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THIS head and face indicate fineness and delicacy of organization, with a fair degree of strength. His intellect originally was decidedly maternal, and we judge his

temperament to be more like that of his mother than that of his father. His perceptive organs are large, and were always more prominent than the reflective, but the head

indicates much growth of the reflective power. The upper part of the forehead seems to have been, as it were, built on, enlarged, and increased in size by later development.

The power of sharp criticism, quick perception, and sound and logical handling of the facts acquired, would seem, from the form of the head as presented in the picture, to be conspicuous traits. His large Language, indicated by fullness and prominence of the eye, and that sack-like protrusion below the eye, shows literary ability, power of description, ability to talk and write and set forth his thoughts in a clear and vigorous style.

The organs of Constructiveness and Ideality are well developed. The region of the temples is well expanded, and the width is considerable in the upper portion of the side-head, indicating mechanical talent, power of invention, and ability to appreciate whatever is nice and beautiful and elegant. His head, as a whole, is rather broad, which gives force of character, courage, energy, and enterprise; but if the reader will observe the great length from the opening of the ear forward to the root of the nose, he will obtain a realistic idea of his eminent intellectual ability.

Order seems to be large, and also Calculation, Locality, and Eventuality, hence we should look for system, organizing talent, memory of places and of particulars, and power to recall the knowledge which he has acquired. With practice, he would have been an excellent extemporaneous speaker, especially in the realm of teaching.

His knowledge of human character is good; he seems to appreciate a stranger intuitively, and knows who may be trusted and who should be distrusted and held at a distance. He has suavity of spirit, kindness of disposition, respect for what is sacred and venerable; is firm, persevering; has strong Conscientiousness or love of truth and duty; is prudent, perhaps inclined to be too conservative to be popular with young men, yet is a

safe, guarded, careful, diligent thinker, and one who rarely has occasion to retreat from a position once taken.

He has all the signs of sociability, affection, fraternal attachment, fondness for the social circle, and capacity for becoming popular as a friend with those who have the opportunity to know him thoroughly.

His head and face correspond in indicating blandness of manner, great kindness of disposition, and whatever is called goodness of heart. We can understand that he can be easily nettled, because he is sensitive; and that he can not comfortably bear opposition and contradiction, because he has positive ideas and the courage and self-respect and determination and integrity which lead men to pursue earnestly that which they understand to be true and right. To such men, who believe in principle and aim to be guided by it, contradiction comes very much against the grain. Among his equals, who incline calmly to discuss questions of importance, he would be patient, placable, and courteous in his intercourse, even though his compeers might differ with him in opinion.

The face reminds one of Dr. Noah Webster, the lexicographer, and of Edward Everett, and if our subject had devoted himself as much to literature as Everett did, he would not have been in that respect inferior to the finest scholar of his time.

JOSEPH HENRY is of Scotch Presbyterian descent; his grandparents, on both sides, landed in New York the day before the battle of Bunker's Hill. His maternal grandfather, Hugh Alexander, was a man of remarkable ingenuity, and settled in Delaware County, New York, where he erected a mill and constructed all the machinery with his own hands. During the progress of the war, however, he was driven from his mill by Indians, and became an artificer in the continental army, and afterward a manufacturer of salt at Salina. His paternal grandfather, William Henry, or Hendrie, as the name was spelled in Scotland, settled on a farm in Al-

Albany County. He lived to the age of ninety, and was wont to give in his late days an account of the appearance of Charles Stuart as he entered Glasgow in 1745.

The subject of this sketch was born in Albany, but having lost his father at an early age, he was adopted by an uncle, and sent, when seven years old, to live with his grandmother and to attend school at Galway, in Saratoga County. Here he remained until fourteen, the latter part of the time being spent in a store, attending school in the afternoon. He showed no aptitude for learning, nor for excelling in the ordinary sports of boyhood. This, however, was mainly due to his having accidentally and secretly obtained access to the village library, where he became so fascinated with works of fiction, perhaps on account of the stolen access to them, that he spent most of the time in reading which was devoted by other boys to active sports. He became the story-teller to his comrades, and on one occasion, while on a visit to his mother in Albany, was taken to the theater by a relative, and on his return amused his young companions by reproducing with them the two plays which had formed the evening entertainment.

