to embitter, which no good fortune could corrupt.

The brow in the picture of 1860 is ample but smooth, and has no look of having grappled with vast difficult and complex political problems; the eyebrows are uniformly arched; the nose straight; the hair careless and inexpressive; the

mouth large, good-natured, full of charity for all; the shoulders have a slouching look as if a laboring man at rest, and hang forward, giving the chest a sunken appearance; his clothes fit loosely, and there is an awkward air about the whole figure which furnished ample occasion for raillery and criticism in the early days of his administration; but looking out from his deep-set and expressive eyes is an intellectual glance in the last degree clear and penetrating, and a soul *whiter* than is often found among the crowds of active and prominent wrestlers upon the arena of public life, and far more conscious than most public men of its final accountability at the great tribunal.

The second face (fig. 760) is stamped deep on all its lineaments with the footprints of strong, momentous, and practical thinking. We can read there, as clearly as in the chronicle of his crowded and brilliant Presidential term, the slow pondering of hard problems, nights anxious and sleepless, days of great labor, enormous responsibilities, severe intellectual toil. Every line is a record; there is history in all those furrows.

The two photographs in contrast clearly illustrate the truth that circumstances make men as often as men make circumstances. No feature of the first picture but has undergone a marked change. The forehead, there smooth, is here furrowed deeply with lines of thought and care; the eyebrow that was there uniformly arched has been elevated at its outer angle, and become more bushy and projecting than before; the unraveling of perplexities and the adjusting of conflicting interests have done this; the exercise of authority and the decision of great practical points of strategy have given to the straight nose a perceptible curve and a military air; the chin also is now more fully set and prominent; the mouth, too, how changed! firmer, more discriminating, accustomed to issue commands and to say things that can not be unsaid, yet wearing the old smile, the same kind, forbearing charity that in its heart could cover even the multitudinous sins of the authors of the war—a mouth from which harsh and bitter words could never issue.

The eventful and powerful life at Washington, during those four years, changed even the figure and bearing of the great departed. The awkward air that hangs about the first picture is gone in the second; the head is carried farther back, and seems more firmly set upon the shoulders; they, too, are changed, and from the slouching and careless air of a man who carried no interests more weighty than the grievances of a client to be redressed in the circuit court, they look now braced to sustain the Atlantean weight of vast questions, whose final adjudication would, he well knew, be at the bar of posterity and at the bar of God.

The lesson of these faces is one of morals as well as of physiognomy. Let any one meet the questions of his time as Mr. Lincoln met those of *his*, and bring to bear upon them *his* best faculties with the same conscientious fidelity that governed the Martyr-President, and he may be sure that the golden legend will be there in his features, perhaps not lifted into historic greatness nor stamped with earthly immortality as Mr. Lincoln's are, but such as will, to the eye of a wise observer, be able to instruct in true wisdom, and guide along the path of noblest endeavor.

Thus a change in calling or position in life produces a change in expression, a change in faculties, and a change in the disposition. Let us suppose the reader to be a clergyman. He will in time take on an expression peculiar to his high and holy avocation; but at the end of ten years' ministration he decides to become a lawyer, to try contested cases before the courts, and to settle disputes. He then calls into action another set of faculties, and in the course of ten years or more he has parted with the ministerial look and has taken on the expression of a shrewd, intellectual polemic. Or suppose he becomes a sailor. His associations are changed, and instead of being surrounded by society, a wife, children, and friends, he becomes the captain of a ship, with a crew of rough, hardy men, who face danger and death in countless storms, but he manages to ride out his time and take his place among navigators. How different in face, as well as in the life he lives, is the sea-captain from the clergyman!

THE TWO PATHS.

The following contrasts, illustrative of the effects of a right or a wrong course of life upon an individual, are submitted to our readers. They tell their own story. In the one case we see a child, as it were, develop into true manhood; in the other, into the miserable inebriate or the raving maniac.



Fig. 761.



Fig. 762.

Two boys (figs. 761 and 762) start out in life with fair advantages and buoyant hopes. With them it remains to choose in what direction they shall steer their barks. Fig. 763 represents the first as having chosen the way of righteousness,



Fig. 763.



Fig. 764.

the upward path. He lives temperately, forms worthy associations, attends the Sunday-school, strives to improve his mind with useful knowledge, and is regarded in the community as a young man of excellent character and promise.

In fig. 764, on the contrary, the other boy is represented as having unwisely chosen the downward course, thinking he will enjoy himself and not submit to what he considers the strait jacket of moral discipline. He becomes coarse and



Fig. 765.



Fig. 766.

rough in feature, slovenly in his dress ; he smokes and chews, drinks, gambles, attends the race-course, spends his nights at the play-house or the tavern, disregards all parental authority and admonition, and develops into the full-grown rowdy,



Fig. 767.



Fig. 768.

and as such he sets at naught all domestic ties and obligations, leaving his wife and children to beg, starve, or eke out a wretched subsistence by the most exhausting and inadequately

compensated toil. Fig. 765 represents the playfellow of his childhood pursuing the straight course, in the full maturity of his faculties and powers, and is constantly rising in the scale of honorable manhood. His habits are regulated by his judgment, and his body and brain are in full vigor and in a high state of development. His features are comely, fresh, and open. Integrity is stamped upon his head and face. He is a loving, cherishing husband, a kind father, an obliging neighbor, a faithful friend, and an esteemed citizen, eligible to any office of trust and honor, and capable of filling any post in civil life with dignity and credit. With increasing years (fig. 767) honors thicken upon him. Beautiful in age, surrounded with appreciative friends, revered by the young, respected and loved by all, he at length, like a shock of corn fully ripe, calmly yields up his spirit to be garnered in among the immortal blessed.

The other, persisting in the course as we last saw him in fig. 766, growing more and more reckless, more and more negligent of the laws of propriety and order, develops at length into the character exhibited in fig. 768, and his career terminates in a frenzied self-murder, or in a drunken fracas, or in an asylum or prison. Hooted at and derided, an incubus upon society, a terror to the weak and delicate, his death affords gratification, for "'tis a nuisance abated."

Young man, which of these paths are you treading now? Are you advancing in that which constitutes the true man? or are you retrograding and descending below even the level of the brute? Your course is either upward or downward. There is no middle by-way, and you will become what your habits and conduct make you. Be warned in time; consider these views; take counsel of the good and the true; follow your own interior convictions of duty and propriety and your career can not but be honorable. Your features, which are now comely and well-formed, may, by boldly pursuing the way of righteousness, become more and more beautiful as you ripen into the glories of Christian manhood, and others, beholding your inflexible integrity and attractive grace, will say, in the words of a noble Swiss, "A man, I'll swear, a man."

XXVIII.

TRANSMITTED PHYSIOGNOMIES.

"Peculiarities sometimes reappear in a subsequent generation, after having failed, from the operation of causes not easily explained, to show themselves in the immediate progeny."—PHYSICAL PERFECTIION.



Fig. 769.—MOTHER AND CHILD.

THE galleries of family portraits, so numerous in Europe and occasionally to be found even in this newest and most unsettled of all communities, reveal many interesting facts relative to the transmission of physiological peculiarities. In some families we can trace a striking resemblance without interruption through several centuries. In others it disappears in one generation to re-emerge in a later one. Occasionally it seems to become obliterated entirely in consequence, probably, of intermarriages unfavorable to the permanence of the particular type thus lost.

The general preservation of family likenesses is most strikingly illustrated in royal and noble houses, in which alliances with persons of a different rank are seldom formed. The Bourbons and the reigning house of Austria furnish cases in point, that have often been quoted. The thick lips introduced into the latter by the marriage of the Emperor Maximilian with Mary of Burgundy are visible in their descendants to the present day, after a lapse of three centuries.

The royal family of England furnishes an equally striking illustration of the persistence of physiognomical characteristics. A portrait of Edward Albert, the present Prince of



Fig. 770.—CHARLES EDWARD STUART.



Fig. 771.—MARY QUEEN OF SCOTS.

Wales, might serve for a likeness of George III. in his youth. The latest photographs of the former show this family resemblance most plainly.



Fig. 772.—QUEEN VICTORIA.



Fig. 773.—PRINCE OF WALES.

The most observable, but not the only peculiarity, of the royal physiognomy consists in a muscular fullness of the lower

part of the cheek. This peculiar feature can be traced back not only to the first monarch of the house of Brunswick Lunenburg, but to his mother, the Electress Sophia of Hanover; which shows that it did not come from the paternal line of the family, but more probably from the house of Stuart, of which the Electress was an immediate descendant, being granddaughter to King James I.

"There is reason to believe," a writer in "The Book of Days" says, "that common points of physiognomy in the Stuart and Hanover families can be traced to a generation prior to the sovereign last mentioned, who is the common ancestor. The writer, at least, must own that he has been very much struck by the resemblance borne by the recent portraits of our present amiable sovereign to one representing Prince Charles Edward in his later years. Our means of representing the two countenances are limited; yet even in the foregoing engravings (figs. 770 and 772) the parity is too clear not to be generally acknowledged. The fullness of cheek is palpable in both portraits; the form of the mouth is the same in both; and the general aspect, when some allowances are made for difference of age and sex, is identical. It is four generations back from the Prince, and eight from the Queen, to King James—two centuries and a half have elapsed since the births of the two children from whom the subjects of the two portraits are respectively descended—yet there is a likeness exceeding what is found in half the cases of brother and sister. The peculiarity, however, is apparent also in a portrait of Mary of Scotland, taken in her latter years; and it may further be remarked, that between the youthful portraits of Prince Charles Edward and those of the Prince of Wales now coming into circulation, a very striking resemblance exists. Thus the perseverance of physiognomy may be said to extend over *three centuries* and *eleven generations*. Most of her Majesty's loyal and affectionate subjects will probably feel that the matter is not without some interest, as reminding them of the connection between the present royal family and that ancient one which it superseded, and as telling us emphatically that Possessor and Pretender are now happily *ONE*."

Our portrait of the unfortunate Queen of Scots does not show the family likeness so strikingly as one taken later in life would have done, but even here it may be traced.

Dr. Holmes, in a late magazine article, notices the fact that Governor Endicott's features "have come straight down to some of his descendants in the present day." He adds: "There is a dimpled chin which runs through one family connection we have studied, and a certain form of lips which belong to another." He adds:

"This is a story we have told so often that we should begin to doubt it, but for the written statement of the person who was its subject. His professor, who did not know his name or anything about him, stopped him one day, after lecture, and asked him if he were not a relation of Mr. —, a person of some note in Essex County. Not that he had ever heard of. The professor thought he must be—would he inquire? Two or three weeks afterward, having made inquiries at his home in Middlesex County, he reported that an elder member of the family informed him that Mr. —'s great-grandfather, on his mother's side, and his own great-grandfather, on his father's side, were own cousins. The whole class of facts, of which this seems to us too singular an instance to be lost, is forcing itself into notice, with new strength of evidence, through the galleries of photographic family portraits which are making everywhere."

Facts might be multiplied under this head, but without the necessary portraits to illustrate them—and such portraits are not generally attainable—it would not be interesting to pursue the subject at length. A few more cases may be mentioned, merely to put our readers in the way of making observations for themselves.

A portrait of John Rogers, the martyr, now in Harvard College, shows that he had red hair. His descendants, who are numerous in this country, generally retain to this day that family characteristic, modified in some cases into light or sandy. He doubtless had a powerful constitution—as he had a strong will—and transmitted his physical and mental qualities with great force.

The thick, heavy, and coarse eyebrows of the Webster family, of which the great Daniel Webster was the most conspicuous member, may be traced through several branches of the original stock for generations. The Folger face and form, which Dr. Franklin inherited from his mother, furnishes another case in point. The descendants of her brother, the Folgers of Nantucket, still bear a marked resemblance to Dr. Franklin. Some of the Tappans, who inherit Folger blood from Franklin's sister, show the same family resemblance. Lucretia Mott, the widely known Quaker lady, whose maiden name was Folger, has also the Franklin cast of countenance, as our engraving (fig. 774) will imperfectly show.

As a circumstance liable to modify, in appearance at least, the law of transmission, we may recur here to the fact, already incidentally alluded to, that children sometimes resemble their grandfather or their grandmother instead of their father or their mother. This phenomenon, which prevails throughout the animal races, and probably among plants, has been called *atavism*.

The writer in "The Book of Days," before quoted, says he could point to "an instance where the beauty of a married woman has passed over her own children to reappear with characteristic form and complexion in her grandchildren.* He knows very intimately a young lady who, in countenance, in



Fig. 774.—LUCRETIA MOTT.

* A curious illustration of these remarks falls under our notice as we are preparing this chapter for the press. A writer in the *Evening Post*, describing the means by which Mr. Huntington secured the likenesses for his picture of "The Republican Court" (including Washington and many of his cotemporaries), after mentioning the picture of Copley and Stuart

port, and in a peculiar form of the feet, is precisely a revival of a *great-grandmother*, whom he also knew intimately. He could also point to an instance where a woman of deep olive complexion and elegant Oriental figure, the inheritress, perhaps, of the style of some remote ancestress, has given birth to children of the same brown, sanguineous type as her own brothers and sisters; the whole constitutional system being thus shown as liable to sinkings and re-emergences."

Another curious circumstance regarding family likenesses, not much, if at all hitherto noticed, but which has a value in connection with the question, is this: "A family characteristic, or a resemblance to a brother, uncle, grandfather, or other relative, may not have appeared throughout life, but will emerge into view after death. The same result is occasionally observed when a person is laboring under the effects of a severe illness. We may presume that the mask which has hitherto concealed or smothered up the resemblance is removed, either by emaciation, or by the subsidence of some hitherto predominant expression."

Why are physiognomical characteristics thus persistent in certain cases, and not in others? Why does some peculiarity often disappear, to re-emerge after several generations have passed? What is the law of transmission?

Like produces like, not in general forms only, but in particular features. The apparent exceptions to this rule, when rightly understood, only confirm it. To show how maternal impressions and other external conditions affect the operation of this law and enable parents to transmit better organizations and a higher order of beauty than is possessed by themselves, does not come within the scope of a work like this; but it is a fact, the philosophy of which all should seek to learn.

and various family portraits, continues: "In some instances, when the resemblance had been transmitted through two generations, a granddaughter would sit for her grandmother's picture; at others, when a face had been laboriously transferred from parchment or ivory to canvas, an expression, caught from the living features of the grandson or great-niece would give it character and animation."

XXIX.

LOVE SIGNS.

"There's language in her eye, her cheek, her lip,
Nay, her foot speaks and love looks out
At every joint and motion of her body."—SHAKESPEARE

"In many ways does the full heart reveal
The presence of the love it would conceal."—COLERIDGE

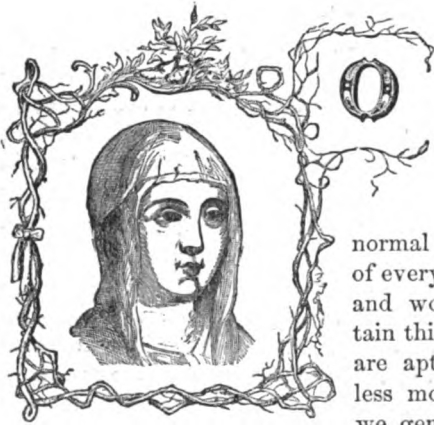


Fig. 775.—ISABELLA OF CASTILE

OUR happiness or misery in this world depends largely upon the state of our affections. To love and to be loved is the normal condition and destiny of every well-constituted man and woman. Failing to attain this condition, our minds are apt to become more or less morbid or warped, and we generally either run into dangerous and sinful excesses of some kind, or, "the milk of human kindness" getting soured in our breasts, we become unsocial and cynical, if not misanthropic. At best, our earthly lives are to a greater or less extent irretrievably marred.

A few individuals may be found who are comparatively indifferent to love. A few others, in whom its manifestation is not naturally wanting, are able, when its object fails them, to substitute ambition or some other sentiment or passion for it; or to hold the whole lower nature in such absolute subjection

to the spiritual faculties, that the ordinances of religion and the duties of Christian charity stand with them in the place of wife or husband, family and home; but these cases constitute the apparent exceptions which prove the rule.

While all men and women, not mentally or physically deficient to the extent of deformity or partial idiocy, may be said to be "born to love and be beloved," there are wide differences in the degree and form in which love manifests itself; and in seeking its fruition in marriage, it is of the highest importance that these differences be taken into account and harmonized. Much—everything almost—depends upon adaptation. We often see couples united in marriage where both parties are amiable and, in some degree, affectionate, who, nevertheless only make each other miserable. Each is capable of loving and making another being happy, but that other does not happen to be the one to which he or she is bound. They are affectionally mis-mated. They do not appreciate or understand each other. Heart does not respond to heart.

Many a young wife, warm-hearted and overflowing with affection, learns, when too late, with pain unutterable, that he on whom she would lavish her love, kind, considerate, and thoughtful of her welfare though he may be, only repels her outgushing tenderness, or, at best, meets it with a cool indifference which turns it back in an icy torrent upon her heart; and many a husband finds in the wife he has blindly chosen, only esteem and a measured and dutiful affection instead of the ardor and impulsive love for which his heart yearns.

In all such cases a *mistake* has been made—a terrible, irremediable mistake—a mistake which a thorough knowledge of Physiology, Phrenology, and Physiognomy would have rendered impossible. The world is full of these matrimonial blunders—full of the unhappiness—the deep misery—which they occasion. Can anything be done to prevent the so frequent occurrence of these fatal errors? Most certainly something can be done. Ignorance is the cause, knowledge is the remedy. That knowledge, in part at least, we have endeavored to supply in this book. One who can read character by means of its physical signs—its indications on the head and

face, in the glances of the eye, in the voice, in the laugh, in the grasp of the hand, in the walk, in the dress—"in every joint and motion of the body," as Shakspeare has it—need not choose amiss (though a Miss may be his choice). Study this work carefully, and you will be prepared to select a partner who will prove all that you can reasonably expect; but, at the risk of some slight repetition, we will here bring together a few useful hints to those who would avoid the fate

Of one that loved not wisely, but too well.

We wish to teach our young readers who are still free to love where they will, how to love both wisely *and* well; how to know who can love them in return as they desire to be loved, satisfy the longings of their hearts, give completeness to their lives, and make them as great, as good, and as happy as they are capable of being, and who can not. We shall try to point out the signs of Love so clearly that "he who runs may read," and he who reads may have no excuse for blundering into an unloving and therefore unhappy marriage, or falling a victim of "unregulated affections."

PHRENOLOGICAL ORGAN OF LOVE.

It has been demonstrated beyond a reasonable doubt that the cerebellum or little brain, whatever additional functions it may have, is the organ of procreation or sexual Love, and we shall enter into no argument and adduce no evidence here to prove what we presume our readers all admit. Should any have doubts on this point, they are referred to the standard works on Phrenology, and especially to Spurzheim on the



Fig. 776.

"Functions of the Cerebellum," and "Boardman's Defense of Phrenology," where all the proofs they can require are to be found.

Here are the outlines of two skulls (figs. 776 and 777), in the first of which you may see the cerebellum largely projecting, while in the second you will observe a marked deficiency in the same region. The portrait of Catharine II., the great but licentious empress of



Fig. 777.

Russia, on page 153, in spite of the style in which the hair is worn, shows the large development of cerebellum with which her character so well corresponded.

To find the organ of Amativeness or Love (we prefer the good Saxon-English term), take the middle of the back part of the ears as your starting-point, draw a line horizontally backward an inch and a half, and you are upon the organ. The outer portion, next to the ear, is believed to exercise the more gross and animal function of the faculty.

Any marked prominence or deficiency of the organ of Love will be sufficiently evident in a side view of the head, unless



Fig. 778.—MISS ———.



Fig. 779.—AARON BURR.

the hair be so disposed as to deceive the observer. Figs. 778 and 779 illustrate the two extremes. There can be no question in cases like these; but where there is about an equal development of this and the neighboring organs, it may be necessary to place the hand upon the part to determine its relative size.

MODIFYING CONDITIONS.

The size of the cerebellum, other things being equal, is the measure of the power of Love; but its action and influence upon the character are modified by other mental and physical developments and conditions, the signs of which it will be necessary to observe before forming an estimate.

TEMPERAMENT AND LOVE.

Prominent among the modifying conditions just referred to

is that of temperament. The motive temperament gives activity, energy, strength, intensity, and tenacity to love. A person with this temperament and a full development of Amativeness loves with a power and singleness of purpose which nothing can turn aside, and loving once loves forever. His love is as constant as the sun. He knows no change—no fickleness. The vital temperament gives ardor and impulsiveness to love, sometimes, though not necessarily, accompanied by a degree of fickleness. Persons in whom it predominates are frequently passionate and voluptuous, but as easily calmed as excited; fond of pleasure, genial, vivacious, and amiable; but lack that depth, strength, and persistence of feeling which characterizes those in whom the motive temperament is in the ascendant. The mental temperament imparts sensitiveness and impressibility in love as in everything else; but when largely predominant is not, especially in woman, favorable to either ardor or strength of passion. It gives refinement and elevation to affection, and directs the choice under the influence of Ideality and the moral sentiments. To learn how to distinguish these temperaments and their modifications and combinations, study our description of them in Chapter IV.

LOVE ON THE CHIN.

The size of the cerebellum, other things being equal, is, as we have said, the measure of the *power* of Love; but this power is sometimes to a greater or less extent latent, and its manifestation does not correspond with the development of its organ. For the indications of its voluntary activity or ability to act at will, we must observe its facial signs in the chin and lips.

One of the physiognomical signs of Love is the anterior projection of the chin proper and the breadth of the lower jaw below the molar teeth. Both this sign and the corresponding phrenological organ were enormously large in Aaron Burr (fig. 779), and his character is well known to have corresponded with these developments. The portrait of Catharine II., already referred to, also shows a strong prominent chin. In fig. 778, which, however, is not to be considered an accurate represent-

ation in that particular, the cerebellum is small and the chin large. Supposing this to be true to life, we should infer that the individual represented has a small but very active organ of Amativeness, and manifests more love than the phrenological development would seem to warrant us in expecting.

The natural language of Love as expressed in the chin consists in throwing it forward or sidewise, as shown in figs. 186 and 187, page 157, the former movement being the more natural to woman and the latter to man.

For the indications of the various forms or manifestations of Love, and their supposed special signs in the chin, see Chapter IX.

LOVING LIPS.

We all look to the lips to make the loving confession—to say “yes” and seal the avowal with a kiss; but only the physiognomist can tell what lips are best fitted for loving words and kisses. We have divulged the secret fully in a previous chapter, but will briefly repeat.

Love, and especially in its more ardent forms, is indicated by the breadth and fullness of the red part of the lips. A bright, clear, and beautiful color in this part is a sign of health, a good circulation of the blood, and ardent desires.

Love is an active impelling force. If not restrained and controlled, it leads to excesses the most destructive to health and happiness. We must observe, then, in examining any individual with reference to the conjugal relation, whether he or she has the restraining and regulating power in proportion to the impelling force. Is there sufficient will or purpose, indicated by the perpendicular or downward projection of the chin and lower jaw? Are Cautiousness and Secretiveness well developed? Is there intellectual discrimination, represented by the reasoning faculties? and, above all, are the moral or spiritual organs in the coronal region full and active? If Love be blind, as the poets say, there is the more reason that Intellect should guide him with her scientific eyes wide open.

The felicities of wedded life depend largely on physiological or temperamental adaptation; and the infelicities grow

out of a neglect of these conditions. Is the one warm and ardent? and is the other cool and indifferent? There will be a sad lack of compatibility here. Is the one low, gross, and ignorant? and is the other refined and educated? Is the one on a high, and the other on a low plane? Is the one very old, and the other very young? We protest there should not be a difference of *more* than fifty years between the parties, unless they marry simply for money; in which case it is only a bargain. In short, are they, or are they not, *adapted* to each other?

These brief hints will put the reader on the right track. He has only to pursue it, and to study character as a whole, to find the guide he needs to matrimonial harmony and happiness.



ANNA BOLENE.

XXX.

SIGNS OF HEALTH AND DISEASE.

"Health's crowning beauty glows on cheek and lip."

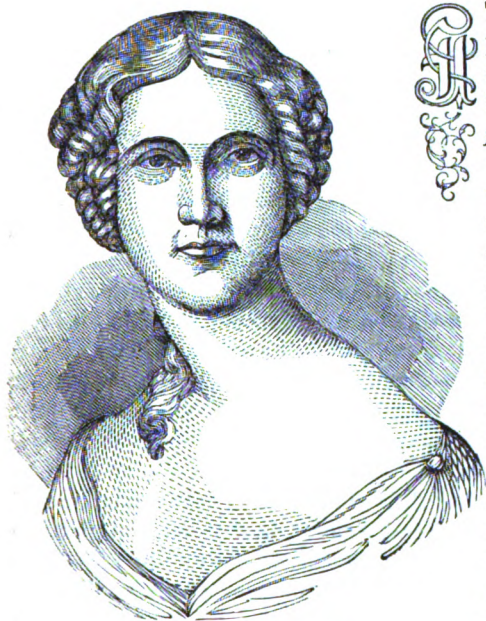


Fig. 780.—MRS. HEMANS.

conditions of the bodily organs, whether external or internal

It is not our purpose to give here a professional treatise on *diagnosis* or *prognosis*; but it will be useful to the general reader to know something of the more prominent and readily observed signs of health and disease; and we hope that this chapter will prove suggestive, at least, to the physician, and lead to a closer study of the physiognomical signs which so clearly indicate the ever-varying con-

SIGNS OF HEALTH.

1. BEAUTY.—The first and chief indication of a healthy state of the body is beauty. In what does beauty consist, if

not in harmonious physical and spiritual development? and how is this harmonious development attained, if not through the agency of health? The healthiest plant or the healthiest animal is most beautiful, according to its own standard of beauty. So in man the complete development of all the parts, constituting the most symmetrically organized body, and thereby insuring the perfect performance of the bodily functions, is the highest order of human beauty. If we particularize with regard to the human organization, we find the head, which combines the various organs in their highest condition of development, to be the finest in contour. That face which is made up of the finest physiognomical organs will be the handsomest. The healthier the organ the better it is adapted to perform its specific office. The finest and brightest eye sees best. The most regular and evenly balanced nose possesses the most delicate smell. The sweetest mouth is that which has the most nearly perfect teeth and the best formed lips. Those limbs, that arm or leg, is the finest and best fitted for its natural duty which has the best muscular development. We may therefore say that where perfect health is found, there also will be found perfect beauty, in the broadest and truest sense of the term, as its inseparable concomitant, and the most admirable adaptation of the part to its special office.

The farther the departure from this standard of beauty the less the harmony of the organization, the more incomplete the development, and the more marked the evidences of disease and premature decay.

Seeing, then, that health is so necessary to the attainment of that universally desired end, beauty, how much reason there is for us to make use of those means which nature affords us to attain it. Simple obedience to the laws of life and health will secure the utmost development our individual constitutions are capable of taking on; and with health, happiness, "our being's end and aim," will be acquired.

Beauty is an ingredient of the divine, and they who scoff at or depreciate it are guilty of irreverence toward that Providence which made all things "very good." It is rather to be admired, desired, loved, and worshiped.

To speak in less general terms, health gives symmetry and a moderate plumpness to the body, gracefully rounded outlines and a soft peachy bloom to the cheeks, rosiness to the lips, brightness to the eyes, grace to the carriage, elasticity to the step, and an indescribable magnetic charm to the whole person.

2. **STRENGTH** is another sign of health. We do not mean that effervescent, spasmodic energy which a diseased condition of the nervous system will sometimes evince; but continuous, regular energy, which can only proceed from a constitution thoroughly sound. To have genuine strength of character, and that steady energy which may be termed "back-bone," one must possess good muscle, a sound nervous system, and good brain. These are derived from a healthy activity of the vital functions. A strong man has a strong will, strong passions, and exhibits strength of character in whatever he does. The more excellent his health the more striking his manifestations of strength. On the other hand, weakness or inertness indicates lack of development, or a diseased or morbid state of some or all of the faculties.

3. **ACTIVITY** is another sign of health. In health, the various parts of the body are actively performing, or competent to perform, their functions. The appetite promptly responds to the call of the stomach. The digestive power is quick and thorough. The organs of conversion and assimilation carry on their work rapidly, affording rich nutriment to the hungry muscles, nerves, and brain. The blood, purified by a deep respiration and impelled by the earnest contractions of an active heart, circulates freely throughout the system, distributing in its course healthy material for body and mind.

Inactivity or indolence denotes disease, either of the whole body or of the part of which it may be affirmed. A sick man is necessarily an indolent, lazy man. So a lazy man is a sick man. Health is inconsistent with lassitude and inaction. It inspires activity, and the healthier a man is the more extended his sphere of activity. "Action is life, inaction is death."

4. **HAPPINESS**.—Another sign or feature of health, a sequent, as it were, of beauty, strength, and activity, is happiness. As health is opposed to disease, so happiness is the apposite of

misery, of which pain is a species, and if we would be happy we must be healthy. The influence of a diseased or morbid bodily condition upon the character and disposition is to render a person thus affected querulous, discontented, rough, and unlovely. Pain is occasioned by disease, so sometimes is sorrow. If, then, human happiness is so dependent upon the bodily condition, it becomes us to seek that condition which is most in keeping with happiness; and he who to-day possesses an organization all aglow with health, strength, and activity, and is conscious of his power to do his part on the arena of life, must feel himself essentially a happy man, and the influence exerted by such a spirit is like the genial sunlight, imparting warmth of feeling and cordial sympathy wherever it moves. Were health—in its broadest sense—universal, we may safely assert that happiness would also be universal. Health would beget health, and in successive stages there would be an approximation to a perfect human constitution, embracing perfect health, perfect strength, perfect activity, perfect beauty, and perfect happiness.

SIGNS OF DISEASE.

Dr. C. G. Raue, a learned and successful physician, has lately, in a lecture before the Homeopathic Medical College of Pennsylvania, so well described the physiognomical signs of disease, that we can hardly do better under this head than to copy such portions of his remarks as are suitable for the perusal of the unprofessional reader. He says:

“The face of a patient tells a long story, and it will be well for the student to observe closely its features, expressions, color, and temperature. The experienced physician reads on it not only the degree of severity of an attack, but often, also, its whole general nature. But this must be learned by practice. There are fine shades which can not well be described, but which, nevertheless, stamp upon the whole a peculiar character.

“1. THE ASPECT OF THE FACE.—(a.) A delicate appearance, with long fringed eyelashes, often serves to point out the tubercular diathesis. (b.) The thickened *alæ nasi* [wings of

the nose] and upper lip of scrofula are most marked in childhood. (c.) The pallor of anæmia is very important; it is waxy in chlorosis, and pasty in diseases of the kidneys. (d.) A puffy appearance about the eyelids, along with anæmia, is very generally the indication of albuminuria. (e.) A bloated, blotchy face generally indicates irregular habits of living. (f.) The features undergo remarkable changes in erysipelas, parotitis, facial paralysis, etc. (g.) A sunken face indicates exhaustion, either from too great exertion, loss of sleep, want of nourishment, profuse diarrhea, or disturbed digestion. If you find it at the beginning of a disease, without previous weakening causes, it denotes a severe illness. If it sets in suddenly during a disease, without chill or spasm, by which it might be caused, it is a sign of extreme exhaustion or metastasis, mortification, or apoplexia nervosa. (h.) The Hippocratic face is characterized in the following way: the skin upon the forehead is tense, dry, or covered with cold perspiration; the temporal regions are sunken, the eyelids are pale and hang down, eyes are dull, without luster, turned upward and sunken; the *alæ nasi* are pinched together, and the nose very pointed; the malar bones stick out, and the cheeks are sunken and wrinkled; the ears appear to be drawn in and are cold, the lips are pale, livid; the lower jaw sinks down, and the mouth is open. It is always a sign of extreme prostration of vital powers, and is found in cholera, in mortification, during the death struggle. (i.) A wrinkled face is natural in old age, but in children it is a sign of imperfect nutrition, and is found in consequence of exhausting diarrhea and atrophy.

“(j.) The *linea ophthalmozygomatica* is a line or fold commencing at the inner canthus [angle] of the eye, running toward the zygoma [cheek-bone], where it ends. It shows momentarily when children cry, but becomes more permanent in children with affections of the brain. Its appearance in simple catarrh is said to indicate the setting in of whooping-cough.

“(k.) The *linea nasalis* is a line or fold which commences at the upper part of the *alæ nasi*, and runs toward the orbi-

cularis oris [the sphincter of the mouth], forming a more or less perfect half circle. This line, if found in children, denotes abdominal diseases, especially inflammation of the bowels, also rachitis, scrofula, and atrophy. In grown persons it is said to have been observed as a concomitant symptom of albuminuria, ulcer and cancer of the stomach, and degenerations of the liver.

“(l.) *The linea labialis* is a line or fold which commences at the corner of the mouth and runs down toward the side of the chin, where it ends, and whereby the chin appears to be elongated. This line is said to be a characteristic sign in children of inflammatory or chronic diseases of the larynx and lungs. It has been found very marked in grown persons, who suffered with ulceration of the larynx and bronchial affections, attended with difficulty in breathing and much mucous discharge.

“(m.) *The risus sardonicus*, a spasmodic distortion of the face, resembling a kind of laughing, is found in irritation and inflammation of the brain, in inflammation of the pericardium and diaphragm, in irritations of the intestinal canal, even after mental excitement, fright, and depression of spirits.

“2. THE EXPRESSION OF THE FACE is in health the reflex of the mind, and in disease it has a distinct reference to the nervous system. In general I may say: (a.) A rigid, staring, stupid, troubled, but sometimes also a smiling countenance is found in affections of the brain and typhoid conditions. (b.) An anxious, sad, and restless expression is found in lung and heart diseases; and, (c.) A morose, long-faced, and apathetic expression is found in abnormal disorders.

“3. THE COLOR OF THE FACE.—(a.) Redness, if habitual, denotes a tendency to gout and hemorrhoids, and is a sign of indulgence in spirituous liquors. Flying, often-changing redness is seen in children during dentition, and is also found in inflammation of the lungs. Bright vivid redness is found in nervous diseases, hysteria, and tendency to hemorrhoids. Dark, purplish redness is found in congestion and apoplectic and suffocative conditions. Redness, coming and going in spots, I have often found in brain diseases of little children.

One-sided redness, with paleness and coldness on the other side, is an inflammation of the brain, according to Schœnlein, a sign of formation of pus in that half of the brain which corresponds with the red side of the face. One-sided redness is found also in diseases of the lungs, of the heart and abdomen. The circumscribed hectic flush [a cherry red spot on the cheek] is characteristic of phthisis. Redness of the cheeks, with a white ring around the *alæ nasi* and the mouth, I have found in different exanthematic fevers.

"4. **PALENESS.**—Sudden paleness, especially around the mouth, is found in children with colic, spasms in the abdomen. Great paleness, alternating with flushes of redness, is found in inflammation of lungs and brain, also during dentition. A pale, peculiar, white, and wrinkled face is found in children with chronic hydrocephalus. A sudden paleness after an inconsiderable limping in children, combined with great lassitude, is a sign of a lingering hip disease. Sudden paleness of the nose is in scarlet fever a bad sign; it denotes a metastasis [transfer] to the brain; during the peeling off, it is a forerunner of dropsy. Sudden paleness after a fall indicates concussion of the brain. Pale lips are characteristic of chlorosis.

"5. **BLUE COLOR OF THE FACE.**—It is found in organic diseases of the heart, especially dilatation of the ventricles and disorganization of the valves, whereby the oxygenization of the blood is interfered with. In the highest degree it exists in cyanosis [blue jaundice]. Blue face of new-born children is found after labor, with face-presentation, or if the navel-string was wound round the neck. If it lasts long after birth it denotes cyanosis. Livid grayish lead color denotes deep-seated organic diseases, scirrhus, gangrene.

"6. **YELLOWISH COLOR** of the face is found mostly in diseases of the liver. A yellowish or brownish bridge over the nose indicates sepsia. The yellowness of jaundice varies from a pale orange to a deep green yellow. There is a certain yellowness of the malignant aspect which is distinguished from jaundice by the pearly luster of the eyes.

"7. **THE TEMPERATURE OF THE FACE.**—(a.) Heat of the face is found in congestion of the head, in fevers, in inflamma-

tory conditions, in coryza, and other different complaints. (b.) Coldness of the face we find in chills, in spasms, exhaustion, in sickness of the stomach, in syncope. A deadly coldness in cholera, also in violent hysterical paroxysms. In inflammation of the lungs, coldness of the face is a bad sign of commencing suppuration. Sudden coldness of the face in scarlet fever indicates the near approach of death."

We could extend the subject and give the physiognomical signs of pregnancy, of impotency, of virility, of imbecility, and of other normal and abnormal conditions; but this will suffice to put the reader on the track of personal observation. Every physician ought to be an expert physiognomist.*

* Cabanis, speaking of insanity, declares that one is unfit to practice the profession if he can not "discern in the features or looks of his patient the signs of a disordered mind," and many others make high pretensions to this divine art. Fonblanque relies much on "a peculiar cast of countenance." Dr. Cox says, "the expression of countenance furnishes an infallible proof of mental disease."



LADY MORGAN.

XXXI.

CHANGES OF COUNTENANCE.

"She's never twice the same;
And changes flash across her face
With every changing mood."—*AYTON*.



Fig. 781.—EMMA STANLEY.*

supposed to suggest and illustrate, with a portrait of Miss Stanley and representations of some of the characters she so successfully personates. The cuts will speak for themselves.

