

THE
GEM OF SCIENCE.

No. 2.

MAY 12, 1846.

Vol. I.

PURENOLOGICAL.

ARTICLE I.

A NOVEL REALITY.

Proceedings of a meeting holden in the upper story of the house of E. H. S.

There being no doubt that all the members of the council were present, the calling of the roll was dispensed with,—

CALVIN CONSCIENTIOUSNESS was appointed moderator, and ISAAC IMITATION Secretary. The moderator on taking the chair presented the following preamble and resolution as the subject for consideration:

Whereas, the proprietor of this house has for several years, spent much of his time in human improvement, and has written some few articles for periodical publications: and whereas, very few productions of his pen have lately appeared in print, and there are some reasons for apprehending remissness on his part in this respect; Therefore, Resolved, That E. H. S. be respectfully requested to renew his labors and at least occasionally to send an article to the Editors of his acquaintance.

The moderator recommended the a-

doption of the preamble and resolution, apparently with a sense of moral obligation, and in few words: and having announced that any remarks would now be in order, the members addressed the chairman substantially as follows:

EUSEBIUS EVENTUALITY. The first two items of the preamble state what I know to be matters of facts, I have known him to be in that practice. And I distinctly remember some articles written by the gentleman referred to, and there are some circumstances connected with several of them which I would like to narrate. While travelling through the eastern countries he forwarded some articles to—

THOMAS TIME (interrupting the speaker,) I wish to remind the member thro' you, Mr. Moderator, that there are many of this council who wish to speak on this subject, and therefore brevity should be consulted. My neighbor is apt to be prolix, man's life is made up of seconds, and seconds are swiftly passing by, and which, like departed friends, can never be recalled. [The Moderator coincided in opinion with Mr. Time and Mr. Eventuality sat down.]

ISAAC INDIVIDUALITY. I would suggest that gentlemen (whose names I distinctly remember) should be very perspicuous in their remarks. Let them take up the subject in all its relations, *seperately*. If they regard generalities to the neglect of particulars, it would be against my wishes. Let them remember that the whole consists of parts; and that the best way to obtain a clear view of the case is to consider it in its several items.

OREN ORDER: It is desirable also, to prevent confusion, that every speaker should preserve his position in this meeting, so that no one need be interrupted. There is a place for every gentleman, and I desire to see every gentleman in his place. And besides; let there be *a proper arrangement of thought* with every speaker. I have often reminded them that Order is Heaven's first law.

MARQUIS MIRTHFULNESS. I care not of whom the members speak or what they say, only, that it excites gaiety of feeling, even though it be ludicrous. Mankind have three sets of muscles to draw the corners of the mouth upward, and only one pair to draw them downward, indicating that people should laugh just three times as much as they cry. A little mirthfulness on this occasion will serve, especially to keep us awake.

ISAAC IMITATION. (the Secretary.) I nearly agree with the last speaker. I would be fond of the mirthful, provided it is bordering upon the comical and the imitative; or, I can follow any example the members are pleased to make. You will probably hear from me after adjournment.

SAMUEL SUAVITY. Having but recent-

ly been recognised as a member of this honorable body, I shall speak with much reference to the opinions of others; for it is far better to *please* than offend. I have only to hint that the 'soft tongue breaketh the bone.'

The moderator here arose and said the members certainly had a right to offer such remarks as they pleased—but he hoped they would come at once to the preamble and resolution and carefully utter their natural language.

HORACE HUMAN NATURE. The study of character, I think would be pleasing and useful to the public. It has long been my opinion that if mankind had more knowledge of each other, there would be less misunderstanding of their motives, less difficulty in the world more confidence in each other; more allowance for each other's defects and imperfections. 'Know then this truth,' 'The proper study of man is man.'

CAIUS CAUSALITY. I think also, it would be gratifying to know the motives which prompt men to action,—I see clearly that a correct philosophy of mind must lie at the foundation of all moral and intellectual reform. What can be either more delightful or useful than to discover not only the bearings and relations of mind, but of every thing in matter or form, and to trace all effects to their causes? Knowledge is the food of the mind, and without knowledge the mind must languish.

WALTER WONDER. Mr. Moderator, the logical member certainly is in error in some part of his speech. He would have things explained, every thing perfectly known—but if it could be so, much of the present happiness of man would be marred and destroyed. Curi-

osity is a source of great pleasure, and curiosity cannot exist without mystery. It is my desire that—[here Mr. W. was silenced by calls to "order," from Mr. Combativeness and other members, who had mistook him for Mr. Marvellousness; but after some discussion the moderator decided upon his right to be heard and directed him to proceed:] Verily (he said,) it is strange that I have not a right to a separate and distinct seat in this council with my semi-intellectual neighbors! It may be wonderful and true that I assist Mr. M. somewhat; yet it is truly astonishing that I have not been regarded before this as having the same sense of semi-intellectual capacity as have Messrs. Imitation and Ideality, or even Mr. Sublimity.

IRA IDEALITY.—I care very little what the proprietor writes about or does only, that it be done in good style. I wish him to pay some attention to bright and beautiful imagery. I have often told him he does not pay enough respect to fancy. Logic and metaphysics are dry things at best.