After the death of his uncle, he was apprenticed to a cousin, to learn the trade of a jeweler; but after he had been two years in this occupation, and before he had acquired sufficient skill to support himself by the art, his cousin gave up the business, and he was let loose from regular employment, and gave himself up, almost entirely, to light reading and theatrical amusements. In this course he was suddenly arrested by opening a book, which had been left upon a table in his mother's house. The reading of a single page produced a remarkable change in his life. It gave a new direction to his thoughts, and called forth mental characteristics of which he had previously supposed himself entirely deficient. He resolved at once to devote his life to the acquisition of knowledge, and immediately commenced to take evening lessons in the Albany Academy. He also became a pupil of the celebrated Hamilton, who visited this country for the purpose of introducing the method recommended by Locke for teaching languages, endeavoring, in the meantime, to support

himself by such chance employment as he could obtain. In this, however, he was not successful, and he abandoned this course for that of a district school teacher. After spending seven months in this occupation, he entered the Academy as a regular pupil, and remained there until his means were exhausted; then returned to school teaching, and at the expiration of his second term again renewed his connection with the Academy. After continuing his studies here for some time he was, through the recommendation of Dr. T. Romeyn Beck, Principal of the Academy, appointed private tutor to the family of Gen. Stephen Van Rensselaer, the patroon of Rensselaerwyck. His duties in this position occupied him only about three hours in the day, and the remainder of his time was spent as an assistant to Dr. Beck in his chemical investigations, and in the study of anatomy and physiology, under Drs. Tully and Marsh, with a view to adopting medicine as a profession. This view, however, was suddenly changed by an offer, through the influence of Judge Conkling, with whom he had become a favorite, of an appointment on the survey of a route for a State road from the Hudson River to Lake Erie, through the southern tier of counties. His labors in this work were exceedingly arduous and responsible. They extended far into the winter, and the operations were carried on amid deep snows, in primeval forests.

Having finished the survey with the approbation of the commissioners, on his return to Albany he was offered the position of engineer on a canal in Ohio, and of director of a mine in Mexico; but the professorship of mathematics in the Academy having fallen vacant, he was elected to fill the chair. Having, however, become enamored with the profession of an engineer, he very reluctantly accepted the position, in accordance with the wishes of his friend, Dr. Beck. The duties of the office did not commence for five or six months, and this time he devoted to the exploration of the geology of New York, with Prof. Eaton, of the Rensselaer School. He entered upon his duties in the Academy in September, 1826, and after devoting some time to the study of mathematics, and other subjects pertaining to his professorship, he commenced a series of orig

inal investigations on electricity and magnetism, the first regular series on natural philosophy which had been prosecuted in this country since the days of Franklin. These researches made him favorably known, not only in this country, but also in Europe, and led to his call, in 1832, to the chair of Natural Philosophy in the College of New Jersey, at Princeton.

In the first year of his course in this College, during the absence of the Professor of Chemistry, Dr. Torrey, in Europe, he gave lectures in natural philosophy, chemistry, mineralogy, geology, astronomy, and architecture. In teaching these multifarious branches, he was unable, during the first year at Princeton, to continue his private investigations; but after that time he commenced anew, and prosecuted his original researches until he was called to his present position in Washington. In 1835 he was elected Professor of Natural Philosophy in the University of Virginia. The offer was a tempting one, since the emoluments connected with the professorship in the Virginia University were greater than perhaps in any other in the country. He was, however, reluctant to leave Princeton, where he had experienced much kindness and encouraging appreciation; and Princeton, loth to lose him, offered special inducements, among them a year's leave to visit Europe, and he decided to remain. Nine months of the year's absence he spent principally in London, Paris, and Edinburgh. His previous researches had given him a favorable introduction to the savans of these cities, and he returned to prosecute his investigations with enlarged views and more efficient apparatus, procured during his tour in Europe.

In 1846 he was requested by some of the members of the Board of Regents of the Smithsonian Institution, then just about to be organized, to give his views as to the best method of realizing the intentions of its founder. In compliance with this request, he gave an exposition of the will, and of the method by which it might most efficiently be realized. On account of this exposition, and his scientific reputation, he was called to the office of Secretary or Director of the establishment. Unfortunately, Congress had attempted to organize the Institution with-

out a due appreciation of the terms of the will. This gave rise to difficulties and expenditures on local objects, particularly the commencement of a very expensive building, which have much retarded the full realization of what might have been produced by the plan originally proposed by Prof. Henry. He has, however, by constant perseverance in one line of policy, brought the Institution into a condition of financial prosperity and wide reputation.

At the time of the organization of the Light-House Board of the United States, Prof. Henry was appointed by President Fillmore one of its members, and still continues as such. During the late war he was appointed one of a Commission, together with Prof. Bache and Admiral Davis, to examine and report upon various inventions, in the capacity of Chairman of the Committee on Propositions, intended to facilitate the operations against the enemy, and to improve the art of navigation. On the death of Prof. Bache, he was elected President of the National Academy of Sciences, established by an act of Congress in 1863, to advance science, and to report upon such questions of a scientific character as might be connected with the operations of the Government. He is a member of various societies in this country and abroad, and has several times received the degree of LL.D., the last time from Cambridge, Mass.