The objector says: "If one and the same face be capable

THE fact that certain personators of character, like Dr. Valentine, Yankee Hill, Mr. Alfred Burdett, and Miss Emma Stanley, have been able to so metamorphose themselves that they have seemed literally almost "all things to all men," is often quoted as an argument against the value if not the truth of Physiognomy. We will place before the reader a concise statement of the objection such cases are

* Miss Emma Stanley is an Englishwoman who commenced her professional life, as an actress, when a mere child, and became very popular in the English theaters. Among other original characters she has stamped the following as emphatically her own: "The Angel of the Attic;" "The Moral Philosopher;" "Ernestine;" and "Ladies, Beware!" She is best

of all these different expressions—if an actor or an actress can assume, for the time being, the physiognomical traits, as well as the language and the costume of the character which he or she desires to personate, how can these expressions and these traits be relied upon as indications of the *true* character of an individual? Who, for instance, without the portrait of the personator of all these characters—Miss Emma Stanley—which stands at the head of this chapter, could determine which, if either, of these varied physiognomies truly represents her own mental personality? In other words, if men can appear to be what they are not, how can we judge from their appearance what they really are? If a man may ‘frame his face to all occasions,’ and

‘Smile, and murder while he smiles,’

how can we tell the honest man from the villain by his physiognomy?”

This objection, which seems at first sight so plausible, is



Fig. 732

based entirely on a false assumption, and we have only to remove its foundation and it will fall to the ground of itself. What is Physiognomy? We have defined it in Chapter III,



Fig. 733

but will briefly repeat. As applied to man, it signifies a knowledge of the relations between the external and the internal—the body and the mind—the manifest effect and the

known in this country, however, by her personation of the “Seven Ages of Woman,” in which she appeared several years ago in our principal cities. It is a sketch of the life of a woman, from infancy to old age—from the infant in its mother’s arms to Grandmother Grey—the last scene of all. Over thirty characters are introduced (some of which are represented in our cuts), including several phases of male character, and each is delineated with surpassing ability.

hidden cause. Practically, it is the art of reading character by means of its signs in the developments of the body—the *whole* body—not the face merely. As we understand physiognomy, it embraces the whole man; taking into account the temperament, the shape of the body, the size and form of the head, the texture of the skin, the quality of the hair, the degree of functional activity, and other physiological conditions, as well as the features of the face. These conditions are, for the most part, entirely incapable of being simulated; and in regard to the face, it is the movable parts merely that are subject to our control for the expression of temporary passions



Fig. 734.

or emotions. The bones of the face are as prominent in their form as those of the cranium. No man can change (except in that gradual way in which the whole character and temperament may be changed) a sharp



Fig. 735.

indented forehead into a round and arched one, or a pointed into a square chin. The same remark will apply to the color of the eyes, the color and position of the eyebrows, the shape of the nose, the form and size of the ears, the shade of the complexion, and other prominent indices of character in the face. Miss Stanley's skill is great, but she never exchanges her straight, handsome nose for a pug, or her oval face for a round one; nor does she ever lose her large mouth, her thick eyebrows, or her abundant dark hair.

The changes wrought, which it must be confessed are striking, are pathognomical rather than physiognomical, pathognomy dealing with the passions and emotions, and physiognomy with the permanent traits of character; a distinction which it is well to bear in mind, though in general we do not deem it necessary to insist upon it, the two being so closely connected as to be inseparable. We must always distinguish, however, between what is permanent and normal and what is transient and incidental.

¶ What, then, do these pictures, or, rather, their subject, prove? Simply that an actor, or an actress—that *any* person having the proper endowments, large Imitation, Comparison, Ideality, etc., with mobile features and a supple body—can, by *assuming mentally*, for the time being, any particular strongly marked trait or traits of character,

assume also, so far as action and the temporary expression of the features may go, the corresponding *external* traits. The representation will be imperfect at best,



Fig. 786.



Fig. 787.

but will approach perfection just in proportion as the actor shall be capable of *becoming internally* (for the time) what he may desire to *appear to be externally*; for the expression must, after all, be in a certain sense a *true* one. This illustrates what is meant by “entering into the spirit” of anything one may undertake.

If we sometimes fail to detect the *true* beneath the mask of the *false*, the fault is in our *observation* and not in the *object*. Even dissimulation itself has a language which the physiognomist is generally able to read. The following incident, copied from Lavater, is in point:

“Two young persons, about four-and-twenty years of age, more than once, came before me, and most solemnly declared two tales, directly opposite, were each of them true! The one affirmed, “Thou art the father of my child.” The other, “I never had any knowledge of thee.” They both must be convinced that one of these assertions was true, the other false. The one must have uttered a known truth, the other, a known lie; and thus the vilest slanderer and the most injured and innocent person both stood in my presence—consequently one of them must be able to dissemble most surprisingly, and

the vilest falsehood may assume the garb of the most injured innocence. Yes, it is a melancholy truth—yet, on consideration, not so—for this is the privilege of the freedom of human nature, the perfection and honor of which alike consists in its infinite capability of perfection and imperfection; for imperfection, to the actual free and moral perfection of man, is its greatest worth. Therefore it is melancholy, not that vile falsehood can, but that it does, assume the appearance of suffering innocence.”

“Well, but it has this power, and what has the physiognomist to answer?” He answers thus:

“Two persons are before me, one of whom puts no constraint upon himself to appear other than he is, while the second is under the greatest constraint, and must also take the greatest care that this constraint shall not appear. The guilty is probably more daring than the innocent, but certainly the voice of innocence has greater energy, persuasiveness, and convicting power; the look of innocence is surely more serene and bright than that of the guilty liar.

“I beheld this look with mingled pity and anger, for innocence, and against guilt; this indescribable look that so expressively said, ‘And darest thou deny it?’ I beheld, on the



Fig. 788.

contrary, a clouded and insolent look; I heard the rude, the loud voice of presumption, but which, yet, like the look was unconvincing, hollow, that with forced tones answered, ‘Yes I dare.’ I viewed



Fig. 789.

the manner of standing, the motion of the hands, particularly the undecided step, and at the moment when I awfully described the solemnity of an oath, at that moment I saw in the motion of lips the downcast look, the manner of standing of the one party; and the open, astonished, firm, penetrating warm, calm look, that silently exclaimed—Lord Jesus, and

wilt thou swear! Wilt thou believe me, O reader?—and I saw, I heard, I felt guilt and innocence—villainy, with a depressed, accursed—I know not what.”

All dissimulation—all hypocrisy—all acting in assumed characters, whether on the stage or elsewhere—is founded on physiognomical principles and furnishes ground for an argument in favor of the system rather than against it. If the hypocritical knave tries to appear like an honest man, is it not because he recognizes the fact that honesty has a certain characteristic expression, and that his fellow-men know what this expression is?

Is the objector answered? We must leave it with our readers to decide that question; but the accompanying woodcuts furnish a text for a further remark or two, which, though not essential to the elucidation of the point at issue, will not be out of place in connection with what we have already offered.

Temporary expressions have a tendency, by means of frequent repetition, to become permanent. A scowl or a frown constantly recurring, finally assumes the character of our essential traits, perpetually overshadowing the face like a cloud. But we do not scowl or frown habitually unless we habitually have the *feeling* in which the scowl or the frown originates. A cross person can not put off at will his cross expression, though he may partially cover it up with smiles. “Mourner will cry;” and so will anger! The face is the mirror of the mind, showing both its transient and its permanent traits. It shows in the latter what we are generally, and in the former what we are capable of becoming at particular moments.

By continually assuming a particular character, we may, in the end, make it our own; and the expression at first put on at will can not be so easily put off. The very effort to smile and look pleasant is one step toward overcoming our sadness or ill-nature, and finally the smile and the sunny look come naturally. The face is molded by the thoughts; and no personation or acting—no dissimulation of any kind—can permanently or completely efface the records which the indwelling spirit has impressed upon the external form.

XXXII.

GRADES OF INTELLIGENCE.

"All things by regular degrees arise—
From mere existence unto life, from life
To intellectual power; and each degree
Has its peculiar necessary stamp,
Cognizable in forms distinct and lines."—LAVATER.



Fig. 790.—AFRICAN LION.

"INNUMERABLE attempts," Lavater remarks, "have been made to exhibit the gradations of form in man and animals and regularly to systematize and define in a physiognomically mathematical manner the peculiar and absolutely fundamental lines of each degree; delineating the transitions from brutal deformity to ideal beauty; from satanic hideousness and ma-

lignity to divine exaltation; from the animality of the frog or of the monkey to the beginning of humanity in the Samoiede, and thence to that of a Newton and a Kant;" and he mentions Albert Durer, Winkleman, Buffon, Sommering, Blumenbach, and Gall among those who have given more or less attention to the subject. He evidently, though a cotemporary of the discoverer of Phrenology, had little or no acquaintance with the system; but he admits as undeniable that "the form of the skull and bones is the most important and essential object to be considered in such observations;"

but the yielding parts, he adds, "are the magical mirror which shows the half virtues and half vices—the depressions and elevations of our internal power—our enjoyment of the gift of divinity."

Lavater was neither a philosopher nor a man of science, but his intuitive perceptions are often wonderfully clear and truthful; and he here shows that he, at times, caught a glimpse of the true relation between mind and organization. He illustrates this relation, so far as it pertains to the outlines of the head and face, in a series of drawings, most of which we here reproduce, with his remarks thereon. So far as they go, his inferences are in the main correct. Our own views will be further developed as we proceed.

"The more acute, in general, the angle of the profile is, the less of which extend either from the closing of the teeth to the cavity of the ear, and the utmost protuberance of the forehead; or from the extreme end of the nose to the outer angle of the eye, and the corner of the mouth, which always ends where, in the skull, the first jaw-tooth begins—the more brutal, inactive, and unproductive is the animal.

"These angles may with propriety be termed the *angles of the lines of the countenance*.

"These angles have, in every species of animal, and every race of men, a characteristic *minimum* and *maximum*—an extreme diminution and extreme magnitude. The former of these angles, as above defined, is employed by M. Camper for his gradation from the monkey to the Apollo; and the latter I had used, before the similar idea of M. Camper was known to me, as the rule for my observations. All creatures which we comprehend under the name of man, with all their anomalies, are included between sixty and seventy degrees of my angle of the countenance; and with reference to the other angle between the seventieth and eightieth degree. The Chinese has seventy-five of the latter degrees, the most beautiful European eighty, and no real natural head, of no age, neither Grecian, Roman, Persian, or Egyptian, has, or ever had, more. What exceeds eighty degrees is not found in healthy nature, though it sometimes may in monstrous births and dropsical heads,

and in the productions of art, in the Roman, and, still more conspicuously, in the Grecian countenances of divinities and heroes; the angle of which is sometimes extended even to a hundred degrees; an evident demonstration that the antiques—let them be considered as beautiful or deformed—are, at least, not naturally beautiful, not truly human; a fact which must be admitted by even the most zealous admirers of antique beauties. What is below seventy degrees gives the countenance of the [uncultured] negro of Angola and the Calmuck; and by a further diminution soon loses all trace of resemblance to humanity. The line of the countenance of the orang-outang makes an angle of fifty-eight degrees; that of the tailed ape, *simia cynomolgus*, an angle of forty-two degrees; and if this angle be diminished still more, we have a dog, a frog, a woodcock; the line of the countenance becomes continually more horizontal, the forehead necessarily contracts, the nose is lost, the eye becomes round and more projecting, the mouth broad, and at length no place is any longer left for the teeth, which appears to be the natural cause that birds have no teeth.

“To render these ideas more intelligible and evident, the reader needs only cast a glance on the annexed plates of profiles, which will explain and elucidate my theory. The gradual transition from the head of a frog to the best human head—which, when we compare figs. 791 and 800 alone, must appear almost impossible without an extravagant leap and unwarrantable violence—exhibits itself, as I may say, in them in such a manner, that we are more surprised it should be so natural than that it is abrupt and forced, and we immediately find the commentary on what we see in our own feelings, without a single word of explanation. Fig. 791 is entirely the frog, the swollen representative of disgusting bestiality; fig. 792, though no longer a frog, is but slightly above that reptile. In fig. 793 there is a sensible advance toward a nose and chin. The progress is much more conspicuous in fig. 794. The lips of fig. 795 are much more defined. Here commences the first degree of the cessation of brutality. In fig. 796 begins the lowest degree of humanity; the angle

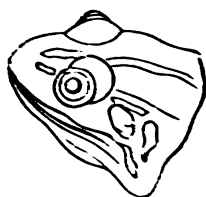


Fig. 111.



Fig. 112.

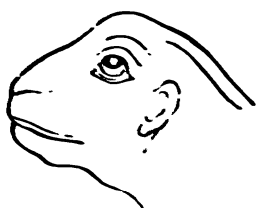


Fig. 113.



Fig. 114.



Fig. 115.



Fig. 116.



Fig. 117.



Fig. 118.



Fig. 799.



Fig. 800.



Fig. 801.



Fig. 802.

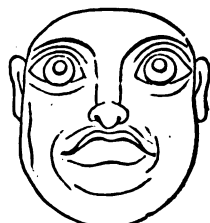


Fig. 803.



Fig. 804.



Fig. 805.

of the countenance is indeed not much larger than sixty degrees, very little raised above brutality, yet [a little] nearer to the negro than the orang-outang; and the projecting nose and defined lips decisively indicate commencing humanity. Fig. 797 has the expression of benevolent weakness. The signs of intelligence are manifest in fig. 798; but still more conspicuous in fig. 799. Much more intelligent, however, is fig. 800 [which, nevertheless, falls short of the phrenologist's idea of intellectual greatness].

"On the same principles, an angle, or rather a triangle, of the countenance may be assigned for the full face, and applied with great advantage for the determination of the degrees of animality as illustrated in figs. 801 to 805 inclusive. Let a horizontal line be drawn from the outer corner of one eye to that of the other, and from its extremities draw lines accurately, bisecting the middle line of the mouth, and forming an isosceles triangle, and you will have my angle of the countenance for the full face. This angle in the frog contains five-and-twenty degrees, and is increased to fifty-six degrees, an angle which Aristotle, Montesquieu, Pitt, and Frederic the Great have in common with the Pythian Apollo.

"When, lastly, the length of the line of the mouth is to that of a line drawn from the outer corner of one eye to that of the other, as thirteen to twenty-seven, and the distance of these two lines equal to the length and half the length of the line of the mouth, or as nineteen and a half; or when the distance of the two inner corners of the eye from each other is to the length of the line of the mouth as three to four, we have in these the proportional lines of extraordinary qualities; such a trapezium is the index of wisdom and greatness."

It would be doing Layater great injustice to suppose he wishes us to infer that man is merely a gradually developed frog, or that it is possible for any animal to rise in the scale of being so far as to take its place in a superior species. He desires simply to show that the different grades of animal life and intelligence are conjoined with and measured by corresponding grades of configuration, a fact which no well-instructed physiologist will venture to deny.

THE CHAIN OF BEING.

"All are but parts of one stupendous whole."—*Pope*.

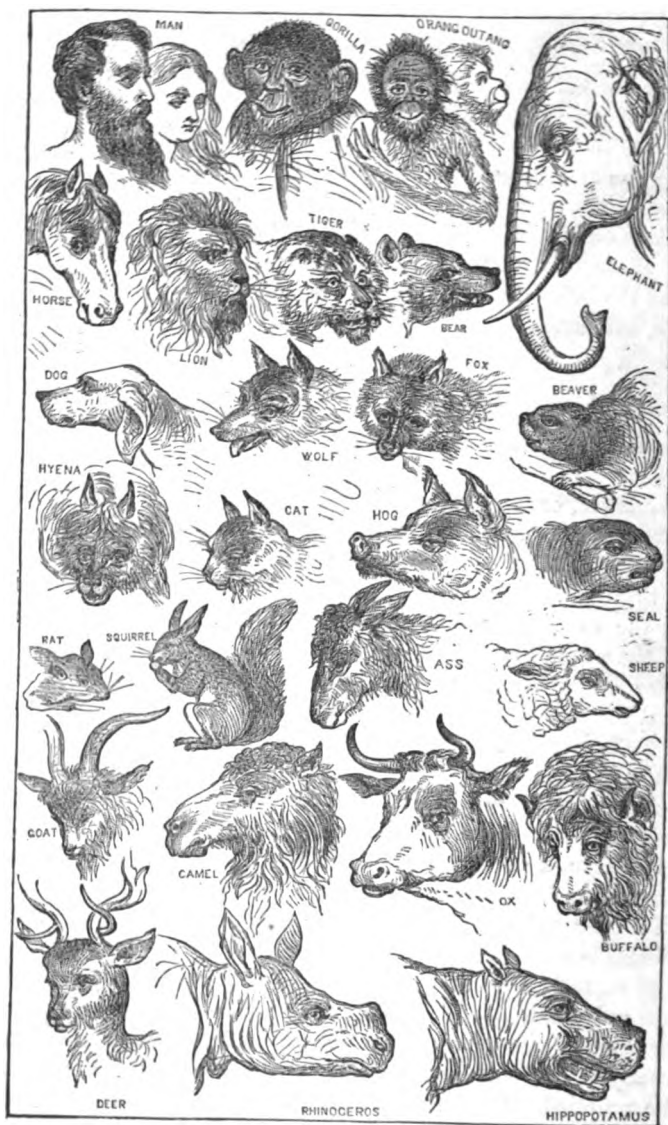
In further and more satisfactory illustration of the great law of gradation, as applied to animal life and intelligence, and to show how organization keeps pace with function and the size and shape of the head with mentality, we have drawn and engraved the accompanying series of representations, in which our artist, beginning with man, the acknowledged lord of all earthly creations, descends step by step to the polypi and the infusoria, in which animal seems linked to vegetable life, and sensation to be lost.

AN ASCENDING SERIES.

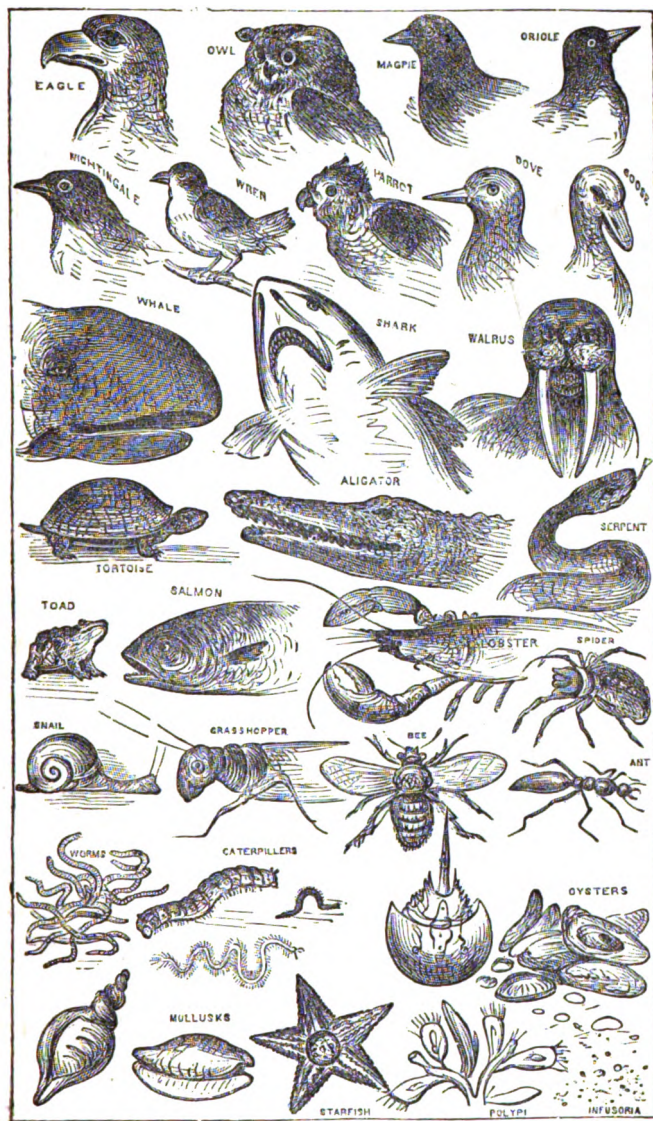
The relative perfection of an animal is in proportion to the number and development of its organs. There are animals whose whole body consists of a single organ, and these, consequently, bear the strongest possible resemblance to the plant cell; others, on the contrary, are composed of a great number of very distinct and dissimilar organs.

Setting aside the sponges, which, though generally classed in the animal kingdom, have so many of the characteristics of the vegetable, that it is a question among naturalists where they really belong, we commence our ascending series of animal life and intelligence with the infusoria.

1. INFUSORIA.—If water be poured upon some vegetable or animal substance and exposed for a few days to a summer temperature, either in the house or out of doors, a thin pellicle will be formed on the surface. A minute portion of this, placed in a drop of water and subjected to examination through a microscope, reveals a multitude of lively creatures of different sizes and shapes moving about with great celerity. A single drop may contain thousands of these animalcules; but scarcely any of them are visible to the naked eye. They are only from $\frac{1}{15000}$ to $\frac{1}{30000}$ part of a line in diameter, and are produced from eggs constantly present in the atmosphere and ready to be developed whenever the necessary conditions may be supplied. Here we have the lowest form of active animal existence known to man.



Figs. 806 to 834.



Figs. 835 to 866.

2. **POLYPI.**—The polypi (*zoophytes* of earlier authors) are gelatinous or membranaceous creatures of various forms, but generally tubular. Their structure is very simple. In general they have only a single aperture, which serves as a mouth, surrounded by from eight to twelve tentacula or feelers. With the latter they seize their prey and convey it to the mouth. Some of these animals increase by means of *ova*, but generally they are propagated by *gemmæ* or buds, which when fully developed are separated from the parent by a natural fissure. They are capable of locomotion, but generally remain attached to rocks or to the bottom of the sea. In appearance, they resemble certain plants, and one species is called the sea-nettle.

3. **RADIATA.**—Another step upward brings us among the radiata, of which the star-fish is an example. The animals of this class are all inhabitants of the sea, and are distinguished by a coriaceous or calcareous investment. They are very simply organized, but have two openings and an intestinal canal disposed in several convolutions, thus showing a decided advance beyond the preceding class.

4. **MOLLUSCA.**—Coming to the oysters, clams, and other shell-fish, we find an alimentary apparatus forming a distinct organ, with several convolutions, a liver, and a circulatory system, having for its center a heart with one ventricle or chamber, and containing a watery fluid. The rudiments of lungs in the form of gills or of pulmonary tubes are also present. To this class belongs the wonderful nautilus, the shell of which resembles a boat, and is used by the animal as such.*

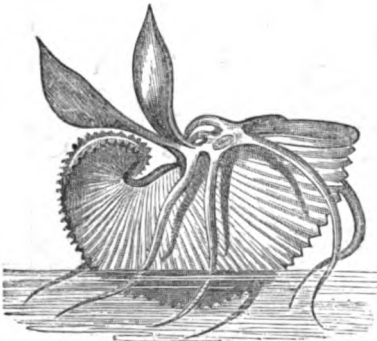


Fig. 867.—THE NAUTILUS.

* "When the sea is calm, groups of these animals may be seen navigating the surface of it, employing six of their tentacula as oars, and raising the

5. ANNULATA.—Some naturalists place this class, which includes the sea-worms, below the mollusca, but their organization is in some respects more complicated, and especially is this observable in the circulatory system.

6. INSECTA.—In the caterpillar we ascend into the insect world, in which we meet the brilliant butterfly, the industrious bee, the fiery hornet, the fierce dragon-fly, the blood-thirsty mosquito, and the destructive grasshopper. In this class there is a complexity of organization corresponding with a higher grade of intelligence than we find in any of the foregoing divisions. In addition to the vital, respiratory, circulatory, and alimentary organs, the perfectly developed insect has the sense of sight, with a complex visual organ. This curious apparatus is composed of an immense number of facets, which correspond with the nervous filaments which convey sensation to the brain. The organs of taste and hearing are not externally developed, but the animals seem capable of exercising these faculties in a manner corresponding to their necessities.

7. CRUSTACEA.—The lobster may be taken as the representative of this class. He belongs to the same subdivision with the crab, the shrimp, and the crayfish. The land crab is common in Jamaica. They are often seen in immense numbers traversing the island to the shore, where they deposit their eggs, returning to the mountains with their young. There is also the dog crab, which is said sometimes to climb trees. In intelligence these animals carry us one step above the insects, but we find as yet no proper brain or spinal cord.

8. PISCES.—The fishes belong to the *vertebrata*—animals with an interior osseous-jointed apparatus (skeleton) containing a brain and spinal cord, which is conveyed through the vertebral canal; a vascular system of arteries, veins, and absorbent vessels; and red blood. The skeleton of the fish, however, is imperfectly developed, the limbs are scarcely rudimentary, and their place is supplied by fins; the muscles are

two with expanded extremities as sails. Whenever the waves rise or danger threatens, the argonaut (*argonauta*, Linn.) withdraws its arms into its shell, contracts itself there, and, admitting the water, sinks to the bottom."—*Cuvier*.

white and not divided into distinct bundles; and the blood is cold—in other words, its temperature is regulated by that of the water in which the animal lives. The brain is very small.

9. **BATRACHIA**.—The development of what may properly be called limbs, though of a rude kind, raises the frog tribe above the fishes. There is also slightly more brain in proportion to the size of the animal in the former than in the latter.

10. **REPTILIA**.—Snakes, alligators, turtles, etc., are not agreeable animals, and we need merely to remark concerning them, that they show a higher degree of organization than the frog. Their muscular system is well developed and separated into bundles by membranous integuments. They are cold-blooded.

11. **CETACEA**.—Externally, the various members of the whale family resemble fishes, but they breathe through nasal apertures like land animals and are warm-blooded, showing in these particulars an organization superior to that of any of the classes heretofore mentioned. Their crania show room for but little brain in proportion to their immense bodies.

12. **AVES**.—In reaching the birds we seem to have made a huge stride upward. Here are seen four well-formed members, the anterior pair being wings and the posterior legs; a bill-formed mouth without teeth; a hard tongue; two nasal apertures; and a highly developed and powerful pulmonary apparatus. The brain is much larger in proportion to the size of the body than in the lower classes already described, and many of the species manifest great intelligence. In the affection of the dove, the imitative talents of the parrot, the tuneful gifts of the nightingale, the constructiveness of the oriole, the sagacity of the magpie, the sage look of the owl, and the lofty pride and fierce energy of the eagle, we find, on a lower plane, indications of a mentality allied to our own.

13. **MAMMALIA**.—We now come to the grand first class which comprehends the most perfect forms of animal life and is generally made to include man—the chief of all earthly creations; though some would place him in a distinct kingdom of nature to which the term animal should not apply.

The mammalia are distinguished by many marks from all

other classes. The most obvious characteristic, however, is that they bring forth their young alive and nourish them with their own milk. As we ascend through the different orders and species which compose this class, we find the physical organization to become more and more complex and beautiful. Between the coarse-grained, small-brained, ponderous, and stupid hippopotamus and the active and intelligent orang-outang and gorilla, we pass over many well-marked grades of physical and mental development. A broad and impassable gulf, with no intermediate stepping-stones, separates the latter from man. Our drawings tell the story well; but the crania of the quadrumana and of man now before us are still more conclusive evidence of the lack of that kinship between man and the monkey which some modern naturalists are so anxious to establish. The phrenologist and physiognomist will not be likely to fall into this absurd error.

We present our arrangement of the animal kingdom in an ascending and descending series as suggestive and instructive, but do not claim that it is by any means perfect. A more careful and extended examination than we have been able to give the subject may show that some of the species are misplaced in the order of precedence. It serves our purpose, however, and illustrates the grand truth that organization and function everywhere correspond and are indicated by unerring external signs.

A NEW FACIAL ANGLE.

The correspondence between the various degrees of mental development and a similar gradation in external forms is strikingly, though in a different way, illustrated by a new facial angle discovered some ten years ago in the course of a series of experiments made with a view of testing the value of an instrument for measuring heads invented by Mr. D. S. Holman, of Philadelphia. When in use, the instrument was attached to the orifice of each ear, and in front was secured in place by a slight pressure immediately beneath and between the nostrils, on the nasal spine. By means of a rotating semi-circle the extent of development, from the orifice of the ear, could be accurately measured in all directions. It became

necessary to determine whether the phrenological organs were always situated at the same angle of elevation before the value of the apparatus could be determined; and while making experiments to ascertain this, some singular results were obtained, among which was the following: It was found that a line drawn from the top of the nose, at the union of the nasal with the frontal bone, to the orifice of the ear would always make nearly the same angle with a line drawn from the latter place to the nasal spine in all men, and, what is still more singular, in most animals also, whatever the form of the face and nose.

The accompanying engravings illustrate the facial and cranial angles here described. Fig. 868 represents a human skull photographed from nature, showing the anatomical structure in general, and of the points referred to in this article—*a*, opening of the ear; *b*, nasal spine; *c*, suture uniting the nasal and frontal bones; *d*, cranial base line; *e*, facial base line. We regard these base lines originating in the opening of the ears as lying at the basis of important cranial, facial, and cerebral estimates and discoveries.

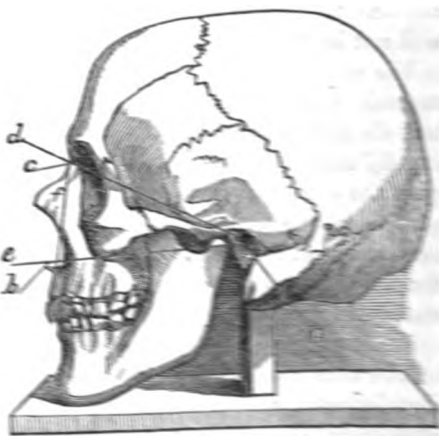


Fig. 868.—HUMAN SKULL.

The orifice of the ear, or a line drawn through the head from ear to ear, shows the location of the *verruilla oblongata*, which in men and all animals is the center, hub, or radial point of the brain. Any rule of measurement, therefore, which starts at this central point of all brains, should be hailed by all students of nature with hope, and anticipation of good results.

Fig. 869 shows the outline of four skulls drawn from nature,

on one plane, and then reduced from the life size by the photographic process directly on the block for engraving. The larger outline represents a human skull which had been sawed open longitudinally, beginning at the root of the nose. One half of the skull, like half an apple, was laid down on

the paper and marked out accurately. The length of this skull, from the root of the nose to the longest part of the back-head, is $7\frac{1}{2}$ inches. The other outlines of skulls—

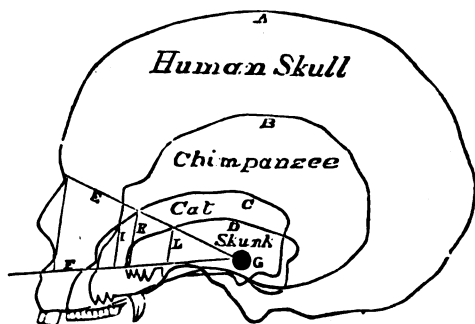


Fig. 869.—OUTLINE OF FOUR SKULLS.

the chimpanzee, the cat, and the skunk—were taken on the same paper, in like manner, the size of nature, and all reduced by the photographic process.

The line, F, drawn from the opening of the ear, G, to the spine of the nose (see *b*, fig. 868), we may call the facial base line, and it bears to the three outlines of the animal skulls the same relation that it does to the human skull. The cerebral base line, E, passing from the opening of the ear to the suture which unites the nasal and frontal bones, at the root of the nose, indicates the base of the anterior lobes of the brain, and nearly so that of the posterior lobes of the cerebrum. The remarkable feature of this whole matter is that these lines, E and F, form an angle with each other of about *thirty degrees*. We applied this measurement to scores of skulls, human and animal, in our collection, and the variation did not amount to more than one or two degrees. The best developed human skull in our possession showed but 29 degrees. We believe that when the brain is sufficiently developed forward and upward to give a vertical face, or a face in a line parallel with the spine, as in the better Caucasian types, any additional anterior extension of the brain would

tend to lessen the angle of the lines E and F, because the size of the face would not be increased in the ratio of the extra increase of the brain. The perpendicular lines, H, I, K, L, drawn from the root of the nose, or so as to form an equal angle with the lines E and F, indicate the vertical length of the nose, and 30° being the cranial angle, it enables us to determine the length of the brain from the ears forward.

Fig. 870 is an illustrative outline of three heads. The first is that of a first-class Caucasian, with a large intellectual brain and a face vertical and parallel to the line of the spine. The second is the outline of a man of lower type, with a good-sized back-head, the lower part of the face extending as far from the ear forward as that of the Caucasian; but the front or intellectual brain being smaller, the upper part of the face falls back and brings the line of the nose at a different angle from that of the Caucasian,

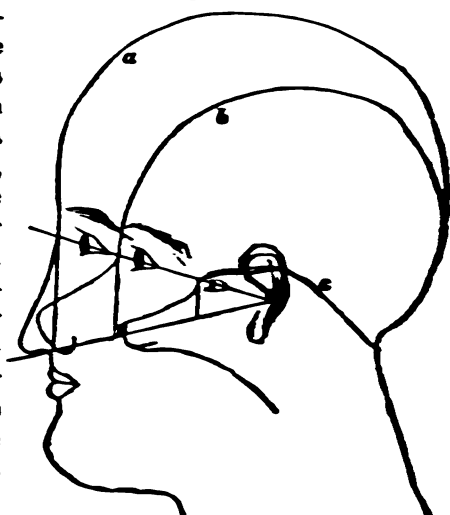


Fig. 870—Outline of Three Heads.

while the root of the nose comes on the same line as that of the other, but farther back. A vertical line from the root of the nose on this outline shows really a short nose, and the comparative smallness of the front brain. The third is the outline of an animal head, to illustrate the application of the rule.

In these illustrations, it will be observed that we have two fixed lines, the cranial base line (d, fig. 868) and the facial base line (e, fig. 868), which form the same angle in each case, and one variable line (H, I, K, L, fig. 869), indicating the vertical length of the nose, which grows continually shorter as we descend in the scale of intelligence.

The length of the nose, therefore, measuring *perpendicularly*, was found to be an indication of the distance of the top of the nose from the orifice of the ear. This fact will be found useful in the examination of pictures which do not give a side view. Thus, a long nose, with a narrow and low forehead, is indicative of memory, versatility, and smartness; if the forehead be high and broad, there will be originality and profundity also. If the nose is short and the forehead small, there will be but little power of intellect and no inclination for study. When the nose is short and the forehead wide and high, considerable pretension to intellect will be found, together with great inaccuracy. Such men can talk well, but fail in all those undertakings which require close calculation and attention to details.

INSTINCT AND REASON.

Closely connected with the subject of the preceding sections is that of instinct and reason. Hitherto metaphysicians have found it impossible to draw a clear dividing line between the two. The old systems of mental philosophy are too imperfect in their classification of the mental powers, too vague in their definitions, and too loose in their nomenclature to furnish any trustworthy basis for the investigation of the subject. The problem presented can be solved by Phrenology alone.

THE PHRENOLOGICAL VIEW.

Man has a brain, which may be likened to a three-story house with a sky-light, while the heads of animals may be compared to a one-story house with a basement and no sky-light. The instincts are manifested through the organs in the *base* of the brain—the organs *below* the lower line in fig. 871. Among the instincts we include the senses of sight, hearing, taste, smell, etc., also procreation, affection, love of young, self-defense, Destructiveness, appetite, Secretiveness, etc., which are common alike to man and animal. Indeed, there are no organs, senses, or qualities possessed by the lower animals which are not possessed by man. But it will be seen that man possesses organs and powers not enjoyed by animals,

and Phrenology enables us to draw the line of demarkation clearly between man and animals, and between instinct and reason. All animals, including reptiles, have appetites, love of young, sight, hearing, Destructiveness, Secretiveness, etc., and some animals, birds, and insects, such as beaver, bird, and bee, have Constructiveness, and they build dams, nests, and places in which to live and rear their young. But they exhibit no reason, no invention, no originality, for they make no improvements. They do their work to-day precisely as they did it a thousand years ago; while a man, through his reason, invention, mechanical talent, and originality combined,

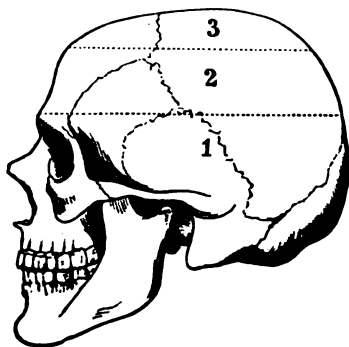


Fig. 871.—DIAGRAM.



Fig. 872.—GORILLA SKULL.

makes improvements. Compare a wigwam with a palace; the canoe with the steamship; the printing press of Franklin's day with the lightning power presses of the present time; the electric telegraph with the flag signal. Man is a progressive being, and his works are a series of improvements. The animal is stationary, and his works are always the same. In the nest of the bird and the cell of the bee we see no improvement. In building nests or honey-combs, or digging holes in the ground, the simple instincts are enough; but when it comes to inventing, building ships, factories, forts, castles, composing music, writing books, erecting telegraphs across continents and through lakes, rivers, and seas, it requires REASON, which is something more than instinct. It is through the organs in the second story of the human brain that these

results are attained. Between the first and second lines are located the organs of Causality, Comparison, Mirthfulness, Human Nature, Constructiveness, Ideality, Sublimity, and other faculties which are peculiarly human, and which are *above* the instincts, both in location and in function.

Rising still higher, we come to the third story—somewhat deficient in our drawing—in which the moral or spiritual organs are located, whose functions are *above* the intellect, and put us in relation with the spiritual. This group of organs separated from the propensities, the senses, and other organs which bind us to earth, are those which incline mankind to worship, to make him religious, and to give him a sense of immortality. These organs are possessed only by man. They are denied to *all* animals, and they place man above all other created beings.

Man has a three-fold nature, ANIMAL, INTELLECTUAL, and RELIGIOUS. He has the instincts of the animal, the reason of the man, and the spirituality of angels. He has the mortality of animal and man, and the immortality of saint and angel.



Fig. 873.

His organization determines his status in this world, if not in the world to come.

There are degrees of intelligence, as we have shown, among animals.



Fig. 874.

Some are more highly organized than others, and possess a higher order of the instincts, but even this does not reach so high as the reason. And it may be admitted that there are different degrees of development among the same class of animals, that one is shrewd and cunning, another stupid and easily trapped; one leads and another follows; and it may be inferred that there are organic reasons for this.