SOLOMON SUBLIMITY.—Mr. Moderator, my neighbor, Mr. Ideality, recommends bright and beautiful imagery, but I am in favor of the Grand and Sublime.—He speaks of fancy, and would doubtless be gratified with poetry and flowers, but of what consequence are they, compared with the lofty facts of Nature? The falls of Niagara, for instance—the madened whirlwind—the wild crashing of the tempest, or the pealing shock of midnight thunder!

CHARLES CAUTIOUSNESS.—Mr. Moderator, my motto is, Take Care! And I feel to admonish the members against precipitate action. We have often

been involved in difficulty by haste.—How do we know that the editor would thank the proprietor for troubling them with his cogitations? Can we foresee all the consequences of his compliance with the resolution? Again I admonish you to Take Care!

SIXON SELF-ESTEEM.—I have no sympathy with the suggestions you offered. On the contrary, I believe the proprietor would be welcome to the columns of any of the papers. There can be no doubt on that part, in this council, excepting with the indignified and timid gentleman, who has just addressed the chair.

CONRAD COMBATIVENESS.—At all events let the proprietor drive through. He formerly fought the adversary, and I want to see him at it again. If he is a good warrior, let him fight. Opposition and debate with me sir, is the life of business.

DAVID DESTRUCTIVENESS.—That is my mind precisely. Let him smite with the sword. Let him lay on manfully, and make inroads into the enemies camp and strike down the foe. 'I'll be hanged if I would'nt.'

BENJAMIN BENEVOLENCE.—Nay, gentlemen, there is too much bloodshed, misery, hanging, contention and useless debate in the world already. Mankind should be more united, in the bonds of love and peace; more willing to aid and assist each other. Too little is contributed for charitable and benevolent objects; and more is done to destroy man, than to ameliorate his condition.—Bear in mind gentlemen,

"An inadvertant step may crush the snail,
That crawls at evening in the public path."

(Concluded in our next.)

ARTICLE II.

THE BRAIN A PLURALITY OF ORGANS.

AN extract from our reply to an "Address of Rev. D. Holmes, before the Cayuga District Association, on the constitution of the Human Mind," &c.

"If once right reason drives that cloud away,
TRUTH breaks upon us with resistless day."

—Pope.

Having pointed out the discrepancies in the main arguments of Mr. H. against phrenology, in as charitable a manner, and in as brief terms as the nature of the subject would permit: and having established by the assistance of those of the same school with Mr. H., the fundamental principle of the science, viz:—*That the brain is the organ of the mind*; it will now be in order in conformity with the design of this replication to show still farther that—

The brain is a plurality of organs.

Upon dissecting the brain, we find it divided into three grand divisions; denominated the posterior, middle and anterior lobes, which are a mass or congeries of organs which constitute the brain. Hence man, with some degree of propriety, has been compared to a "cabbage head," from the organs shooting out from the *medulla oblongata*, which connects the spinal marrow with the brain, and which when removed from the skull or cranium with the lining membrane, we find this plurality of organs, while the *medulla oblongata* has an office similar to the finger board of a ladies' piano-forte, from whence proceed its different, but harmonious powers: and the organ of the brain may be compared to the blossoms and branches of the orange tree, which

are supported by the body and the surrounding congenial elements.

Now to suppose the brain a unit organ, would be quite as inconsistent as to suppose the different senses may be performed thro' the medium of one nerve or even one pair of nerves: and as there is one pair of nerves for the operations of each sense; so, there is a pair of organs for each faculty of the mind, one in each hemisphere of the brain. These two hemispheres are separated by a small membrane called the *falciform*, (or scythe like process, from its resembling a scythe in shape,) which dips down between the hemispheres and prevents the organs from falling on to or oppressing each other when the person is lying down, or in sleep, and keeps them in their proper places: while another design quite as apparent is, that when one organ is injured, impaired or destroyed, the other may perform its operation, though not to so great an extent.

And further; as man is in possession of animal feeling common to the brute creation, can we infer he has no other which we would be obliged to do, if we should not admit a plurality of the organs of the brain, and consequently of the faculties of the mind, "which is the capability given to us by the Creator?"

We find man not only an animal, but a selfish, moral and intelligent being:—and as we have seen that these natures are all referable to the brain; and as a feeling or sentiment of devotion can not originate in the same organ which gives a regard for home, we must conclude that the brain is more than one organ:—and "having gained this step," we may go on in the same order, until we have an organ of the brain for each distinct

faculty of the mind, and "when we would have an infallible rule," for accounting for "all kinds of mental phenomena."

Wigan, "on the qualities of the mind," speaking of the phenomena of the brain, relates the following valuable and interesting fact in support of phrenology :

"One of the most inconceivable things that can be found in the nature of the brain, is that the organ of sensation should itself be insensible. To cut the brain gives no pain, yet in the brain alone resides the power of feeling pain in any part of the body. It is only by communication with the brain, any kind of sensation is produced, yet the organ itself is insensible. But there is a circumstance more wonderful. The brain itself may be removed, may be cut down to the *corpus callosum*, without destroying life. The animal lives, and performs all those functions which are necessary to simple vitality, but has no longer a mind. It can not think or feel, it requires that the food should be pushed into the stomach; once there it will thrive and grow fat. We infer therefore, that the part of the brain called the convolutions, is simply intended for the exercise of the intellectual faculties, whether of that low degree called instinct or of that exalted kind bestowed on man, the gift of reason."