Prof. Henry was married in May, 1830, to Miss Alexander, of Schenectady, the sister of Prof. Alexander, of Princeton, and from the ardent devotion of his wife, and the fraternal sympathy of her brother in his pursuits, he has received assistance and support beyond that which usually fall to the lot of men. The most peaceful, and to himself the most profitable, part of his life, was that spent in Princeton, for which place, and the College connected with it, he retains the warmest attachment. He left Princeton with the intention of returning to his professorship as soon as he should have been able to organize the Smithsonian Institution; but in this he was disappointed—he could not leave without losing the fruits of his labors.

Among the more important of his numerous scientific investigations and discoveries are the following:

The first application of electro-magnetism as a power, to produce continued motion in a machine.

An exposition of the method by which electro-magnetism might be employed in transmitting power to a distance, and the demonstration of the practicability of an electro-magnetic telegraph, which, without these discoveries, was impossible.

The discovery of currents of induction of different orders, and of the neutralization of the induction by the interposition of plates of metal.

Investigations on molecular attraction, as exhibited in liquids, and in yielding and rigid solids, and an exposition of the theory of soap bubbles. [These originated from his being called upon to investigate the causes of the bursting of the great gun on the United States steamer, Princeton.]

Original experiments on and exposition of the principles of acoustics, as applied to churches and other public buildings.

A series of experiments on various illuminating materials for light-house use, and the introduction of lard oil for lighting the coasts of the United States. This and others were made in his office of Chairman of the Committee on Experiments of the Light-House Board.

Observations on the comparative temperature of the sun-spots, and also of different portions of the sun's disk. In these experiments he was assisted by Prof. Alexander.

Observations, in connection with Prof. Alexander, on the red flames on the border of the sun, as observed in the annular eclipse of 1838.

Besides these and other experimental ad-

ditions to physical science, Prof. Henry is the author of twenty-five (1846-71) reports, giving an exposition of the annual operations of the Smithsonian Institution. He has also published a series of essays on meteorology in the Patent Office Reports, which, besides an exposition of established principles, contain many new suggestions; and, among others, the origin of the development of electricity, as exhibited in the thunder-storm; and an essay on the principal source of the power which does the work of developing the plant in the bud and the animal in the egg.

He has also published a theory of elementary education, in his address as President of the American Association for the Advancement of Education, the principle of which is, that in instruction the order of nature should be followed; that we should begin with the concrete and end with the abstract, the one gradually shading into the other; also the importance of early impressions, and the tendency in old age to relapse into the vices of early youth. Youth is the father of old age rather than of manhood.

He was successful as a teacher, his object being not merely to impart a knowledge of facts, but mainly to give clear expositions of principles; to teach the use of generalizations; the method of arriving at laws by the process of induction, and the inference from these of facts by logical deduction.

Of advanced life, yet vigorous in mind and body, Prof. Henry is still at his old post in the Smithsonian, apparently thinking little of retirement from the cares and responsibilities of so important a position, on the score of accumulated years, so long as brain and hand work with their accustomed harmony and efficiency.

SOCRATES.

The earth is full of riches—solid rock
Serves as the central nucleus round which
Diamond and chrysolite in massive bands
Circle the mighty orb; there's not a gem
Known by the lapidary, but round the earth
Glitters resplendent in a shining zone
Of almost fathomless luster. Now and then,
At intervals, a specimen of each
Shines on the surface like a drop of dew
Fallen from the firmament, and monarchs then
Strive for the great possession. Were it not
For specimens like these, man would not know
Such splendor had existence; seeing them,

He learns to hope, until his spiritual eyes
Are opened and he sees unvalued wealth
Concealed within the bosom of the earth
Beyond the grasp of avarice, beyond
Imagination's utmost range of thought.

So is it in the moral world—there is
Faith at the center, and exhaustless mines
Of charitable glories circling it,
Beyond the grasp of thought. Thou, Socrates,
Wast thrown upon the surface like a gem
To show the mine below, and not a stone
In Aaron's ephod more celestial shone.

—Rufus Dawes.

HOW I CHANGED MY NOSE.