It is the same among men. There are millions who rise

but little above the animal plane. They eat, drink, and breed—little more! Of this class was Pope Alexander VI. (fig. 873.) Here the animal organs, it may be seen, comprise by far the largest portion of the brain. There is a good degree of perceptive intellect, but the region of reflection is very deficient, and that of spirituality almost entirely wanting. The third story is unbuilt. There is hardly enough above the line for a roof!* Compare this head with that of Zeno the Stoic (fig. 874), and mark the immense difference! The latter is the head not only of a thinker, but of a moralist. See how prominent the upper portion of the forehead is! and what a mass of brain must lie between the first and second lines! The spiritual region, though not so full as in some highly cultivated Christian men of the present day, is exceedingly well developed for a heathen philosopher. He was not deficient in Benevolence, Veneration, Firmness, or Conscientiousness. He, though denied the light of Christian truth, had “the windows opening toward heaven.”

The philosophers, the scientific investigators, and men of the world generally live in the instincts and in the intellect. They are skeptical, refuse to open their spiritual eyes, and look, through faith, out of the upper story of their minds, and hence they remain “doubting Thomases,” refusing to admit for truth anything which may not be proved to their lower senses of sight, smell, taste, touch, or hearing, not realizing that each and all of these senses may be easily deceived by the expert juggler. Spiritual truth is a principle, and is beyond the reach of the senses, as the attributes of the infinite God are above the comprehension of finite man. When these little great men come to see their spiritual ignorance, and the limited reach of their mere intellects, they will sink into utter insignificance. They should not be compared with those bright and shining lights whose prophetic and spiritual minds radiate great and heavenly truths.

* Alexander was, in truth, a scandal to the papal chair. From the earliest age he was disorderly and artful; and his life to the last was infamous. He is said to have secured his seat by bribing a number of the cardinals.

Man has Veneration, and he worships. All nations, races, and tribes of men worship something. Man is *naturally* a religious being. When enlightened by Christian teaching he worships God. When unenlightened, he "bows down to wood and stone," and worships images, idols, fire, water, sun, moon, stars, and other objects.

But animals have no Veneration, no sense of godliness, nor spiritual insight. Animals have no sense of justice, no hope of immortality, no benevolence or brotherly kindness. They have not the organs or nerves through which these emotions are expressed. Their brain is all below the lower line, as may be seen by looking at the skull of the gorilla, fig. 872. There is something in animals akin to kindness, and that is affection. But this is only that instinct which induces the horse and dog to love his master, and the mother monkey, bird, or snake to provide for its young. Reason and Religion and Benevolence are manifested through organs located higher up than the animal instinct and affections.



XXXIII.

ANIMAL HEADS.

"A beast that wants discourse of reason."—SHAKESPEARE.



Fig. 875.—DOMESTICATED DEER.

USEFUL lessons in Physiognomy and Phrenology (as we have shown in the last chapter) may be drawn from the animal kingdom; and it will not be unprofitable, we think, to pursue the subject a little further, especially as the scope of the preceding remarks was necessarily limited to particular aspects of it.

We have looked at the animal kingdom as a graduated series of creations, ascending step by step from the microscopic infusoria of a drop of stagnant water to lordly man. We have seen what marked differences there are in organization and in intelligence, but we have paid little attention to specific and individual differences. We will now call the reader's attention to the fact that animals differ not less in the kind than in the degree of their mental development, illustrating some of the more prominent points by means of correct drawings of animal heads.

BROAD HEADS VS. NARROW HEADS.

One of the most striking differences observable in a collection of animal heads or skulls is that some are broad and

others are narrow. We have shown (in Chapter XXII. and elsewhere) what these opposite conditions indicate in man. They point to similar characteristics in animals. The broad heads (like fig. 876) belong to the carnivorous tribes, and are always associated with a blood-thirsty



Fig. 876.—YOUNG LION.

disposition and a fierce, destructive energy. The same conformation of head may be observed in birds of prey, and the same dispositions attend it. Such heads, by



Fig. 877.—DEER.

virtue of the law of might, everywhere dominate over, despoil, and destroy the narrow heads. The narrow-headed deer (fig. 877) trembles and flies before the broad-headed cougar, or is pounced upon and devoured; the sheep is the victim of the wolf; and the blood of the dove stains the claws of the hawk. So it is even among men to a large extent. Prominent foreheads and lofty top-heads, where breadth of base is lacking, are hardly a match for the broad heads of the carnivora type. The narrow heads are most liable to go under. The grandest heads are both broad and high, and their owners are the true leaders, champions, and rulers of the world.

STRENGTH VS. CUNNING.

Though all carnivorous animals resemble each other in certain particulars, they differ widely among themselves in others. The lion and the fox may be cited as furnishing striking examples of this specific difference. In both there is large Destructiveness and a love of blood. Both prey upon the weaker and more timid races of animals; but while the one depends upon his courage and strength, and though fierce is never malignant nor treacherous, the other depends upon his cunning to attain his ends, and is the embodiment of selfishness and treachery.

The lion is proud, confident, and bold. "What majesty in his countenance!" Lavater says; "how far from mean, insidious cunning, ensnaring ferocity! It is ferocity of a different kind, of conscious strength and superiority.



Fig. 878.—LION.

In the region above the eyes appear *discretion* and *consideration*." Without indorsing Lavater's last remark, which may imply the reasoning power which belongs to man alone, we may say that there are indications of great intelligence as well as tremendous energy in his head.

In the fox, Secretiveness and Cautiousness are the predominant organs, and there is an unmistakable

expression of cunning in his face. We have never seen the skull of any animal which equals that of the fox for its development of Secretiveness. The following anecdotes illustrate this trait of character:



Fig. 879.—FOX.

1. "We knew," a late writer says, "a young domesticated fox who would gambol all day among the children and chickens as honestly as a respectable dog, but, though well fed with fresh meat, he would steal out of his kennel at night, when all was still, and kill several chickens, and having eaten one or two would return to his bed and look as honest in the morning as if nothing had happened."

2. "A farmer had discovered that a fox came along a beam

in the night to seize his poultry; so he sawed the end of the beam nearly through. In the night the fox fell into a place whence he could not escape, and there he was found in the morning as stiff as though he were lifeless. Taking him out of the building, the farmer threw him on the dunghill. In a short time Reynard opened his eyes, and seeing that all was safe, galloped away to the mountains, having shown more cunning than the man who entrapped him."

CATS AND THEIR CHARACTERISTICS.

If we seek illustrations of the fact, so often and in so many forms set forth in this work, that similarity of character and function in different species or individuals is always accompanied and indicated by similarity of external configuration, we may take the feline or cat family, embracing in its wide range the lion, the tiger, the leopard, the panther, the puma, the lynx, the wild cat, and the domestic cat as examples. In all the animals of this tribe we find similar developments and similar habits and dispositions. They all seek a living prey, feed on flesh, and, in their natural state, are dependent upon their own efforts for a supply of food. In character they are cunning, watchful, ferocious, and blood-thirsty. Destructiveness and Secretiveness are their leading organs. Observe the width of their heads from ear to ear! See how broad those



Fig. 880.—TIGER.

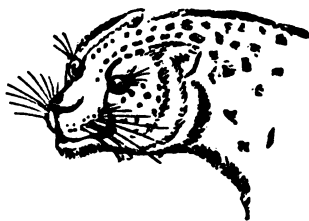


Fig. 881.—LEOPARD.

of the tiger and the leopard, and how low! There is no benevolence, kindness, or even mercy in such orania, and we look for it in vain in their characters. The lion, the noblest of the feline family, however, furnishes, as we have seen, a partial exception to some of these remarks.

THE GRASS EATERS.

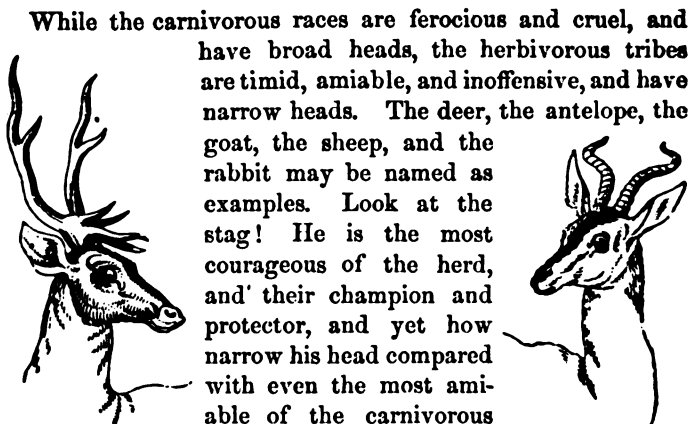


Fig. 882.—STAG.

Fig. 883.—ANTELOPE.

(fig. 883) has a still narrower head and a more gentle and timid disposition.

THE WILD AND THE CULTIVATED.

Culture does not create new faculties. It can not lift instinct into the sphere of reason, but it may develop the better class of existing faculties, calling into activity and prominence organs which in a wild or savage state are compara-

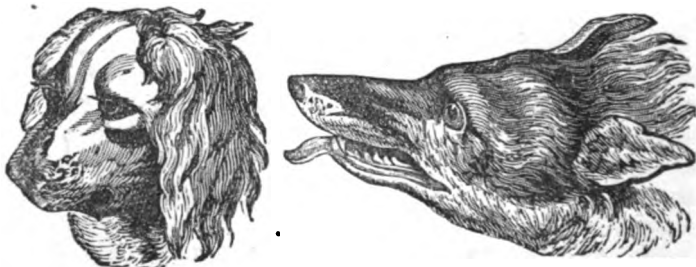


Fig. 884.—NEWFOUNDLAND Dog.

Fig. 885.—WILD Dog.

tively dormant. The most sagacious and affectionate Newfoundlander dog, after having received a finished canine education, is only a dog; yet how superior he is to the wild, uncultured dog! The two heads (figs. 884 and 885) speak for themselves.

In the wild dog, the great breadth between the ears indicates immense Destructiveness, while the flatness of the top of the head and the lowness of the forehead leave no room for kindness and little for intelligence. The Newfoundland, on the contrary, has the signs of intelligence and affection fully developed. Look at his half-human eyes and forehead! His better dog-nature has been brought out, and Destructiveness, Combativeness, and Secretiveness are held in abeyance. The wild dog is stupid, ferocious, and unsocial; the cultivated dog is intelligent, gentle, and friendly.

Among the highly cultivated dogs that of Great St. Bernard (fig. 886) and the shepherd's dog (fig. 887) may be mentioned. The first-named enjoys a world-wide reputation for



Fig. 886.—GREAT ST. BERNARD DOG.



Fig. 887.—SHEPHERD'S DOG.

activity, strength, and sagacity exercised in the service of man. In organization and character the St. Bernard or Alpine dog resembles the Newfoundland dog; but while the latter often renders us his valuable aid in the water, the former finds his congenial sphere of duty among the snowy passes of the mountains, where he has brought hope and succor to many an exhausted and bewildered traveler. How well his character corresponds with his splendid head and benignant expression!

The shepherd's dog, though moving in a more humble sphere, is not inferior to his companion in intelligence and usefulness. He doubtless inherits, like the ancient races of men, the results of many centuries of cultivation. His apti-

tade for certain duties connected with the care of sheep are most astonishing; and he is perhaps on the whole the most highly organized, as he certainly is the most useful, of all dogs.

SOME BAD HEADS.

It requires no great proficiency in Physiognomy and Phrenology to discover the signs of brutal ferocity and malignant



Fig. 32.—Wolf.



Fig. 33.—Blood-sucker.

treachery in these heads and countenances. No one of them has an amiable expression, or a cranium bespeaking either kindness or mercy. The dog (fig. 33) is not deficient in intelligence of a low order, but he has a look of relentless ferocity and blood-thirstiness that is terrible to behold. It is a wild

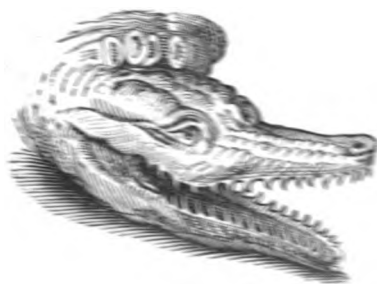


Fig. 34.—Alligator.



Fig. 35.—Dog.

hound of the race formerly used by the Squamish in the conquest of the Western Hemisphere. They have been trained as blood-hounds, and used for the purpose of hunting criminals

and fugitive slaves. The animal stands twenty-eight inches high at the shoulders, and is possessed of immense strength. The character of the wolf is well known, and is aptly expressed in our cut (fig. 888). The species represented is that known as the Mexican wolf. The hyena (fig. 891), another bad specimen of the canine series, has an expression which we like even less than the open-mouthed savagery of the wolf. The head is equally low and flat. In the alligator we come down to the reptile plane. How low and flat the head! how debased the abhorrent form! how terrific the expression! We will not dwell on it.

INDIVIDUAL DIFFERENCES.

In the foregoing examples we have called the reader's attention to resemblances and differences among animals of different species. There are individual differences also as among men. No two dogs, no two horses, no two cats are exactly alike.



Fig. 892.—A GENTLE HORSE.



Fig. 893.—A VICIOUS HORSE.

We observe these individual differences most perhaps in the horse, because they affect our relations with him most seriously. It is important, therefore, that we be able to detect at a glance, by outward signs, the inherent qualities which are desirable on the one hand, or to be avoided on the other. If we know that width between the eyes and prominence of those organs indicate mental activity and intelligence—aptness to learn; that roundness and elevation between and above

the eyes betokens mildness, amiability, and kindness; and that breadth between the ears means courage, energy, and strength of character, we shall hardly be induced to invest our money in a dull, weak, skittish, or vicious animal. The observant reader will hardly need to be told which of the foregoing heads is that of the intelligent, tractable, and gentle but spirited and courageous horse, and which that of the weak, skittish, irritable, untrustworthy animal. Examine the heads and expressions of animals for yourself, and you will find illustrations of the points thus briefly touched upon on every side. Physiognomy and Phrenology can be applied to all animals which have brains, and their indications may be relied upon with the same certainty as in the case of man.

BREAKING HORSES.

A knowledge of the foregoing facts should guide us in breaking or taming horses and other domestic animals. The Rareys—there are two or three of them—taught the world a most important lesson when they taught it the “power of kindness” and “self-control” in the management of horses, donkeys, zebras, and other animals. There have been famous lion-tamers and horse-breakers who were supposed to possess “special gifts” in the line of their calling, when the “great secret” was simply *“kindness, authority, and self-control.”* If one would control another, he must *first* control *himself*.



XXXIV.

COMPARATIVE PHYSIOGNOMY.

—“Thy face itself
Half mated with the royal stamp of man
And half o’ercome with beast.”—SHAKESPEARE.



Fig. 894.—THE DOG-MAN.

IN addition to his superior and distinctively human faculties and sentiments, man has all the propensities and instincts of the animal. The mental basis of both rests on the same lower nature. The grand difference lies in the superstructure—in the existence in the one case of the reasoning powers and the spiritual sentiments, and in their

absence in the other. The animal is simply an animal, and can be nothing more. Man is all that the animal is, with reason and spirituality superadded. Why, then, should there not be resemblances between men and animals? They have the senses of sight, hearing, taste, smell, and touch in common. Both have love of life and the instinct of self-preservation; both are capable of affection and of anger; both are cautious,

secretive, acquisitive, combative, and destructive in a greater or less degree; so if cunning predominate in a man, why should he not come to have a cunning, foxy look? or why should not courage and a consciousness of power give him a lion-like expression?

The ancient physiognomists laid great stress upon the real or fancied resemblances existing between men and animals, but their speculations are of little value. Modern writings on the same subject are in the main equally fanciful, and are calculated to amuse rather than instruct. We shall claim little more for *our* remarks in this chapter. If the reader shall be pleasantly entertained, the organ of Mirthfulness developed, and the upward curving lines at the corners of the mouth improved, we shall not have written in vain.

While admitting that we see little in Comparative Physiognomy, in its present rudimentary state, that promises any great degree of practical utility, we shall, however, insist that there must be some foundation in truth for the common belief, that animal resemblances may be traced among men and women, and that they have their value—little or great—as signs of character.

“What a goose!” Geese, it is generally understood, are made to be “plucked,” and our “goosey,” if he come from the rural districts to the cities, will be likely to share the fate of his feathered cousins. Ten to one, he will go “gabbling” about till, before he is aware that he is being “relieved,” he will “feather” somebody’s “nest”—not his own.

You would never think of calling the sharp-nosed, crafty, secretive character represented in fig. 898 a goose. No, indeed—and goosey people may well beware of him. He is a wily schemer, and prefers to gain his ends by cunning rather than by force. What the real fox is among poultry, the foxy counterfeiter, gambler, lottery dealer, mock-auctioneer, pocket-book dropper, and thief is among honest men. If he be a military man, look out for “flank movements” and midnight “surprises” where he commands. He will never willingly attack you in front.

Conscious strength when coupled with noble and generous

qualities disdains to conquer by cunning devices, and, lion-like, leaps upon the foe with a terrible and resistless impetuosity. Such a character may be ferocious and blood-thirsty,



Fig. 895.—Goose.



Fig. 896.—A GOOSEY.

but he is capable of magnanimity and generosity. He may crush the strong but spare the weak and defenseless. He takes counsel of his sagacity, but scorns to be merely cunning.

When we call one a "great bear," we hardly pay him a compliment. It may be inferred that he is somewhat rough, coarse, and uncouth—hardly a gentleman—but he may have



Fig. 897.—Fox.



Fig. 898.—FOXY.

his good qualities and be a useful member of society. One may be bearish and yet not unbearable. The ancients seem to have had considerable respect for the bear, in the feminine

gender at least, for we have from the Latin the not uncommon name of *Ursula*, a she-bear. A bearish person will be rough,



Fig. 899.—LION.



Fig. 900.—LEONINE.

blunt, uncouth, restless—walking back and forth, with no apparent object, like a bear in a cage—and when he speaks it is with a grunt or a growl, rather than in kindly and cultivated accents. We sometimes meet such persons—more frequently on shipboard—and are careful not to “come too near.”



Fig. 901.—BEAR.



Fig. 902.—A GREAT BEAR.

That some people are “hoggish” seems to be universally admitted, though a resemblance in physiognomical expression

as strong as that exhibited in our cuts, may not always be traced. The hog is a selfish, acquisitive, and, in a low sense, *inquisitive* animal. The hoggish man is greedy, makes a god of his belly, and inhospitably drives away not only the stran-



Fig. 903.—Hog.



Fig. 904.—HOGGISH.

ger, but even his own kin, because however well supplied his table, he has only enough for himself. "What a pig the fellow is!" Sure enough! Selfishness is natural and is inherited by all, while kindness is more generally the result of culture. Were children not *taught* to be generous and to divide, there would be far more selfishness in the world than there is.



Fig. 905.—Ass.



Fig. 906.—A DONKEY.

There are few, if any, who are not selfish and obstinate enough without additional incentives in this direction.

We read in one of Shakspeare's immortal comedies of a

certain personage who loudly lamented that no reporter was present to write him down an ass!* In our day, the reporter is generally at hand, and men who "make donkeys of themselves" often get "written down" in that way without even being consulted in the matter. There is little harm done, for if left alone they are sure to make the record themselves. Mulishness or obstinacy has ruined many a man. Where Self-Esteem or Firmness predominate over the intellect we may look for obstinacy; so where there is little culture and much ignorance there will be both pride and prejudice, bigotry, stupidity and superstition.

Dog types are numerous among men and women. One, like



Fig. 907.—A STRIKING RESEMBLANCE.

a Scotch terrier, is continually "smelling a rat." Another is like a bull-dog, combative, destructive, and tenacious; a third has the graceful gait and nervous activity of the greyhound. Some women are like poodles, and are never so happy as when being caressed, petted, and fondled; others resemble the gentle and graceful King Charles spaniel; and others still the

* "O that he were here to write me down an ass."

—*Much Ado About Nothing.*

setter or the pointer. Impressed with this idea, an artist, in whom, we venture to say, Ideality, Imitation, and Comparison are well developed, has drawn the accompanying doggish figures. They tell their own story so well that we forbear any further description. To those who can not see these "striking resemblances," all explanation would be entirely superfluous.

The dog, we may add, will take on something of the spirit of his master, will even come to slightly resemble him by associating constantly with him. It will be remembered that Hogarth was always



FIG. 908.—A BRACE OF BULL-DOGS.

painted with his dog, and it has been said that he ultimately came to resemble that animal; but we should say that his dog, by remaining almost constantly in the presence of his master, and endeavoring to understand his thoughts, words, and expressions, had really come, to a limited extent, to resemble the humorous artist, for we can not suppose that the man was lost in the dog, but we may suppose that the dog had taken on something of the man.

The cat tribe has its representatives among the fair sex. Many a Miss Puss watches slyly for the unsuspecting masculine mouse. She rubs her head coquettishly against you and *purrs* very lovingly. Look out for the claws at the ends of her soft fingers. Perhaps she has offended you, and comes to "make up." "There, don't be angry," she says, "I will be good; I will never do so again!" "Can you forgive her?" Of course you can; and of course she repeats the mischief, if it were only for the pleasure of again begging pardon and

being again forgiven. Pretty, graceful, fond, sly, cruel creatures are these cat-women. Commend us rather to the spaniel, or even the poodle type.

But there are masculine cats too. A late writer—a lady we venture to say—thus describes one, and, strange to say, he has a rat for a partner. A dance is going on. The narrator says:

“Mark those two yonder undergoing the formality of an introduction. Verily, a “rat and a cat!” Were they prince and princess of the blood-royal, our conclusion must be the same.



FIG. 909.—SPANIEL.



FIG. 910.—SCOTTISH TERRIER.

There is the rat and cat type, and the peculiar antipathies of the two become at once manifest as they meet. He, the cat, regards her, though unconsciously to himself, with ferocious intensity. There is no genuine softness in that look, but more the expression of the tiger about to spring upon his prey. His large, round, greenish eyes, capable of seeing so



Fig. 911.—GREYHOUNDS.

be worn by a man ! See, on the other hand, how the rat is typified in the woman's form and demeanor ! She turns this and that way without knowing what ails her, as if to escape her enemy. There is timidity expressed in the indecision of her small beady eye, and with voice a-squeak she steals mincingly about the room. Regard her when she eats. She will not take an honest appreciative bite of the re-

much with so little light, are full of feline rapacity. Mark the figure—the limbs sleek and supple ; notice the stealthy tread ; observe the breadth of the facial angle, the excessive thinness of the lips, deeply indented at the corners ; all, even to the tips of his ears, represent the dominance of the feline propensity. You must allow that very sparse apology for a mustache is more like a cat's smellers than anything that ought to

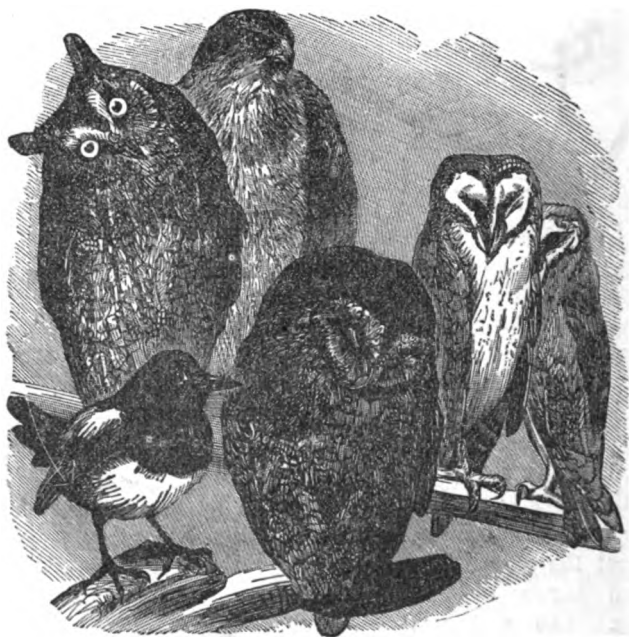


Fig. 912.—POINTERS.

freshment, but nibbles, nibbles with those little teeth set in that funnel jaw. We'll be bound she prowls about the cupboards at home, munching a little here and there, and finds no appetite for a good square meal."

In reply to the question "how can they help it?" we may state, our bodies, brains, and faces take their shape and are formed by the cultivation they receive, and the state of mind they are in. We may, therefore, take on, to some extent, the character of the goose, the fox, the lion, or the donkey by inattention to manly qualities, and by associating chiefly with the weak, the crafty, the mulish, or with beasts, birds, and reptiles.

"Birds of a feather flock together."



XXXV.

GRAPHOMANCY AND CHIROMANCY.

"The more I compare the different handwritings which pass under my observation, the more I am confirmed in the idea that they are so many expressions—so many emanations from the mind of the writer, by which you can judge of it.—CHATEAUBRIAND.



Fig. 913.



IND precedes, fashions, and directs the physical organization. It determines the shape of the head, the contours of the body, the expression of the countenance, the tones and modulations of the voice, the manner of walking, the mode of shaking hands, the gestures—in

INDIAN "TOKEN." short, the appearance and movements of the individual generally, including the shape of the fingers and their motions in forming the characters used in writing. It follows that the latter must differ in the handwriting of different persons, and be in some manner and degree signs of character. This general proposition will, we presume, be almost universally admitted. We, at least, shall not seek to avoid a conclusion so naturally and directly reached. Every general rule, however, has its exceptions—or, more correctly, there are minor laws which modify the action of all general laws, in some cases practically nullifying them. These minor laws or modifying conditions must be understood and taken into account, or the observer will be liable to fall into many errors. The admission that there are indications of character in chiromancy does not involve a claim to be able in all cases to discover and read them; and the physiognomist who

should set up such a claim, in the present state of our knowledge on this subject, would soon find himself involved in inextricable difficulties.

In order that the reader may get a clear idea of the real value of handwriting as an index of character, it will be necessary to consider—

- 1st. The principal styles of caligraphy in connection with the mental and bodily characteristics on which they depend, and which they, therefore normally indicate ;
- 2d. The accidental conditions which often modify or render nugatory the action of the general laws involved ; and,
- 3d. Various illustrative examples.

STYLES OF HANDWRITING.

The various styles of handwriting, so far as they are affected by the mental organization and can be taken as indicative of character, may be thus numbered and classified :

1. The Fine and Regular ;
2. The Irregular and Unsightly ;
3. The Rounded and Measured ;
4. The Angular and Pointed ;
5. The Large and Bold ;
6. The Small and Cramped or Weak ;
7. The Formal and Precise ;
8. The Ornate ;
9. The Plain and Legible ; and
10. The Dashing and Illegible.

1. THE FINE AND REGULAR. — Large Constructiveness, Form, and Order with a good degree of Ideality, and a calm, cool, equable temper are favorable to the formation of this style of handwriting ; and in a person habitually making use of it, we should look for good sense,



Fig. 914.—M. F. TUPPER.

industry, self-control, taste, neatness, and a mild, patient, even disposition, with little imagination or originality, and moderate executiveness. We shall seek in vain for perfect examples of this style among really great men. Fig. 914 is characteristic of the man.

2. **THE IRREGULAR AND UNSIGHTLY.**—In this style the letters are badly shaped, lack completeness, and manifest general disorder. The lines are usually as irregular as the letters and words, being jumbled together, and seldom keeping the proper horizontal direction. We infer from it a lack of Constructiveness and Order, and a want of harmony in the action of the

Horace Greeley.

Fig. 915.—HORACE GREELEY.

various faculties. There must be either abstraction and inattention, or indecision and unsteadiness, and perhaps all of them. There may be talent and energy, but we should expect much ill-directed effort. Mr. Greeley's handwriting combines with many of the characteristics of this style some also which belong to the Angular and Pointed.

3. **THE ROUNDED AND MEASURED.**—Here, as in the first class, large Constructiveness and large Order are indicated, but with more strength and deliberation. The individual to whom this hand is natural should possess clearness, coolness, steadiness, perseverance, patience, and mechanical skill. In disposition he is likely to be calm, resolute, and equable.

4. **THE ANGULAR AND POINTED.**—The characters in this style seem to be formed, as it were, by sudden jerks, and possess more force than grace. It may be more or less regular and beautiful, depending for these qualities upon the greater

Andrew Jackson

Fig. 916.—ANDREW JACKSON.

or less development of Constructiveness, Order, and Ideality, but it always has definiteness and directness. It indicates talent and energy. The writer may be rough and uncultivated, but he will be found to have great mental vigor and originality, and a strong will. He is likely to be impatient of restraint, independent, self-reliant, courageous, and steadfast.

5. **THE LARGE AND BOLD.**—This style is generally, but

not always, regular, and legible as well as strong. It indicates a mind more manly, broad, and strong than delicate or penetrating; a spirit firm, resolute, and determined, taking hold, without hesitation and without calculation, and forming many resolutions which are frequently more rash than wise; an independent, daring, courageous, but benevolent, philanthropic, and generous disposition; free without ostentation in prosperity, and patient, spirited, and inflexible in adversity. A person thus characterized is capable of undertaking very difficult, severe, and dangerous enterprises, seldom lacking the necessary power and will to execute them, if there be sufficient talent or genius for their conception.

6. **THE SMALL AND CRAMPED.**—In this style the letters appear to have been commenced with hesitation, as if there were doubts in the writer's mind of his ability, through a lack of strength or of resolution, to complete them. It seems to indicate weakness either of body or of mind, if not of both. Fearful impressions control a will without power to resist and neutralize their depressing influence—a spirit without intrinsic power, without resolution, and without ability, easily disconcerted and discouraged if hindered in the performance of anything, and even fearful in doing that which it has the power to begin. The disposition is reckless, though not bold; lazy, timid, shy, and irritable; seeing everywhere traps, ambushes, and nameless dangers. There is large Cautiousness, combined with small Hope and little executiveness.

7. **THE FORMAL AND PRECISE.**—Here the letters are formed and arranged as if by measurement. It is mechanically methodical. Constructiveness and Order are indicated, but there is no exhibition of Ideality. We infer that the mind of the writer is conventional, narrow, precise to a fault, and lacking in taste and imagination as well as in warmth and sensibility. The spirit is positive and exact, but usually contracted, and the tastes, customs, and inclinations few and circumscribed; yet there is a tendency to egotism, and too little susceptibility to the finer feelings and social relationships.

8. **THE ORNATE.**—This is written with excessive strokes and superfluous ornaments. This style is frequently seen among

young writing-masters of bad taste, who are given to brilliant and extravagant flourishes. Such writing, when not professional or a mere matter of education or imitation, denotes a full development of Constructiveness, Form, and Ideality, with less reflective intellect, and a light-hearted, buoyant, enterprising, and adventurous disposition. The individual to whom such a style of writing is natural, will be found to possess great activity of body and mind, to be impatient of inaction, always occupied, but often without results, beginning many things and finishing few. He will have more energy than persistence, and more hopefulness than foresight.

9. **THE PLAIN AND LEGIBLE.**—This style, though it may not always present the qualities of good writing, is nevertheless traced by a sure, calm, and careful hand, so that he who writes thus, cares more for clearness than for embellishment. It denotes reflective intellect, a firm will, prudence, and a serious, steadfast disposition. We should look to the writer of such a hand for well-directed and profitable labor in any sphere in which he might be placed. He would live for usefulness rather than for show, and if not brilliant or original, will be likely to benefit the world quite as much as many a more aspiring and highly gifted, but less industrious and painstaking person.



Fig. 917.—A. LINCOLN.

10. **THE DASHING AND ILLEGIBLE.**—In this kind of writing, the words seem to be thrown upon the paper with so much hastiness that the letters are scarcely formed, and indicate an intellect generally well developed, sometimes even illuminated by genius, but in every case under the control of a lively and fertile imagination. The spirit is turbulent, carried away by the force of an inspiration, often too exuberant, while the hand, striving to keep pace with the thought, finds itself incapable of expressing the ideas and sentiments with corresponding rapidity. The character is often lively, impatient, ambitious, violent, incapable of bearing contradiction, and hot in controversy; and in matters of affection, devotion, charity, and philanthropy it exhibits a like fervor and enthusiasm.

PRACTICAL SUGGESTIONS.

We claim nothing like absolute correctness in every point of the foregoing remarks on the indications of the various kinds of handwriting. We believe that they will be found to be more theoretically sound—in other words, that suggesting a person to trace his letters and words freely, uncontrolled by a conscious eye and uncontrolled by a too active organ



FIG. 112.—BEN. FRANKLIN.

of imitation, he will express something of his character in deed, and that his indications are as we have stated them. It does not follow that we and much less the inexperienced readers can tell every man's character by inspecting his handwriting. Various incidental conditions modifying our general rules, some of which have already been hinted at, must now be taken into consideration.*

1. Education.—Some persons continue to write through life substantially the hand they originally acquired by imitating the copies set before them by their teacher. If such



FIG. 113.—G. WASHINGTON.

handwriting express any character, it must be that of the teacher rather than the pupil. It tells us one thing of the

* In the preparation of the foregoing sections we have availed ourselves, so far as we deem them correct and appropriate, of the interesting remarks of Lepelletier de la Sarthe in his *Traité Complet de Physiognomonie*. They have been so greatly modified, however, that anything more than this general acknowledgment is impracticable.

latter, however, that is, that he has little character of his own to exhibit—at least, little originality, independence, or self-reliance. Most persons who write much, soon lose or greatly modify their school-boy caligraphy, though it may have a greater or less influence in the formation of the individual's distinctive handwriting, and must be taken into the account in our estimate of its value as a sign of character.

As a matter of education as well as of original differences of character, each nation has its peculiar general style of caligraphy, so that an experienced observer can tell a person's nationality by his style of penmanship, irrespective of any difference in their alphabet or language. The Englishman's handwriting is differ-

ent from that of the American; and the Frenchman's, the Ger-



Fig. 920.—ABBOTT LAWRENCE.

man's, the Italian's, the Spaniard's, etc., differs widely from both and from each other.

PROFESSIONAL HANDWRITING.—In all our cities and towns there is a large class of persons, including reporters, book-keepers, clerks, and copyists, who write in a style that may be called professional, and which though it does not entirely exclude variety and originality, tends to create a degree of sameness, and to constantly repress all eccentricities. Such writing can be at best only partially characteristic of the individual. It is rather an index of his business or profession than of his personal traits.



Fig. 921.—Z. TAYLOR.

HANDWRITING OF WOMEN.—In general, women adhere more closely than men to prescribed models, and there is great similarity in the style of the great mass of feminine writers. The remarks we have made in reference to the preceding classes will apply with still greater force to them. Such remarks, of course, are general, and many exceptions may be pointed out. Strong traits of character, whether in man or woman, will break over conventional rules.

IMITATION LARGE.—In some individuals Imitation is so large and active, that it seems easier for them to be “somebody else” than themselves. They assume any character they



FIG. 322.—FRANK PERCE.

choose, or any one that is presented for them to copy. Their handwriting is hardly twice alike. If they admire any particular style they at once copy it, but soon abandon it for a new fancy, or in imitation of that of a letter which they may be answering. Of course the chiromancy of such persons is of no value in Physiognomy beyond its use as a sign of dominant Imitation.

COMBINATIONS OF STYLES.—Leaving out of view the large



FIG. 323.—E. H. CHOPIN.

classes of exceptional cases which we have named, we have still subjects enough on which to exercise our skill. Here, though we shall meet with many difficulties, we shall be rewarded in the end with satisfactory results; but we must first learn to distinguish the different styles of handwriting and their indications, then we must study them in their combinations (for we seldom find them pure) and give to each element its due weight in our estimates of character. Observation and study



FIG. 324.—HENRY W. LONGFELLOW.

will elicit new facts and principles, and in time, perhaps, we may have a science, or at least a system, founded on handwriting, which may be called GRAPHOMANCY.

ILLUSTRATIVE EXAMPLES.

From several hundred autographs of noted men and women now before us, we select a few with which to illustrate the foregoing remarks. We attempt no classification, and leave the reader to draw his own inferences.

Benjamin Franklin expressed in his handwriting the vigor,

the breadth, the liberality, the independence, and the practical tendencies of his mind. His signature shows a combination of the qualities of our fifth and ninth classes. It is round, bold, plain, and legible.

George Washington's signature is large, bold, and round, the strokes being heavier and more dashing than those of Franklin. Its main characteristics are those of the fifth class, but it has some of the qualities of the fourth and the tenth.

Andrew Jackson wrote a strong, bold, angular hand, in every stroke of which may be traced his indomitable will and directness of purpose. His signature is underscored with a heavy straight line, drawn by a firm, steady hand.

Zachary Taylor's autograph is similar to that of Jackson, but somewhat less free and flowing. In striking contrast with both is that of

Frank Pierce, which is elegant, ornate, and dashing.

John Randolph wrote in the angular and pointed style, as did Thomas Jefferson and Patrick Henry.

Henry W. Longfellow furnishes us with an elegant autograph, free, rounded, backward sloping, and somewhat dashing, but very legible.

Lord Byron wrote an angular, dashing, irregular, illegible hand, indicative at the same time of genius and want of mental symmetry and self-control.

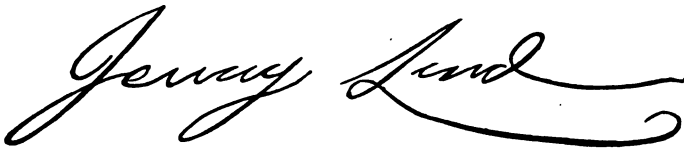


Fig. 925.—JENNY LIND.

Jenny Lind's autograph is large, bold, open, flowing, and pointed, and fitly symbolizes the power and compass of her melodious and most fascinating voice.

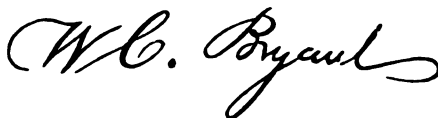


Abraham Lincoln's signature shows

Fig. 926.—THOMAS MOORE. a good example of the plain, legible, open style, with an approach to the angular.

Madame Octavia Walton Le Vert writes an elegant, regular Italian hand, somewhat ornate, but very beautiful.

Horace Greeley, as is generally known, writes a most irregular and illegible hand. Contrast it with the handsome, round, bold, regular, and legible caligraphy of the poet—



William Cullen

Fig. 927.—W. C. BRYANT.

Bryant. Both are men of great talent, but their organizations and minds differ as widely as their handwriting.

Edward Everett wrote in an elegant, measured style, in keeping with his character.