In addition to the above, I quote the following from the January No. of Fowler's Am. Phrenological Journal, p. 21.

"Within five miles of Huntsville, Ala. there lives a negro who was seventeen years old last August, and weighs over 200 pounds. But his body is not the wonder. It is the mind, if he may be said to have any." "His laugh and movements are perfectly idiotical. He does not

know a letter or figure. Except in one respect, he is the most extraordinary human being I ever saw. Almost his only manifestation of mind is in relation to numbers. His power over numbers are at once extraordinary and incredible."*

Mr. George Combe stated in one of his public lectures in New York, that the organ of number in his own head was small and that he was incapable of telling how many 8 times 9 were, except as he added by tens!

Can Mr. H. account for this fact from his theory of "capabilities" in the case of Mr. Combe, who is already acknowledged to be a man of strong judgment—a philosopher.

I shall now conclude, from the preceding, that a faculty of mind can not be manifested except through the medium of a particular organ; that in the absence of casuality* or color,† their functions can not be performed through any other organ; and that as the functions of animal life are performed by, and through the various organs and constitu-

* It is stated also that there is a remarkable correspondence between his phrenological developments and the above manifestations.

† At Sandusky, N. Y. in the fall of 1843, Mr. Page by a fall of a tree, which fractured his skull and injured the organ of casuality and some others in the same group, from which was removed a tea cup full of brains, was from that time deprived of any faculty for tracing cause and effect, and the other accompanying phenomena were a striking demonstration of the correctness of the locations of these faculties. Mr. Page survived the accident, and the last time I saw him his health was middling good.

† In the fall of 1843, while lecturing at Belfast, N. Y., the P. M. of that place was called on for a public examination, in whose case I found a deficiency of the organ of color, and remarked, that he could not discriminate between colors, when he stated to the audience that "he could never tell when cherries were ripe from their color—that he could not tell red from black," and yet he was an excellent carpenter and joiner, and was in possession of good eyes!

ent elements of the body ; so the operations of mind, in this state of existence, are performed through the medium of different organs of the brain : and that as each and every organ of the body performs functions differing from each other, but all contributing to physical or animal existence ; so also, each and every organ of the brain is differing from the other, but all contribute to mind or mental existence ; and as the various functions of the body can not be performed through the medium of one organ ; so also, the diversity of disposition, intellect, and feeling can not exist except through a plurality of organs of the brain.

ARTICLE III.

ANALYSIS OF THE FACULTIES, NO. 2. II. PHILOPROGENITIVENESS.

Function.—Paternal attachment ; love of young.

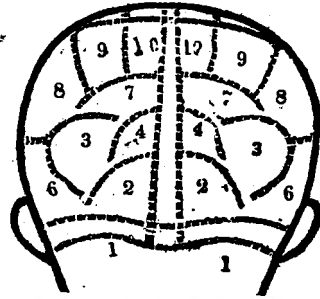
Small.—The person will have little regard for the young, and as a parent, would be cold toward, and would make little provisions for his children. The mother who has a small share of this organ, will be unfit for rearing a family of children, and destitute of parental affection.

Full.—This organ gives moderate but uniform regard for the young—the father will regard, but will not spoil his children by giving them too much lenity, and will generally be interested in their behalf, and have an eye to their present and future welfare.

Large.—This will give *strong paternal love & lasting attachments* for the young ; will be fond of, and will be almost always in the company of children.—With this, and a larger size the individual will well be passionately fond of

the young, and as a parent, should be guarded against injuring children by excessive indulgence.

Its natural Language, may be seen when the mother calls the child to her embrace and the organ throws the head directly backward, accompanied with a short but a quick movement of the head.



LOCATION.

This organ is marked No. 2 in the cut, and is situated in the posterior lobe of the brain, and is separated from the cerebellum by a small membrane called the "Tentorium." Its development occupies nearly all of the occipital bone above the transverse ridge and occipital protuberance. This organ as well as Amativeness, was discovered by Dr. Gall.

GENERAL REMARKS.

This organ is larger in the female head than in the male, and their characters correspond with this fact. The mother who possesses a general share of this organ would join with the Poetess in singing,

"Take me and bind these arms, these hands
With Russia's heaviest iron bands,
And drag me to Siberia's wilds,
To perish if 'twill save my child."

Henry Clay's bust, which is in our possession, shows a large development of parentiveness. Osceola likewise had it very large, so large in fact, he

died in prison with a broken heart at hearing the death of his children who were killed in the Seminole war.

This organ should ever be kept active, and the parent should look well to every influence upon the child, all which have a bearing upon either the happiness or misery, the prosperity and usefulness of the child, in future. There is no little responsibility resting on parents.—They are forming minds for future weal or wo. A new generation is rising as fast as the wheels of time roll on, to fill the stations allotted them, by the course pursued by their parents in the theatre of life. The education of the youth of our land, physically, intellectually and morally, then, is a subject of vast magnitude.

ARTICLE IV.

TEMPERANCE DOXOLOGY.

Praise God for murmuring rills and streams,
For dimpled waters clear and bright,
Cool babbling brooks and fountains pure,
And laughing lakes in liquid light.

TEMPERANCE.

"A breath revives him, or a breath o'erthrows."

TEMPERANCE is a proper exercise of, and restraint upon the appetite and passions. *Intemperance* is an excess of action in, or exercise of alimentiveness, (speaking phrenologically,) and results in a longing and hankering after something to stimulate and satisfy.