MY nose was an inexpressible trial to me during all my childhood and early womanhood. Not that I had no nose, or an insignificant nose; indeed, I had too much nose, and then it would assert itself in such an uncompromising sort of way! There was no doing anything with it or without it—for what is a woman without a nose? I have learned within a few years, since I ceased to care anything about it at all, that this feature is an heir-loom in our family, and skipping two generations crops out in every third or fourth. My great-grandfather had just such a nose as I have, only there was a good deal



more of it; indeed, so prominent and ludicrous was the outline of his nasal organ, that those who saw him for the first time would laugh outright involuntarily. How he came by such a nose I never could learn; probably his mother was frightened by an elephant and he was born with it. But what a trial this heritage was to me! My ideal of a handsome nose is of one exactly like that of Minerva or Apollo Belvidere, forming a continuous line with the forehead, straight, pointed at the end, with a little groove running from the extremity of the nose to the beginning of the upper lip; the nostrils curved, delicate, spirited. Alas, what a contrast to that was mine, with its camel's hump half-way of its length, and a great meaningless knob on the end! It was of no use at all to try and be pretty with such a nose, and I gave it up and applied myself to acquiring those stores of information that would make me happy in spite of personal blemish, not thinking or caring whether my nose was pretty or ugly. All this passed while I was yet at school. But when I had become settled in teaching, my old enemy again tormented me. By some happy chance I was introduced to the writings of Plato, and what a world of delight they opened to me! It was just the atmosphere I had longed for, unknowing what it was I wanted. So I bought the translation of his works

published by Bohn, and hid them away, lest my temerity and self-conceit in attempting to understand such an author should excite remark among my friends. Again and again I read and re-read Phædon and Phædrus, until all my mind was filled with images of those glorious Greeks. I cut out Plato's picture from the volume and hung it in my room. I purchased a copy of the Belvidere and of Minerva, that evermore the beauty of their faces might delight my eyes. Then began the looking-glass torment. To turn from those perfect outlines to the image that met me as I stood before my mirror—it was too much! I

learned to comb my hair without a glass, to arrange my toilet with as little aid from quicksilver as possible, and I lived with my Greek faces, upon whose changeless lineaments I could never see that the monstrosity of my nose made any unpleasant impression.

About this time I became quite intimately acquainted with the family of a gentleman who had spent some years in China as missionary to that celestial people, but who had found the climate so incongenial that he had returned to America to abide. I was reading also, for the first time, "Signs of Character," a book which accompanied the phrenological busts, reading it with intense interest, since I thought there was a hope in its teachings that I might approximate, even though faintly, toward the form and expression of my beautiful ideals.

I was riding with this gentleman one July day, and I remarked upon the curious hat he wore, one he had brought home with him from his missionary field. From hats we naturally passed to heads, and he spoke of the astonishing effect the study of the Chinese language had had on the shape of his forehead. Over the eyes, and all along the region of the perceptive faculties, there seemed to be built on a layer of bone a quarter of an inch in thickness, and about half or three-quarters of an inch in width.

"You see," said he, "the study of the Chinese language calls into exercise only the perception and memory. Instead of one or two nasal sounds, as we have in our language, they have thirteen, and it is the most difficult matter at first for an American to distinguish between them." Then he gave examples of these different nasal sounds, but to my uneducated ear they seemed quite alike. "For eighteen months," he said, "we did little but study the language, and during that time my forehead changed wonderfully in shape. It used to be smooth like yours, and uniformly developed, but this great ridge here spoils the shape of it; and the hats I used to wear will only rest on the top of my head now."

"Then you must be a believer in Phrenology," I said.

"It would be impossible for me to doubt what my own experience has proved," he replied; "and the same effect was produced upon the heads of the other missionaries—we all had to change the size of our hats."

Was there not in this some hope for me? Might I not, by constant and loving intercourse with my Greek ideals, be changed into the same image? However that might be, I must still live with them and in them, for they had become a part and parcel of me. About that time I read Milton's *Comus*, and, of all the passages in that wonderful poem, this charmed me most:

"So dear to heaven is saintly chastity,
That when a soul is found sincerely so,
Ten thousand liveried angels lackey her,
Driving far off each thing of sin and guilt;
And, in clear dream and solemn vision,
Tell her of things that no gross ear can hear;
Till oft converse with heavenly habitants
Begin to cast a beam on the outward shape,
The unpolluted temple of the mind,
And turn it, by degrees, to the soul's essence,
Till all be made immortal."

I read Spencer's "Fairy Queen," and pondered on his assertion, no less true than poetical:

"Soul is form, and doth the body make."

Yet Socrates, with his beautiful soul, had a most ungainly body—pop eyes, pug nose, sensual lips; one of his disciples said to him (we quote from memory, as the volume is lent), "You indeed appear to me, Socrates, to be like those ugly statues in one of the

temples, unsightly to the eye, but full of golden images within."

Ah! do we care how ugly Socrates was? Don't we love him all the better because he triumphed over every physical and moral defect, so far as light was given him, and became, through his disciple, Plato, the great teacher of philosophic morality for twenty-two centuries? Do we care whether his nose was straight or crooked? or what kind of a complexion he had, so long as within him were those "golden images" of unspeakable loveliness? And yet the instinct of beauty is indestructible, and we can not cease to long for the time when every shape and every face shall beam heavenly and divine.