Edgar A. Poe's signature is bold, dashing, irregular, and full of originality.



Fig. 928.—EDGAR A. POE.

Lieut.-General U. S. Grant's handwriting is plain and angular; that of General Sherman, angular and dashing; and that of General McClellan, angular, but small and slightly cramped.

President Andrew Johnson's signature indicates the plain and legible style.

John G. Whittier writes in a bold, dashing, but irregular and uneven style.

Lord Palmerston's autograph shows a combination of styles, which makes it difficult to analyze, but it certainly has angularity and irregularity. It would, perhaps, be dashing, were it not a little cramped



or constrained.

Fig. 929.—WASHINGTON IRVING.

Washington Irving wrote in a small, uniform, but rather heavy, angular, legible style.

P. B. Shillaber (Mrs. Partington) writes in a facile and legible, but irregular style, the letters sloping both ways.

Abbott Lawrence signed his name in a handsome, round, bold, business-like style.

Daniel Webster's handwriting was bold,

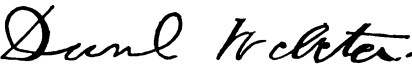


Fig. 930.—DANIEL WEBSTER.

strong, and legible; and George Bancroft's has similar characteristics, but, in his signature at least, is more dashing.

Henry Ward Beecher signs his name in a free, dashing, independent style, in which vigor, boldness, and originality are manifest.

Pauline Cushman's handwriting is large, bold, round, and masculine.

Fitz Greene Halleck's autograph is small, elegant, and delicate, but pointed, while Thomas Carlyle's chirography is as strong, as eccentric, and as nervous as his style, and as difficult to describe.



Fig. 931.—T. CARLYLE.

Thomas Moore's signature is small, round, and graceful; Thackeray's is also small and handsome, but more dashing; while Tupper's is elegant and measured, if not formal.

George Francis Train writes as he speaks, in a bold, free, "spread-eagle" style.

N. P. Willis writes in a small, but rather heavy, angular, even, firm style.



Fig. 932.—WM. LLOYD GARRISON.

Wm. Lloyd Garrison writes a firm, plain, legible hand, with some of the characteristics of the angular and pointed style, though the latter are not very evident in his signature.

CHIROMANCY OR PALMISTRY.

The art of chiromancy or divination by the hand has been practiced for ages; those who professed to be expert in it were supposed to be able to foretell the future history and to discover the natural peculiarities in disposition of persons from an examination of the lines of their hands. This practice or art is also termed "palmistry," as the palm of the hand is the part specially consulted by the diviner.

This subject has been examined and discussed at considerable length by M. Desbarrolles, Richard Beamish, and others in Europe, and we avail ourselves of the result of their labors in the following condensed statement of the system.

Chiromancy like physiology proposes to show the nature and amount of those impulses to which each individual is or may be subjected under the temptations offered by our social relations. As water falling continuously upon the stone in time makes an impression, so may the hand be presumed to receive impressions from or be in a measure molded by the constant action of the mind upon its plastic susceptibilities. In the form of the hand society recognizes certain relationships in life, and presupposes it an index of graduated intelli-

gence. We speak of the hard, rough palm of labor—of the soft, voluptuous hand of luxury—of the slender fingers of refinement; if then, in general, we distinguish certain peculiarities of disposition, of thought, of pursuit in the form of the hand, why may we not go further, and discover in the fully developed palm indications or premonitions of that course in life which predominant passion, intellect, or sentiment will shape for itself?

Observation has

shown that the lines of the palm are gradually enlarged and intensified by an undue exercise of the feelings and propensities ; while they are diminished very much if the feelings and passions are kept under proper control. We will now proceed, with the assistance of our diagrams, to describe the principal lines and lineaments of the hand.

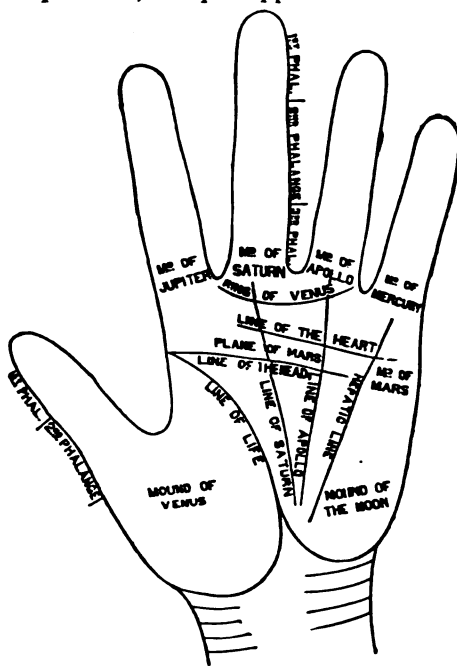


Fig. 933.—DIAGRAM A.

At the root of each finger, elevations, more or less distinct, are seen, to which the names *mound of Jupiter*, *mound of Saturn*, *mound of Apollo*, *mound of Mercury* are applied. (See diagram.) At the root of the thumb is usually a well-marked elevation which is named *mound of Venus*. The first or index finger is said to be under the influence of Jupiter, the king of the pagan deities; because from analogy it contains the indices of domination and command, and the elevation is therefore called the *mound of Jupiter*, which, when large, is said to indicate ambition and love of display. The middle finger is placed under the dominion of Saturn, the supposed executive of destiny or fatality.

The *third* or ring finger is presided over by Apollo, and is regarded as especially devoted to the artistic, the beautiful. The *little* finger claims Mercury as its patron, the graceful, wing-footed messenger of the gods. The elevation, more or less conspicuous, about midway between the wrist and the root of the *little* finger, is dedicated to Mars,

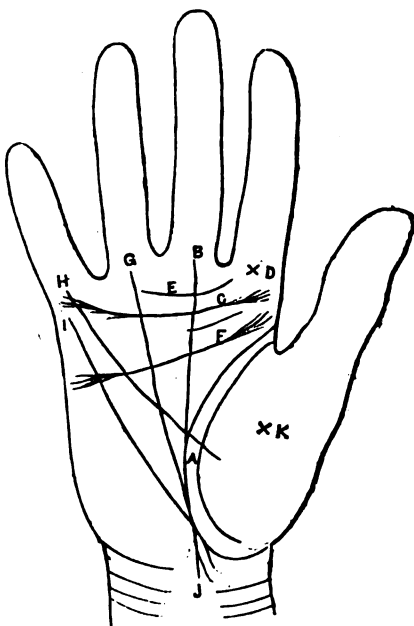


Fig. 234.—DIAGRAM B.

the heathen god of war; when large, it shows courage, force, resistance; very large, it indicates rudeness, violence, and cruelty; want of development indicates puerility and cowardice. The outer lowest portion of the palm is presided over by the moon, the type of caprice. A state of full development indicates a strong imagination, chastity, love of mystery, of quiet, loneliness, and meditation. Weak development of

this part manifests poverty of imagination and a tendency to the matter-of-fact in thought and statement. Prominence in the region which is regarded sacred to Venus, marks a love of beauty in form, of melody in music, of graceful movement, and the desire to afford pleasure through love and kindness. If deficiency exist here, these qualities will be lacking; but if the lower part of this mound be more prominent than the upper, there is an inclination to sensuality.

There are three principal lines in the palm, formed of course by the natural closing and opening of the hand, to which distinctive titles are given, and which are said to denote certain phases of character and future experience according to their physical manifestation. One of these, denominated the **LIVE OF THE HEART** (see diagram A), proceeds from the outer edge of the palm, and, usually inclining upward, ends either at the root of the first finger or the root of the second finger. When this line presents a healthy and uniform appearance, it is an indication of an affectionate and happy nature, the strength of attachment varying with the length of the line. For example, if this line crosses the entire palm, it marks an excess of tenderness, productive of exquisite happiness on the one hand, or of acute suffering on the other. When this line extends no farther than the second finger, the attachment will partake of the nature of sensuality. If it stops between the third and fourth fingers, the affection will assume a pleasant character being untroubled by passion or prejudice. Should this line present a broken or distorted appearance, it will indicate fickleness and inconsistency in attachment, contempt and even rudeness toward females. If the line of the heart be broken near the middle finger, it is supposed to involve infidelity; if between the middle and third finger, folly; if around the third finger, fatuity; if between the third and little finger, stupidity and blindness; if immediately opposite the little finger, avarice and ignorance. Should this line appear like a chain, or have small lines shooting from it, it becomes the index of instability in attachment.

A junction of this line with that of the **HEAD** shows that the heart is led by the head, and is significant of selfishness.

while if it be united with those of both the *head* and *life*, between the thumb and index finger, misfortune, physical and mental, is indicated. According to the brightness of color exhibited by the line of the heart, the strength of physical love is presumed to be proportioned. Branches from this line have their significance predicated upon the part of the palm whence they originate and the direction which they take. If this line be bifurcated and one branch ascends toward the index finger, it is a sign of happiness; if one branch be elevated toward the second finger and the other descend to the line of the head, there will be found a strong indication of self-deception and pecuniary losses. A hand in which the line of the heart is wanting, is one lacking sympathy, and denotes bad faith and premature death.

The LINE OF THE HEAD takes its rise from between the thumb and first finger. It is usually united at its origin with the line of life, from which it rapidly diverges. When quite straight and well developed, this line indicates sound judgment and clearness of understanding. These qualities will, however, be more or less active in correspondence with the development of the mound of Mars. Should this line be considerably extended and direct, it shows a strong disposition toward economy, which, if carried to excess, will lead to avarice. If much extended, and descending abruptly toward the mound of the Moon, it marks a longing for the means of gratifying the caprices of the imagination—a leaning toward prodigality.

A weak judgment is denoted where the line of the head descends to the lower outer region of the palm, imagination prevails and fills the mind with fancies. If this line runs quite low, so much so as to form a well-defined cross with the line running from the little finger toward the center of the wrist, which is called the "hepatic line," it shows a strong tendency to mystery. Should this line be directed up toward any of the fingers, its influence may be taken as unfavorable upon the qualities assigned to the root of the finger toward which it tends.

If it be pale and broad, weakness in intellect is indicated ;

if quite short, irresolution is denoted; if it appear like a chain, there will be a want of concentration. Its termination by a short defined line, like a bar, indicates injury to the throat or head. Round knots appearing on the line of the head are supposed to denote a tendency to murder, while red points predicate wounds on the head.

When this line separates into two branches, one going directly downward and the other toward the mound of the Moon, there is shown a disposition to deceive others and self—to play the hypocrite and liar.

It may be observed here that the indications shown by one hand are strengthened by corresponding signs in the other. When in one hand, therefore, the line of the head is broken into two parts, there is a presentment of mental derangement; but should the line be well formed in the other hand, the danger will be greatly diminished.

When this line is very short and deeply marked, and does not pass a perpendicular line drawn through the axis of the middle finger, it marks a malicious disposition and early death.

A cross in the middle of the line of the head denotes fatal injuries or sudden death. If a well-marked line proceed straight from this line to the mound of Mercury, it is taken as an omen of success in business; while if it terminate between the mounds of Apollo and Mercury, it shows success in art and science.

LINE OF LIFE.—This line, extending from the inner edge of the palm between the thumb and fore-finger, bounds the root of the thumb. "When well formed," says M. Desbarrolles, "of a soft color, and bounding entirely the thumb, it indicates a long and happy life." When pale and broad, it is the index of ill-health and a fretful disposition; and according to its length may be predicated life's duration. If double, it signifies strong vitativeness and vital energy (fig. 934).

Should the origin of this line appear to be in the mound of Jupiter, the tendency is to subordinate life to ambition, and the attainment of honors and position is probable. Lines arising from the line of life and running upward denote an aspiring mind and more or less elevation of character.

Should it be cut by numerous small lines, sickness and misfortune are imminent; should it present an irregular form, that is to say more marked in some places than in others, it indicates violence of temper and unbridled passion.

These are a few of the many appearances which these lines present; but enough for our purpose. Of course we do not indorse the prognostications which are assigned to them.

There are other lines of less importance to the diviner than those already mentioned. There are the *line of Saturn*, the *line of Apollo*, the *Hepatic line*, and the *ring of Venus*, which, with their branches, cross-lines, crosses, angles, etc., make up the physical indices of Chiromancy.

When the *line of Saturn* proceeds from the center of the palm, which is called the "plane of Mars," it indicates that success in life is to be attained by slow and continuous effort. When it proceeds from the wrist and ascends directly to the middle finger, it betokens considerable happiness; and should it penetrate even into the first joint of that finger, it shows a high destiny. Uncertainty with reference to success is indicated where this line is broken in its passage. Hands devoid of this line mark a life passive and insignificant.

The *line of Apollo*, otherwise known as the line of the sun, proceeds either from the line of life or from the region of the mound of the Moon and passes upward to the third finger. When clearly defined, it marks a love of art and distinction. Those who have this line will show strong love of art, at the least in their admiration for the ornamental and beautiful. Subdivision of this line into many small lines at its termination strengthens the desire for artistic effects. When this line rises from the line of the heart, and proceeding to the mound of Apollo divides there into three equally well-defined branches, it denotes great celebrity.

The *Hepatic line* or *line of the liver* when it proceeds from the wrist straight to the mound of Mercury and is clearly defined, indicates sound health, a good physiological condition generally, with an excellent memory and sterling probity. If it presents an irregular and tortuous appearance, it shows poor health, bilious difficulty, and questionable integrity.

The *ring of Venus*, which forms an arc of a circle between the first and fourth fingers, when strongly defined, manifests unrestrained sensuality. If double or triple, it is indicative of shameless licentiousness. The indications of this line are generally unfavorable to morality, except where instead of forming part of a circle it passes to the outer edge of the palm, when the significance is that the qualities attributed to that portion of the palm are strengthened in activity.

The other palm-marks which we have enumerated we will but slightly allude to.

Branches are small lines issuing from the principal lines. They generally indicate exuberance in the qualities applied to those lines from which they proceed.

Curved lines, and especially broken lines, indicate lack of continuity, spasmodic effort.

Cross lines usually betoken defects. On the mound of Jupiter they show a tendency to mysticism, pride, and self-will; on Saturn they indicate misfortune; on Apollo, vanity and folly; on Mercury, a lying and thievish disposition; on Mars, the probability of sudden death.

Branches from the principal lines tending upward toward the fingers are supposed to be favorable omens; while those which tend downward are regarded as unpropitious.

When the mounds or any of them are destitute of linear marks, the indication is favorable for tranquillity of life.

Crosses, generally, are unfavorable marks, particularly when irregular in formation. A cross on the mound of the Sun betokens hindrance in business and failure in art. A cross on Mercury manifests a tendency to robbery; on the plane of Mars, a combative disposition.

The *angles* which constitute the *triangle* formed by the junction or intersection of the line of the head, the line of life, and the hepatic line, are very significant. The angle at the vertex of this triangle, formed by the junction of the lines of the head and life, when sharp and well marked, indicates a good disposition and much elevation of character; when obtuse, it indicates dullness of intellect. The angle at the base, formed by the hepatic line and the line of life, if well and

clearly formed, is the index of sound health and amiability. Should it be obtuse or with a large opening, the indication is the reverse.

The remaining angle, formed by the hepatic line and the extremity of the line of the head, near the bottom of the mound of Mars, when well formed and of good color, augurs a long life, with intelligence and good-nature. If it be very acute, it betokens a malicious disposition. If obtuse, a sluggish nature and infidelity.

If the triangle itself be large, it shows a generous nature, largeness of mind, and nobleness of character. If it be small, it evinces littleness of mind and spirit.

A palm which exhibits many lines is the index of an anxious and disturbed mental life. Our second diagram is a tracing from life, which is regarded by the chiromantist as very favorably marked to reveal all the peculiar characteristics of the possessor.

We repeat, the claims put forth above are those advocated by distinguished observers, but we do not indorse them, and simply give them place as matters of curious information, and not as established signs of character. There is sufficient in Phrenology and Physiognomy to evidence character without reference to this system; but let every one read, observe, and judge for himself.

We think with the author of an article upon the subject of Chirognomy, in the *Anthropological Review* for October, 1865, that the hand as an index of racial peculiarities and distinctions is worthy of special consideration, but that those enthusiasts and observers who profess to have found in the hand certain indices of individual character and derivation, even to minute particulars, go too far, and base their statements upon too narrow a basis for strict science. More facts are needed. We have not yet the data which would warrant even a plausible hypothesis. We should first settle the question of the racial hand, and mark the distinctive features of the Caucasian, the Mongolian, the Negro, etc., and then we shall be the better prepared to descend into the details of individual specialty.

XXXVI.

EXERCISES IN EXPRESSION.

— To trace each passion's impress on the face—
Each mood's expression. — WILSON.



Fig. 385.—Tears.



So transient expressions, frequently repeated, finally imprint themselves in permanent lines upon the visage, they become not only interesting subjects of observation, but important aids to the physiognomist. If the exercise of mindfulness wreathes the lips with smiles and turns up

the corners of the mouth, we have but to exercise it habitually to give the mouth a half-smiling expression, even when the lips are at rest. In the same way sadness or gloom, if nursed or indulged in, deepens day by day the lines which characterize depression of spirits, till at last the smile itself, if it come at all, loses itself in the dominant expression of sorrow. It is so with all other expressions of passion or deep feeling. We have therefore, in even the most transitory workings of the features, trustworthy guides to a better knowledge of the more enduring facial signs of character.

To illustrate this fact, and to furnish the student with a series of interesting and useful exercises, we now proceed to present a collection of outlined faces after Le Firm and Chodowiecki, the drawings for which were originally made under the direction of Lavater. We shall leave them mainly to tell

their own story, making merely a few remarks to awaken the reader's interest and enlist his attention. If he would turn them to the best account, he must study them for himself and compare them with the living faces around him.



Fig. 936.—ASTONISHMENT.



Fig. 937.—CURIOSITY.

The expression of fig. 936 is that of attention excited by astonishment in a person of considerable intelligence. In fig. 937 the attention exhibited is the result of curiosity in an old lady who is fond of scandal and gossip. We may be sure she will give her neighbors the full benefit of any discoveries



Fig. 938.—SILLY WONDER.



Fig. 939.—CREDULITY.

she may make. Fig. 938 has an air of astonished stupidity. The face is of a low sensual type, and the head betokens a very moderate endowment of brain, and that mainly in the base of the skull. Fig. 939 has the attentive, credulous look of honest ignorance.

Figs. 940 and 941 form a striking contrast. In the first, we see a sensitive, refined, delicate girl overwhelmed with deep distress and bending like a reed before the blast of adversity. In the second, the complacency of a coarse, unscrupulous, low-



Fig. 940.—Distress.



Fig. 941.—Complacency.

minded sensualist—a hardened coquette—is manifested. The one awakens our sympathy, the other our disgust and aversion.

In 942 we have a strongly marked face in which we distinguish some of the elements of greatness, but the expression



Fig. 942.—Contempt.



Fig. 943.—Curiosity.

is one of contempt, not mingled with interest. True nobility of nature never wears such an expression.

Curiosity is the dominant expression in fig. 943, but it is the good-natured, interested curiosity of an affectionate and sympathizing old woman, and gives no offense.

Figs. 944 and 945, like fig. 942, express contempt, but in each it is modified by other feelings and by differences in temperament and general character. Fig. 944 represents a strong, irascible character, in whom anger gives a terrible force to



Fig. 944.
CONTEMPT AND
ANGER.

contempt. His companion is furious, but weak. He rages, but is impotent. We heed neither his fury nor his contempt. The latter is rather assumed than real.

Fig. 946 is a child-face, with an intent, but not strongly interested look. There



Fig. 945.—FURY AND CONTEMPT.

is too little energy of character for much earnestness in anything. What a contrast between this and the accompanying head (fig. 947)! In the latter, the attention is profound and concentrated, and the character is a terribly energetic one, and full of destructive violence. See how the eyebrows are drawn



Fig. 946.—ATTENTION.

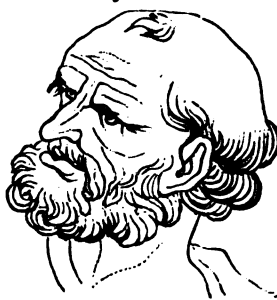


Fig. 947.—PROFOUND ATTENTION.

down in the effort at close scrutiny! His view is concentrated on a single object. He will know all about that object, so far at least as the sense of sight can inform him. His companion will see much in a careless cursory way, and will be but little wiser for all his seeing. There are many such persons in the world and they generally have widely-opened eyes.

The next two faces (figs. 948 and 949) furnish us with contrasts of another kind. In the first there is a thoughtful sadness. Some sorrowful memory is at work in a mind capable of both feeling and reflection. In the second, some shallow



Fig. 948.—SADNESS.



Fig. 949.—SILLY MIRTH.

pleasure fills the present moment in a mind incapable of receiving any deep impression and careless alike of the past and of the future.

We next observe (fig. 950) a look of eagerness and triumph on the face of an artful, intriguing woman—a designing co-



Fig. 950.—TRIUMPH.



Fig. 951.—DESIRE.

quette. In the accompanying figure (fig. 951), the eagerness is that of desire on a voluptuous and good-naturedly simple face. It is doubtless intended for a negro head, but is badly drawn. The lips and nose are those of the African, but the chin as well as the general form of the head and face are incorrect. As a study in expression it is good.

In fig. 952 there are indications of thoughtful attention and reflection with a shade of seriousness, if not of sorrow. Fig. 953 has a silly but bold and impudent stare, which could find a place on no face but that of an ignorant, low-bred person.



Fig. 952.—SERIOUS ATTENTION.



Fig. 953.—IMPUDENCE.

Desire and hope give a look of eager attention to fig. 954. There is a stretching forward of the head as if to meet the desired and hoped-for object, and a parting of the lips as in active and ardent love. More expression than is here represented can hardly be put into a few simple outlines. We could



find in the sketch a subject for a love-poem or the germs of a romance. Terror, as expressed in the face of a weak and timid character, may be seen in fig. 958. There is little action, because all the faculties are paralyzed. She can neither fly nor resist—can not even give the alarm which might bring some more courageous person to her assistance. Had the artist understood Phrenology, he would have given less breadth to the head immediately above and behind the ears. No development of Cautiousness can produce such fearfulness in one not deficient in Combaticiveness and Destructiveness.

find in the sketch a subject for a love-poem or the germs of a romance. Terror, as expressed in the face of a weak and timid character, may be seen in fig. 958. There is little action, because all the faculties are paralyzed. She can neither



Fig. 955.—TERROR.

Grief, deep and enduring, but serene and exalted, is exhibited in fig. 956. The character, so far as these simple outlines can express it, is a marked and admirable one, approaching sublimity in its sorrow. Very different is that represented in



Fig. 956.—GRIEF.



Fig. 957.—DESPAIR.

the next drawing (fig. 957). Here we have a sort of theatric expression of frenzy and despair, without grandeur or exaltation. It awakens little sympathy, because we perceive that it has no depth, and, if real, is a merely transitory outburst



Fig. 958.—ATTENTION AND DESIRE.



Fig. 959.—TERROR AND VEXATION.

Attention and interest with desire or love are indicated in fig. 958. It is a somewhat voluptuous but not a bad face. In fig. 959 terror is putting a guilty woman to flight; and there is mingled with the fear an expression of vexation, as if some stolen pleasure had been rudely interrupted by an unwelcome and avenging visitor.

Disappointed love seems to give the dominant expression to fig. 960. Fig. 961 presents another example of fear and terror, but in this case there is less mingling of any other feeling, and the whole gives the impression of weakness rather



Fig. 960.—DISAPPOINTED LOVE.



Fig. 961.—FEAR.

than guilt. We may imagine this person screaming childishly. Fig. 962 is mute with terror mingled with astonishment. Rage mingles with fear and pain in fig. 963; but the passion is that of weakness rather than of strength. A character like the one here represented has neither the courage to



Fig. 962.—TERROR AND ASTONISHMENT.



Fig. 963.—RAGE AND FEAR.

face the danger which menaces him nor the power to make his anger felt. He gnashes his teeth in impotent rage.

In the next figure, which is from Sir Charles Bell's "Anatomy of Expression," the fear is mingled with wonder, and the

imagination is busy with some distant but approaching object of terror.

Fear is an essentially mean feeling, and there can be no dignity in its expression. The eyeball is uncovered, the eyes stare wildly, the action of the lungs is disturbed, and there is a convulsive gasping for breath, with an inflation of the nostril, a dropping of the jaw, and a trembling of the lips. The



Fig. 964.—WONDER AND TERROR.

cheeks are hollow, the aspect pale, and the hair lifted by the creeping of the skin and the action of the *occipito-frontalis* muscle stands erect. As the object of fear approaches, he trembles, turns pale, has a cold sweat on his face, and in proportion as the imagination has less room to range in, and the danger is more distinctly visible, the expression partakes more of bodily pain. The scream of fear is heard, the eyes start forward, the lips are drawn wide, the hands are clenched, and the expression strictly animal and indicative of such fear as is common to brutes. No wonder that fear, in a man, is so despised and courage so honored, the world over.

EXPRESSION IN ANIMALS.

Spitefulness and envy are almost as plainly expressed in fig. 965 as they could be on the human face; while fig. 966 indicates a calm, collected, and watchful but courageous disposition, more inclined to bite than to bark or growl.



Fig. 965.—SPITEFULNESS.

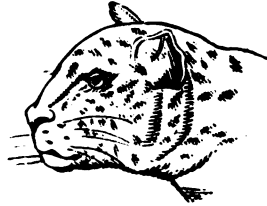


Fig. 966.—WATCHFULNESS.

Fig. 967 is pacific, timid, and watchful, and fig. 967 sly, artful, eager, blood-thirsty, and intent upon some helpless victim. Though the faces of animals have less mobility than that of man, and are not furnished with muscles devoted exclusively to the purposes of expression, yet within the range



Fig. 967.—TIMIDITY.



Fig. 968.—EAGERNESS.

of the faculties or propensities proper to their kind, they are capable of very energetic if not varied movements corresponding with the action of their dominant instincts. Desire, rage, jealousy, fear, and cunning show their workings on the animal physiognomy as surely if not as clearly as on the "human face divine," where the nobler and loftier emotions should alone be habitually exhibited.



XXXVII.

THE SECRET OF BEAUTY.

"Beauty or strength casketed in a rounded, complete, and admirable physique, free from excess or deficiency of proportions, stands among the highest ambitions of the woman or the man. The admiration we bestow upon a perfect form, when by chance we meet with one, is a feeling akin to worship—one in which the head has no part or prerogative. We reverence instinctively the largeness of grace, the perfection of motion, life, and capability of which we perceive that our nature is susceptible."—
LAYS ILLUSTRATED.



FIG. 38.—GAY AND BEAUTY.

THE desire for completeness and completeness of form and face is universal. "Am I engaging?" is the incessant but often unexpressed question of the woman's bosom: "Am I commanding?" the unexpressed aspiration of the boy. Beauty is power! We all acknowledge its sway—we almost worship it! It rules alike in court and in camp: in the drawing-room and in the street: in the city and in the forest: among civilized men and in the wigwags of the savage. It nurtures the

very civilization: it subjects to its domination the ruler of a hundred barons: it renders base what even wisdom's golden key can not unlock: it charms wild savages and kingdoms and human hearts! And what is it? A something unattainable

and undefinable? A fairy gift? A grand prize in a lottery in which a few are the lucky holders of fortunate numbers and the many inevitably draw blanks? This is the popular notion, but it is not the doctrine of this book, as the reader will have already perceived.

If form corresponds with and indicates character, it must change with the latter, and be, like that, measurably under our control. If the soul builds up, molds, and re-molds the body, it must do it in accordance with its own organization and to suit its changing disposition and wants.

Physical comeliness, then, may be acquired (as well as inherited) like health, or good manners, or correct morals. It is no more difficult to become beautiful than to become good—in fact, physical beauty is closely allied to moral beauty. With age, our characters harden like our bones, and improvement becomes more and more difficult, but never, by any means, impossible. Even the matured physical organization is susceptible of almost unlimited modification; though changes are more easily wrought and rapid during youth.

WHAT IS BEAUTY?

“Beauty,” the author of “Hints Toward Physical Perfection” truly says, “whether in plants and animals or in men and women, is the grand external sign of goodness of constitution and integrity of function.”* It must be understood, however, that the term “goodness” is used in its broadest signification, and when applied to the human being implies—1. Physical goodness or health; 2. Intellectual goodness, strength, and balance of mind; and 3. Moral goodness, or the development and ascendancy of the spiritual nature. This relation was well understood by the ancient Greeks, who placed beauty next to virtue and made it an object of worship.

* Hints Toward Physical Perfection : or the Philosophy of Human Beauty ; showing how to Acquire and Retain Bodily Symmetry, Health, and Vigor, Secure Long Life, and Avoid the Infirmities and Deformities of Age. By D. H. Jacques. New York : Fowler and Wells. 1866. 1 vol., 12mo. Illustrated. Cloth, gilt, \$1 75.

STYLES OF BEAUTY.

Very narrow ideas prevail in reference to personal beauty, and greatly hinder those who entertain them from arriving at correct conclusions on the subject.

Most people have a *beau-ideal*—a particular style of face and figure which they call beautiful, and nothing which does not conform to their particular standard is honored with that title. But this *beau-ideal* is merely one of the types of beauty, and that not generally the highest—in fact, the style of face that many admire is not beautiful at all, and can properly lay claim to merely a doll-like *prettiness*. People who admire such faces can not appreciate true beauty. A face with *character* in it they might pronounce “good looking” or “interesting,” but would not admit to be beautiful.

During a walk up Broadway, any fine afternoon, we are sure to meet at least a score of beautiful women—beautiful according to a high standard, too—but there is likely to be little resemblance between any two of them, and they will represent perhaps half a dozen distinct styles of beauty. In all, however, may be seen the signs of physical health, mental development, moral goodness, and active affections. These are essentials. Take away any one of them, and the person falls short, to that extent, of being beautiful, whatever may be the general form of the face. But one may be plump and round, another tall and elegant, and a third slight and graceful; and yet all be truly beautiful. In one the complexion may be fair—the lily and the rose sweetly blended—and the hair blonde; another may have the peachy bloom and gold-tinged auburn hair so much admired by poets and artists; while a third may throw the shadow of her raven tresses over the warm glow of olive-tinted cheeks. In one, the face may be round; in the next, oval; and in a third, pyriform; but in all there must necessarily be the large, clear, eloquent eyes; the shapely nose, indicative of developed faculties, culture, and taste; the full lips, which speak of sweetness of temper, warmth of affection, and womanly dignity; and the well-formed and ample but not heavy chin, which betokens an active circulation and a warm, loving heart.

But how can the graces of face and form which constitute true beauty be acquired by those who have them not? This is the practical question. “Tell us,” the reader is ready to say,

“HOW TO BE BEAUTIFUL.”

The answer may be very brief: *By acquiring those internal qualities of which beauty is the external sign.* Going a little into detail, however, we may, in explanation, say further:

1. You must, if you do not already possess it, acquire good physical health. Without this there can be no complete and satisfactory personal attractiveness. It is a perverted taste which admires a pale, sickly, sentimental look. Any functional derangement manifests itself at once externally. A dyspeptic stomach or a diseased liver records its condition on face and form in characters which can not be misunderstood. There must be a good digestion, to nourish and give the proper fullness to the frame; an active circulation, to convey the nutritive particles to every part and carry off the effete matter from the system; good lungs and full breathing, to oxygenize and thereby vitalize the blood (for it is oxygen that glows on the lip and blushes on the cheek), in short, there must be complete organic and functional integrity.

2. But mere physical health, though one of its essential elements, is not of itself true beauty. There must be intellectual culture. Shining tresses, rose-tinted cheeks, and a doll-like prettiness may be consistent with an inane or shallow mind, but no face through which active intelligence does not look forth can justly claim to be, in any strict sense, beautiful. Only persons of a low order of development can be permanently pleased with it. The would-be belle, therefore, who neglects the cultivation of her mind for the mere adornment of her person, will learn, sooner or later, that the most magnificently embellished shrine, without the manifest presence of a presiding divinity, will attract few real worshipers. There can be no true or satisfactory beauty in the human face without cultivated intelligence.

3. But there will still be something lacking. Man is a social

and a spiritual being. The heart must be warmed and the moral nature awakened before the highest order of beauty can be attained.

"Goodness of heart and purity of life," to quote again from "Physical Perfection," "co-operate with an expanded chest, wholesome air, copious breathing, and out-door exercise, in imparting to the fair cheek the coveted roseate tinge. Quiet, happiness, ease, and freedom from care are essential auxiliaries. Violent passions, mental or physical suffering, care and anxiety depress and bleach the cheek, and give a peculiarly haggard expression to the countenance. Whatever, then, is favorable to goodness, happiness, and ease is, in the same degree, favorable to health and beauty."

Here, briefly stated, are some of the general principles which lie at the basis of the art and science of beauty. Those who desire to see the theory more fully stated (and at the same time proved and illustrated), may consult the interesting work just quoted. A few extracts from it may appropriately close this chapter.

THE RATIONALE OF PHYSICAL CHANGES.

"Within certain limits, the nervous fluid or vital force strengthens and develops any part of the body or brain in proportion as it is brought to bear upon it. Its currents are controlled in two ways—directly, by a mere act of the mind, and indirectly, by the exercise, whether voluntary or involuntary, of the part to be developed. Study and reflection summon it to the forehead, the lobes of which gradually protrude; the exercise of the moral sentiments calls it to the coronal region, where it elevates insensibly, but certainly, the cranial arch; the lower faculties make use of it to feed and develop the basilar organs and to enlarge the jaws and abdomen. The special exercise of the arm induces a stronger tendency of the vital currents to that organ; the process of waste and renovation is quickened; and if the exercise be regular and not excessive, more particles are deposited than are carried off, and the arm is strengthened and increased in size. It is for this reason that the right arm and hand are

larger and stronger than the left. By allowing the right arm and hand to fall into comparative disuse and transferring their functions to the left arm and hand, the latter may be increased and strengthened while the former will shrink and grow weaker, till the relative size and strength of the two opposite sides are reversed."

EFFECTS OF INTELLECTUAL CULTURE.

"One of the most striking effects of intellectual culture on configuration may be observed in the gradual change which takes place in the outlines presented in a front view of the head and face. The expansion of the forehead and the superior and more intellectual portions of the face, and the relative if not absolute diminution of the lower parts, produce a marked departure from the circular, which is a low order of form, and an approach, more or less near, to the perfect pyri-form outline. This alone is a great gain in the direction of beauty; for nothing is more repugnant to correct taste than rotundity of form and bullet-headedness in a man or a woman, significant as such a conformation is of predominant animality.

LOVE, AS A COSMETIC.

"This passion is Nature's grand cosmetic. It has power to transfigure every form in which it is truly incarnate. Homely indeed must be the face which is not rendered pleasing by its influence. It gives roundness to the form, fullness to the bosom, grace to the movements, light to the eye, sweetness to the mouth, color to the cheek, and animation to the whole figure. Every organ of the body seems imbued by it with new life, and every function to be rendered more efficient. This fine spiritual stimulus is in the highest degree favorable to health, and thus indirectly, as well as by direct nervous influence, favoring the development of beauty. To the face of many a pale-cheeked girl have 'three sweet words' brought the rosy hue of health and beauty. The betrothed, in that beautiful Irish song, 'The Welcome,' says:

*Light is my heart since the day we were plighted,
Red is my cheek that they told me was blighted.*

"Love is not less promotive of manly than of womanly beauty. It makes one 'twice a man,' and equal to anything that man may do or dare. It makes him strong and brave as well as gentle and tender, gives firmness to his figure, grace to his carriage, and character to his face."

SPIRITUAL BEAUTY.

"The religious sentiments, which, when proportionately developed and active, form the grand unitary and harmonizing passion of the soul, have undoubtedly a powerful influence in modifying physical configuration. Veneration, while it gives a sublime altitude to the coronal arch of the cranium, has a similarly elevating influence upon the features. Wherever the spiritual nature of man has been harmoniously developed, there will be found a higher tone of organization and a purer type of face, together with a sweet radiation of life—a subtle, penetrating, and indescribable charm which attracts all hearts."

A SWEET TEMPER ESSENTIAL.

"And with the rest the affections must be cultivated. A sweet temper and loving moods are in the highest degree friendly to health and beauty. A cross, ill-natured, unloving child can not be beautiful. That temper and disposition make their characteristic marks upon face and form is especially observable in childhood, when the features and configuration are so readily modified. As the crowning excellence, then, cultivate a gentle, tender, loving, hopeful, trusting spirit in your children; for goodness and beauty ever go hand in hand."

BEAUTY BEGETS BEAUTY.

"In the light of this fact, the fine arts assume a new degree of importance and utility. They not only minister immediately and directly to our inherent love of the beautiful, but serve us still more effectually by increasing continually the available fund of beauty in ourselves and our children. The beauty of the pictures and statues which adorn the homes of wealth and taste, reflected upon the faces of their inmates, gradually transfigures them. Loving wife and mother, if you

would be beautiful, and see beautiful children grow up around you, adorn your rooms with beautiful objects. If you can not get paintings and statues, you may at least have engravings, statuettes, and medallions, as they are within the reach of every one above the grade of absolute poverty."

HOW TO IMPROVE THE COMPLEXION.

"The beauty of the complexion, depending upon the efficient performance of the vital functions of nutrition, circulation, and excretion, is generally in proportion to the integrity and vigor of the vital system. The complexion, then, is improved by increasing vitality, and injured by depressing it. To promote vitality (and through it a clear complexion), expand the chest by deep, full breathing, either in the open air or in well-ventilated rooms, and by other appropriate movements (for which see 'Physical Perfection,' Chapter XII.); keep the pores of the skin open by bathing and gentle friction; avoid hot bread and all very greasy or high-seasoned food, rich pies and cakes, stimulants, hot or heating drinks, bad air (and, if possible, stove-heated rooms), excessive heat and cold, dissipation, and late hours."

BEAUTY OF AGE.