The former secures the happiness of its possessor, renders his countenance brilliant, the system vigorous, secures domestic enjoyment, tranquility of mind, and qualifies him for the smiles of heaven; while the latter, is itself, a transgression of a law of one's organization, and results in an abuse of, not only one, but many of those faculties which the God

of nature has bestowed upon him for his own happiness, and brings down upon himself its desolating effects, which disposes him to inferiority, doubt, misery and despondency; he feels penitent and is disposed to reform, when he reflects upon the misery of the past—and looks upon his afflicted wife, whose heart beats high with grief which rushes the life blood to the head as she is nearly crazed with care, and borne down with anguish and despair, and who, though often abused, ever willingly administers to his wants; and when he listens with paternal regard to the earnest appeals of his desolate children, and looks around upon the condition of his family—upon his inferiority, and the station which he might have occupied, he is almost persuaded to walk the path of virtue and road to happiness, under the protecting banner of "total abstinence." But alas! how clearly is he described in the following appropriate lines:

See the inebriate half relents,
His drunken follies he repents,
And heeds to virtue's lore:
But ah! that soft and soothing voice,
He stops and makes the foolish choice,
And says "I'll taste once more."

Thus the flattering rumseller has made him a present of a glass of poison as a token of his friendship; has persuaded him to break that pledge which he had made upon his honor, in the presence of his God, and upon the integrity of his soul: his brain is again set on fire; his suffering family are perishing in want; the hopes of his wife are again blasted; she sinks under her sorrowful reflections—leaves a group of sprightly, promising, though helpless children, and is borne away to another world—the suffering children have no longer a mother's care,

and are provided for only by those cold and distant strangers who *licensed* the rum-seller to bring them and their once respected father to their deplorable condition.

The reader is left to draw his own conclusion in regard to his duty and moral obligation.

TEMPERANCE.—The virtue of temperance in the use of food is to little practiced by many, who, at the same time, would be shocked by the charge of excess in the use of strong drink.— Yet intemperance in eating is, perhaps, no less mischievous than in drinking; and when properly considered, equally disgraceful. Excess in the use of food begins at a point far short of that brutal intemperance which shocks every beholder; it begins soon after hunger is appeased, and the animal spirits are refreshed; it begins when the otherwise satiated appetite must be tempted by variety and by dainties; it begins when a person begins to feel oppression.

For my part, when I behold a fashionable table, set out in all its magnificence, I fancy that I see gouts and dropsies, fevers and lothargies, with other innumerable distempers, lying in ambuscade among the dishes.—*Addison*.

ATMOSPHERIC PRESSURE.

A beautiful illustration of the expansive power of heat and the pressure of the atmosphere occurs in baking a fruit pie.

The cook inverts a cup in the dish, from which a portion of the air is expelled by the heat of the Oven; when allowed to cool, the remainder contracts and a partial vacuum being formed, the pressure of the atmosphere forces the juice to rise in the cup, and thus prevents its coming in contact with the crust, by which it would be absorbed,

“Short visits are the best,” as the fly said when he lit on a hot stove.

POETRY.

For the Gem of Science.

THE LAWS OF NATURE.

BY J. H. SANFORD,

Before man studied Nature's Laws
And learned to comprehend the cause
Of all things here below,
Through errors wilds in pain he went,
His head in gloom was downward bent,
But why, he did not know.

He thought the sun was but a flame;
As from the east it swiftly came,
By dappled courses drawn,
Which through ethereal regions sped;
And soon behind the mountains fled,
Or sunk beneath the lawn.

He thought this orb a flattened mass
Of clay and sand, o'erspread with grass,
On some broad platform laid:
While round and round, each in its turn,
The little twinkling stars did burn
To cheer the gloomy shade.

When storms arose and thunders roar'd,
Into the heart deep terrors pour'd
Which filled the mind with fear:
And when the vivid lightnings play'd,
The stoutest heart was oft dismay'd,—
The feeble shed a tear.

Thus ignorance and fear were join'd,
And much enslaved the human mind,
Prostrating him in awe;
While on, through life, without relief,
He struggled hard in unbelief
Of Nature's gen'ral Law.

But now the light of science pours
Into the mind her bounteous stores;
While all may understand
That though the lightnings flash so bright,
Or thunders roar with dreadful might,
In wisdom all are planned.

DETROIT, April, 1846.

Geoffry Chaucer was the father of true English Poetry. He flourished from 1370 to 1400.

MAGNETISM.

ARTICLE V.

HISTORY OF MAGNETISM.

In the foregoing, but imperfect history of animal magnetism, we give an *impartial* and *just* account of the principles, which cannot fail to be interesting to the curious, and believers in the principles, and useful to its advocates.