Thus, in the study of the great masters of poetry and song passed my days, and after one of our collegiate exhibitions said a lady to me, "I have a fine compliment for you. Mrs. C., who has resided several years in Italy, says you have a very classic face." I laughed in sheer amazement, for what classic face ever had such a nose as deformed mine? But I was pleased notwithstanding, for I divined that my Greek readings had begun, as Milton says, "to cast a beam on the outward shape," and she, familiar with the clime and the song of that sunny Hellenic land, saw it and recognized it. There was hope.

Bye-and-bye I married—married a Greek nose, a Greek head, a Greek heart, though a native American. That matchless outline of face was and is a perpetual delight, and I have it in the faces of my children. Only a little while ago, as I entered the study where my beautiful Greek sat writing, he said, "My dear, your face is as the face of an angel. You will look just as you do now when you have passed the pearly gates." I smiled incredulously, and he added, smiling, "I don't doubt but there your nose will be straight, and the freckles gone from your face, perhaps your hair will be changed a tint or two, but your expression of countenance will be just the same."

How could I wish for more than this?

Only a little while ago my sister visited me, and remarking upon the changes produced by time, and a steady pressing forward to realize the glorious ideals that ever haunt me, and will not let me rest in inglori-

ous ease—remarking on these changes, she said, “Every time I come to see you I notice that your nose is different; the curve of the nostril is finer and more delicate, and the line of your brow is more spiritual and beautiful than it used to be.”

Suppose that after all I should get to be handsome, wouldn't it be because, to begin with, I had such a very ugly nose, a nose that drove me to higher pursuits than mere physical culture and adornment?

Not less than of old do I worship at the shrine of beauty, but my beauties all have “golden images” within them; they love those things that are more excellent, their souls are fair and of noble proportion, and when I look on them the spiritual body stands forth and clothes the natural with its own intrinsic loveliness and perfection.

It may be well to state that the ex-Chinese missionary alluded to, after twenty years of devotion to the ministry, and a mastery of the system of theology adopted by the denomination to which he belongs, has received the title of D.D., and, what is more *apropos* than that to this article, has now a forehead as full in the reflective region as in the perceptive, so that the ridge over his eyebrows is no longer specially noticeable.

There is a way for us all to be beautiful. “Soul is form and doth the body make,” even in this world. High purpose, lofty ideals, pure moral and intellectual associations, these persisted in year after year, through youth, maturity, and age, *will* chisel the homeliest features into beauty, and clothe the plainest face with divine radiance.

L. E. L.

LESSONS IN PRACTICAL PHRENOLOGY.

TYPES OF DEVELOPMENT.

EVERY quick observer and clear thinker forms some opinion of each person he meets. Some tell us they can read a man like a book, can take his measure, comprehend his power, talent, worth or worthlessness at a glance. Phrenology recognizes a set of faculties, some of which give facility to their possessor in thus reading character, but they do it without any rule or principle. It is simply an impulse, an intuition. They can give no reason for their opinions, they simply feel impressed that one man is good, another better, another best, or the reverse.

When Hamlet picked up the skull of Yorick, which the grave-digger threw out, and pondered on the cranium of his old friend, around whose neck in boyhood he had so fondly clung, and had listened to his gibes and jeers, and saw now where once those warm lips spoke the living word, only dry bone, ghastly and hideous, it was to him only a ruined wall, a mockery of what it once was, furnishing no indication of what it might have been. The history of Yorick was remembered by Hamlet, and when he looked upon his hollow skull he could think of his history, which his affection treasured, and sighing say, “Alas, poor Yorick!”

That same skull, however, laid in the hand of a phrenologist, would be to him an index of the character of him who once inhabited it. When we are traveling and lecturing—and when we are in our office—persons bring skulls whose history they know, and ask us to write out in full our opinion, and we have made more than one convert to Phrenology of the skeptics who brought the skulls for such inspection, because of our agreement with the written history of the originals.

If, then, Phrenology can read the talents and tendencies of the person who once owned and occupied a given skull, and if this science in its application to character-reading is not one of difficult attainment, why should it not be considered a useful, if not an indispensable branch of education?

We wish it understood at the start that we do not estimate the sizes of the organs merely by protuberances upon the skull, but by the distance from that point where the spinal cord unites with the brain to the surface of the head where an organ is designated.

It is the theory of Phrenology that the brain has its center at what is called the medulla oblongata, the capital of the spinal cord, and that the brain develops in every

direction, upward, forward, backward, and outward from that center, just as a stalk or head of cauliflower develops from its stem, or as the apple or pear grow outward from the core to the periphery.