"The most beautiful face that ever was, Alexander Smith says, is made yet more beautiful when there is laid upon it the reverence of silver hairs. Men and women make their own beauty or their own ugliness. Sir Edward Bulwer Lytton speaks in one of his novels of a man 'who was uglier than he had any business to be;' and, if we could but read it, every human being carries his life in his face, and is good-looking or the reverse as that life has been good or evil. On our features the fine chisels of thought and emotion are eternally at work. Beauty is not the monopoly of blooming young men and white-and-pink maids. There is a slow-growing beauty which only comes to perfection in old age. Grace belongs to no period of life, and goodness improves the longer it exists. I have seen sweeter smiles on a lip of seventy than I ever saw on a lip of seventeen. There is the beauty of

youth, and there is also the beauty of holiness—a beauty much more seldom met; and more frequently found in the arm-chair by the fire, with grandchildren around its knee, than in the ball-room or the promenade. Husband and wife who have fought the world side by side, who have made common stock of joy or sorrow, and aged together, are not unfrequently found curiously alike in personal appearance and in pitch and tone of voice—just as twin pebbles on the beach, exposed to the same tidal influences, are each other's *aliter ego*. *He* has gained a feminine something which brings his manhood into full relief. *She* has gained a masculine something which acts as a foil to her womanhood. Beautiful are they in life, those pale winter roses, and in death they will not be divided. When death comes, he will not pluck one, but both."

Fair reader, and reader not so fair—maiden and youth—"the Secret of Beauty" is a secret no longer. Improve your physical condition, educate your intellect, expand and purify your affections, cultivate your spiritual nature—be healthy, be wise, be loving, be "spiritually-minded"—be BEAUTIFUL!



XXXVIII.

CHILDHOOD—EFFECTS OF TRAINING.

“Just as the twig is bent, the tree's inclined.”—Pope.



Fig. 970.—THE RIGHT WAY AND THE WRONG.

It is in childhood that the effects of training and external influences generally upon the character, and through that upon the brain, the face, and the general form, are most observable and striking. All is then soft and pliable. We can mold the plastic being at will. Impressions are readily made, and as readily effaced. In the rapid movements of the life-currents, the particles which make up the child's body are quickly changed, and with every change of matter may come a change of form. If the straight twig may be made crooked, so may the crooked twig be made straight. If vice may deform, it is equally within the power of virtue to beautify.

“Any one,” a late writer says, “may prove the power of education upon the features by noticing the ignorant, vicious children who are sent to a school of reform, where they are properly fed and instructed. Day by day, as they receive new ideas of right and wrong and think new thoughts, their

eyes brighten, their cheeks assume a deeper color, and the whole expression of the face changes and improves.

“How noble are the faces of most men known for their culture and genius! so noble, that in any crowd they would be noticed and remarked upon, though unknown. It is not that they are, in the common acceptation of the term, handsome men, but because education and intelligence have wrought upon their features till they are grand as the sculptured faces of heroes and demi-gods. If every mother and teacher would but take the requisite care in the physical and moral culture of the young, in two generations the appearance of the race might be vastly improved.”

To illustrate still more strikingly the influence of mental and moral culture, on brain, face, and body, we will take two lads of the same age—they may be brothers, or even twins—as nearly alike in organization and disposition as possible. They become orphans, we will suppose, at an early period, say at one or two years of age, and it is necessary that they be placed under the guardianship of persons, not their parents. Let one be placed in the care of a kind, affectionate, Christian woman, who nourishes, cherishes, caresses, and loves the little charge, and who by her kind attentions calls out the affections, the respect, and devotional feelings of the child. On putting him to bed she joins him in an appropriate little hymn, like that commencing “The day is past and gone,” she hears his evening prayer, and kisses him with a loving “good-night.” Under these influences he goes to sleep, and if he dreams, his dreams will be pleasant, and the blood will course freely to his higher faculties, Benevolence, Veneration, Hope, Conscientiousness, and the nobler nature grows by virtue of such influences.

When he rises in the morning, his guardian parent meets him with a kindly smile, and a pleasant “Good-morning, my dear! Did you sleep well last night?”

“Oh, yes! thank you, mamma; and I had such pleasant dreams! I thought how kind you were, and how I was growing; that I had a little pony, a harness, and a wagon, with ‘lots’ of pretty things which you gave me on my birthday. I

dreamed of the Sunday-school, of the teacher, and of the pretty presents which I there received. Oh! I was so happy."

He is growing into manhood.

The other child, his brother, is placed in the keeping of a woman who is very different from the one just mentioned; she is not only irreligious, but skeptical, ill-tempered, out of sorts, and at war with herself and the world. She is fretful, peevish, irritable, cross, and scolds, scolds, scolds, with seldom a joyous or happy expression on her countenance. Her treatment of the child is in keeping with her spirit and state of mind. Instead of caressing or kissing the child with a "good-night," she boxes his ears, calls him a "dirty brat," a "block-head," or a "dunce," and sends him to bed crying or fighting. This child also dreams; but what is the spirit of those dreams? Is it that of love and devotion? or is it that of hate and revenge? What are the thoughts of the child?

"When I get old enough, won't I pay her for that?"

And the blood goes coursing all night long to the passions, enlarging, if not inflaming, his Destructiveness and Combative-ness, while his moral sense not being awakened by appeals to his sense of justice, or duty, or sympathy, is dormant, if not spiritually dead.

These children are forming their characters. Now think you that these circumstances have nothing to do with giving shape to the head and the features? Think you that the first mentioned will not be more attractive and comely than his less fortunate brother when they come into manhood? Which one will most likely become a good citizen? and which a culprit or a vagabond? Which will be hopeful and enterprising? and which careless, moping, and indifferent?

It is useless to argue the point further. It must be self-evident to every sensible, reasoning being that the influences and surroundings under which we come up through infancy into manhood, have a marked effect upon our characters, organizations, and features. How important, then, that parents themselves *be* what they would have their children *become*—intelligent, kind, useful, Christian men and women! Are little children disobedient? who is to blame? Are they willful, obsti-

nate, and mischievous? who sets them an example? or, if the example is not set, who allows them to pervert their natures by following the bent of their propensities without restraint? Children inherit a predisposition to vice or virtue, depending on the state of mind of the parents under which they come into existence. Godless parents will beget children of a godless tendency. Christian parents who are sincerely devout will impart this spirit or its tendency to their progeny. Children are *said* to resemble their parents in complexion, form of body, in faculties, and why not also in natural tendency of mind? Assuredly they do. Are the parents musical, mechanical, or artistic? it is expected the child will inherit something of the same peculiarities. Are they peevish, quarrelsome, and vindictive? it is the same with their children—"like begets like." Training and proper influences will have their effect in forming the character while it is soft and impressible. The "wise man" hath instructed us in sacred writ, that if "Foolishness is bound in the heart of a child, the rod of correction shall drive it far from him."^{*} And that excellent mother who, ever solicitous for her children's welfare, endeavors to instill within their minds wise and holy principles, will have her reward, for thus saith the preacher, "Her children will rise up and call her blessed."

^{*} We interpret this to mean the rod of the spirit, not beech or birch.



A CRANKED SPIRIT.

XXXIX.

CHARACTER-READING.

"To find the mind's construction in the face."—SHAKESPEARE.



Fig. 971.—LAVATER IN HIS STUDY.

O still further illustrate the practical application of the principles we have laid down in the preceding chapters, as well as to introduce to our readers some noted personages of various classes and professions, we shall now proceed to give a large number of

brief sketches of character accompanied by biographical notes and likenesses. Our limited space compels us to confine ourselves to the most prominent points. It will be a good exercise for the reader to study each head and face carefully in the light of the rules we have laid down and the instructions we have given, with a view to obtain still further insight into the mental constitution there represented in external forms. It must be borne in mind, however, that a wood-cut, at the best, furnishes but an imperfect representation of "the human face divine." The living presence is the best for physiognomical study and description, and next to that a good photograph from life.

TWO HISTORIANS—BANCROFT AND MOTLEY.

George Bancroft, the great American historian, has a strongly marked face and well-developed head. Observe the forehead! See how the perceptive faculties project, especially Individu-



Fig. 972.—GEORGE BANCROFT.*



Fig. 973.—J. LATHROP MOTLEY.†

ality, Eventuality, Locality, Form, Size, and Order! Notice the great distance from the ear forward and from the ear upward. Observe also the extreme shortness of the head back of the ear. Compared with the size of the body, the head is

* George Bancroft was born at Worcester, Mass., October 3, 1800. His father, Rev. Aaron Bancroft, gave him opportunities for a most liberal education, of which he availed himself to the fullest extent. Having completed a course of study at Harvard College, he went to Europe, and passed several years in the careful study of the ancient and modern languages. On his return home, in 1822, he accepted the office of tutor in Greek at Harvard College, where he remained one year, and in 1823 established, in conjunction with Dr. Cogswell, the Round Hill School at Northampton. Although he has been extensively engaged in political affairs, being in 1845 Secretary of the Navy, under President Polk, and from 1846 to 1849 minister to England, yet he is best known as a historian. His "History of the United States" is the most complete and elaborate work of the kind, and is regarded as one of the noblest monuments of American literature. He is now occupied chiefly in historical labors, making New York his principal abode.

† John Lathrop Motley was born in Dorchester, Mass., April 15, 1814. He graduated at Harvard College at 1831, and thence proceeded to the

decidedly large and the quality particularly fine. The mental and motive temperaments predominate, with comparatively less of the vital. The particular physiognomical indications are—first, a very prominent and exquisitely chiseled nose, indicating a highly developed mentality; secondly, a very long and full upper lip, indicating dignity, authority, and perseverance; and thirdly, a prominent chin and a strong jaw, which are among the indications of tenacity of life and endurance. The eye is also quite prominent, denoting freedom in the use of words, copiousness of language, and mental activity. There is less indication of the social affections. He is just the opposite of a sensualist. His regard for woman is of the nature of admiration, an intellectual appreciation rather than of physical attraction. The organization, as a whole, indicates a love of fact, science, and philosophy in history, rather than music, poetry, or art.

Mr. Motley has a large brain and an active mental temperament, with sufficient of the vital to give endurance. There is also considerable motive power and love of action. In his features we observe indications of love for art, poetry, and the ideal, and we should expect to find in his writings many poetic passages, although expressed in prose. His is a comparatively even organization, with few excesses and no marked deficiencies. Apparently there is considerable fullness in the crown, in the top and side-head, while the intellectual faculties, as a class, are well developed, both in the perceptive and reflective departments. In this organization we should look for the vivacity and playfulness of the Frenchman with the tenacity and perseverance of the Englishman. There is evidently real agreeableness with great love for music, poetry, and the works of art and of nature. The social affections are evidently fully developed, rendering him fond of friends and domestic life.

University of Göttingen, where he continued about a year, and spent another year at the University of Berlin; after which he traveled for some time in Europe. After returning home he entered upon the study of the law, which, not liking, he did not practice to any extent. He found in literature a more congenial occupation, and contributed articles from time to

A POET IN YOUTH AND IN AGE.

We present our countryman William Cullen Bryant as he appeared at thirty years, and again as a hale, well-preserved, vigorous-minded, hard-working gentleman of seventy years.



Fig. 974.—WM. C. BRYANT AT 30.*



Fig. 975.—WM. C. BRYANT AT 70.

What of the head? This: it is a fine model for a sculptor. It was handsome in youth; it is grand in maturity. We have no ancient or modern type with which to compare it, and it stands out an original creation.

time to the various reviews. In 1856 he published his largest and best work, his history of "The Rise of the Dutch Republic," which has obtained extensive circulation in Europe and America. In 1860 he published a continuation of the above work under the title of "The United Netherlands," and is still engaged in historical researches.

• William Cullen Bryant was born November 3, 1794, at Cummington, Hampshire County, Mass. His father was a physician of some distinction, and devoted much attention to the mental training of his children. Early in life Mr. Bryant manifested a high order of poetic talent, and in his nineteenth year wrote "Thanatopsis," one of his most admired poems. He studied law, and was admitted to the Massachusetts bar in 1815. As a lawyer he rose to a good position; but his tastes inclined him more to letters. In 1825 he removed to the city of New York, and was engaged as an editor of the *New York Review*, afterward the *United States Review*. In 1826 he connected himself with the *Evening Post*, of which he afterward became one of the proprietors, and has since remained so. He has written several prose compositions of merit, which are said to be marked throughout by "pure, manly, straightforward, and vigorous English." His poems, however, claim more attention for their purity of thought and high-toned religious sentiments. As a close and sympathetic observer of nature he is almost without a rival.

Observe the nostrils; how large and well defined! indicating good breathing power. An honest, honorable, useful, and strictly temperate life has left fewer marks of age upon his features than most men wear at seventy years of age. In youth there was buoyancy, vivacity, joyousness, and hopefulness, with a vivid imagination and a clear intellect, all the organs appearing well developed and in healthy action. We need only specify the evidences of affection in the full, plump lips, of a vigorous constitution in the well-formed chin, full cheeks, etc. There is sufficient breadth of brain to give executiveness, which is indicated also in the outline of the nose, which partakes of the Roman type. See, also, how much breadth there is between the eyes, and how prominent the arch is above, giving him much descriptive ability. There is besides great height of head, which in the coronal region somewhat resembles that of Sir Walter Scott.

Now look at him when matured, and observe the form of the head. How full in every part! The high crown corresponds with the full upper lip, and indicates great dignity. How full the head at Benevolence and Veneration! How full in Language, and how almost youthful and playful the lips! Here we have the joyousness and vivacity of youth, and the manliness and steadiness of age.

This organization and character are in perfect keeping with the doctrine we would teach—namely, that the body and brain become in quality and shape what the mind makes them. Had Mr. Bryant turned his attention at thirty to mercantile, mechanical, agricultural, or other pursuits instead of poetry, literature, travel, and authorship, is it not probable that he would have changed the expression of his features and altered the shape of his head? Or suppose he had lived a sensual, dissipated life, would not *that* have made a difference? Suppose he had become a soldier, a sailor, or a surgeon, he would have developed the organs in the side-head and in the perceptive region more than those in the top-head.

Our callings have much to do in making us comely or ugly; in giving us manliness or clownishness; mentality or animality. Reader, whither are *you* drifting?

TWO AMERICAN POETS.

Americans feel a just pride in Professor Longfellow, both as a scholar and as a poet. His fame is world-wide. His name is never spoken except with the kindest respect. What



Fig. 976.—HENRY W. LONGFELLOW.*



Fig. 977.—JOHN G. WHITTIER†

is it that gives him such an enviable reputation? He is at once a scholar, a genius, a gentleman, and a Christian. There is a happy blending of all the higher human qualities in his composition, with a predominance of the moral and spiritual.

◦ Henry Wadsworth Longfellow was born in Portland, Maine, February 27, 1807. Having completed a collegiate course at Bowdoin College, he was appointed professor of modern languages and literature in that institution, and assumed the position after a few years spent in travel in Europe. In 1835 he was appointed professor of modern languages in Harvard College, which place he occupied for seventeen years, and in 1854 resigned. He has attained a high place as a poet. His poetical compositions are numerous and varied. "Voices of the Night," "Evangeline," "The Golden Legend," and "The Song of Hiawatha" are among his best productions. The character of his poetry is tender and sympathetic, tolerant and human, appealing to the universal affections of humanity by thoughts and images derived from nature and every-day life. His works have been extensively published both in Europe and America. Mr. Longfellow now resides at Cambridge, near Boston, Mass.

† John G. Whittier was born at Haverhill, Mass., in December, 1807. His parents were members of the Society of Friends. He was educated in youth at home and worked on the farm until his eighteenth year, when he spent two years at the town academy. In 1829 he became editor of the *American Manufacturer*, at Boston, and afterward, in 1830, succeeded George D. Prentice as editor of the *New England Weekly Review*, at Hartford.

In the intellect, he is clear, comprehensive, definite, and practical; in imagination, he has a clearness and reach seldom surpassed; while, socially, he is one of the warmest and most loving of men. He is also spirited, terse, and emphatic, but never rash, severe, or cruel. Kindness, justice, devotion, and affection render his mind warm and genial. The brain is rather large and quite symmetrical in form. The body is well molded and without excess or deficiency, and the features are at once bold and open. The forehead is even handsome. That is a well-formed nose, slightly inclined to the Roman. The eyes are full, set well apart, and the mouth has loving lips. The chin seems altogether faultless.

Whittier, the Quaker poet, has a marked head and face. The brain seems almost unnaturally high, and full across the top. Conscientiousness and Benevolence are evidently among the larger organs of his top-head, while Hope, Veneration, and Faith are prominently indicated. His love of liberty, manifesting itself through Self-Esteem and Firmness, forms a leading trait in his character. He has the modesty and reserve of a woman, with the resolution and executiveness of a soldier; but his religion will not permit him to manifest his pluck so much in deeds as in words. Where moral principle might be involved, we would choose him for a leading representative, and should feel sure that he would hold steadily to his convictions. He would not waver or yield, but hold each and every one to a most rigid accountability. The face is somewhat angular, and, if not inviting, is certainly not repellant. The lips incline up at the corners, indicating Mirthfulness, but there is a compression indicating decision. The chin is large, the nose prominent, the eyes expressive, and the whole shows originality, honesty, earnestness, and will.

Afterward, the pursuits of agriculture and literary and political labor have variously occupied his attention. His writings, chiefly poetical, are earnest and vigorous, and comprise a multitude of subjects. As one of the foremost opponents of slavery, his writings exhibit the spirit and opinions of their author in that respect. His "Legends of New England," "Leaves from Margaret Smith's Journal," "Voices of Freedom," and "Home Ballads," are probably the most read of his works. In 1840 he took up his residence in Amesbury, Mass., where he has since resided.

THE PREACHER AND THE WRITER.

Is there something of sternness and rigidity expressed in the most intellectual face of Dr. Barnes? Consider his age (now nearly seventy years) and the severe mental toil through



Fig. 978.—ALBERT BARNES.*



Fig. 979.—WASHINGTON IRVING.†

which he has passed; but that is not a hard expression when analyzed. Observe the shaded lines at the root of the nose between the eyebrows; these lines denote breadth of brain at Conscientiousness, which organ is immensely large. His

* Albert Barnes, a distinguished clergyman of the Presbyterian denomination, was born at Rome, N. Y., December 1, 1798. His father was a tanner, and until he was seventeen he was employed to a considerable extent in the same occupation. At the age of twenty-two he graduated at Hamilton College, and soon afterward entered upon a course of study preparatory to the ministry, which he had selected for his pursuit. In 1824 he was licensed to preach, and has ever since been a zealous minister of the Gospel. He is a voluminous author and ranks among the first Biblical commentators of the present age. The circulation of his "Notes on the New Testament" is said to exceed 400,000 volumes. As a pulpit orator he is calm and impressive, and may be ranked among the first of American divines. He has for many years occupied a pulpit in Philadelphia, where he now resides.

† Washington Irving was born in New York city, April 3, 1783. At the age of sixteen he commenced the study of law, was admitted to the New York bar as a practitioner in 1806. Instead of exercising his profession, however, he turned his attention to literature, thus following the natural bent of his intellect. During his long life of seventy-six years he wrote many works, each of which bears the impress of careful preparation. Those on which his fame as an author chiefly depends are the "Knickerbocker History of New York," "Sketch Book," which was written while the author

Benevolence is almost equally so, and his Veneration is the keystone of that magnificent arch. Observe the height of the brain from the ear upward. A side view would show an almost equal degree of length from front to rear; and it is not lacking in breadth when compared with other heads, but length and height are the most prominent peculiarities. There is eloquence in those eyes, and eloquence in every feature. A more honest, kindly, and devout man may not be found in all the land.

Equanimity is impressed upon the face of Irving. See how regular and even are all the features! The brain is equally symmetrical. The head was large and the body plump and full, inclining to stoutness; and the whole nature was warmed by a predominantly vital but well-mixed temperament. See what a mouth! what indications of affection! what loving lips! what a genial look in the eye! and the nose seems to scent sweet savors. His spirit was calm, and he was at peace with himself and all mankind. His temper was not easily ruffled, but he was forbearing and quiet. There is little disposition to fight indicated here. The nose is well formed and almost Grecian. Mirthfulness, Ideality, and Imitation, with a love for the comic and grotesque, as well as for the chaste and elegant, are well marked. Order, with judgment of forms and proportions, is well-nigh perfect. Indeed, it is at once the face of the artist, the scholar, and the poet.

As compared with Dr. Barnes, Irving was the more plastic, the more pliable man. Self-reliance was not so much a characteristic, evident in the features of the latter, as it is plainly of the former. Irving could appreciate and enter into the spirit of social enjoyment with much more zest than can Barnes; the externals of life had more influence with Irving.

was visiting England, "History of Christopher Columbus," "Bracebridge Hall," and the "Life of Washington." Irving was the first American writer to break down foreign prejudice and contempt for American authorship, and he obtained from the most eminent English critics warm approval and praise. His miscellaneous works are portraits of rural and domestic life, through which breathes a tender and most agreeable humor. He died suddenly at Sunnyside, on the Hudson, near Tarrytown, N. Y., November 28, 1859.

A TRAVELER AND A LEGISLATOR.

In Mr. Livingstone we have something of the Captain Cook cast of brain. Our artist has failed to do the subject justice. The perceptive faculties, including Individuality, Locality, and



Fig. 980.—DAVID LIVINGSTONE.*



Fig. 981.—SCHUYLER COLFAX.†

Eventuality, are immensely large in the original. There is also great shrewdness and sagacity. He has the cautiousness and perseverance of the Scot, with the love of adventure of the American. Perseverance is clearly indicated. He

◦ David Livingstone was born at Blantyre Works, near Glasgow, Scotland, in 1815. In his youth he was employed with his father and brothers in the cotton-mills of Blantyre Works, but devoted the intervals of his daily labor to self-instruction. Partly in this manner and partly by attending an evening school he acquired a knowledge of the classics and the natural sciences. When about twenty he found opportunity to attend lectures on medicine and divinity at the University of Glasgow during the winter, his design being to go to China as a medical missionary. His intention in this respect was frustrated by the breaking out of war between Great Britain and China. He then turned his attention to southern Africa, and embarked in 1840 for Cape Town. He at once engaged vigorously in his missionary enterprise and succeeded in founding several stations. In 1849 he commenced a series of explorations penetrating into the very center of Africa, and traversing the country from the Indian to the Atlantic Ocean. He has published an extended account of his travels and researches in Africa, and is still prosecuting his explorations and missionary work there.

† Schuyler Colfax was born in New York, March 23, 1823. His early education was obtained chiefly through his own diligent application. At thirteen he went to Indiana, where he worked in a printing-office until 1844, when he became the editor of the *South Bend Register*. He was deep-

would exhibit the spirit which says "I can" and "I will." His high moral and religious sense sustains him in his adventurous work. He is buoyed up and kept in health by a firm reliance on Providence; and with the hope of doing good and being useful to his fellow-men he goes forth, leaving consequences to God. There is great motive power, toughness, and endurance. There is nothing like hilarity in this face. It is rather stern than otherwise, and he would permit nothing like clownish trifling in his presence. His is a very striking character.

Mr. Colfax is playful and jolly. He combines the sprightliness and genial good-humor of youth with the steadiness and gravity of mature age. His brain is large and high, and his body well formed. We infer that he is trying to live a consistent and temperate life. He is energetic, persevering, industrious, ambitious, kindly, and possesses a high sense of honor. The mouth is slightly larger in the portrait than in the original, but inclines up at the outer corners indicating that mirthfulness and playfulness which indeed his whole countenance bespeaks. If not great, he is popular; and if not profound, he is intelligent and practical. Combativeness and Destructiveness are not large in him. He is not an audacious man, nor aggressive in the common acceptance of the term. His Caution is quite influential, but Hope and Mirthfulness give him a tendency to look rather on the bright than on the dark side of life. He is the kind of man to take responsibility without feeling overwhelmed.

There is much similarity in the temperaments of Mr. Livingston and Mr. Colfax, although the latter possesses more of the mental element. The former exhibits in his features more excitability, more of the disposition called "dash." He is not quite so even-tempered a man as the latter, yet has perhaps more endurance and boldness of action.

ly interested in politics from the first, and became when yet a young man an influential leader in Indiana. In 1854 he was elected a representative in the National Congress, and continues to serve his State in that capacity, exhibiting intellectual vigor and integrity which have made him universally honored and esteemed.

THE ARTIST AND THE WOMAN OF THE WORLD.

In Rosa Bonheur we see a child of inborn genius, inherited from an artist-parent, developed by necessity, and perfected by persevering exertion. From a love of them, her artistic



Fig. 982.—ROSA BONHEUR.*



Fig. 983.—THEODOSIA BURR.†

sympathies seem to fix upon horses, cattle, sheep, etc., and if she does not take on their natures, she portrayed them on can

* Rosa Bonheur was born at Bordeaux, France, May 22, 1822; her father, Raymond Bonheur, an artist by profession, and in humble circumstances. In 1829 he removed to Paris, where he put Rosa in a boarding-school. There her poverty, however, was a constant source of annoyance to her very sensitive nature, as it provoked the sneers of her wealthier school associates. On that account she did not remain long at school, but being taken home was instructed by her father in drawing. From childhood she exhibited an intuitive love of art, her inclinations tending toward the representation of domestic animals. Making these her special study, she soon excelled in their portraiture. The picture which has obtained for Miss Bonheur a world-wide reputation is "Le Marché aux Chevaux," otherwise known as the "Horse Fair." It is now in the hands of a gentleman residing in New Jersey. Miss Bonheur at present resides in Paris, industriously pursuing her art. The great feature of her works is faithfulness to nature and boldness of design.

† Theodosia Burr Allston, the daughter and only child of Aaron Burr, was born at Albany, N. Y., in 1783. Her father tenderly loved her and spared no pains in her education. It is said that "in solid and elegant accomplishments she was very far superior to the ladies of her time." She married Joseph Allston, who was in 1812 Governor of South Carolina. She was lost in the schooner Patriot, on the voyage from Charleston to New York, January, 1813.

was to the life. One almost fancies he can hear her pictured beasts breathe, so naturally are they drawn. Hers is a beautiful face, if somewhat masculine; it is not coarse; if strongly marked, it is still womanly. The forehead is beautifully shaped, the eyes well placed and expressive, the nose handsome, and the lips exquisite. The chin shows chaste affection, with nothing of the sensual or voluptuous; indeed, it is rarely we meet with more natural feminine attractiveness than in this artist-woman, and we dismiss her from our considerations with the happiest impressions.

There is character in the head and face of Theodosia Burr. See how high the brain is in the crown! She was emphatically her father's daughter. There is great dignity, pride, will, and sense of character indicated in her physiognomy. Nothing but religious influences could subdue such a nature. There is something voluptuous in the lip, cheek, and chin. The affections were evidently ardent and strong. Such a woman would scarcely be content in private and domestic life, but would crave a high and even stately position where her pride and love of display could be gratified. There was nothing of "your humble servant" in this person. Educated as she was, she could be lady-like and refined. Had she been uneducated, there would have been much willfulness, obstinacy, and perhaps sensuality exhibited. Analyzed, her head and face exhibit the following organs conspicuously developed—Firmness, Approbativeness, Caution, Ideality, Sublimity, Conscientiousness, Language, Agreeableness, and those of the back-head generally.

Rosa Bonheur shows a higher forehead, a more meditative disposition of mind than her associate; her head is broader in Constructiveness, Sublimity, Ideality, and the crown, and more prominent in the region of Benevolence, Veneration, and Spirituality than that of the latter. In a social point of view, Theodosia shows more ardent feeling, more intensity of emotion. The latter had more sympathy for general society, entered enthusiastically into its enjoyments; the former finds her highest enjoyment in a life of serene retirement with a limited circle of friends and at her easel.

THE GREAT ENGLISH REFORMERS.

In the head and face of Mr. Cobden we observe those qualities which make up the statesman, the reformer, and the philanthropist. His head was very large, upward of twenty-



Fig. 984.

RICHARD COBDEN.*

three and a half inches in circumference, and very well balanced. His reflective and perceptive organs were large, the latter predominating. Benevolence, Conscientiousness, Cautiousness, Constructiveness, Causality, Calculation, Size, Form, and Order were all large, and the most



Fig. 985.

JOHN BRIGHT.†

conspicuous traits in his character. Firmness, Hope, and Combativeness were well marked, and imparted that enthusiastic industry in his difficult measures of reform which distinguished him. His social nature was active; appreciating domestic life, he sought to improve the condition of the lower classes of England in that respect. In the depressed cheeks we do not see those desirable indications of

* Richard Cobden was born near Midhurst, Sussex, England, June 3, 1804. His father was a farmer, but not in such circumstances as to give his son a superior education. Richard, however, persevered, and made his way upward by personal application. He became the leader of the Anti-Corn Law League, and his influence in a great measure obtained its success. He visited the United States twice, and was a warm friend of our country, taking ground, from the commencement of the late war, in favor of the North. His intelligence and nobility of character won respect everywhere. He died April 2, 1865.

† John Bright was born at Greenbank, near Rochdale, Lancashire, England, in 1811. His father was a cotton manufacturer in that place. Mr. Bright's youthful education was good, and while but a young man he took the field as a lecturer on Temperance. He was prominently interested in the Anti-Corn Law movement, occupying a place in the League second only to Mr. Cobden. The United States found in him a warm friend and energetic advocate, for he, like Cobden, maintained the rights of the North.

good digestion and lung power, so inseparable from vigorous health. The large, full eyes betray that oratorical power which moved nations, and the firmly cut mouth shows the resolute spirit which animated the great man.

John Bright, the cotemporary and co-worker with Richard Cobden, though younger in years, possesses a large head, and like that of Mr. Cobden, it is large in Benevolence, Conscientiousness, Firmness, and Combativeness. The percepts of Mr. Bright are not so prominent as those of his file leader, nor do his features show so much mental activity. Mr. Bright is jovial and easy in disposition, and has much kindness and sympathy in his composition. We do not find in the contour of the nose that progressiveness and industry so marked in Cobden, yet there is will-power enough stamped upon the mouth to assure us of John Bright's steadfastness. In the plumpness of the face we see the indication of fine recuperative powers. The eyes are sufficiently full to denote fluency of speech. Mr. Bright is a fine speaker.

Both faces exhibit an earnest sympathy with their kind, an appreciation of the wants and condition of others. Human Nature and Comparison are distinguishing qualities in both heads. Mr. Cobden while in life was eminent for his powers of analysis and ready judgment of men and measures. These powers gained for him the ascendancy, which he readily obtained in whatever cause he espoused. John Bright, fully equal to his illustrious compeer in these faculties, still retains his well-earned prominence among England's living worthies. Though far from deficient in self-reliance and independence, the latter is more pliable and impressible than was the former. Mr. Cobden was the better politician ; could stand more undauntedly amid the turbulence of faction and the surges of party animosity, and hurl defiance back upon the contentious. Mr. Bright is more inclined to quiet, to conduct his measures firmly but peacefully, and to avoid as far as possible the boisterous assaults of the factious. Each was organized for his sphere, and each was and is an ornament to his age and country. As time rolls on, the names of these great reformers will become more and more known, still more honored.

THE OBSERVER AND MAN OF FACTS.

Had not our engraver carefully followed the photographic copy, which we received directly from the artist to whom Mr. Mill sat, we should have doubted the correctness of the outline, but we may assure the reader that it is true to the life. The perceptive faculties which bulge out so conspicuously above the eyes are seldom surpassed, and may be, in this respect, likened to those of Michael Angelo. See how pointed all the features are! how free from adipose, and how almost purely mental! There is fact, philosophy, science, and great practical common sense expressed in



Fig. 296.—JOHN STUART MILL.*

this face, but there is little humility, faith, or spirituality. It indicates a man of works—one who believes in nothing without proof, and will inevitably be classed among the doubters, if not the skeptical. While his truth and integrity may be unquestioned, his deductions on theological questions will not be accepted. If he would simply close his eyes and open his mind, as it were, through the top, he might get prophetic impressions not to be obtained through sight or other physical sense.

* John Stuart Mill, son of James Mill, a distinguished metaphysician and political economist, was born in London in 1806. His early education, conducted under his father's supervision, was of the severest stamp with respect to application. His holidays and vacations only diverted his studies into new channels, without suspending them. At the age of seventeen he became a clerk in the establishment of the British East India Company, where after a series of promotions he received in 1856 the appointment of examiner of the Indian correspondence. This place had been held by his father over twenty years before. During all this time his leisure was occupied in literary labor. He was a frequent contributor to the journals in favor of advanced liberal views. Between 1835 and 1840 he conducted the *London and Westminster Review*. He has also written several works on polit-

THE THINKER.

The head and face of Professor Bush contrast strongly with those of Mr. Mill, and it will be readily seen that they must represent an original character, as such a head is not often met with; and when we find one of this sort well cultivated by a liberal education, we may look for substantial results. It can not be claimed, however, that a person with a head and face so peculiar would be likely to follow in any beaten path. Such minds never run in ruts, but make tracks of their own. There was dignity, self-reliance, kindness, strong social feelings, and a well-developed intellect. The mouth indicates a genial spirit; there was no rancor or malevolence, no love of strife, but a winning way begotten of a generous nature. Though a preacher and an author, he was also a natural reformer and philanthropist.



Fig. 987.—GEORGE BUSH.*

ical economy, which are all highly esteemed for their clearness and vigor of thought. The most popular of his writings are his "System of Logic Ratiocinative and Inductive," "Principles of Political Economy," and his work "On Liberty." He has recently been elected a member of the British Parliament.

* George Bush was born at Norwich, Vt., June 12, 1796. He completed a course of instruction at Dartmouth College, studied theology in the seminary at Princeton, N. J., and was ordained in the Presbyterian Church. In 1831 he was elected Professor of Hebrew in the University of the City of New York. He has written several books on theological subjects, and since 1845 has especially interested himself in the publication of Swedenborgian treatises. His work entitled "Anastasis," or his views on the Resurrection of Christ, has claimed more attention than his other writings.

THE LECTURER AND REFORMER.

Miss Dickinson has a very large brain for a lady of her size, though she is in the main symmetrically formed. Her hair is a dark brown, her eyes a deep blue, her skin fair, and her whole



Fig. 988.—ANNA E. DICKINSON.*

organization of rather a fine texture. Her brain is broad, high, and long, and she not only has a sharp, clear, practical intellect, but deep and strong sympathies, much devotion, and a will of her own. She is very energetic, having Combativeness and the other side organs well developed, giving her force and propelling power. What she undertakes she does with earnestness and effect. She is also very affectionate, and capable of enjoying the social relations in a very high degree. Should she enter into married life under favorable auspices, she would readily conform to its different phases. She has the ability to rise to almost any condition in public or private life, and in fact is something of a genius in her way. She has large Conscientiousness, Hope, Spirituality, and Benevolence. As her countenance shows, she combines the vigor and strength of the masculine with the softness and grace of the feminine character. That is a handsome nose, a well-formed mouth, a beautiful chin.

* Anna E. Dickinson is a native of Pennsylvania, and was born about 1841. Her parents are Friends or Quakers. Commencing as a school-teacher, she has since acquired some celebrity from the active part taken by her in political affairs as an earnest advocate of anti-slavery doctrines. She also has rendered material service to sick and wounded soldiers as a hospital attendant during our recent civil war.

THE MAGAZINIST.

"Grace Greenwood" has a very active mind, the mental temperament predominating. Her brain is quite large, and quite high in the center at Veneration, and forward at Benevolence. The perceptive

and reflective faculties are both well marked, rendering her at once observant and meditative. Her back-head, in the social region, is also prominent. Her side-head exhibits large Ideality and Sublimity, while forward, Mirthfulness, Individuality, and Comparison are quite conspicuous. Approbativeness and Conscientiousness are large. Self-Esteem is less develop-



Fig. 989.—GRACE GREENWOOD.*

ed. The most noticeable features are the nose, chin, and eyes, all of which are prominent. Her spirit is the reverse of indolent or passive, but full of zeal and energy. She has all the qualities of the wife, the companion, the mother, and the friend, with a superior intellect well cultivated and exercised. One thus favorably organized, if suitably educated, can fill any sphere for which woman is adapted. It is a clear mental temperament.

* Sarah G. Clarke Lippincott, more familiarly known as "Grace Greenwood," was born in Pompey, Onondaga County, New York, about the year 1824. While still a child, her parents removed to Rochester, where she obtained her education. Afterward, in 1843, she accompanied her parents to New Brighton, Pennsylvania, where, with the exception of a fifteen-months' tour in Europe, she resided until her marriage, in 1853, to Mr. Lippincott, of Philadelphia. She has contributed several books, both in prose and poetry, to American literature. Her writings are piquant and sparkling with vivacity. Her juvenile story-books are extensively read. At present she edits a juvenile monthly publication in Philadelphia, and enjoys some reputation as a public lecturer.

THE MERCHANT.

Our succinct biographical sketch tells the story of Abbott Lawrence's life. He was in all respects a handsome and well-



Fig. 990.—ABBOTT LAWRENCE.*

made man, not great, but clear-headed, practical, methodical, persevering, and very industrious. There is evidence of great ambition here, with no lack of pride, but with little or no ostentation. Had Mr. Lawrence lived in a monarchy instead of a republic, he probably would have conformed to the ways and usages of an aristocracy. Always neat, tidy, and gentlemanlike, he would be, in most respects, a model for young men to copy after. His fea-

tures were graceful, benignant, and attractive. There is nothing excessive or repulsive in the entire physiognomy.

* Abbott Lawrence was born at Groton, Mass., Dec. 16, 1792. He obtained his education chiefly at the district school of Groton, and at the age of sixteen became a clerk in a mercantile house in Boston, of which his brother Amos was proprietor. In 1814 he became a partner in the business, and for several years conducted affairs with considerable profit. He early interested himself in State and National politics, advocating the principles of the Whig party. In 1842 he was appointed commissioner from Massachusetts in the matter of the boundary line between Maine and the British possessions, which had been a subject in dispute for many years. Through his influence chiefly, the matter was settled satisfactorily, and the present boundary established by treaty. From 1850 to October, 1852, he occupied with credit the office of Minister to England. He greatly promoted the cause of education in Massachusetts, and was distinguished for general munificence. He died in Boston, August 18, 1855.

THE POLITICIAN.