Animal Magnetism has been practiced more or less for centuries past, but was revived in Vienna, in the year 1772 by Frderick Anthony Mesmer, a German Physician, born at Mersbury, in Suabia, in 1734. Mesmer supposed himself the first discoverer of the principles. He attempted at first to practice magnetism with the magnet, but at length declared, it was not the magnet, but a mysterious power in his own constitution which produced the effects, and that this power was related not only to that of the magnet, but to the attraction dispersed throughout the universe. He had little success in Vienna, and his applications to the Academies of Science at Paris and Berlin, and the Royal Society of London were treated with neglect. After an attempt to cure Melle. Paradis, a celebrated blind musician, by Magnetism, Mesmer left Vienna for Paris, in 1778. He in vain endeavored to attract the attention of Scientific men in this place; but at length he made a convert of M. Daslon, who, from being his pupil became his rival, and whom he then represented as an impostor. Mesmer had the complacency to demand from the French Government, the gift of a Castle and estate, as a reward for his discoveries, and the baron de Breuille carried on a negotiation with him, and offered him

a very liberal reward, if he would instruct three persons to be chosen, by government, in his discoveries and mode of procedure. He however rejected the proposal and removed with some others to Spa.

A subscription was opened to induce him to return to paris, and reveal the principles of his discovery. He complied, and went to paris, and succeeded in getting a goodly number of converts and received 440,000 livres.

But his extravagant, pecuniary and selfish desires got for him many opposers and recalled much of the confidence which he had gained by his experiments. Government soon afterwards appointed a committee of Physicians, and members of the Academy of Sciences, among whom as is generally known, was Benj. Franklin, to investigate and test Mesmer's discoveries; and the result of their inquiries appeared in an unfavorable report, drawn up by M. Bailly, which went far to destroy public confidence in the principles, and Mesmer afterwards spent sometime in England, where he called himself by another name, and finally died at his native place, in the year 1815.

Since this time, (in 1820) the Russian Government caused a prize to be offered for the last treatise on the subject, but it was subsequently withdrawn.

Harriet Martineau, whose name has been going the rounds in the public prints, was once a professed subject of Magnetism; and in her investigations when she was supposed to be in a Magnetic sleep, astonished the people by the accuracy of her descriptions through her supposed unnatural and incredible perceptions; but she was afterwards in-

duced to avow that she was practicing impositions.

The reader now has an outline of the history of Animal Magnetism, drawn in nearly its darkest coloring. We have now seen that the history of Magnetism is like the tides of the Sea—now rising with foaming wave and surging billows, rolling high, and overwhelming every thing within its reach,—now declining steadily, and returning from whence they came; but no sooner are they returned, than they are moved back again by the power that made them.

ARTICLE VI.

EXTRACT OF A LETTER

From Mr. Jno. Whiffin of Utica N.Y. He was formerly a member of our class at that place in Phrenology and Magnetism.

"I am very sorry to inform you that we have been destitute of any lectures on Phrenology and Magnetism, since you left us, and the result is, we are living at a poor dying rate. So far as concerns myself, I have been somewhat engaged in the work, have had Mr. Davis for a subject, and so long as we would go from house to house and shew, and explain to them the science as well as we could, gratis, we were welcome received. But Mr. D. wanted pay for his time—myself not excepted; for to go before a company of skeptics and try to explain and confirm truth to them, and to loose time for naught, there was no reason in it, I have lost trebble the time I ever got pay for, but that I care but little about.

* * * *

"I had an excellent experiment of mesmerism upon a tavern keeper, eight

miles north of this city. He is a very strong man, of large size, and I should as much thought of magnetising a horse as him. When I entered the bar-room, I saw he was sick. On inquiring into his illness he informed me, he had the tooth-ache, severely, so hard that he could not eat nor sleep. There was another skeptic in the room with him, and knowing that I thought a good deal of the science, they wanted me to try my skill. I went to work reluctantly. But to my surprise, I may say, I done the work—cured his face, and magnetised him so that I could excite his phrenological organs."

REMARKS.

We are glad, that, in the absence of lectures on the above mentioned subjects, our friend is interested in the work, and endeavoring to make a good use of the principl's into which he has got an insight He will doubtless do much good if he continues on, and advocates independent of his own selfish interests, those principles which he is laboring to extend. And while the people may not show proper gratitude and make out a remuneration, he should not become discouraged; for he is sowing good seed that will spring up after many days.— Besides, an advocate of new truths should not expect alway a compensation, other than that, of which Shakespeare speaks, in Henry VIII Act III, Sec. II.

"I feel within me a peace, above all earthly dignities,—
A still and quiet conscience."

We have been laboring a number of years for the advancement of these principles, and are not so well off, as to our wordly things this moment, into \$400, (saying nothing of our limited cabinet and the like,) as when we commenced;

nord do we ever expect to *make* them a speculative hobby. Nor can *any one* expect to benefit community that does.

We are likewise gratified in learning that Mr. Davis is still willing to submit to experiments for the benefit of others and the science. We *know* he will be of much use to society if he will continue his labors. We have magnetised him in the lecture room and in private; and we can safely say this of his wonderful power of discrimination when *properly* thrown into a clairvoyant state; among other things, he has described a number of cases of disease, with almost astonishing accuracy, in our presence, and when there *could* be no deception about it, and when he knew nothing about what he was going to point out before he was put into that state; and we now let the isolated fact which Mr. W. has related above, in reference to the landlord, go to the public, as evidence of *one* instance where magnetism has been useful as a remedial agent, although it might not have been intended for publication.

ARTICLE VII.