We have been more than a third of a century striving to make this thought understood by the public, yet many intelligent men take exception to the teachings of Phrenology, and will insist that the little unevennesses of the surface of the head, or "bumps," as they call them, constitute the basis of phrenological inspection. Nothing is further from the truth, and we have sometimes thought that objectors to Phrenology, having heard this fact, had forgotten it, or spoke recklessly, without regard to the truth, knowing that their hearers or readers were not sufficiently informed to contradict them.

Let us look, then, at fig. 1 of our illustrations. How deficient the upper part of the forehead and frontal and upper portions of the head! It rises high at the crown, and is large just above the eyes. Any boy or girl twelve years of age, carefully noting the shape of that head and reading what we say, will never hereafter need to be in doubt as to the tendency of such a character.

That class of organs located across the brows is devoted to perception and observation, to gathering knowledge respecting external things, to observing things as things, studying their form, magnitude, color, and

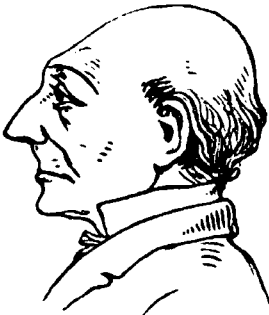


Fig. 1—OBSERVING AND DOGMATIC.

number. The fullness of the eye itself indicates power of expression by means of speech. This person, then, was a great observer, he knew every road, and place, and thing; would go to a neighbor's house, and if any new piece of furniture had been procured, or if there had been any change in the order of the

furnishing, he would notice it instantly. If one had a new article of dress, or had adopted a new style of combing the hair, or dressing the beard, or arranging the necktie or other clothing, he would notice it.

Put him into a store, he would soon know



Fig. 2—CONSERVATIVE AND THEORETICAL.

where everything was, what it was called, what to say about it, and would give a description that would be full and complete. Observe the length of the head from the opening of the ear to the root of the nose; that part of the forehead is amply developed, while the upper part of the forehead is deficient. Most persons will have noticed that such a form of forehead goes with quick observation, not with profoundness of thought or philosophy; but no man, as an artist, would make such a shaped head as an ideal, and most artists, when they meet with such a face and head, incline to modify the picture and make the head a little fuller where it is so deficient, and thus, as far as they can do it without spoiling the likeness, make it lean toward harmony of development.

Taking the head into account, from the opening of the ear upward and backward in the region of the crown, the observer will see but little deficiency, if any; and it being the largest part of his head, it would have a controlling influence in his character.

Firmness and Self-Esteem will lead him to tell "What I have decided upon," "What I think and have seen and know." He inclines to talk like an oracle, but very unphilosophically; he will form opinions from appearances without much regard to first principles or interior ideas. Such a man would dictate, likes to lead off, wants to be master of everybody and everything, and frequently

shows his lack of sound sense, and without being aware of it.

Number 2 is deficient, but in a little different way from number 1; his head is uneven and irregular, but the upper part of his forehead being larger, he thinks, theorizes, meditates; but he has not such sharp observation as number 1, does not do so much looking and observing, and sometimes needs more facts than he is inclined to gather in order to sustain and illustrate his ideas. His head is hardly high enough from the opening of the ear directly upward for a well-balanced brain.

He does not take hold strongly of spiritual themes, but is more inclined to regard himself as a hard, dry thinker, able to reach truth by dint of logical effort. He cares less for facts and more for theories, but the general drift of such an organization is not very elevating. He is secular. The middle section of the head, where the selfish feelings are located, drawing a line from the center of the forehead to the center of the back-head, and regarding that portion of the head along and below such a line, is the strongest in this organization. His head is basilar, rather than lofty and expanded at the top, therefore he has a sense of physical pleasure and enjoyment, inclines to lay up property, looks out for sickness and a wet day, and takes care of himself. Figure 1 would



Fig. 3—REFINED AND SPIRITUAL.

travel and observe, and become well posted; he would go to parties and entertainments, and to theaters; he would have on his tongue's end a good deal of floating literature; would even make a good reporter for a newspaper, picking up items here and there, and making a paper gossipy and en-

tertaining. Fig. 2 would write a strong, heavy article, but he would want to be a month about it, and take his time, and write when he felt in the mood for it.

Fig. 3, it will be observed, has a superior development in the upper part of the head; the forehead is better than that of fig. 2, it is



Fig. 4—LOW AND BRUTAL.

fall in the center, well developed across the brow, ample in the upper part, and the top-head is well rounded and ample. The face also shows more of the spiritual and sentimental, but the head itself, to a phrenologist, indicates what the character really is, and, under favorable conditions, the side-face will corroborate the cranial development. The brain being the center and source of mental emotion, the face, as well as all other parts of the body, becomes an exponent of the thoughts and emotions and consciousness of the subject.