A cast taken from the head of Mr. Wise by ourselves, some twenty-five years ago, shows excessive love of approbation, very large Combativeness, with less Self-Esteem, Veneration,



Fig. 991.—HENRY A. WISE.*

Acquisitiveness, and Secretiveness. The temperament is mental-motive, with little of the mollifying and softening influences of the vital. In youth he was scholarly, brilliant, oratorical, and flowery. There appear quite conspicuously in his features great ambition and desire for distinction, but a lack of that commanding dignity and high devotion which indicate true greatness. He would be likely to be eccentric, and to become an extremist. With a slender body, attenuated limbs,

imperfect digestion, a large and over-active brain, such a temperament can ill afford the exhausting habit of smoking or chewing tobacco, or the habitual use of alcoholic stimulants. The most temperate habits are indispensable to health, happiness, or peace of mind in such a one.

* Henry Alexander Wise was born at Drummondtown, Accomac County Va., December 8, 1806. Having been left an orphan at the age of seven, he was educated by his father's relatives, studied law, married and settled in Nashville, Tennessee. Two years after he returned to Accomac, and besides his legal practice engaged deeply in politics. In 1833 he was elected to Congress and exerted considerable influence as a politician. In 1855 he was elected Governor of Virginia. The principal act of his term as Governor was the suppression of the John Brown conspiracy and the execution of the principals, December 2, 1859. During the early part of the rebellion he occupied the position of brigadier-general in the Confederate army; but after the capture of Roanoke Island, the defense of which he had in charge, he retired or was detached from any important part in the war. He is now practicing law in Richmond.

THE PHILANTHROPIST.

Gerritt Smith is a very large man, standing some six feet in height and weighing about two hundred pounds. His brain is decidedly large, measuring twenty-three inches or more in



Fig. 992.—GERRIT SMITH.*

circumference, and the quality is good. He has lived a strictly temperate life. The likeness was taken some years ago, and would not at present correctly represent him. His head is high, full in Veneration, large in Conscientiousness, and very large in Benevolence. The intellectual region is prominent. In character he is almost free from ambition, and is influenced chiefly through his sympathies, his sense of justice, and his desire to do good. Such an organiza-

tion tends toward a high regard for sacred subjects, and readily comes under religious influences. He is more philanthropic than poetic, more just and generous than brilliant, more loving and affectionate than philosophic or abstract. He is the one to sympathize with all classes, to take an active part in reforms, and do much to improve the condition of the masses. That is a thoughtful brow, a practical intellect, a well-formed nose, loving lips, a kindly but dignified mouth, a good chin, and very expressive eyes. The full flowing beard, he now wears gives him a more patriarchal appearance than is indicated in the above smooth-shaved face.

* Gerrit Smith was born in Utica, New York, March 6, 1797. His father, Peter Smith, was one of the largest landholders in the United States, and gave him a liberal education. He is distinguished for his general benevolence, and although not formally connected with any political party, he has energetically advocated anti-slavery principles. He has published numerous pamphlets and addresses, most of which are philanthropic in their nature. Whatever he attempts in the way of reform is usually conducted quietly and at his own expense. He is a retiring rather than a forward man.

THE MAN OF WILL AND ENERGY.

George Law was cast in a very different mold from the preceding gentleman. In him the lymphatic and bilious temperaments predominate. With a body almost gigantic and a brain also large, but rather coarse and strong than fine and delicate, he is at once hardy, robust, and burly. He is thoroughly self-relying, very persevering and determined, and is bound to have his own way at any cost. This is a face to command rather than comply; a face that can say No and stick to it, rather than Yes and do it. Observe the mouth, and, indeed, the whole expression!

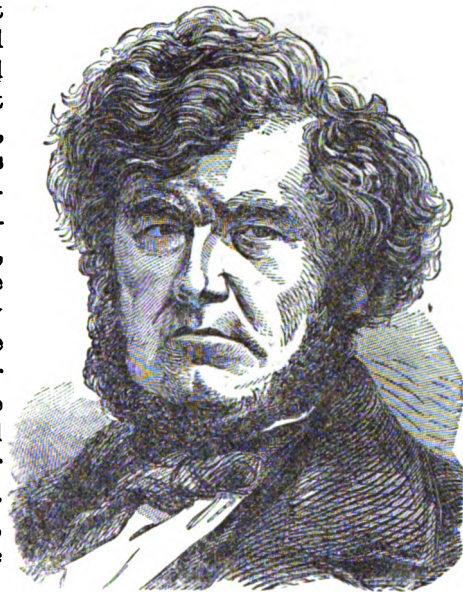


Fig. 903.—GEORGE LAW.*

A single incident will illustrate his character. When building the "High Bridge," he had a team of oxen to draw stone. One day an ox was a little fractious and would not work. With an iron crowbar in his hand George looked at the animal a moment, coolly remarking that the ox was good for nothing to draw, but would make good beef, and in an instant drove the bar through its body and killed it on the spot. With his unconquerable will, his large Combativeness and Destructiveness, his tireless energy, his very large perceptive faculties, and a most retentive memory, he fills a place in creation which no other man could fill. Grace could do much for him.

* George Law was born in Jackson, Washington County, New York, October 25, 1806. His advantages for acquiring an education were few.

THE AGITATOR.

William Lyon Mackenzie had a very large brain, somewhat exceeding twenty-three inches in circumference, with a body rather below the average in stature. He was hardy, vigorous,



Fig. 994.—WM. LYON MACKENZIE.*

and possessed of great powers of endurance; was full of the executive spirit and an incessant worker. He also abounded in wit and fun, and was quite original in all respects. If not eccentric, he certainly was the next thing to it, and though kindly, genial, and very affectionate, he was also sharp, cutting, and sarcastic. However he may have erred in judgment, his integrity was not questioned by those who knew him intimately. He was a copious talker, a fluent writer, full of poetic imagery and illustration. He was more

of an agitator than a leader, easily stirring up the spirits of men whom he could not so well direct. His measures had in view political improvement, however little they evinced it.

but such as they were he availed himself of them, and at the age of eighteen left the paternal mansion and struck out for himself. By degrees he advanced from the position of a journeyman to that of a master-mechanic and contractor, and accumulated a large fortune in building houses, bridges, etc., including the High Bridge over Harlem River. Latterly, he has been extensively engaged in the business of steam navigation and city railways.

◦ William Lyon Mackenzie was born at the close of the eighteenth century in Dundee, Scotland, and emigrated early to Canada. He died in Toronto in 1862. He was notorious as a political agitator; was the leader in the Canadian rebellion in 1837, and narrowly escaped to the United States with his life by flight. Twelve years afterward, however, he was invited to return to Canada, when he was elected a member of Parliament. He edited for several years a paper called "Mackenzie's Toronto Weekly Message," in which he boldly avows his sentiments, advocating annexation to the United States.

THE AMBITIOUS REVOLUTIONIST.

Bolivar's head and face are evidently those of a very ambitious personage. There is more vanity than dignity here, more pride and love of display than pluck or sense. The head is not large—falling below the measurement, which is usually found in a great leader. There was a desire to command, but not the ability to do it successfully. The head is neither long or broad, but somewhat cramped in all its parts. The nose is fairly conspicuous, but the upper lip is short and insignificant, and the features as a whole fail to indicate greatness or goodness. Bolivar's was that kind of spirit which



Fig. 993.—SIMON BOLIVAR.*

longs for high position and influence, and when they are secured, finds the utmost self-satisfaction in the prerogative of command. Consequence is of great importance with such an organization.

* Simon Bolivar Y Ponte was born at Caracas, New Granada, July 24, 1783, and died at San Pedro, near Santa Martha, December 17, 1830. In his youth he resided in Spain and France several years. In 1811 he commenced the revolutionary career which has rendered his name famous. In Venezuela, New Granada, Colombia, and Peru he fomented revolutions, his aim being to establish a great southern republic, with himself at its head as "dictator." The republic which bears his name was formerly a part of Peru, but under the lead of Bolivar in 1825 it was erected into an independent state by a declaration of its citizens. As Bolivar was ostensibly at the head of the movement, he obtained the title of the "Liberator." The people of the South American states ill brooking the Spanish rule, which was exacting and despotic, were ripe for revolt, and eagerly availed themselves of the leadership of Bolivar, behind whose semblance of authority were weakness and temerity. Every scheme which he inaugurated and attempted to carry out individually, met with disaster through either precipitancy or cowardice.

THE CHRISTIAN GENTLEMAN.

From the portrait alone, reader, what would be your impression in regard to the character of the person here represented? Would you infer that he was a sullen, acrimonious, vindictive



Fig. 906.—REV. BAPTIST NOEL.*

man, or would you judge him to be kindly, amiable, and well disposed? To our view, there is a predominance of the higher human sentiments and emotions. The head is high and narrow, especially developed in the frontal and coronal regions. The face is beaming with generous impulses, as though he were living in accordance with the precepts of his Great Exemplar. The head is quite broad across the top, indicating large Conscientiousness, Hope, and Faith. It is especially full at Benevolence, Ideality, and Sublimity. There appears to be taste, refinement, justice, discretion, great circumspection, devotion, and generosity. The features are in keeping with this view. That is a most chaste and affectionate mouth. The nose is not over prominent, but clearly defined and symmetrical. The eyes seem to speak kindly and invitingly, and there is a sort of joyousness and hopefulness which illumines the whole. There is nothing ugly here. In short, it is the head and face of a philanthropist, a scholar, a gentleman, and a Christian.

* Baptist Wriothlesley Noel, M.A., a son of Sir Girard Noel, and a younger brother of the Earl of Gainsborough, was born in England, July 10, 1799. He was educated at Trinity College, Cambridge, and soon after taking holy orders attained a prominent position as an Episcopal clergyman, being one of the Queen's chaplains. In 1849 he joined the Baptists, and is now one of their most prominent leaders. He is very actively engaged in the promotion of charitable movements, both advocating benevolence in the pulpit and personally ministering among the London poor.

THE EXPERIMENTER.

There is a wild, unnatural expression in this imperfect likeness of the great chemist, and almost its only merit consists in showing something of the shape of the head and indicating the great activity of his mental temperament. The head is broad and full at the sides, large in the intellectual region, and high in the crown. There are signs of great perseverance, industry, application, economy, and love of investigation in this countenance, but his mind was more practical than theoretical, more intellectual than spiritual. He would pass for a racy, emphatic, and almost egocentric person. There is



Fig. 997.—JUSTUS LIEBIG.*

a want of vitality and a lack of that balance in his appearance which obtains where the temperaments are more equally blended. Such minds suggest and try experiments, and in this way develop principles. His tendency would be to excess of exertion, and thus render himself liable to premature decay.

He has written several books on temperance, and others of a religious character.

* Justus von Baron Liebig was born at Darmstadt, in the Grand Duchy of Hesse-Darmstadt, May 12, 1803. After a course of study particularly devoted to medicine he received the degree of M.D. at Erlangen. He then went to Paris and studied chemistry for two years there. His researches were chiefly directed to animal and vegetable chemistry, and were pursued with such skill and success that in 1826 he was appointed Professor of Chemistry at the University of Giessen. There he instituted the first school of practical chemistry known in Germany. He has written several works on chemistry, and has contributed more than any other chemist toward revealing the chemical processes of animal organization. In 1852 he was appointed Professor of Chemistry at Munich, and in 1860 succeeded Thiersch in the presidency of the Academy of Sciences, at Munich.

THE RELIGIOUS METAPHYSICIAN.

The brain of that distinguished metaphysician Archbishop Whately was not over large, but it was so disposed as to be perfectly available. See how prominent the perceptive facul-



Fig. 998.—RICHARD WHATELY.*

ties, and how high the whole make-up! He was eminently practical and descriptive. He readily perceived the relations between one thing and another, and whatever he wished to communicate he illustrated with pictures, as it were, from nature. Our likeness was taken late in life, and shows but the general contour of face and brain. In middle age his features were much less rigid and stern in expression, for he possessed a mirthful nature. He was capable, however, of severity, especially in speech, and had a very active sense of the ludicrous. Indeed, he would pass for an original wit. He was a supporter of reformatory measures, taking an interest in advanced views. There was great pride, self-reliance, authority, love of command, and dignity in his nature.

* Richard Whately, D.D., was born in London, February 1, 1787. He was carefully educated, and graduated at Oriel College, Oxford; after which he became an instructor at Oxford, and continued there until 1831, when he was consecrated Archbishop of Dublin and Bishop of Glendalgh. Since 1846, and until his death, he also held the bishopric of Kildare. During his residence in Ireland he took an active part in measures for the educational improvement of the people. He was a most voluminous author, especially in the department of theology. His works entitled "Elements of Rhetoric," "Elements of Logic," and "Historic Doubts relative to Napoleon Bonaparte," are probably the most extensively known. In metaphysical learning he had no superior. His style is clear and elegant, and his reasoning cogent. He died at Roebuck, near Dublin, October 8, 1863.

THE BRUTAL MURDERER.

Here is the likeness of an unfortunate mortal, almost a moral abortion. There was evidently the germ out of which, if rightly developed from early youth, there might have come a well-organized human being, but through a wicked perversion, by means of a dissipated, vicious life, he culminated in the miserable vagabond, murderer, and suicide. The face is most repulsive. See how contracted and pinched it is! see how sly, cunning, and concealed! The head is low in Benevolence, small in Conscientiousness and Spirituality. In fine, the whole is coarse and low. It is painful to contemplate



Fig. 999.—SEAMAN SIMONS.*

such an organization, and still more painful to trace the life such a one would be likely, if unrestrained, to lead. Nothing but Christianity and the best social influences could have saved him from crime; and yet even worse persons than he have been reclaimed and lived useful lives in their spheres. Grace works in every breast, and if fostered, its influence may be said to be without limit to save such persons from misery and crime. There is yet work for philanthropists and reformers.

* Seaman Simons, the murderer of Levi Van Gelder in September, 1863, was born about the year 1820. He was illiterate and low-lived, and worked as a farm laborer in the valley of Ten Mile Creek, Steuben County, New York. Van Gelder was also a farm laborer, and generally regarded as a quiet, inoffensive man. The only known motive for Simons' atrocious villainy was his own criminal intimacy with Van Gelder's wife, and even to that the weak-minded Van Gelder had offered little opposition. Simon was tried and convicted of the murder, but escaped the well-deserved penalty of his crimes by suicide.

THE HUMORIST.

Mr. Thackeray was a specimen of the better class of literary Englishmen. He was at once bluff and kindly, full of human sympathies, and endowed with a keen and quick appreciation



of character in its various phases. His intellect was eminently practical, yet had breadth and comprehensiveness. Mirthfulness, Benevolence, Combativeness, Constructiveness, and Comparison were large, giving him vivacity, kindness, force, invention, and critical acumen. In his writings we should look for good-humor, sprightliness, and piquancy, pervaded with a vein of satire. It is

well known that through his encouragement Miss Brontë's writings first obtained public notice. He saw her genius and originality, and deemed her well worthy of general favor. He was more sensible than showy, more practical than imaginative, more observing than reflective, and, judging only from this portrait, more worldly-minded than spiritual.

° William Makepeace Thackeray was born of English parents in Calcutta, Hindoostan, in 1811, his father being engaged in the civil service of the East India Company. At the age of seven he was sent to England, where he was educated. On coming to his majority, and at the same time into the possession of a large fortune, he chose Art as a profession, and traveled and studied in France, Italy, and Germany. Not making satisfactory progress in this sphere, before his thirtieth year he relinquished it and made letters his pursuit. His efforts as a writer did not meet with much favor at first, but his satirical contributions to the *London Punch*, in 1841, brought him into notice. As a humorous and satirical writer and lecturer he had no superior. His "History of Henry Esmond, Esq.," and "Pendennis" are considered his best works. He edited the *Cornhill Magazine*, which he commenced in January, 1860, and also contributed largely and most successfully to other serials.

THE ENGINEER.

In Brunel we have the man of deeds rather than of words. His brain was not so broad as that of Thackeray, but longer, and immensely developed in the perceptive region. Brunel's reflective faculties were also well manifested, indicating the profound thinker. His Constructiveness was very large and dealt with mechanical affairs, while that of Thackeray revealed itself in the structure of his literary compositions. He was kind and well disposed to his fellow-men, but had not so much of the feeling of good-fellowship as Thackeray, nor was he so fond of good living. Brunel exhibits in his head and face the scientific scholar, the deep thinker, and examiner of physical laws. Like Thackeray, he had strong social tendencies, but they were more of the retired home sort. Brunel's forehead was very high, much surpassing Thackeray's in that respect, evincing his strong natural disposition to plan great enterprises and superintend measures of a broad and comprehensive character. We could not ascribe to such an intellect insignificant or mean projects, but would rather expect his undertakings to be so vast as to appear even chimerical.



Fig. 1001.—MARK I. BRUNEL.*

* Sir Mark Isambart Brunel was born at Haqueville, near Rouen, France, April 25, 1769. He was educated in Rouen, and at the age of seventeen entered the French merchant service and made several voyages to the West Indies. His constructive talent was remarkable. On board ship he made nautical instruments and a piano-forte. In 1793 he left France on account of some political difficulty and came to New York. Here he engaged in architecture and engineering, and was employed in the survey for the Champlain Canal. After a few years' residence in America he returned to Europe, where he made several improvements in naval architecture. The work specially associated with his name is the tunnel under the Thames River, about two miles below London Bridge, which is considered a triumph of engineering skill. He died December 12, 1849.

THE TRAITOR.

The well-outlined profile of Benedict Arnold conveys to the reader a fair conception of the character of this unfortunate man. The percepts are predominant, showing him a



Fig. 1002.—BENEDICT ARNOLD.

tical, working man. His arched nose shows force and progressiveness, while in the curve of the upper lip is seen ambition and will. The massive chin and cheek, so full at the lower portion, show a strong disposition for animal enjoyment and a tendency to dissipation, unless due moral restraint were exercised. The head is high in the crown, but very *short* on top, and the moral organs are only moderately developed—Benevolence and Conscientiousness especially. He had more Approbativeness than Self-Esteem, and more Combativeness than Cautiousness. His social organs were large and active, and not sufficiently restrained by the higher sentiments. Destructiveness being influential, gave him a character for positiveness and thoroughness in whatever he took an interest in.

° Benedict Arnold was born at Norwich, Conn., January 3, 1740. He began life a horse-dealer, and subsequently was an apothecary and bookseller. Early in the war of the American Revolution he distinguished himself as a leader in the Continental army, and was promoted to the position of brigadier-general. After several gallant military operations, through dissipation and pecuniary embarrassment he was induced in the hope of retrieving his fortunes to turn traitor to his country. The scheme which he had concerted with the British commandant, for surrendering West Point, miscarried, but Arnold escaped to the British forces. After crowning his perfidy by fighting as vigorously against his country as he had previously done for her, he retired to private life in England, where in shame and solitude he died without friends June 14, 1801.

THE ECCENTRIC PREACHER.

In Lorenzo Dow we find a brain of large size, the chief peculiarity of which is the prominence of the coronal or moral region. He had force and courage, which, allied to his moral and religious nature, stimulated the latter and rendered him efficient as a preacher. His social nature was strong and active, but rendered subservient to the higher feelings. Veneration, Benevolence, Human Nature, Firmness, Conscientiousness, and Self-Esteem were all large. There was an unusually even balance between the perceptive and reflective organs. Imitation was not large in Dow, while in Benedict Arnold it was well marked. The superiority of Dow's head is quite apparent. See how high and long on top! In force of character he was fully equal to Arnold; in intellect and moral organization he was much superior.



Fig. 1003.—LORENZO DOW.*

* Lorenzo Dow was born in Coventry, Connecticut, October 16, 1777, and died in Georgetown, D. C., February 2, 1834. He became a preacher of the Methodist persuasion when but nineteen years of age, and traveled throughout the United States and Canada, preaching here and there. He visited England and Ireland, boldly announcing his opinions wherever he could find a listener. His eccentricities of dress and manner were such as to impress one with doubts as to his sanity, yet his preaching was sometimes attended by astonishing results in the way of "conversions" among the poor and illiterate to whom he addressed himself. His wife, Peggy Dow, a Friend or Quaker, accompanied him in his travels, and harmonized strangely with him in character and disposition.

THE JOURNALIST AND AUTHOR.

Mr. Curtis is well made, somewhat above the average in height, and possesses a mental-motive temperament. His head is above the medium in circumference, and his features are



Fig. 1004.—GEORGE Wm. CURTIS.

well marked. His complexion is light, his hair brown, and eyes bluish-gray. He has large Mirthfulness, large Benevolence, and the organs of the coronal region are all amply developed. The features do not indicate much severity of temper, but on the contrary, a mild and pliable nature, a disposition inclined to sympathy and generosity where he becomes interested. The large open eyes and the playful mouth denote frankness of manner and

speech, while in the upper lip we may detect a feeling of pride, and a soul stirred by motives somewhat ambitious. The large chin shows ardor of social feeling with a general warmth of expression and demeanor. The perceptive faculties are rather more conspicuous than the reflective, still there is a fair balance of the intellectual organs, with high moral sentiments.

° George William Curtis was born in Providence, Rhode Island, Feb. 24, 1824. After the age of fifteen, and until 1842, he spent one year in the counting-house, and the other two in agricultural pursuits and study. In 1846 he went to Europe, where he traveled considerably and studied. He also visited Egypt and Syria. In 1850 he returned to the United States, where he engaged in literary life. He is distinguished as an author, poet, and lecturer. Was at one time associated in editing a periodical known as *Putnam's Monthly*, and more recently of *Harper's Weekly*. He has written several books, among which the "Nile Notes of a Howadji" and "Lotus Eating" are perhaps the best known.

A MODERN PHILOSOPHER.

Herbert Spencer has a brain the magnitude of which evidently ill accords with his body. In him the nervous system greatly predominates. He certainly must carefully guard his health, or the vital system would soon succumb to the great activity of his brain. Comparing him with Mr. Curtis, we find a greater breadth of brain at the top and more conspicuous reflective organs. Mr. Curtis is definite and clear in his views of men and things; Mr. Spencer profound and deeply theoretical, looking more into the interior essence of subjects and discuss-



Fig. 1005.—HERBERT SPENCER.*

ing their special relations and properties. If Mr. Spencer is more distinguished for his abstract speculation and philosophical inquiry, Mr. Curtis should be more known for his vivid imagination and poetical conceptions. In Mr. Spencer we observe great independence of spirit with great constructive ability and method. Mr. Curtis has more constitution, more enthusiasm and sprightliness. As authors, the one writes for the many, the other for the few.

* Herbert Spencer, an English author of considerable repute, was born in Derby, in 1820. His education was derived chiefly at home from the instructions of his father, and of an uncle who was a clergyman. He became a civil engineer, but at the age of twenty-five left the profession to engage in literature. His writings are quite numerous, all of a deeply philosophical or metaphysical caste; in some of them he treats of society and practical life upon a philosophical basis, looking into the interior mechanism of human character, and tracing its relations with the great laws which govern the external world.

THE ROMANCE WRITER.

Mr. Hawthorne possessed a large brain, the most striking peculiarity of which was its great height. Ideality, Mirthfulness, Human Nature, and Comparison were among his most

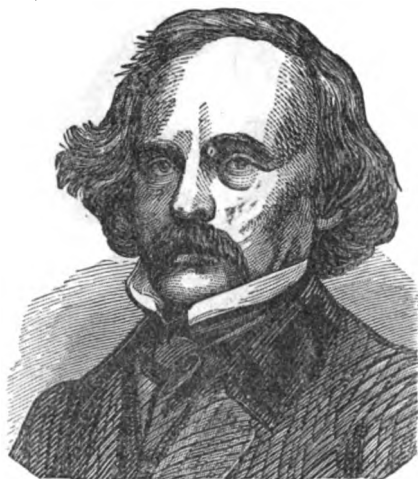


Fig. 1006.—NATHANIEL HAWTHORNE.*

prominent qualities. His observing faculties were not small, but large enough to furnish the material from the world without, which fed his higher intellectual powers. Benevolence, Conscientiousness, and Cautiousness contributed greatly in the formation of his mental and moral character. As a writer, his style would be rather of the grave than the gay, dealing with mankind in the abstract. His large Human Nature would aid him in the faithful portraiture of character, whether in domestic or public life, while his Benevolence would invest his subjects with the charm of tenderness and cordiality. Among strangers he was sedate, among friends most genial. Our portrait—from a photograph, the best we could obtain—fails to do him justice. His features were regular and very expressive.

* Nathaniel Hawthorne was born at Salem, Massachusetts, July 5, 1804. His ancestors were seamen; but leaving the track well-worn by his fathers, Nathaniel obtained a classical education, and found in literature food for his reflective and imaginative mind. His productions when first published did not meet with public favor, but after a while the originality and genius displayed in them won general approval. Mr. Hawthorne during his life occupied several offices of responsibility under the national government. His principal writings are "The Scarlet Letter," "The Marble Faun," and "Our Old Home." He is graceful and refined in style, sparkling with wit and condensed in thought, and taken altogether ranks with the first of American novelists. He died May 18th, 1864, at Plymouth, N. H. His brain was more active than his body was strong.

THE ESSAYIST AND POET.

In Mr. Willis we observe vivacity and raciness. He is less restrained and more spontaneous and communicative than Mr. Hawthorne. The perceptive faculties are more prominent; he deals with things and men as they are; and his large Ideality, Mirthfulness, and evidently well-marked Hope render him something of an enthusiast in that which especially interests him. He is much more playful and demonstrative than was the author of "The Scarlet Letter." The latter possessed more dignity; Mr. Willis has more affability. As writers, Mr. Hawthorne's imagination would take a higher range than that of Mr. Willis and

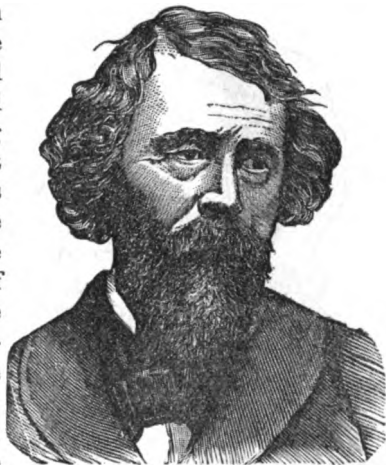


Fig. 1007.—N. P. WILLIS.*

manifest a depth of thought which would not appear in the compositions of the latter. Mr. Willis would be more social, more popular with the many, and take on more of the conventionalities of society. The quality of this organization is exquisitely fine; the touch most sensitive; and the mind remarkably susceptible. The features are nicely chiseled, and the entire person refined and delicate rather than strong and robust. The portrait is far from perfect.

* Nathaniel Parker Willis was born in Portland, Maine, Jan. 20, 1807. When about six years of age his parents removed to Boston, where he received his early education. In 1827 he graduated at Yale College, and immediately engaged in literary pursuits. He is extensively known in both America and Europe as a poet and novelist. A large portion of his writings are sketches of travel in Europe, where he spent several years. Since 1846, until recently, he was associated with Mr. George P. Morris in the publication of the *Home Journal*, a literary weekly. His style as a writer is graceful and sprightly. He resides at Idlewild, an elegant country seat on the banks of the Hudson River, near Newburg, N. Y.

AN ART WRITER.

This is a singular face, not unlike that of Lavater. We should class Fuseli among observers and practical workers rather than among original thinkers. Such an intellect would



Fig. 1008.—HENRY FUSELI.*

be both receptive and communicative. His mental temperament was most active and predominant. There was also ambition and considerable devotion and imagination. He evidently would make the most of his opportunities, and such persons usually appear to better advantage than those more profound. They certainly deserve credit for the perseverance and application usually exhibited by them in the furtherance of particular interests, and for the suc-

cess which generally attends their efforts. Zeal, enthusiasm, and ambition to excel in a particular direction, are clearly expressed in this face. The head is that of an observer rather than that of a philosopher.

* Henry Fuseli, eminent as a painter and writer on Art, was born at Zurich, Switzerland, February 7, 1741. His father, John Caspar Fuseli, was also a painter, but intended Henry for the Church, and to that end gave him a classical education. He took orders in 1761, but his inclination toward his father's art had led him from childhood to cultivate painting in secret. He visited England, and was there advised by Sir Joshua Reynolds to devote himself to Art, in pursuance of which advice he spent eight years in Italy studying the old masters. In 1788 he returned to England, where he industriously pursued his vocation, writing and lecturing on the subject of Art, and executing paintings *seriatim* on an extended scale. His "Milton Gallery," including forty-seven designs, ranks first among his performances. He wrote in a clear and vigorous style, and his lectures before the Royal Academy were considered among the best specimens of Art criticism in English literature. He died in London, April 16, 1825.

A PREACHER AND POET.

In the Rev. John Pierpont we have quite a different organization from that of the preceding. The temperament is not less active, but the brain better balanced. There is symmetry, evenness, and fullness.

The head would pass for that of a philosopher, as well as for that of a poet or preacher. There is a reasonable degree of Self-Esteem and Approbativeness, not large Destructiveness, nor very strong Combative-ness. He has integrity, devotion, the broadest and warmest sympathies, and an intellect at once comprehensive and critical. It can not be wondered at that he has taken a leading place among American divines. His brain being well sustained by an excellent physical constitution, he can work almost incessantly, and continue sound to the last. His hair is fine and silky; his skin fresh and rosy; and his countenance full of dignity, integrity, respect, kindness, and intelligence. He is in many respects a very remarkable man.



Fig. 1009.—JOHN PIERPONT.*

* John Pierpont was born at Litchfield, Connecticut, April 6, 1785. He graduated at Yale College in 1804, and after four years spent in the capacity of a private tutor, studied law, and in 1812 commenced the practice of that profession in Newburyport, Massachusetts. Want of success induced him to leave the law and embark in mercantile business, in which he was likewise unsuccessful. In 1816 he studied theology, and three years afterward was ordained a Congregationalist minister. He occupied the pulpit of the Old South Church in Boston for many years. During his ministry he has traveled considerably in Europe, and has advocated energetically various moral reforms, emancipation and temperance chiefly. He has published several poems, prominent among which is "Airs of Palestine." At present he occupies a post of honor and of trust in the Treasury Department at Washington.

THE WOMAN OF GENIUS.

Intensity is the most striking expression in the intellectual countenance of Charlotte Brontë. Her brain was evidently large and her temperament of the finest quality. There was



nothing coarse or crude about her. There was enough of the Irish element in her composition to give vivacity and versatility, but scarcely enough of the Saxon to render her steady and enduring. All things with her would be in the extreme—her affections, her sympathies, her devotion and her imaginations. Unless she were fortunately or pleasantly situated, the mind would of necessity wear out the body, as her mental machinery was too much for the vital powers. She may be ac-

counted as one of the more exquisite, chaste, and sensitive of human beings. There were gifts here higher than intellectual observation or reflection. There was something spiritual, akin to the prophetic. Like our Laura Bridgeman, the deaf, dumb, and blind girl of Boston, she could see, as it were, with her mind, independent of the organs of vision. She was psychological, a natural clairvoyant, and chiefly made up of *nerves*, rather than, like others, of bones and muscles. More vitality was necessary.

° Charlotte Brontë was born at Thornton, in Yorkshire, England, April 21, 1816. Her father was a curate in humble circumstances. Her life, up to almost the period of her death, was one of anxiety and care. Domestic bereavements, and the lack of favor which her earlier literary efforts met with, embittered her career. But in 1847 her perseverance as a writer was rewarded by the enthusiastic reception of "Jane Eyre," her best effort. Two other novels of her composition, "Shirley" and "Villette," are highly esteemed. The charm which pervades her writings is the knowledge of the secret workings of the human heart, there evinced. In 1854 she married Mr. Nicholls, her father's curate, but did not long survive the union. She died at Haworth, March 31, 1855.

THE DRESS REFORMER.

This lady possesses a good figure, and is slightly under the average size. Her brain is well balanced, but rather more developed in the social and religious than in the imaginative and reflective regions. Her features are fairly formed. Language is large, as may be seen in our portrait by the fullness of the eye. Her nose is regular in outline, indicating gentleness and forbearance rather than boldness of spirit. The mouth is large, but delicate and well shaped. In her chin and cheeks are evidences of strong and healthy circulation and a well-nourished physique.



Fig. 1011.—AMELIA BLOOMER.*

In character she would be more reformatory than conservative. She would not be indifferent to praise or blame, but sensitive, though she possesses a comfortable degree of self-reliance and assurance. The depth and compression of the upper lip indicate decision and positiveness of character. Still, she is gentle and quite affable and agreeable in her deportment. Such an organization, if the mind be cultivated, would respond readily to the call of duty, be it approved or disapproved by the *vox populi*. Conscious of the correctness of her motives, she holds herself accountable, first to her Maker, next to society. She would not turn back because opposed. There is great moral fortitude here. She is evidently like her father, in the love of liberty and sense of independence. She would have her own way.

* Mrs. Amelia Bloomer was born in Cortlandt County, N. Y., about 1819. Her education has been well attended to, and she stands well among American female magazine writers. She is best known for her efforts in promoting the adoption of that peculiar style of female dress generally called by her name, "the Bloomer costume," which she adopted some years ago and advocated in her journal called the "Lily." In 1840 she was married to Mr. D. C. Bloomer, a lawyer in Seneca Falls, N. Y., now residing at Council Bluffs, Iowa.

THE GREAT HISTORIAN.

In Mr. Prescott we behold a noble, high-minded, dignified gentleman. The countenance speaks his character. Observe the distance from the ear forward and to the top of the head.



Fig. 1012.—WILLIAM H. PRESCOTT.

There was nothing lacking in this organization to prevent him from being a model man. It is scarcely necessary to specify particular features where the whole was so fully developed, so even, and harmonious. His mentality was of the meditative order. His character was very harmonious in all respects. Kind and genial in manner, unassuming yet self-reliant, warm in friendship, and affectionate, persevering, and industrious, he appears in every lineament a truly admirable character. That

is a classical face; a large forehead, but not excessive, an elegant nose, a fine mouth, a beautiful chin, and the whole nicely rounded and set off by a mind of surpassing simplicity, strength, dignity, humility, kindness, devotion, and affection.

◦ William Hickling Prescott was born in Salem, Massachusetts, May 4, 1796, and died in Boston, January 28, 1859. At the close of a course of study at Harvard College he accidentally lost the use of one of his eyes. Excessive study produced an inflammation in the other, which almost deprived him of sight. He was intended for the law, but the condition of his eyesight obliged him to forego that intention; he therefore turned to literature, making the department of history his specialty. He is eminent as the principal historian of Spain in her golden age. His histories of "Ferdinand and Isabella," "Conquest of Mexico," and "Conquest of Peru" rank as high authority in Europe as well as in America. Notwithstanding his physical infirmity, by the aid of other eyes he has been unsurpassed among historians for the depth and accuracy of his researches, and for the care and impartiality exhibited in his compilations.

“THE OLD MAN ELOQUENT.”

In John Quincy Adams is seen a very “strong character.” A cast in our collection taken from his head exhibits one of the largest developments of Self-Esteem, Firmness, and Conscientiousness among all our statesmen. His intellect was eminently practical, as appears in the prominent perceptive faculties. The face shows power, will, and endurance, and in these respects, as is well known, he had few equals—no superiors. Observe the wrinkle at the root of the nose. Although not distinguished for his urbanity and kindness of manner, he was one of the most upright and just of men. His integrity was never questioned.



Fig. 1013.—JOHN QUINCY ADAMS.*

* John Quincy Adams was born in Braintree, Massachusetts, July 11, 1767. He was the eldest son of John Adams, second President of the United States. In early life he traveled considerably in Europe, accompanying his father, who had been appointed minister to France. When but fifteen he acted as private secretary to Francis Dana, then American minister to Russia. In 1791 he was admitted to the Massachusetts bar, and commenced the practice of law in Boston. Interesting himself in the stirring politics of the day he soon became a leader of the Federalist party. In 1794 Washington appointed him minister to Holland; afterward, in 1797, to Berlin. In 1803 he was chosen a Senator to Congress from Massachusetts, a position which he held from time to time during his life. He succeeded Monroe in the Presidency of the United States. As Secretary of State in Mr. Monroe's cabinet, he distinguished himself for his bold diplomatic measures, especially in regard to the boundaries of Florida and Louisiana, and the famous Missouri compromise. As a diplomatist he was regarded by Washington as the ablest in the American diplomatic corps, and as a statesman was one of the most indomitable spirits of his time. He died at Washington from a stroke of paralysis, while occupying his seat in Congress, February 23, 1848.

THE SCOTCH PHILANTHROPIST.

Our engraving scarcely approaches a resemblance to this eminent man. He has a large brain and a strong mental-motive temperament. The head is very high in Benevolence,



Veneration, and Conscientiousness. Caution is also well marked. He is evidently one of the most kindly and affectionate of men. Language is well expressed in the fullness of the eye, and it, combined with his fine intellect and well-marked Ideality, gives him the ability as a speaker for which he is eminent. The large reflective and the large perceptive faculties constitute him both a thinker and an observer. He evidently

Fig. 1014.—THOMAS GUTHRIE, D.D.*

includes both the practical and theoretical in his point of view, combines practice with precept, while his social sympathies and devotional feelings imbue and give direction to his mental considerations. He has enough of the positive and resolute to make him direct and definite in the furtherance of his purposes, but devotion and kindness greatly predominate.

* Thomas Guthrie, D.D., was born in Brechin, Forfarshire, Scotland. He was educated for the ministry in the University of Edinburgh; and also studied medicine in Paris, for the purpose of assisting the poor medically in the course of his ministry. He has attained great eminence in Scotland for philanthropy and pulpit eloquence. Associated with Dr. Chalmers and others, he aided not a little in establishing the Free Church of Scotland, in 1843. He may be counted the father of the ragged-school system, through which an inestimable amount of good has been done. He is also distinguished as one of the most zealous advocates of temperance, in which cause he has rendered efficient service both as a writer and lecturer

THE MAN OF THE PEOPLE.