FACTS like the one below must place the utility of the principles of magnetism beyond the doubts of the public mind:

ALMOST INCREDIBLE—ANIMAL MAGNETISM.—A few days since, a large tumor was removed from the shoulder of Mrs. Dunn, wife of the principle of the Academy at Hempstead, L. I., without pain, she having been put in a mesmeric sleep. After the operation was finished, Mr. Dunn, by a few passes, restored her to consciousness. In reply to an observation that she had had quite a nap, she said she had, and that she felt better for

it. The tumor having been mentioned, she was told that the physicians had examined it, and had concluded to do nothing more with it at present. She expressed considerable disappointment, and being asked if she would consent next week to be mesmerized, and have it taken out, she answered in the negative, and said if it became necessary to have it removed, she would prefer to be in a state of consciousness. Dr. French asked her if she had experienced any pain or uncomfortable sensation during her sleep. She said she had not, and the Doctor then asked her what she would think if he should tell her it had been removed. She turned her eyes towards her shoulder, and perceiving a small spot of blood, lower down on her dress, with a countenance indicating much anxiety, she asked her husband if it was out. The tumor was now shown to her, and she evinced considerable agitation. The parties to this transaction, says the Brooklyn Eagle, are well known in Hempstead, and their standing and position are such as to preclude all idea of deception—*N. Y. Journal of Commerce.*

A FATAL CATASTROPHE from incautious experiments upon atmospheric electricity occurred to Professor Richman, of St. Petersburg, in 1753. He had erected an apparatus in the air, and was examining it with a friend, when a flash of lightning passed from the insulating rod through his body, and instant death was the consequence. His companion was at the same time struck senseless to the ground.

MERIT.—The man of modest merit is like melted glass; because, the more you "*draw him out*" the *finer* he appears.

PHYSIOLOGICAL.

ARTICLE VIII.

THE CIRCULATORY SYSTEM.

THE *heart* is placed in the chest toward the left side and is the centre of the circulation. It moves two sets of vessels, the arteries and veins. The arteries convey the blood from the heart to different parts of the body; the veins return it to the heart.

The blood leaves the heart by a large artery, called the *aorta*, which gives off numerous branches and divide and subdivide, until every part of the body is supplied with blood and at last terminates in small (cappillary) vessels. These join small cappillary veins, and unite to form larger veins until at last they are all joined in two large veins called *vena cavae*, decedens, returning the blood from the head and upper extremities, and the *vena cavae*, ascendens, returning the blood from the trunk and lower extremities; they both empty their blood into a large *sinus* or reservoir, which furnishes the heart continually with blood. This sinus is called the *right auricle*; and by the contraction of this, the blood is forced into the right ventricle, and is prevented by a valve, from rushing back. From the right ventricle, the blood is sent into the pulmonary artery, which conveys it to the lungs; and from the lungs it is conveyed to the left auricle of the heart; then from the left auricle to the left ventricle, and thence, to the *aorta*.

A. F. T.

ANN ARBOR, May, 1846.

Recent experimenters have stated their belief, that in the blood of forty men there is iron sufficient to form a plough share.

ARTICLE IX.

From the Water-Cure Journal.

CASE OF FEVER, FROM DR. CRANE,

Doct. Shaw :—We have tested the medical effects of the water-cure in our own family, under the following circumstances :

Our eldest daughter, about eleven years of age, arose one morning with violent pain in the head, sore throat, and considerable fever, great thirst, unable to sit up but a few moments.—After getting her bed, we commenced with the usual remedies, and continued to give them through the day and night without the desired effect; her fever increasing, we became more anxious, and a physician was called, who immediately inquired if she had ever had the scarlet fever,

On ascertaining that she had, and very severely, he remarked that the appearance of the skin and other symptoms indicated the scarlet fever. This was about ten in the morning. He ordered medicine to be given every half hour, and if no moisture appeared on the surface in the course of an hour or two, the remedy to be repeated every fifteen minutes; we continued this treatment until seven in the evening without any favorable change in the symptoms. In fact the chill was evidently growing worse! her mind wandered during the latter part of the day, and the pulse was rapid and strong.—I went out soon after dark, and was absent about an hour. On my return I enquired after the child. I was requested to place my hand upon her forehead, which I found moist with perspiration. At this moment I was not aware of what had transpired during my absence, but supposed the medicine had produced the change. Mrs. C. informed me, that as the remedies would produce no change, she had ventured to wrap her in a sheet wet with cold water, with a thick wool blanket over it tucked closely about and under the body. In fifteen or twenty minutes perspired freely and slept, but on awakening she called for a fresh wet sheet, and continued to do so until we changed it six or seven times in about eight hours, which time the fever had entirely left her and did not return. She drank four or five tumblers of water during this treatment; and the next day was out of bed and

ressed, feeling perfectly well, only somewhat weak.

J. W. CRANE, M. D.

11 Leroy Place, Bleecker St. N. York,

REMARKS—We gladly insert this communication from our friend Dr. Crane, and we are authorized to say that some months since the child's illness above mentioned, she was again attacked in a similar way and has been cured as before. The case illustrates the power of water cure over acute diseases. By observing a few simple rules, people can everywhere practice safely in fever; and if they will but remain calm and self-possessed, and persevere, in almost every case, a fever of whatever kind may be at once nipped in the bud. By affusion, wet sheets, shower or plunging baths, or by a part of all of these united, keeping the whole system cool, if it is too hot, or comfortable if it is too cool, (using vapor or warm baths in the latter case, alternating with the cold,) together with cleansing and keeping clear the stomach and bowels, and diluting well with water as a drink, —any person of good common sense will do incomparably better work in all manner of fevers and we may add, in all inflammatory diseases, than a score of doctors with their whole armament of poisonous drugs. We go, in toto, against the idea, that the physician only is to administer water. Act according to those plain rules we have given. Take fifty wet sheets and baths in a day, if so many are necessary to keep the system cool, or to remain, as some have done, for hours in water, till the fever is thoroughly broken; and better still by far, to regulate the diet, labor, exercise and daily bathing, that these attacks of disease are avoided. This is what hydropathy brings us to ultimately. Friends, heed well its precepts!—*Ed. Jour.*

Want of prudence, says Goldsmith, is sometimes the want of virtue; nor is there a more powerful advocate of vice and poverty.