Fig. 2, it will be seen, has a heavy back-head, with strong social dispositions, but the top of the head being deficient, as compared with the base, he lacks those elevated sentiments which belong to fig. 3. In this head we see gentleness indicated by large Benevolence, fullness and height of the head above where the hair joins the forehead. We see a large development of the center of the top-head, where Veneration, Spirituality, and Hope are located. There is less relatively in the crown than there is in fig. 1, still fig. 3 is not much wanting in that region. Hence, there is quite well-poised and substantial dignity, without the gruff dictum of such a head as fig. 2, or the fancied greatness of fig. 1.

In fig. 4 we have a strong animal face, massive cheek-bones, a bony mouth and chin, and lips whose form would seem to be a cross between the bull-dog and the bull-frog. The

eyes seem made merely for seeing and for terrifying those they look at. Behold how broad the head is just above the ears! That outward swelling of the side-head is in the region where Phrenology locates the selfish propensities, such as Destructiveness, Combativeness, and appetite or Alimentiveness, and Acquisitiveness, or the love of property. The top-head is very contracted, narrow, and low; the moral sentiments, the superior part of the intellect, and all the faculties which render man manly, human and humane, spiritual and religious, seem dwarfed.

We see such organizations very rarely, but if one will go to prison, work-house, or insane asylum, he will see that type of head, and it is generally accompanied by brutal energy of the propensities, with weakness of thought and febleness of moral sentiment. Such persons, not restrained, sooner or later find themselves in places of restraint; generally they are the offspring of intemperate, quarrelsome, low-bred, abject people.

Fig. 5 is not a perfect head, though it is in the main good. The face is amiable, intelligent, and discriminative, but hardly strong enough for an ideal subject. The forehead is amply developed, well filled out in the middle, where memory has its seat, amply developed across the brow, where perception with its many organs is located, and fairly developed in the upper part of the forehead, in the region of the higher intelligence. On the side-head we see it well expanded; in the region of the temples we see amplitude of Constructiveness, or the mechanical faculty. As we run the eye further back it is well spread out at Acquisitiveness, or love of property. There is a fair share of Ideality. Along the center of the top-head we have Benevolence and Veneration, but the head slopes too rapidly from the center line along the top outward. It should be carried out more fully, not descend so rapidly toward the sides. There is hardly enough of Imitation, Spirituality, Hope, and Conscientiousness in this head. As this series of articles will probably be continued, a more satisfactory form of head will be shown in this particular.

Let the reader take into account the forms of these heads, and then look at the heads of his school-fellows, his neighbors, and those

whom he meets. He need not be intrusive, nor need he stare, but simply use the perceptive faculties in a proper manner, and it will not be long before as much difference in the shape of heads will be observed as there is noticed in the features of faces.

A phrenologist gets through with the face very quickly. His eye rests upon the face at a glance, and instantly goes to the head. If the head suits him, he will soon learn to like the face, and the expression of the face. If the form of the head does not suit him, the face will not redeem it; for it is true that we sometimes see a person whose face has been inherited from one parent, and the form of the head from the other parent, neither being so wise nor so good as the one whose face is borne by the subject.



Fig. 5—WELL-ORGANIZED—POETIC.

If the brain be the organ of the mind, and if the size of the brain, as size is in everything else, be the measure of power, other conditions being the same, the brain must be the center and source of all mentality, the organ, at least, through which the mind finds its outlet.

Therefore we must go to the head for the fundamental principles of character and talent. The face in some instances does not fully exemplify the character, but we know of no instance in which the brain is not the seat of character and disposition, and these may be read from the development of the head if health, habits, and other conditions be normal. We hope our young readers will take these cuts as one of our drawing-lessons, and learn to put them on the slate or paper from memory, and, ere long, we may give them something else as well marked and, perhaps, as interesting.

THE FACE OF MAN.

(FROM THE SWEDISH.)

STIEL lonely earth for highest beauty mourned,
Creation's crown not yet her head adorned ;
Till from the dust lifted man's face in light,
And cast o'er earth his godlike glance so bright.

Its whiteness lost the mountain snow ;
Dark down the hills morn's rose sank low ;
The star which in day's brow before
Had shown so fair, would shine no more ;

And bird and beast knelt lowly down,
Homage to pay creation's crown.
Before those eyes, where love so bright
Beamed over earth Hope's new-born light,

Dumb stood the angel-host and gazed
As these new orbs uplifted raised ;

While Heaven, to crown and seal his bliss,
Gave man's pure brow its royal kiss.

Oh, face of man, pressed with your godlike
seal,

Which earth's dim veil doth only half reveal,
Do you adorn alone this mortal isle,
Or through Eternity's long while
Shall angels see your tear and smile ?

Yes, human face, with all thy mortal tears,
Thou shalt forever, through the endless years,
Thy godlike smile backward and forward cast
While heaven shall live, angels or stars shall last.

LYDIA M. MILLARD.