President Johnson possesses a large, dense, and compact organization. His head is broad and rather long, and in the crown exhibits more Firmness, Conscientiousness, and Benev-

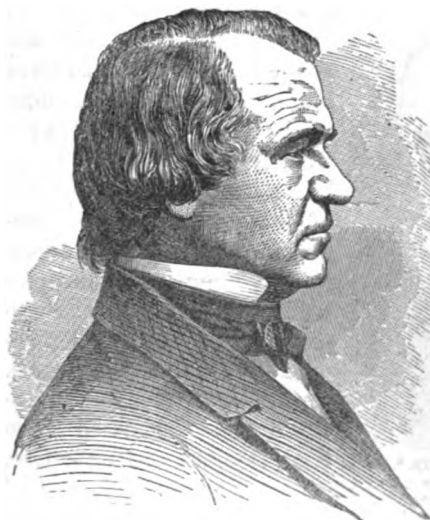


Fig. 1015.—ANDREW JOHNSON.*

The enjoyments of physical life possess a greater attraction for him, and he would relish the good things of the table with a keener zest. Dr. Guthrie evidently would not utter his opinions with the force and positiveness which Mr. Johnson might exhibit, his larger Cautiousness exercising its restraint, and his powers of analysis being probably less extensive. President Johnson's intellect is critical and analytical, more sound than brilliant, more practical and utilitarian than ornamental or facile. That is an anxious and emphatic face.

olence than Veneration, Self-Esteem, and Spirituality. Approbation is not a controlling element in his character; he cares little for display or ornament. Compared with Dr. Guthrie, President Johnson would care less for the delicate and artistic, and be more practical and matter-of-fact. The latter has more Secretiveness and Destructiveness and less Cautiousness.

* Andrew Johnson was born at Raleigh, N. C., December 29, 1808. His parents were poor, and the death of his father, when Andrew was but a child, left the family in straitened circumstances. At an early age he went into a shop to learn the tailor's trade. His educational advantages were very few, and what he has obtained in the way of mental improvement was acquired by dint of close application after he came to man's estate. He settled himself when a young man in Greenville, Tennessee, and as soon as he felt strong enough intellectually, interested himself in the po-

THE GREAT LAWYER.

In Rufus Choate we find the mental-motive temperament, the mental element greatly predominating, but the motive also strongly marked. This combination imparted that vigor-



Fig. 1016.—RUFUS CHOATE.*

ous mentality for which he was remarkable. The organs at the base of the brain were large, giving him great endurance, which sustained his extremely active intellect much beyond the apparent capacity of his vital energies. Language, Human Nature, Mirthfulness, Time, and Color were well developed. He also possessed Firmness and Self-Esteem in a conspicuous degree. Large Combativeness and Destructiveness rendered him bold, resolute, and executive.

The back-head was evidently strong, warming up his mental manifestations and contributing largely toward that fiery eloquence for which he was distinguished. See how expressive!

litical questions of the day. His abilities soon made him known and respected. In 1851 he was elected Governor of Tennessee; in 1857 he was chosen a Senator in the United States Congress, and in 1864 was elected Vice-President of the United States. President Lincoln having been assassinated soon after his re-inauguration, Mr. Johnson by virtue of his office was called to assume the chief magistracy in April, 1865.

* Rufus Choate, an eminent American lawyer, was born at Essex, Massachusetts, October 1, 1799. After a thorough collegiate education he studied law, and commenced the practice of that profession in 1824. He rapidly rose in public estimation, and when but thirty-five years of age was considered one of the foremost advocates of the Massachusetts bar. In 1841 he was chosen a member of the United States Senate, but preferring private life and the practice of his profession, at the close of his term he returned to his office in Boston. He was a close and thorough student, and no man in New England possessed a more extensive knowledge of legal principles and practice. In the management of jury trials he probably was never surpassed. He died in the summer of 1859.

THE EMINENT JURIST.

In John Marshall, who was nearly cotemporary with Choate, and like him a lawyer, we find marked differences in mental and physical constitution. The face of Marshall exhibits calmness, mildness, and freedom from the mental excitability which we find so deeply impressed upon that of Choate. The organs of his side-head were not so large as those of the latter; but Conscientiousness, Veneration, Caution, and Spirituality were larger. His Approbativeness was less strongly indicated. A man with the organization of Choate would be restless, ambitious, sprightly, and brilliant. One with the organization of Marshall would be cool, profound, and rather indifferent to the estimation of the world and the pleasures of sense. Marshall's head is high, long, and narrow; Choate's is broad at the base and not so high. In Marshall, the moral organs were more active; in Choate, the organs in the side-head were predominant. In the one we see the earnest advocate; and in the other, the profound judge.



Fig. 1017.—JOHN MARSHALL.*

* John Marshall, eminent as a patriot and jurist in the early days of the American republic, was born at Germantown, Fauquier County, Virginia, September 24, 1755. He was the eldest of fifteen children. In early youth he exhibited considerable aptitude for literature and acquired a fair education. In the war of the Revolution he did good service as a volunteer. In 1781 he commenced the practice of law, and in a short time became eminent. He was called to take part in the political affairs of his State, by being elected to a seat in the Virginia Legislature when but twenty-six years of age. He afterward was appointed ambassador to France, and at a later period occupied a seat in Congress. In 1801 he was chosen Chief-Justice of the Supreme Court of the United States, and in this office conducted himself with spotless integrity. His decisions are authorities, the world over. He died at Philadelphia, July 6, 1835.



Fig. 1018.—GEORGE WASHINGTON.*

* George Washington was born in Westmoreland County, Virginia, February 22, 1732, and died at Mount Vernon, Virginia, December 14, 1799. He received a good but not superior education at school, afterward using to advantage all opportunities for mental improvement. His entire life from the very cradle has been the theme of many a historian; but it is on his successful leadership of the American armies during the trying years of the Revolution that his fame chiefly rests. When the Federal constitution was formed, Washington was unanimously chosen the first President



Fig. 1019.—JULIUS CÆSAR.*

of the United States, and served two terms with great executive ability. On retiring from public life he spent the remainder of his days in the peaceful retirement of his farm at Mount Vernon, and died the truly beloved of his nation. Our likeness is copied from Dodge's portrait.

* Julius Cæsar was born in Rome, in the year 100 B.C. In early youth he was distinguished for the precocity of his intellect. When about thirty-

THE FATHER OF HIS COUNTRY.

George Washington affords an admirable illustration of all the temperaments in harmonious combination. The brain was decidedly large, but not excessive; the quality was good, somewhat finer than the average, and the whole more evenly and harmoniously developed than is usually to be met with. In his intellect the perceptive faculties predominated over the reflective. All the organs of the crown and top-head were large and active. His phrenological organization was such as to render him a character eminent for calmness, devotion, deliberation, frugality, industry, and justice. If any qualities were more conspicuous than the others, they were Veneration, Firmness, Conscientiousness, and Spirituality. Self Esteem and Approbativeness were about even in development. Concentrativeness was also active. He was dignified, conservative, and steadfast. In the massive and well-proportioned nose we find the index of a highly developed character. The organs which give strength, thoroughness, boldness, prudence, and executiveness were strongly marked. His passions and propensities were perfectly subordinated to his moral sense, and the whole were under the direction of a well-balanced intellect. Washington was no eccentric; he was an excellent engineer, surveyor, architect, merchant, magistrate, counselor, farmer, soldier, and statesman. He could both plan and execute, lead or follow, write or speak, work or play. His spiritual forecast made him prophetic. He was something of a poet, a philosopher, an artist; and above all, he was a most dutiful son, a loving husband, a kindly neighbor, a good citizen, and a circumspect Christian gentleman.

four years of age he achieved considerable military success in a campaign against some of the native tribes in Spain. He was soon afterward chosen to the consulship by the Senate and Roman people. He also gained great renown by his brilliant military operations in France, Germany, and Britain; and afterward espousing the cause of the people in the great civil war, he defeated the patricians in the memorable battle of Pharsalia. After other successful warlike undertakings in Egypt, Greece, and Africa, he was made emperor in 45 B.C. The jealousy of the aristocracy, however, culminated in his assassination in 44 B.C. He ranks among the first of ancient and modern times as a general, a statesman, and a historian.

THE AMBITIOUS RULER.

The profile of Julius Cæsar, here given, well represents the mental giant who has inscribed his name high on the roll of fame. His percepts were immense, Locality, Individuality, Form, and Size especially so. His head was high, but did not possess the breadth in the crown or the length on top which we find so conspicuous in Washington. We do not find Conscientiousness, Self-Esteem, Spirituality, and Hope so well indicated; but Approbativeness, Combativeness, and Acquisitiveness more prominent. Ambition would mark the career of Cæsar; duty would govern the efforts of Washington. Socially considered, Cæsar would be inclined to voluptuousness; while Washington would find the tranquil happiness of domestic life a source of comfort and refined enjoyment. Steadiness, integrity, and a strict adherence to moral obligations would mark the conduct of the one in public life; while the other would carve fame by rendering circumstances subservient to his purposes. Ambition was the main characteristic of the one, rectitude and duty the pole-star of the other. Louis Napoleon gives the following personal description of the great Roman:

"His eyes were dark, his glance penetrating, his complexion colorless, and his nose straight and somewhat thick. [We class it among Roman noses, as it most certainly was.] His mouth was small and regular, and the lips, rather full, gave to the lower part of his face an expression of kindliness, while his breadth of forehead indicated the development of the intellectual faculties. His face was full, at least in his youth; but in the busts which were made toward the close of his life, his features are thinner, and bear the traces of fatigue. His voice was sonorous and vibrating; his gesture noble, and an air of dignity pervaded his whole person. His constitution, which at first was delicate, grew robust by sober living, and by his habit of exposing himself to the inclemency of the seasons. Accustomed from his youth to manly exercises, he was a bold horseman; and he supported with ease privations and fatigues. Habitually abstemious, his health was not weakened by excess of labor nor by excess of pleasure."

Observe the muscles of the neck. See how rigid, how compact, and how angular the features! There was power in every line, but the whole aspect is individual, worldly, and material. Compare him with the mild and genial Washington.

THE RELIGIOUS REFORMER.

This portrait of John Knox presents one of the most original and strongly marked faces in our large collection of likenesses. It is at once massive and symmetrical. In a phre-



Fig. 1020.—JOHN KNOX.*

nological point of view it would afford much greater interest had the portrait been taken without the hat. There was large Conscientiousness, very large Firmness, full Self-Esteem, and large Veneration and Benevolence. Spirituality was probably not very conspicuously marked, but active. The organs which impart courage and executiveness were strong. Language was large, and the perceptive and reflective intellect well

indicated. His emotional and sympathetic nature was active and influential. The strong mental-motive temperament indicates the earnest worker, and the stern serenity of the features evinces his fixedness of purpose. Approbativeness and Acquisitiveness were evidently small, while Secretiveness did not give him policy enough to restrain his boldness. Taken altogether there is something of real moral grandeur impressed upon this countenance. There is originality and strength here.

* John Knox, the Scottish Reformer, was born at Gifford, in East Lothian, in 1505. His education was classical, and being destined for the Church he took orders about 1530. Becoming averse to Popish theology as it was then taught, he in 1542 formally avowed Protestantism and joined the ranks of the Reformers. He was one of the boldest champions of the Reformed faith, persecuted and protected by turns, and finally triumphant in establishing the Protestant Church in Scotland. The house in which he lived is still standing. His death occurred November 24, 1572.

THE PRIEST AND DIPLOMATIST.

There is a marked difference in contour between the head of the French cardinal and that of the Scottish Reformer, and the characteristics of each were as widely different. In Richelieu, pride, ambition, and imagination are conspicuous. In Knox, dignity, integrity, and steadfastness. The former was brilliant and showy, but lacked that calm self-reliance and disinterestedness which proceed from high-born motives and superior morality. Richelieu coveted the applause of men, the honors of state, the magnificence of official elevation. Knox cared nothing for worldly show and worldly preference, but, calm in his



Fig. 1021.—CARDINAL RICHELIEU.

convictions, would have died at the stake sooner than yield to error. The one made fame the object of his endeavors and disregarded the moral character of the means used to obtain it; the other brought all his motives to the test of Conscientiousness, and made duty the main-spring of action. In Richelieu we discern the unscrupulous minister of royalty and the brilliant courtier. In Knox, unswerving loyalty to justice and duty are apparent. Here, in Richelieu, Ideality, Sublimity, Imitation, and Language were large. He would be imaginative, tasteful, brilliant, and eloquent. Socially, he would manifest more admiration than true love for woman.

^o Cardinal Armand J. Du P. Richelieu was born at Paris, September 5, 1585. At the early age of twenty-two he was consecrated Bishop of Luçon, and conducted himself with such success in this high station as to gain the royal favor. In 1622 he was made cardinal, and two years afterward became the chief minister of France. His career was distinguished for the boldness and success of his measures, and also for his intolerance of the Calvinists. He died December 4, 1642.

THE PULPIT ORATOR.

In Dr. Potts, as represented by our portrait, the moral organs were large and their manifestations the most conspicuous in his character. The brain was large and well balanced,



Fig. 1022.—GEORGE POTTS, D.D.*

and sustained by a vigorous vital system. Veneration was very large; so were Conscientiousness and Approbation; Self-Esteem was somewhat deficient. The organs in the back-head were active, and taken in combination with his devotional and moral sentiments, rendered him affectionate, just, sympathetical, and reverential. The

intellectual faculties were large, and being well cultivated, their manifestations were of a superior order. Clearness and force were rather more conspicuous in his reasoning than depth; yet he was not by any means deficient in intellectual comprehension. All the perceptive organs were large. The organs of the side-head—Mirthfulness, Ideality, and Sublimity—were large enough to render his discourse graceful, rich, and imaginative. He was extremely sensitive, and suffered much from this weakness. The truth alone sustained him.

* George Potts was born at Philadelphia, Pa., and educated at Princeton College, New Jersey. Soon after graduating he became pastor of a Presbyterian church in Natchez, Miss., where he remained fifteen years. Subsequently he came to New York city, where he occupied the pulpit of the largest Presbyterian congregation in the city until his death, which occurred September 15, 1864. As a pulpit orator he was classed among the foremost ministers of his denomination, and as a controversialist, one of the ablest of American divines.

THE FRIEND.

The strong, positive features of Isaac T. Hopper's face in the absence of a view of the top-head impress us with the idea that its owner's main characteristic was efficiency. Boldness, independence, and fortitude would characterize his relations with the world. Aside from his religious connections, we would consider him as possessed of large Benevolence, Combative-ness, Destructiveness, Self-Esteem, and Firmness, with comparatively small Veneration. In intellect, the perceptive faculties are manifestly paramount. In comparison with Dr. Potts, Mr.



Fig. 1023.—ISAAC T. HOPPER.*

Hopper would be bold, resolute, and self-assured, while the former would be mild, meek, and retiring. Dr. Potts has much more of the sentimental, of the tendency to conform to custom, and of the feeling of reverence; Mr. Hopper has more of the independent, incredulous, and inquisitive. Dr. Potts would be the more deferential and unassuming of the two; Mr. Hopper might exhibit more active benevolence and would be more blunt in the expression of sympathy. In the latter, mercy would be the end of the law; in the former, justice, humility and devotion. This is not a timid face.

* Isaac T. Hopper was born in Deptford, near Woodbury, New Jersey, December 3, 1771, and died in New York city, May 7, 1852. He was for many years a member of the Society of Friends, and resided during the greater part of his life in Philadelphia, where he distinguished himself by his general benevolence. He was an earnest friend of the negro, aiding slaves in their efforts to obtain freedom. When seventy years of age, he became the treasurer and book-agent of the Anti-Slavery Society in New York, and performed the duties of his office with great fidelity and success.

THE PHILOSOPHICAL HISTORIAN.

Mr. Buckle had the mental-vital temperament. His brain was large, even massive, the intellectual region being greatly developed. Firmness and Self-Esteem were large, giving him positiveness and independence in thought and expression. Cautiousness and Secretiveness were moderate, rendering him not remarkable for shrewdness and policy. He was more a reasoner than an observer; his large Causality and Comparison gave him character for comprehensive thought and critical investigation. He was orderly and clear in statement and possessed a good memory.



Fig. 1024.—THOMAS BUCKLE.*

His Combativeness appears to have been well developed, and of that character which tends to provoke discussion. He evidently placed a high estimate upon his own opinions. Human Nature is conspicuous, Benevolence was large, and Veneration was moderate. That is an open, unconcealed, and outspoken countenance.

* Henry Thomas Buckle was born at Lee, England, November 24, 1822. His father, being a wealthy merchant, educated him liberally. In 1840 his father died, leaving an ample fortune, which enabled him to indulge a natural taste for study. In 1857 he published the first part of the work which renders his name distinguished, the "History of Civilization in England," and later, in 1861, a second volume appeared. So secluded had been his life, and so assiduous his application, that Mr. Buckle's health became impaired to such a degree that he died May 28, 1862, at Damascus, Syria, while on an Eastern tour for his health. His work is regarded as of standard value by many, but is severely criticised by others.

THE DELINEATOR OF LIFE AND CHARACTER.

Charles Dickens' head is broader and his mind more ethereal in its tendencies than that of Buckle. Possessing large perceptive and a well-developed reflective intellect, he is at once the close observer and the shrewd reasoner. Comparison, Human Nature, Mirthfulness, and Ideality are leading characteristics. He should excel in the graphic delineation of character and in the description of scenery, evincing grace and skill, wit and humor. Language is very conspicuous. He is well-fitted for an artist, be it the limner or the word painter. Mr. Dickens has dash—and is racy and sensational. He can also imitate to the very life.



Fig. 1025.—CHARLES DICKENS.*

* Charles Dickens was born at Portsmouth, England, February 7, 1812. He was intended by his father for the law, and to that end placed in an attorney's office in London. Here, however, he became discontented, and at length left law for letters, and in the capacity of a reporter attached himself to a London newspaper. In this new field his intellectual ability soon manifested itself. He wrote a series of sketches on London life which soon gained public approval. The "Pickwick Papers," a comic work which appeared in monthly editions, obtained for him an enviable popularity. Since that time Mr. Dickens has written many novels illustrative of society in its various phases, prominent among which are "Oliver Twist," "Dombey and Son," and "Nicholas Nickleby." As a writer he certainly excels in the intimate knowledge of human nature which his writings display, and in the quaintness of his humor and his powers of combination and description. Probably no other living writer has so engaged the attention of reading people everywhere as Mr. Dickens.

THE PHYSIOGNOMIST.

Lavater was emphatically an observer. Notice the great prominence of the lower range of intellectual faculties which indicate the strong tendency to gather facts from the world without. Individuality, Eventuality, Form, Size, Weight, and Locality were very large. Comparison was full, Order moderate, while Causality was hardly above average. Benevolence and Veneration were prominent and exceedingly active. So also were friendship and love of home. He was charitable, affectionate, reverential, and patriotic. Not eminent in Caution, Acquisitiveness, or Destructiveness, but rather strong in Combativeness, he was frank, communicative, tender-hearted, liberal in the use of his means,



Fig. 1026.—JOHN CASPAR LAVATER.*

and courageous in maintaining his views of faith and practice. Large Human Nature imparted that intuitive perception of character so conspicuous in his writings. He was the opposite of a thinker, at the best a practical metaphysician. Agreeableness and Mirthfulness were apparently full, giving him sprightliness and affability, which coupled with large Language gave him freedom, facility, and versatility of expression.

* John Caspar Lavater was born November 14, 1741, at Zurich, Switzerland. He was the twelfth child of his parents, and destined by them to the practice of medicine; his own inclination, however, was toward divinity, and in that direction he was educated. He became pastor of the principal church in his native place, and was highly esteemed for high moral character and benevolence. The work which has rendered him eminent, "Essays on Physiognomy," has been extensively circulated. He died January 2, 1801, of wounds received during the occupation of Zurich by the French under Massena.

THE FOUNDER OF PHRENOLOGY.

The portrait of Dr. Gall exhibits a fine development of the reasoning intellect, with almost an equal prominence of the faculties of observation. He was both an observer and a thinker.

Human Nature and Benevolence are strikingly indicated. Order was somewhat deficient, and his writings on Phrenology, although exhibiting close analysis and deep thought, are not presented with that systematic precision which a scientific treatise properly demands. He was a close observer, keen and critical in judgment, and possessed of those powers of cogent, persuasive reasoning which influence the



Fig. 1027.—DR. F. J. GALL.*

learned and profound. Like Lavater, Dr. Gall had large social organs, Amativeness and Philoprogenitiveness being the most strongly marked. He had more Combativeness and Destructiveness than Lavater. The latter was superior in Veneration, Hope, and Spirituality, but decidedly inferior in the reflectives. Power of concentration is much more marked in Gall than in Lavater. We should expect to find in the writings of the latter a compilation of facts without much ratiocination, either inductive or logical. In the former, logical discussion would be supported by factitious illustration.

* Francis Joseph Gall was born March 9, 1758 at Tiefenbrunn, in the Grand Duchy of Baden. He had been intended for the Church by his parents, but preferring medicine, his natural inclination was followed up by a course of study at Baden and Strasburg. He became eminent as a physician, prosecuting his profession in Vienna, where he also pursued his researches in that science of which he was the discoverer, Phrenology. He is the author of several works on Medicine, Anatomy, and Phrenology. He died at Montrouge, near Paris, August 22, 1828.

THE PHYSIOGNOMIST.

Lavater was emphatically an observer. Notice the physiognomy of the lower range of intellectual faculty. It indicates the strong tendency to gather facts from serving without. Individuality, Eventuality, Form, Size, Weight, and Locality were very large. Comparison was full, Order moderate, while Causality was hardly above average. Benevolence and Veneration were prominent and exceedingly active. So also were friendship and love of home. He was charitable, affectionate, reverential, and patriotic. Not eminent in Caution, Acquisitiveness, or Destructiveness, but rather strong in Combativeness, he was frank, communicative, tender-hearted, liberal in the use of his means, and courageous in maintaining his rights. Large Human Nature imparted to his character so conspicuous in his face, the opposite of a thinker, at the best. Agreeableness and Mirthfulness gave him sprightliness and affability, and his easy language gave him freedom, facility.

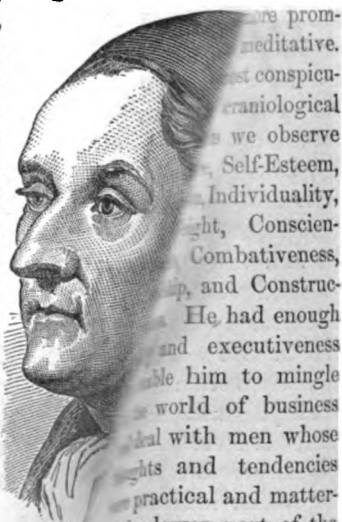


Fig. 1

John Caspar Lavater was born in Zurich, Switzerland. He was the twelfth child of a family of the practice of medicine; his own profession was in that direction he was a member of the principal church in his native place. His character and benevolence. His "Essays on Physiognomy," published in 1788, January 2, 1801, of wounds received in the French under Massena.

Lincolnshire, England, June 17, 1791, receiving, through the religious fervor which distinguished him. In 1785 he was sent as a missionary to Savannah, Georgia, where he made Savannah his headquarters. His new idea of Methodism, and his return to England and joined the Wesleyan connection. This connection was broken in 1791, which he advocated with great zeal. His death occurred on January 2, 1791.

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Fig. 1029.—JONATHAN EDWARDS.*

esley was the kind of man to face opposition and overcome it by direct appeals from their own hearts; Edwards an excellent representative of the Puritanish; Edwards a fair representative of the Calvinistic, which he was a member. The latter was more practical, but was eminently original; and as no occasion to be ashamed of this, as the former, his representatives.

He was born at East Windsor, Connecticut, October 5, 1703, received a classical education, and entered the ministry in 1722, among the most acute metaphysicians and sound theologians of the age. In 1757 he was appointed President of the College at Princeton, but did not live long enough to be fairly tried in that position. He died March 22, 1758. He wrote many con- religious literature of the age, which are considered the most valuable of modern productions in that de- writings are standards among theologians.

"SARTOR RESARTUS."

The features of Carlyle are a living embodiment of "Sartor Resartus." Of the temperaments, the motive is predominant, and the mental next. His long



Fig. 1030.—THOMAS CARLYLE.*

residence in the British metropolis has evidently failed to inoculate him with any one ingredient of character distinctively English. The canny Scot is everywhere conspicuous. His head and face are peculiar in organization. There are expressions of harshness and softness, firmness and concession, indiscriminately mingled. The greatness of his intellect lies in his large percepts—Individuality, Comparison, and Event-

uality. Criticism and analysis would be his forte. There would be very few honeyed expressions; very little of the spirit of compromise. This face says, *My* will—not thine—be done. Angular himself, he views subjects angularly, and he is nothing more nor less than the character he seems. Among over-jubilant spirits, his presence would serve as a damper, while on the more sober and serious he might beget a feeling of hopeless melancholy.

* Thomas Carlyle, an eminent essayist, was born at Middlebie, in Dumfriesshire, Scotland, in 1796, where his father was a farmer. He obtained his education at the University of Edinburgh, and afterward taught mathematics for two years. He then devoted himself to literature, contributing articles of a critical character to the "Edinburgh Encyclopedia" and "London Magazine." The most celebrated of his writings is "Sartor Resartus," a work at once profound, sprightly, rude, brilliant, and humorous. The "French Revolution," published in 1837, is also considered a remarkable work. He has resided since 1830 chiefly at Chelsea, London. He was recently elected President of the University of Edinburgh.

THE GREAT PRUSSIAN.

The mighty monarch who raised Prussia in the estimation of Europe and gave her an importance unknown before, had a head large in the basilar region. The crown was not more than average in height, although the organs of Firmness and Self-Esteem were well developed. Caution was moderate, but Combativeness and Inhabitiveness were large. The perceptive organs were evidently all large, which, allied with his great Constructiveness, Comparison, shrewdness, and thoroughness, rendered him a man of unusual executiveness and practical talent. Language and Ideality were conspicuous, whence we see the mainsprings of his attempts at authorship. As an author he would be critical and analytical, showing fine powers of description and unusual clearness and force in statement. We should not expect to find his writings especially worthy of remark for depth and breadth of reasoning power. The organs of the lower side-head are prominent, giving him tenacity of life and unusual powers of endurance. Taken altogether he is a character by



Fig. 1031.—FREDERIC II.

* Frederic II., third king of Prussia, and usually known as Frederic the Great, was born in Berlin, January 24, 1712; died at Sans Souci, August 17, 1786. From childhood up to the age of twenty he experienced severe, even cruel treatment from his father. He was educated mainly by French refugees, and received but limited instruction from them. On the death of his father, in 1740, he ascended the throne. Scarcely had he settled himself in this position when he invaded Austria, being intent upon extending his dominions. This warlike measure, which gained for him Silesia, was the beginning of a general war in Europe, mainly directed against him. He fought successively the armies of France, Russia, Austria, Sax-

himself, an acute observer, drawing his own inferences in a manner peculiarly his own. Frederic the Great was an original worker, conceiving schemes and personally reducing them to practice and astonishing the world by his performances, while Carlyle astonished the world by the novelty of his literary productions.

ony, and Bavaria, which countries were at one time allied to crush him, and after years of struggle the treaty of Hubertsburg left Frederic in the possession of Silesia. In the famous seven years' war, he in fact stood alone against continental Europe, and gained his title of the "Great." He was also an author, wrote both prose and verse, was very frugal in his expenditure, and while his nation enjoyed peace, energetically promoted internal improvement.



OLIVER GOLDSMITH.

XL.

MISCELLANEOUS ADDENDA.

"Gather up the fragments that nothing be lost."—JOHN VI. 12.

ARISTOTLE.*



Fig. 1032.—ARISTOTLE.

as it has been handed down to us from ancient times. It is believed to be authentic. He had naturally a weak constitu-



ARISTOTLE is described in ancient works as being slender in person, and having small eyes and a weak voice. Plutarch says that when young he had great hesitation in his speech. He was accustomed to dress richly, and to wear rings on his fingers. He wore no beard, and his hair was cut short. He had a large nose and strongly-marked features generally.

We give his portrait

* Aristotle, perhaps one of the greatest scholars and philosophers of ancient times, was born 384 B.C., at Stagira, a Greek colony of Macedonia, whence his appellation of the "Stagirite." Both his father, Nichomachus, the private physician of King Amyntas, and his mother, Phæstis, seem to have belonged to the Macedonian nobility.—*New Am. Cyclopædia*.

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AN IDEAL HEAD.

We must of course look at this picture as simply an imperfect embodiment of the artist's idea of a perfect head and face. He may have been no phrenologist or physiognomist in the common acceptation of these terms, but he had no doubt observed that in all the noblest specimens of humanity—those who are both great and good—the forehead is amply developed, the coronal region grandly elevated, and the expression of the face full of thoughtful earnestness, benignity, and spirituality; and he has essayed to give



Fig. 1033.—HEAD OF THE SAVIOUR.

to his head of Christ all these characteristics in the highest degree, and to imbue the whole, so far as art is capable of doing it, with the spirit of divinity. Of course it falls far short of our highest conceptions of the incarnate Son of God, but it may be studied with profit as an approach to the perfect head. It is selected from thirty different portraits.

HEAD OF ST. PAUL.

There is at least a degree of probability that we have here a genuine likeness of the great Apostle of the Gentiles. Our engraving was made from a copy of a medallion said to have been found in the ruins of Herculaneum; and there is good

tion, but his temperate habits enabled him to make th
of it. He died at the age of sixty-three years.

Aristotle wrote on Physiognomy, and though hi
so far as it has any foundation in truth, has been
in later works, it may be interesting to quote he
the "signs of character" as originally describ
We translate from a synopsis which we find in '
tionnaire de Phrenologie et Physiognomonie."

Signs of Courage.—An upright carriage
large bones, and robust limbs and body; broad
chest; a muscular, but not too fleshy neck;
hair; a sloping and not large forehead, and
very pale nor too red.

Signs of Timidity.—A stooping body;
small legs; long, delicate hands; weak, ro
fine hair.

Signs of Ingenuity (Inventive talent).
complexion white, but slightly tinged
skin, and hair neither coarse nor dark.

Signs of Shallowness.—A fleshy neck;
sive thighs; thick, fleshy, round ankle
and a fat round face, much broadened

Signs of Impudence.—Bright, op
lids; high shoulders; lively movem
the top; a round face, and a florid c

Signs of Peevishness.—A dark,
and bristling, dark hair.

He taught that there is a close c
soul and the body, and that the
other—that grief darkens the c
brightness. He also showed the
always connected with certain
resemblances may be traced bet
resemblances he points out at
are often, like many of those
merely fanciful.

His works may be read wit
the wisest of the moderns.

in striking con-
sions of his mind
and power.

in making observations
y, has come to the con-
kinds—single line, single
vel bar of hair (fig. 1035)
ge of the forehead. When
deep-set eyes, especially if
red, stern, strong, fierce, and

There are two
long one.
other hand,
ness, sweet-



Fig. 1036.
SINGLE ARCH.

peculiarly melancholy expression of the brows. A very common type is where the brows never ends almost in a straight line, at a distinct angle, reach with the same terminations to which they brought them. The substitution of the curve gives a very charming

expression to the face, without losing its gracefulness.

The double arch eyebrow (fig. 1037) is perhaps the commonest of all, but its two curves are usually of a com-



Fig. 1038.—TURT.

monplace character, may be called good, sound, practical, every-day brows. They have many minor variations, not distinguishable. Sometimes the arches are strongly sprung, and their heavy bars mingle at the bridge. This gives a sort of wide-awake look, sometimes

to women an aspect of innocent astonishment. Sometimes, also, it makes the face irresolute in expression; for lifted brows denote surprise or apprehension, while it is "bent brows," or "contracted brows," that denote thought and will.

4. The tuft eyebrow (fig. 1038) is not agreeable, and gives an impression of imperfection or vulgarity of physique. Sometimes the tufts are two little brushes that stick outward and upward from the inner part of the eyebrow line; sometimes they stick out and downward from the outer part of that line. Sometimes they give a peculiar oddity or quaintness to the look; and sometimes they are insignificant only.



Fig. 1039.

MEPHISTOPHELES.

There is an eyebrow which can hardly be classed with any of these, which may be called the Mephistopheles eyebrow (fig. 1039), being such as is conventionally used on pictures and personations of that very unscrupulous but able gentleman from Tophet. It should go with very full and sharp perceptive, and consists of two distinctly marked lines, nearly straight and converging sharply downward and inward over the inner part of the eyes, almost to a meeting at the nose. The Chinese eyebrow often approximates to this style.

LIFE AS SEEN FROM OPPOSITE STAND-POINTS.

Some persons always put the best foot forward and are constantly looking on the bright side of everything, like our good friend Mr. Hopeful; while others, like his neighbor, Mr. Trepid, persist in putting the darkest shadows into the foreground and in ignoring entirely the silver lining which ever relieves the darkest cloud. They put on a bad face on every occasion and turn even prosperity into a cause for repining despondency. According to them—

"Whatever is, is *wrong*."

How well the two faces (figs. 1040 and 1041) tell their story! When the owner of the doleful visage, after assuring us that everything is going wrong with him, and that he is "behind

in everything," caps the climax by saying, "I was born the last hour of the day, the last day of the week, the last week



Fig. 1040.—MR. HOPEFUL.

of the month, and the last month of the year, and I am quite certain it would have been fifty dollars in my pocket if I had not been born at all," we are inclined, for once, to agree with him. His face is elongated, his mouth is drawn down at the outer corners, his nose is



Fig. 1041.—MR. TREPID

of the melancholy type, and his whole aspect forlorn in the extreme. Contrast him with his cheerful neighbor Hopeful!

PHYSIOGNOMICAL ANECDOTES.

1. **HOW THE FACE CHANGES.**—One night, an amiable young lady, who had resided almost continually in the country, and who was remarkable for virtuous and religious sentiments, catching a glance of her own features in the glass at the instant when, having performed her pious exercises, she was going to replace her Bible and take away the light, impressed by her own figure, she looked down, and her countenance glowed with the sensations of unaffected modesty. She spent the winter in town, encircled by a crowd of flatterers, busied only with trivial affairs; lost in a vortex of fascinating delight, she forgot both her Bible and her habits of devotion. In the spring, this young lady revisits the country, and entering her chamber, advances toward the place where her Bible lay, presents herself before the glass, and changes color at the view of her own features. She removes the light, throws herself upon the sofa, then upon her knees, exclaiming, "Just Heaven! I do not recognize myself again. In what manner

am I altered? My countenance carries the indications of a wretched vanity. How could they so long escape my notice? Yes, it is in the recesses of a calm retirement, in the delightful performances of religious and moral duties, that every vestige of them must be obliterated."

2. THE BEAUTIFUL MURDERESS.—The anecdote which ensues is extracted from a work called "Eloges des Scavans:" "A stranger, whose name was Kubisse, crossing a hall in the house of M. de Langes, was so affected with the view of a portrait which was hanging there with many more, that he neglected following us, and staid reflecting on the picture. Seeing Mr. Kubisse did not join us in the space of a quarter of an hour, we returned to look for him, and discovered him with his eyes still fastened on the portrait. 'What is your opinion of that portrait?' said Mr. Langes to him. 'Does she not seem a beautiful woman?' 'Yes,' answered Mr. Kubisse, 'but if that portrait be a resemblance, the person it is intended to represent has a diabolical mind; she must be an infernal wretch.' It was the picture of Brinvilliers, the famous poisoner—nearly as celebrated for her personal charms as for the atrocity of the guilt for which she was burnt."

3. STUDYING THE FACE.—A story is told of a great French satirist which finely illustrates his knowledge of human nature. He was traveling in Germany, in entire ignorance of its language and currency. Having obtained some small change for some of his French coins, he used to pay drivers and others in the following manner: Taking a handful of the numismatical specimens from his pockets, he counted them one by one into the creditor's hands, keeping his eye fixed all the time on the receiver's face. As soon as he perceived the least twinkle of a smile, he took back the last coin deposited in the hand, and returned it, with the remainder, to his pocket. He afterward found that in pursuing this method he had not overpaid for anything.

4. THE PHYSIOGNOMIST AND THE BEGGAR.—One day a pauper was soliciting charity in the street. "What will satisfy

your necessity?" said a passer-by, whose attention was arrested by the probity of his look. "Oh, sir! how can I name it?" said the distressed person. "Bestow what you think fit, I shall be contented and thankful, be it ever so little." "No," says the physiognomist; "tell me how much you have occasion for, and be it much or little, depend upon it you shall have it." "Give me then—a shilling." "A shilling! there it is. Had you asked for fifty guineas, you should have had them."

5. **VALUE OF A GOOD FACE.**—A physiognomist was questioned by a stranger—"At what price do you estimate my countenance?" With much fitness he answered, "That to place a value on it was not an easy task." "Its value is fifteen hundred crowns," said the person who asked the question; "for that money I have just borrowed of a man who was unacquainted with me, and credited me solely on my physiognomy."

6. **DISSIMULATION.**—"May I die if that person is not a cheat," said Titus, talking of the priest Tacitus; "I perceived him, in the performance of his office, sob and cry three times when there was not anything to affect his feelings, and avert his countenance ten times to hide a smile when wretchedness or villainy was mentioned."

7. **THE FATHER'S REQUEST.**—An amiable young man's father addressed him at their parting interview—"The whole that I request of you, my son, is to return to me with the same countenance."

PHYSIOGNOMY OF THE SENSE OF TASTE.

That distinguished physician and author, Dr. Wm. Elder, maintains that by careful study and observation we may determine the flavor of anything that a person may be eating by means of the expression which is, as it were, telegraphed from the palate to the lips and other features—an acid giving one expression, a sweet another, and so on. We are not disposed to doubt this statement as the assertion of a human possibility. We may not be able to do it, but another may.

There are minds so highly organized as to read even the very thoughts of those with whom they are brought in contact.

THE HUMAN FACE AND THE FACE OF A WATCH.

As the face of a watch presents to the eye signs of the movements going on within, and ceases to tell the hour whenever those movements cease, so the "human face divine" is an index of internal emotions and loses all power to change its expression so soon as the vital powers are withdrawn. Behind the face of the watch is the machinery—which *is* the watch. Behind the human countenance are the complicated apparatuses of bones, muscles, and nerves, which form the human machinery; but behind this machinery there is what the watch has not, a controlling intelligence, which precedes the living organism to which it gives rational activity.