'Man is an imitative animal' as the ape said to the dandy.

LADIES' DEPARTMENT.

ARTICLE X.

SWEETNESS OF TEMPER.

BY MRS. M. JONES.

Of all the excellencies which adorn the female character, there is none more conspicuous; none more desirable than sweetness of temper. It is that beauty of soul which renders home, communion with society and the paths of life pleasant. Our Heavenly Parent has acknowledged it to be, in his sight, of great price. This qualification is within the reach of every individual; and although Science and many personal accomplishments may be denied, yet this, most pleasing and engaging quality can be acquired in all situations in life. But to gain a complete ascendancy over an irritable temper, it is needful to begin at an early period, before habits of petulance have gained such an ascendancy over the mind as to produce peevishness upon every occasion when the feelings are crossed and hopes are disappointed. Although much depends upon the managements of parents at an early period, yet much more remains to be accomplished when their control is no longer required.

How lamentable it is, that this essential qualification is so much overlooked, when the peace and happiness of families and societies are depending thereon!

Neither beauty of person nor fascinations of wit, nor the most splendid talent can make up the deficiency. In its absence, how often is the fireside rendered a place of contention! how often are the spirits of servants embittered, and the happiness of whole families de-

stroyed by a single female, who attempts to control others, but has never learned to govern herself.

Many are the apologies to be made for persons of excitable brains and highly nervous temperaments; but I doubt if these are sufficient to excuse the indulgence of a petulant disposition and a total neglect of those prominent features by which woman is generally known—meekness and humility.

TUSCOLA MICH.

SPEAK GENTLY.

Speak gently—it is better far
To rule by love than fear—
Speak gently—let not harsh words mar
The good we might do here !

Speak gently—love doth whisper low
The vows that true hearts bind ;
And gently friendship's accents flow ;
Affection's voice is kind.

Speak gently to the little child,
Its love be sure to gain ;
Teach it in accents soft and mild ;
It may not long remain.

Speak gently to the young, for they
Will have enough to bear—
Pass through this life as best they may,
'Tis full of anxious care !

Speak gently to the aged one.
Grieve not the care-worn heart,
The sands of life are nearly run,
Let such in peace depart.

Speak gently, kindly to the poor—
Let no harsh tone be heard :
They have enough they must endure,
Without an unkind word !

Speak gently to the erring—know
They must have toiled in vain ;
Perchance unkindness made them so,
Oh, win them back again.

Speak gently !—He who gave his life
To bend man's stubborn will,
When elements were fierce with strife,
Said to them "Peace, be still!"

Speak gently !—'tis a little thing
Dropped in the heart's deep well ;
The good, the joy it may bring,
Eternity shall toll.

Worthy is the woman who like the unknown authoress of the above lines, when possessed of poetic powers, makes use of them for elevating and happifying of the great family of man.—Such an one is more deserving of honor and praise than many well known to fame, the tendency of whose writings is destructive to man's best interest.

Reader, bear in mind the truths of this article, and speak gently and with tenderness to the little child, the aged one, the poor and the erring. In so doing, blessings will follow thee,—thy heart will be light, and joy ever thine attendant. And what is still better, thereby thou shalt lighten the burden of thy fellow man, irradiating the sorrow-stricken countenance with the smile of hope, and cheering the saddened heart by the warm gush of thy sympathy.

MISCELLANEOUS.

CAPITAL PUNISHMENT.

We take great pleasure in announcing that the wisdom and humanity of our Legislators, have blotted the DEATH PENALTY from our Statute books; thus setting a worthy example to others of our Nation, by doing away with the wicked, fool-hardy and exterminating practice that has so long been cherished—of hurling men, who are more deserving our pity than hatred, from time and life's reformation and improvement, into another existence.

We may say with propriety, the Legislature of Michigan has done well, though it is not a little strange that men professing dignity of sentiment should have so long neglected to place themselves where they now stand—pre-eminently—above the character of murderers.

THE DEATH PENALTY ABOLISHED IN MICHIGAN.—The gentlemen engaged to revise the laws of Michigan, incorporated the laws of Maine on the subject of capital punishment—not allowing it to be enforced until one year after the conviction, and then not until the Governor shall issue his warrant ordering the convict to execution. A few days since, the Senate so amended the bill as to do entirely away with the death penalty and the House after amending the amendment concurred. On yesterday, the Senate by a large majority agreed to the house amendment, and as soon as the revised statutes take effect, *legal murder* is abolished in Michigan. The substitute for hanging is imprisonment in the state prison at hard labor and in solitude for life.

Other states, Maine, for instance, have so modified the death penalty as to virtually abolish it, but to Michigan belongs the high honor of being the first state to expunge the bloody code from her statute book.

Where the penalty was death, it was almost impossible to procure a conviction. Under the revised code, we hesitate not to say that fewer murders will be committed and more convictions be had, for it is the certainty of punishment, more than its cruelty, that prevents crime.—*Detroit Free Press.*

Oxygen is the vital principle of the atmosphere, and is the principal material which, when taken into the lungs, causes the change in the color and properties of the blood, and develops the requisite caloric; without it, combustion, and life would both become extinguished.

WATER

Is composed of two gases; 85 parts in wt. of oxygen, 15 of hydrogen, or two parts in volume of the latter and one of the former.

If these quantities be put together and several electric sparks be passed through them, a chemical union takes place and water is the product—and vice versa—if the galvanic spark be made to pass through water, a portion of fluid is immediately decomposed into its two constituent gasses—oxygen and hydrogen. When, therefore, the whole strength of those opposite agents are brought together into a state of conflict, the noise and thunderings ensue.

SHOWERS OF BLOOD.—Showers of blood are frequently spoken of in History. In 1017 a shower of rain of a blood color fell in Agui taine. In 1819 a red shower fell in Curniola.—Red rain fell also at Dixmudo, in Flanders, Nov. 2, 1819, and on the following day at Schenev-ingen.

ELECTRICITY.—It was observed by the Ancients, and the fact is mentioned by Theophrastus that when a piece of amber is rubbed, it acquires the power of attracting light bodies. The Greek name for amber being *electrom* the unknown cause of this phenomenon has been called ELECTRICITY.

STEAMBOAT HOTEL.—DETROIT.—A Clergyman in this village, has been informed by a letter from Detroit, that Mr. Barber, the proprietor of this well known establishment, has converted it into a Temperance House. This resolution of Mr. B. opposed to his own *pecuniary* interest as it is, speaks in the most favorable terms of the house, and he should loose nothing by this example to others.

POET'S CORNER.

"Yet much remains unsung."

For the Gem of Science.

NATURE'S MUSIC.

BY E. C. SCHELLHOUS.

There's music in the wintry wind
That whistles through the leafless trees ;
There's music in the lonely dell,
And in the summer's whispering breeze.

There's music in the gentle tide,
And in the Ocean's raging wave ;
There's music in the winding stream
That wanders by the Indian's grave.

There's music in the withered leaf,
That rustles lonely to the ground ;
There's music now, in zephyrs low,
That brings to me a joyful sound.

There's music sweet, when nature smiles,
And where the flow'rets early spring :

There's music in the wild bird's song—
Alone to Nature's God they sing.
Ann Arbor, May, 1846.

PROTEST.—The Newspapers contain a strong protest against American slavery signed by 304 Universalist Ministers.—Why are other denominations of Christians behind the heretical Unitarians and Universalists? If one division makes up in humanity what it is reputed to want in orthodoxy, will not the old tests of heresy fall into disuse?—*State Journal.*

We shall publish more than one cut in our next, to make up the deficiency in this number.

REMITTANCES RECEIVED.

C O Stickney \$4, R McCrary, R Hanvey, R W Loring, S Webster, N Christian \$5, Q E Bridgman, Rev J H Sanford, Hon Lucius Lyon, J Ludington, F J B Crane, Rev Mr Simons, D W Kellogg, Mr Bonsteel, S Armstrong, Riddle and Hinman, A Roarbacher, D Sanford, J Swiney, Mrs M Crawford, Miss E A Terry, Mrs E Stone, R Stone \$4, A Jones \$2, B F Kelly \$3, Mrs E Winans, Miss H Davis, J Burgess, Dr Burger 50 cts, J H Handy 50 cts, Capt. Scott 50 cts, Mr. Royce 62 C, Shumway.

EDITOR'S TABLE.

WATER CURE JOURNAL, by JOEL SHEW, M. D., Editor, is devoted to the cure of diseases. It contains more facts than mere theory, and is a work which should be within the reach of every family.—The benefits which a proper mode of treatment has wrought in a goodly number of cases where it has been tried, has disposed us favorably towards it. And so important do we regard it, we shall not entirely shut it out of our columns during the present volume. *Terms, One Dollar in advance--24 numbers, 16 pages, octavo each.*

PHONOGRAPHIC JOURNAL.—By Andrews and Boyle, Phonographic Institution, 339, Washington street, Boston. This work is issued monthly, at one dollar per year; each number 8 pages, 8 vo. This publication, we believe is now receiving much attention, and bids fair to come into general use. Who will subscribe?—Address, "Andrews and Boyle, 339, Washington street, Boston."

THE SCIENTIFIC AMERICAN.—We have been shown a few numbers of this excellent work, which we think is exceedingly useful. Every person who is an admirer of the Arts and Sciences should subscribe. *Terms, only two dollars per annum. Published weekly, at New York city.*

TO CORRESPONDENTS.—Mrs. J's article is inserted in this number. It possesses merit, and induces us to solicit a continuance of her favors. The Poetic articles from E. C. S., and J. H. S., are well worth our commendation.—And while their willing pens have been busied in the aid of other periodicals, we shall take pleasure in entering their names on our list of regular correspondents.

H. R. S. we are obliged to decline. The article is good, but too lengthy.—Short articles would be more acceptable.

Several articles designed for this No., are necessarily crowded out.