THE TWO FACES.

An artist wished to paint a face,
The symbol of Innocence and joy;
He sought a child for his ideal,
And drew the likeness of a boy.

Long years passed on. The artist now
A gray old man, one picture more
Designed to make, and call it Guilt—
A contrast to the child of yore.

He went into a dungeon dark,
Its cold walls damp with slime,
And painted a wretched man chained there,
Condemned to death for crime.

Beside the other he placed the last;
And when he learned the prisoner's name,
He found the innocent, laughing child
And hardened man were but the same.

MONTAGU YERRE.



XLI.

RECAPITULATION.

“ Here, then, we come to the summing up of the whole matter.”—SHAKESPEARE.



Fig. 1042.—A CONTRAST.



ELIEVING that a general review of our work, embracing a synopsis of the principal branches of the subject, with occasionally an additional fact or thought thrown in by way of further illustration will prove not only acceptable, but highly useful to the reader and student, we purpose here to enter upon such a summing up

as the occasion requires and our remaining space will allow.

I. PHYSIOGNOMY DEFINED.—In its most general sense Physiognomy signifies a knowledge of nature, but more particularly of the *forms* of things. In the restricted sense in which it is generally used, it may be defined as a knowledge of the correspondence between the internal and the external of man—between character and configuration—between the spiritual principle and the physical system which it animates and controls. As an art, it consists in reading character by means of its signs in the developments of the body as a whole, but more particularly of the head and face. [See pp. xiii. and 81.]

II. **BENEFITS OF PHYSIOGNOMY.**—It aids us in acquiring that most important of all knowledge, a knowledge of man—of ourselves and others. [Introduction, pp. xxii.–xxiv.] Its practical application to Ethnology is shown Chap. xxiv.; to Hereditary Descent in Chap. xxviii.; to Love and Marriage in Chap. xxix.; to Health and Personal Improvement in Chaps. xxvii., xxx., and xxxvii.; and to Character-Reading in General in Chap. xxxix.

III. **PREVIOUS SYSTEMS.**—The ancients wrote on Physiognomy, but their works on the subject, so far as they have come down to us, are made up in the main of mere fanciful speculations. We do not find it necessary to go back to them in our chapter on this subject [Chap. i.], but give a brief notice of some of Aristotle's "Signs of Character" in Chap. xl. Lavater, Alexander Walker, and Dr. Redfield are the only writers abstracts of whose systems we have thought it desirable to give. These are presented at considerable length, and copiously illustrated. [Chap. i.]

IV. **THE PHYSICAL MAN.**—The human body is made up of three grand classes of organs, each of which has its special function in the general economy. We call them—

1. The Motive or Mechanical System ;
2. The Vital or Nutritive System ; and
3. The Mental or Nervous System.

1. The mechanical system consists of three sets of organs, forming in combination an apparatus of *levers*, through which locomotion and all the larger movements of the body are affected. They are (*a*) the bones ; (*b*) the ligaments ; and (*c*) the muscles.

2. The vital system consists of three classes of organs, forming a complicated system of *tubes* which perform the functions of absorption, circulation, secretion, and incidentally of purification. They comprise (*a*) the lymphatics ; (*b*) the blood-vessels ; and (*c*) the glands.

3. The mental or nervous system forms the medium of connection between the soul and the external world, and is the instrument through which thought and impulse culminate in action. It consists, structurally, of a series of *globules* bound

by membranous investments into fibers of various forms. The chief seat of this system is the head. Its three orders of organs are (a) the organs of sense; (b) the cerebrum; and (c) the cerebellum. [Chap. II.]

V. GENERAL PRINCIPLES.—The grand corner-stone of Physiognomy—the broad general principle without which no system of character-reading would be possible, is—

1. *The Law of Correspondence*.—Our definition of Physiognomy embraces a statement of this law, which may, however, be more compactly set forth as follows:

Differences of external form are the result and measure of pre-existing differences of internal character—in other words, *configuration* corresponds with *organization* and *function*.

We have shown this to be true not only in generals but in particulars, and have illustrated it in many ways [pp. 81–85].

2. *The Law of Homogeneousness*.—This is closely related to the foregoing, and requires that

Every part of a thing shall correspond with every other part and with the whole—in other words, and paradoxically, *the whole is in every part*.

This law has been illustrated in a most remarkable manner by Professors Owen and Agassiz in natural history, and we have shown it to pervade the vegetable as well as the animal kingdom, but that man affords its most striking exemplification [pp. 86, 87].

Still further to illustrate this principle in its practical application to man, we offer the accompanying illustrations (figs. 1043 to 1051 inclusive), which tell their own story too well to need much explanation. Every one will see at a glance that each hand and foot corresponds with the head and face with which it is associated, and that if we were to give to fig. 1043, for instance, the extremities of fig. 1046, we should form an impossible monster. Figs. 1043 and 1046 are extremes. In the one, every part is constructed on the principle of giving
• as much *breadth* and *thickness* as possible to every part; in the other, *length* seems to be the great characteristic aimed at. The face and the hand are equally elongated, and the foot is evidently something more than the third of a yard. Fig.



Fig. 1043.



Fig. 1044.



Fig. 1045.

A chuckle head, a chuckle hand, a chuckle body, and a chuckle foot.



Fig. 1046.



Fig. 1047.



Fig. 1048.

A long head and face, a long hand, a long body, and a long foot.



Fig. 1049.



Fig. 1050.



Fig. 1051.

A well-formed or symmetrical head, body, hand, and foot.

1049 represents a medium—a symmetrical head and face, and the accompanying hand and foot are seen to correspond.

3. *The Law of Special Development.*—The growth or development of the different parts of the body is *normally* uniform, the tendency being to keep unimpaired, or, if impaired, to restore, the symmetry or harmony of the whole, as indicated in the preceding section; but

As exercise (within certain limits), by attracting the vital currents, strengthens and increases the size of the organ or part exercised, therefore when any organ or part is disproportionately exercised or excited, it is correspondingly developed, and the harmonious relation of the parts is impaired.

The arm and hand of the blacksmith, the trained boxer, or the professional gymnast furnish illustrative examples [p. 88].

3. *The Law of Quantity or Size.*—In general terms—

Size is the measure of power—that is, other things being equal, the larger the head, the face, the body, or any particular organ or part of either, the greater the power indicated.



Fig. 1052.—A PARTIAL IDIOT.



Fig. 1053.—WILLIAM BECKFORD.

This is an undisputed and universal law and requires no extended exposition. There can be no question, for instance, which of these two heads (figs. 1052 and 1053) indicates the higher degree of mentality. Granting, for the argument's sake, that the quality may be the same in both, we decide at once that the difference in mental manifestation must be im-

mense [p. 89]. See the same truth illustrated on p. xviii. [Introduction.]

Size, other things being equal, is the measure of power, but other things are often *unequal*. A piece of wrought iron is much stronger than a piece of cast iron of the same size; a comparatively small horse may sometimes draw a heavier load than a much larger one; and some men with moderate-sized heads manifest more mental power than others whose heads are much larger; which facts indicate that there is some other law or laws modifying that of quantity or size, and this brings us to

5. *The Law of Quality*—which may be thus stated:

Size and other conditions being equal, the higher or finer the organic quality the greater the power.

Large size and high quality, then, must be combined to give us the highest order of power [p. 90. See also Chap. xxvii., pp. 540, 541].

6. *The Law of Temperament*.—Closely related to the foregoing, and further modifying the law of size, is that of temperament, in accordance with which

The action proper to any particular physiognomical development, as well as the development itself, is modified by temperament. As a full chapter elsewhere is given to this subject, it need not be dwelt on here [p. 90 and p. 94 *et seq.*].

7. *The Law of Form*.—It is an established principle that

Length indicates and causes activity and intensity; and breadth, comprehensiveness, stability, latent force, and endurance.

The disposition of stout, broad-built persons to be slow but plodding, to take good care of themselves, and are not to be soon worn out by over-work, and of those built on the long and narrow principle to be quick-motioned, lively, fond of action, and apt to overdo and prematurely exhaust themselves, furnishes one of the many illustrations of this law which might be referred to [p. 91].

8. *The Law of Distinct Function*.—In comparing the head with the face, it must be noted that while

The brain indicates the absolute power of the mind, its vol-

untariness and ability to act at will (and consequently its habitual activity), *are indicated by the facial signs ; and that the two sets of indications, taken either collectively or individually, are not necessarily equal*—in other words, there may be *latent* power—mental capacity not manifested in the character or shown in the face.

It is important to bear this in mind both in reading character and in judging of the correctness of any delineation based on either Phrenology or Physiognomy alone [p. 91].

9. *The Law of Latency*.—It should be noted, further, that

In the very young (the character being in a rudimentary condition and much of its power lying latent), *many of the facial signs of character are as yet undeveloped ; while in the very old, many of them are partially or wholly effaced*.

We are not to consider the faces of young children and very old persons as characterless, by any means, but must make due allowance for the conditions just named [p. 92].

VI. THE TEMPERAMENTS.—We describe and illustrate the ancient doctrine of the temperaments and its modifications by Stahl, Bærrhaave, Gregory, Cullen, Richerand, and Spurzheim ; but give our preference, as at once simpler and more comprehensive, to a classification resting on the natural basis of the anatomical system set forth in Chap. II. We teach, therefore, that there are primarily three temperaments, corresponding with the three systems of organs of which we have shown the human body to be composed, and we name them accordingly

1. The Motive Temperament ;
2. The Vital Temperament ; and
3. The Mental Temperament.

1. *The Motive Temperament* depends upon the predominance of the bony frame-work of the body, and is generally marked by a tall figure, an oval or oblong face, tough, wiry muscles, prominent features, strong, abundant, and commonly, but not always, dark hair, great bodily strength, and an energetic, determined, and persevering character.

2. *The Vital Temperament*, as its name implies, depends upon the preponderance of the nutritive organs, which occupy the great cavity of the trunk, and is necessarily marked by a

breadth and thickness of body proportionally greater and a stature and size of limbs proportionally less than in the motive temperament. The figure is generally stout, the face inclines to roundness, the limbs are plump but tapering, the complexion florid, the hair light, and the character lively, genial, versatile, impulsive, and sometimes fickle.

3. *The Mental Temperament*, depending upon the brain and nervous system, is characterized by a slight frame, a head relatively large, a pyriform face, a high forehead, delicate, finely chiseled features, fine, soft, and not abundant hair, and a character marked by vividness of conception, intensity of emotion, liveliness of imagination, and refinement of tastes. [Chap. iv.]

VII. *FACES—GENERAL FORMS.*—The fact that each of the three temperaments has a form of head and face peculiar to itself is further illustrated in Chap. vi., where the three classes of faces and their modifications are described and illustrated, both in front view and in profile. That chapter should be carefully studied and its teachings practically applied at the very commencement of one's physiognomical career. Observe the striking differences between the round-faced and the oblong-faced, and between both and the owners of the pyriform or pear-shaped face. The general outlines of the head and face contain a synopsis, as it were, of the whole character.

VIII. *MAN AND WOMAN.*—The influence of sex on external forms must not be lost sight of in applying physiognomical rules. Man is characterized by compact and muscular developments and a strongly-hinged frame, indicative of power; woman, by bending and varied lines, gracefully rounded limbs, smooth surfaces, and elasticity, indicative of delicacy and grace. Roundness prevails in her, angularity in him. She has more of the vital system, he more of the motive apparatus. The head is more massive in man than in woman, but hers is often somewhat longer from the forehead to the occiput. The features are more prominent and strongly marked in the masculine face than in the feminine, but the latter has relatively larger eyes, softer hair and skin, and a finer texture generally. [Chap. v.]

IX. FACIAL ANGLES.—Camper's mode of measuring the degree of intelligence by means of facial angles is examined and admitted to be useful in connection with other indications, but shown to be very imperfect as an exclusive sign of character. [Chap. vi., p. 124.] A new facial angle is also described and its application explained in another place. [Chap. xxxii.]

X. OUTLINES OF PHRENOLOGY.—What Phrenology is, with the names, locations, and definitions of the organs, is set forth in a condensed form and copiously illustrated, in order to enable the reader to understand any allusions to it in other parts of the work. [Chap. vii.]

Phrenology, as here introduced, may be considered as a branch of Physiognomy, the signs treated of being found in the head alone. In making the head a special subject of physiognomical observation (after having considered the temperament or bodily constitution of the individual), examine it generally in regard to size, so as to judge whether it may be called large, small, or medium. Observe then its general form, both in front view and in profile. You will be astonished perhaps at the striking differences presented.

The accompanying outlines (fig. 1054) illustrate some of these differences, and they are such as will strike even the casual observer. The figure, it will be observed, is composed of one face with the outlines of four heads attached.



Fig. 1054.—OUTLINES—SIDE VIEW.

No. 1 represents that of Pope Alexander VI., whom history charges with some of the foulest crimes that disgrace human

records. How low the head in the top, and how it retreats in the forehead! how heavy it is about the ears! how prominent and heavy in the back-head!

No. 2, Zeno, shows a vertical forehead; it is especially large in the upper or reasoning part of the forehead; it is well developed in the moral organs, along the middle of the top-head, and not very large in the back-head; the distance from the opening of the ear backward is not great; his moral and intellectual powers were more amply developed than his social propensities and animal nature. Zeno, the Stoic, was a wise, philosophical, thoughtful, moral man.

The dotted line No. 3 shows the outline of the head of Father Oberlin, one of the most persevering, practical, and Christian of ministers; he was a kind of apostle to the people in the mountains of Switzerland, to whom he ministered and whom he taught domestic economy, industry, agriculture, and theology.

No. 4 shows a long, high head, excessively developed in the region of the crown, thus representing the head of Philip II, king of Spain, a fanatic in religion and a tyrant in government.

Fig. 1055 represents the horizontal outlines of several heads

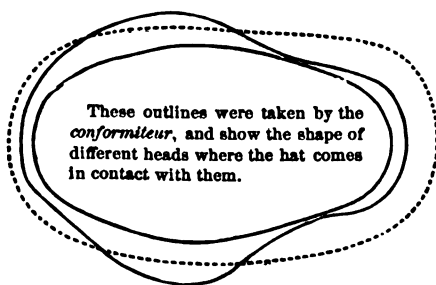


Fig. 1055.—HORIZONTAL OUTLINES.

as taken by an instrument used by hatters for the purpose of fitting the heads of their customers. The dotted line represents the head of Daniel Webster; the forehead is immensely large, the posterior or social region is also large, while the side-head, which gives prudence, polish, economy, and propelling power, is not large. The inner line shows a head fuller at the sides, indicating larger Destructiveness, Combaticiveness, Secretiveness, and Cautiousness than shown in the head of Webster. The intermediate outline shows a head immensely broad at the sides in propor-

tion to its general size and development. Cautiousness, Secretiveness, Destructiveness, Acquisitiveness, Alimnateness, and Combativeness are excessive. The smaller outline is the best balanced of the three.

A method of ascertaining the proportionate size of different regions of the head is illustrated in figs. 1056 and 1057, in



Fig. 1056.—REFLECTIVE.

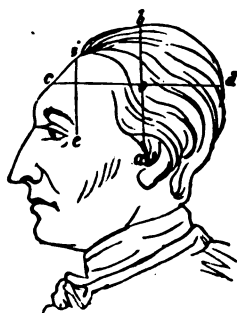


Fig. 1057.—PERCEPTIVE.

which the head, viewed profile-wise, is divided into two regions by a vertical line drawn from the orifice of the ear (*a*) to a point in the middle of the upper part of the head (*b*) which corresponds with the union of the frontal and sagittal sutures. The region behind the line *a-b* is the *occipital*, and that before it, the *frontal*. In fig. 1056 the frontal region is seen to be largest, and in fig. 1057 the occipital.

In this view of the head, lines may also be drawn from the opening of the ear (*a*) to the different points in the circumference of the head, such as *a-c*, *a-i*, *a-b*, and *a-d*, in order to learn in what direction the brain, on the mesial line, is most developed.

Finally, in this view of the head, its length from the forehead (*c*) to the occiput (*d*) and the height from the ear (*a*) to the vertex (*b*) are to be noted.

The horizontal line *c-d*, commencing at the center of the organ of Eventuality and ending at the center of Inhabitativeness, divides the head into two regions, the one below the line being called the *basilar*, and the one above, the *coronal*. If the former be the larger of the two, the animal nature is pre-

dominant; if the latter, the intellect and the moral sentiments have the ascendancy.

The width of the head should also, of course, be compared with the height, but this has been well illustrated in Chaps. III., XII., XXVI., (Preachers and Pugilists), and XXXIII.

XI. FACIAL ANATOMY.—As it is necessary frequently to refer to the various bones and muscles of the face, it is thought desirable to give a careful, though brief description of all the more important ones. The chapter may be a dry one, but the student should not skip it. [Chap. VII.]

XII. SIGNS OF CHARACTER IN THE FACE.—Having noted the temperament and the general form of the head and face, we direct our attention to particular features and observe—

1. *The Chin.*—The lower jaw, of which the chin forms a part, corresponds in position with the cerebellum, with which it is in close anatomical relation, and, like the latter, indicates the vigor of animal life and the strength of the circulation as well as the special power of the amative propensity. The anterior projection of the chin, depending upon the length of the lower jaw forward from the angle, indicates the intensity of love, and its breadth the steadiness, stability, and endurance of the passion. The perpendicular or downward projection of the chin is believed to be the sign of Will-Power—that quality through which we are enabled to control ourselves and those around us. Chins are of five classes—

1. The Pointed, or Narrow Round Chins;
2. The Indented Chins;
3. The Narrow Square Chins;
4. The Broad Square Chins; and
5. The Broad Round Chins.

Each of these chins indicates a special manifestation of love. [Chap. IX.]

2. *The Jaws and Teeth.*—By comparing the jaws and teeth of man with those of the various classes of animals, we are led to infer that heavy projecting jaws and protuberant teeth in the human species are signs of animality and a low order of development. Imperfectly developed jaws (often seen in persons of weak constitution), on the contrary, are signs of de-

terioration and lack of vital power. Some inferences in regard to diet and the development of Destructiveness are drawn from the chin. [Chap. x.]

3. *The Mouth*.—The mouth, to say nothing of the words which may issue from it, is the most eloquent feature of the face—the center of expression. The lips signify affection. Friendship gives strength and fullness to the muscle which surrounds the mouth and closes the lips. Large, full, red lips mean ardent love, and are fond of kissing and being kissed. Jealousy, Contempt, Approbateness, Firmness, Self-Esteem, Mirthfulness, Gravity, Self-Control, and other signs are also found on and near the lips. [Chap. xi.]

4. *About Noses*.—The nose is primarily the organ of smell. Being connected with the lungs, its openings or nostrils bear a definite relation to the size of the chest and afford indications of the breathing power. The development of its cavities has also an influence upon the voice. The nose is next looked upon as a sign of development—an index of the status of an individual or a race in relation to mental growth and culture. Noses are classified as

1. The Roman Noses; 3. The Jewish Noses;
2. The Greek Noses; 4. The Snub Noses; and
5. The Celestial Noses.

(a) The Roman Nose is the executive, the energetic, the powerful, and the power-loving nose.

(b) The Greek Nose is the index of refinement, taste, elegance, and love of art.

(c) The Jewish Nose indicates acquisitiveness and the commercial spirit, as well as great energy and perseverance.

(d) The Snub Nose is the nose of undevelopment—the nose of childhood and of weakness.

(e) The Celestial or Turned-up Nose indicates Inquisitiveness—a disposition to make inquiries and to find out secrets.

We mention also the Apprehensive Nose, the Defensive Nose, the Irritable Nose, the Aggressive Nose, the Secretive Nose, the Acquisitive Nose, Intellectual Noses, National Noses, Noted Noses, etc. [Chap. xii.]

5. *About the Eyes*.—The eyes are said to speak all lan-

guges, nevertheless they are not always understood, and our interpretations will, we are sure, be found very useful. Primarily, the eye is for seeing, and a large eye, other things being equal, sees more than a small one. Physiognomically, large eyes indicate lively emotions and a general activity of mind and body.

Prominence of the eyes denotes a full development of Language and great capacity for receiving impressions from surrounding objects. Deep-seated eyes see less but receive more accurate and deeper impressions.

Prayerfulness turns the eyes upward, humility casts them down, rapture and wonder roll them obliquely, and penitence causes the eyelid to droop over them.

Mirthfulness shows itself in the eyes and eyelids, and in very mirthful persons wrinkles may be observed turning downward from the outer corners of the eyes as if to meet those which turn upward from the mouth.

The color of the eye is among the indications of temperament [Chap. iv.], and so far may be considered as a sign of character—the dark eyes indicating power, and the light delicacy. [Chap. xiii.]

6. *The Cheeks*.—The fullness or thinness and color of the cheeks depend upon hygienic and temperamental conditions. Good health and a vital temperament give full, round cheeks and a florid complexion. Less plumpness and more prominent cheek-bones are found with the motive temperament, even with the best health. In the mental temperament, when no diseased conditions exist, we find finely curved cheeks, but only a moderate degree of fullness. Various physiognomical signs are pointed out on the cheeks by Dr. Redfield, some account of which we give without indorsing them. [Chap. xiv.]

7. *The Forehead*.—The forehead is the region of intellect and the measure of its capacity. If the lower part predominate, perception is in the ascendant; the middle region full, denotes memory of events and power of analysis; while if the upper portion be largest, there are indications of more thoughtfulness and reasoning power and less observation and analytical ability. If the outer portion of the upper forehead

be most developed, Mirthfulness is indicated in connection with Causality. Ideality broadens the head farther back and higher, or on a line with the temples. Benevolence and Conscientiousness are shown to have signs in the muscles of the forehead. [Chap. xv.]

8. *The Neck*.—The neck, so far as exposed to view, may be taken into account with the face in physiological and physiognomical character-reading. A short, thick neck indicates closeness of connection between the base of the brain and the vital organs, and is a sign of Vitality and tenacity of life.

Firmness has one of its most striking indications (aside from the prominence of its organ in the head) in the size and strength of the cervical vertebræ or bones of the neck, and in the perpendicularity of the neck itself.

Self-Esteem throws the neck back in the direction of its phrenological organ in the crown. [Chap. xvi.]

9. *The Ears*.—Ears are undoubtedly first of all to hear with, and the larger they are (others things being equal—always bear this qualification in mind) the better, or rather the more they can hear; and the finer and more perfectly formed, the greater their delicacy and discrimination in matters of sound, and incidentally, the greater the general sensibility. [Chap. xvi.]

XIII. *HAIR AND BEARD*.—The color and quality and abundance or thinness of the hair and beard afford some valuable indications of temperament and race, and therefore of character. As in the case of the eyes, the dark colors indicate strength, and the light delicacy. The beard indicates the masculine or virile forces of our nature. [Chap. xvii.]

XIV. *HANDS AND FEET*.—In illustrating the law of homogeneity [Chap. iii.] we have shown that the hands and feet correspond with the head and face, and in describing the temperaments [Chap. iv.], a peculiar form of head, face, and body has been found to characterize each of them. It follows that the hands and feet may be taken as indices of character and studied with advantage by the physiognomist.

We make three grand classes of hands, corresponding with the three temperaments, and call them

1. The Long, Bony Hands; 2. The Short, Fleshy Hands; and
3. The Small, Slender Hands.

1. The Long, Bony Hand is the hand of action and power.

2. The Short, Fleshy Hand is the hand of vivacity and versatility.

3. The Small, Slender Hand is the hand of delicacy and artistic taste.

In form, the feet follow the same law as the hands, as we have seen in a preceding section. [Chap. xviii.]

XV. SIGNS OF CHARACTER IN ACTION.—Signs of character may be found in movements as well as in forms. We have shown how it is expressed in the walk, in the manner of shaking hands, in attitude, in gestures, in the voice, in laughter, and in dress. [Chap. xix.]

XVI. INSANITY AND IDIOCY.—Abnormal and diseased conditions, whether affecting the brain or the general system, show themselves externally by unmistakable signs. We have carefully considered these in our chapters on these subjects, but can not readily condense our statements so that the synopsis would be of value. [Chap. xx. Insanity, Chap. xxi. Idiocy, Chap. xxx. Health and Disease.]

XVII. FIGHTING PHYSIONOMIES.—According to the law of special development (p. 88), disproportionate exercise causes disproportionate development. Natural fighters have broad heads, and the exercise of the organs of Combateness and Destructiveness tends to increase this breadth. Signs of the fighting propensity are also found in the jaws, the nose, the temples, and the chin. [Chap. xxii.]

XVIII. EFFECTS OF CLIMATE ON CHARACTER.—The changes effected in the lower animals and in plants by a change of climate are striking, and well known to the stock raiser and the agriculturist. Man has more power than the animals and plants to resist external influences, but he can by no means wholly escape from their effects. The man of the tropics must necessarily be very different from the man who dwells amid the polar ices. The temperate zones are most favorable

to development and progress. The differences between the Southerner and the Northerner may be summed up as follows: The man of the North is more cautious, considerate, thoughtful, calculating, and economical; the man of the South more venturesome, impulsive, reckless, generous, improvident, and revengeful. In complexion, the South promotes the dark, and the North the light. [Chap. xxiii.]

XIX. TYPES OF MANKIND.—Each race is shown to have its peculiar physiognomy—its distinctive form of cranium, style of face, and shade of complexion. The shape of the skull alone is shown to be sufficient in general to indicate the race to which its owner belonged. The various sub-races and tribes



Fig. 1053.—GROUP FROM A CROWD IN INDIA.*

are also described and their peculiar organizations and characters pointed out. These characteristics are found to be permanent, the modifications effected by climate, locality, etc.,

* One of the figures, the young man with negro features, is a Nubian, from the northeastern part of Africa, who has perhaps been brought over as a slave. Another figure is an old Indian Mohammedan. The old man's cap is the national hat of Sindh, which is usually worn by the people; it is made of silk and gold thread, and lined with red velvet.

never eradicating them. A residence of ages in the same country, for instance, will not, without a mixture of their blood, blend the races represented in the foregoing group into one. [Chap. xxiv.]

Our ethno-physiognomical inquiries are continued under the head of "National Types," and the cranial and facial characteristics of the Englishman, the Scotchman, the Irishman, the American, the Frenchman, the German, the Russian, the Spaniard, the Italian, the Jew, the ancient Roman, the Greek, the Arab, etc., are described. The North American Indian and the Anglo-African of the United States are also discussed. [Chap. xv.]

XX. PHYSIOGNOMY OF CLASSES.—A person whom nature has, as it were, set apart for a certain calling by giving him the organization best fitted for it, will have the impress of that calling stamped upon him from the beginning, to be strengthened and deepened by its exercise; and one not particularly adapted to the profession or occupation which he may adopt will, by degrees, if he follow it perseveringly, assimilate himself to its peculiar type. Here the law of Correspondence (p. 81) is modified by the law of Special Development (p. 88). In illustration of these laws and the facts just stated we have given a series of groups, each embracing the portraits of the leading representatives of a profession, calling, or class, accompanied by descriptions and biographical notes. These groups comprise the most distinguished Clergymen, the most notorious Boxers, the greatest Warriors, Surgeons, Actors, Artists, Inventors, Discoverers, Philosophers, Statesmen, Orators, Poets, and Musicians of the world, and show conclusively that each profession and occupation has a tendency to produce a peculiar type of head and style of face. [Chap. xxvi.]

XXI. CONTRASTED FACES.—Having shown how resemblances in the shape of the head and the cut of the features result from similarity of surroundings, external influences, and habitual actions, such as are implied in any particular trade or profession [Chap. xxvi.], we illustrate the same general principle in a series of contrasts drawn from life and embracing portraits of many noted persons. [Chap. xxvi.]

XXII. THE TWO PATHS.—"The Two Paths" are two paths of *life*, and the results of opposite courses are most strikingly shown in the careers of two boys, one of whom chooses the *right* path and the other the *wrong*. The young reader, or the parent or teacher who has charge of the young, will do well to turn to it again. [Chap. xxvii., p. 553.]

XXIII. TRANSMITTED PHYSIOGNOMIES.—Some very striking illustrations of the persistence of family likenesses in general, and of peculiar isolated traits in particular, are given. [Chap. xxviii.]

XXIV. LOVE SIGNS.—The importance of the practical application of Physiognomy to the selection of matrimonial partners has induced us to bring together in one chapter the principal signs specially important to be observed in conjugal selection, by those who would love both *wisely* and *well*. We hardly need to urge those "whom it may concern" to study thoroughly Chap. xxix. The information there condensed into a few pages is worth many times the price of this book. [Chap. xxix.]

XXV. CHANGES OF COUNTENANCE.—The objection sometimes urged against Physiognomy on the ground that some persons (and perhaps all, in a degree) have the power to change the expression of the countenance at will and thus appear to be what they are not—one moment one thing and the next something else—is thoroughly disposed of and shown to be founded entirely on a false assumption.

XXVI. GRADES OF INTELLIGENCE.—By tracing animal life upward from its lowest recognized form in the infusoria, through the insect, the reptile, the bird, and the quadruped to its culminating point in man, we prove and illustrate the fact that throughout all nature organization keeps pace with function, and the shape and size of the head with mentality—in short, that the same law applies to species, genera, orders, and classes as to individuals; a higher nature everywhere necessitating a higher form and constitution. [Chap. xxxi.]

XXVII. INSTINCT AND REASON.—Phrenology and Physiognomy enable us to draw a line between man and animal—between instinct and reason. Instinct is manifested through

the base of the brain. Reason dwells one story higher up. The spiritual nature has its place highest of all, and just under the roof of the grand

“Dome of thought and palace of the soul,”

through the sky-light of which it receives its illumination directly from heaven. [Chap. xxxii.]

XXVIII. ANIMAL HEADS.—The heads of the lower animals are found to manifest individual as well as specific differences, and to correspond with character as perfectly as those of men. The flesh-eating animals are found to have broad heads and cruel, blood-thirsty dispositions, while the grass-eaters have narrow heads and are timid and gentle. Contrasting the wild dog with the tame, we find a difference similar to that between the civilized man and the savage. Individual traits are traced in the same way. [Chap. xxxiii.]

XXIX. COMPARATIVE PHYSIOGNOMY.—While admitting that we see little in Comparative Physiognomy, in its present state of development, that promises any great degree of practical utility, we nevertheless insist that there must be some foundation in truth for the common belief, that animal resemblances may be traced among men and women, and that they have their value—little or great—as signs of character, and we accordingly present some illustrative examples which will be found amusing if not instructive. [Chap. xxxiv.]

XXX. GRAPHOMANCY.—As mind determines and guides all the movements of the body and gives expression to its peculiarities through them, it follows that the characters traced by the hand in writing must to some extent be signs of the writer's disposition. We establish this proposition by describing the different kinds of caligraphy, with the traits of character indicated by each, and then giving illustrative specimens of autographs of many distinguished persons. They may be examined with profit; but there are modifying conditions to result from the various circumstances which render handwriting in many cases habitual rather than a sign of character. [Chap. xxxv.]

XXXI. CHIROGRAPHY.—The hand, in its physiological and principle in its use, is examined in Chap. xviii., and its various forms are illustrated in a previous section of this

recapitulation. Under the head of Chiromancy we give, as a piece of curious information, a condensed account of the ancient system of palmistry. [Chap. xxxv.]

XXXII. EXPRESSION.—The influence of transient expressions, often repeated or habitual, on the permanent lines of face, is noticed in Chap. xxxi. (p. 582). The fact that such expressions aid in molding the face, give them importance as a branch of physiognomical study, and invest with interest the numerous illustrations which we present. [Chap. xxxvi.]

XXXIII. THE SECRET OF BEAUTY.—Under this head we have shown what personal beauty is, described its various styles, shown on what conditions it depends, and indicated the way to acquire and retain it. [Chap. xxxvii.]

The effects of training on childhood are shown to illustrate the same principle. [Chap. xxxviii.]

XXXIV. CHARACTER-READING.—The chapter under this head exemplifies the practical application of the principles set forth in the preceding parts of the work, and, in addition, introduce to the reader a large number of the most noted personages of all ages and of various countries, of whom portraits and sketches of character are given. [Chap. xxxix.]

XXXV. MISCELLANY.—Some very interesting miscellaneous addenda, including some account of Aristotle and his "signs of character;" the Head of Christ; St. Paul; Eyebrows Illustrated; Life from Opposite Points of View; Anecdotes, etc., fitly close our great work. [Chap. xl.]

"The tissue of the life to be,
We weave with colors all our own,
And in the field of destiny,
We reap as we have sown !



THEIR ACTIONS AND RESULTS.

AFFABLE.—Individuality, Eventuality, Language, Benevolence, Approbativeness, Secretiveness, and Agreeableness.

AMIALE.—Benevolence, Hope, Veneration, Conscientiousness, Friendship, Approbativeness, and Amativeness.

AUDACIOUS.—Combativeness, Destructiveness, Self-Esteem, Firmness, with deficient Cautiousness, Conscientiousness, Veneration, and Benevolence.

AUSTERE.—Firmness, Conscientiousness, Self-Esteem, Cautiousness, Destructiveness, Combativeness, with defective Mirthfulness and Benevolence.

AVARICIOUS.—Acquisitiveness, Cautiousness, and Secretiveness, with moderate Benevolence and Conscientiousness.

BRUTAL.—Combativeness, Destructiveness, Self-Esteem, Firmness, Acquisitiveness, without Benevolence, Veneration, Conscientiousness, and Approbativeness.

CALUMNIATOR.—Self-Esteem, Firmness, Secretiveness, Eventuality, and Language, with little Conscientiousness, Benevolence, Veneration, and Cautiousness.

CAPRICIOUS.—Self-Esteem, Firmness, Love of Approbation, Ideality, with deficient Continuity, Conscientiousness, Benevolence, Cautiousness, and Reflective faculties, increased by Acquisitiveness and Combativeness.

COMIC.—Mirthfulness and Imitation; it increases by Time, Hope, Eventuality, and by little Cautiousness.

COMMUNICATIVE.—Benevolence, Veneration, Hope, Attachment, Love of Approbation, Eventuality, Language, with little Secretiveness and Self-Esteem.

CREDULOUS.—Spirituality, Hope, Reverence, Eventuality, with moderate Cautiousness, Secretiveness, and Reflection.

DECENT.—Approbativeness, Cautiousness, Conscientiousness, Self-Esteem, Benevolence, Firmness, and Order.

DIFFIDENT.—Secretiveness and Cautiousness, with less Combativeness, Self-Esteem, and Firmness.

DISCREET.—Great Cautiousness, Conscientiousness, Benevolence, Reverence, and Order, with less Self-Esteem and Combativeness.

DISPUTATIVE.—Firmness, Self-Esteem, Combativeness, Approbativeness, increased by Acquisitiveness, Secretiveness, and less Cautiousness and Reverence.

DOOMATIST.—Spirituality, Hope, Veneration, Cautiousness, Conscientiousness, Firmness, and Self-Esteem, increased by Combativeness and Destructiveness.

ELOQUENT.—Individuality, Eventuality, Perceptive faculties in general, Language, Comparison, Causality, Ideality, Imitation, Firmness, and Combativeness.

EXTRAVAGANT.—Secretiveness, Acquisitiveness, and Cautiousness small, Ideality and Spirituality large.

FALSE.—Secretiveness, Acquisitiveness, without Conscientiousness and Benevolence, increased by Combativeness.

FLATTERER.—Secretiveness, Approbativeness, increased by less Conscientiousness, Self-Esteem, and Cautiousness.

GLOOMY.—Cautiousness, Conscientiousness, and the Reflective faculties, without Combativeness, Hope, and Mirthfulness.

HYPOCRITE.—Secretiveness, Acquisitiveness, Cautiousness, without Conscientiousness and Benevolence.

IMPERTINENT.—Combativeness, Self-Esteem, Destructiveness, Firmness, without Cautiousness, Approbativeness, Conscientiousness, Veneration, and Benevolence.

INDUSTRIOUS.—Acquisitiveness, Secretiveness, Approbativeness, Firmness, Cautiousness, Combativeness, Destructiveness, and the Perceptive faculties.

INSANITY.—Caused by great mental excitement, preceded by exhausted vitality, by intemperance, etc., the mind is liable to become warped and insane.

IDIOT.—Results from the violation of physiological law, either on the part of the parents or the individual; it may be inherited, or produced by wrong living.

MODEST.—Cautiousness, Benevolence, Veneration, Conscientiousness, with less Self-Esteem and Combativeness.

NOBLE.—Self-Esteem, Firmness, Conscientiousness, Veneration, Benevolence, the Reflective powers strong, while all the animal propensities remain subordinate.

PARTIAL.—Acquisitiveness, Adhesiveness, Secretiveness, Self-Esteem, Approbativeness, Combativeness, and Destructiveness, with deficient Conscientiousness.

RASH.—Combativeness, Destructiveness, Self-Esteem, Acquisitiveness, without Cautiousness, Veneration, Conscientiousness, and Benevolence.

SUPERSTITIOUS.—Spirituality, Veneration, Hope, Ideality, and no culture.

TYRANT.—Self-Esteem, Firmness, Approbativeness, Combativeness, Destructiveness, Secretiveness, Acquisitiveness, without Benevolence.

UNPOLITE.—Firmness, Self-Esteem, Combativeness, and Destructiveness, without Approbativeness, Secretiveness, Benevolence, Reverence, and Conscientiousness.

VINDICTIVE.—Combativeness, Self-Esteem, Destructiveness, Firmness, Acquisitiveness, and Approbativeness.

WAYWARD.—Destructiveness, Combativeness, Firmness, Alimentiveness, Self-Esteem, with small Cautiousness, Order, Imitation, Conscientiousness, and reasoning organs and an impulsive temperament.

STUPIDITY.—A low, dull, heavy temperament, an inactive brain, sluggish circulation, a poor quality of organization.

Education, and religious influences modify these conditions and tendencies. But the best corrective may be found in a correct philosophy, temperate habits, in education, and religious culture.

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HOME TREATMENT FOR THE SICK;

OR,

How to Gain and Retain Health.

By JOEL SHEW, M.D.,

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