JOHN McCLOSKEY, D.D.,

FIRST AMERICAN CARDINAL.

ST. PATRICK'S CATHEDRAL, in New York city, was the scene, on the 27th of April last, of an extraordinary religious spectacle, the most imposing one, perhaps, that was ever witnessed in this country. It was the occasion of the conferring of the *beretta* upon Archbishop McCloskey, who had recently been elevated to the Cardinalate by command of Pope Pius IX. The cathedral was beautifully decorated, all the appurtenances of the church ceremony and ritual being brought into requisition. The assemblage of clergy was very large, representing the Roman Catholic Church of all parts of the Union, and they, clothed in their richest vestments, presented a most brilliant appearance.

This being the only instance of the kind which has ever occurred on this continent, the interest which it aroused was, of course, very great, and all of the faithful who could attend the ceremony, or rather find admittance within the walls of the beautiful edifice, did so.

The Roman pontiff was represented by special emissaries, who contributed in no small degree to the solemnity and magnificence of the occasion. The "beretta" is a scarlet cap worn by cardinals only in the ceremonial observances of the Church.

The recipient of this high dignity, in fact the one next in importance to that of the

Pontificate itself, Dr. John McCloskey, is of American birth, having been born in Brooklyn, N. Y., on the 20th day of March, 1810. His parents were of Irish birth, but long settled in this country.

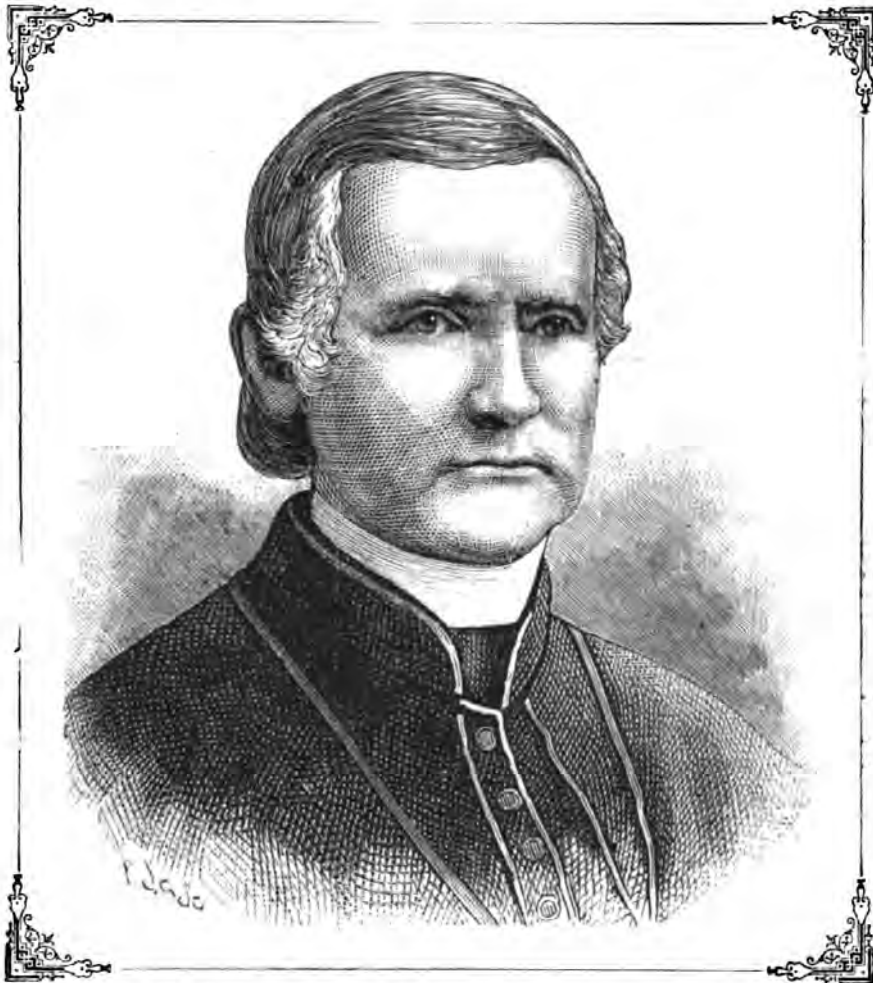
Appreciative of the advantages of education, his mother, who was left a widow when her son had attained the age of about ten years, secured for him the advantages of a liberal education, with a view to his entering the priesthood. In 1821 he became a student in the College of St. Mary's, at Emmetsburg, Md., where he completed a collegiate course. Among his classmates were the distinguished John Hughes, late Archbishop of New York, Francis Gottland, first bishop of Savannah, and other gentlemen of eminent piety and learning.

Leaving the college in 1827, he addressed himself to studies preparatory for entering the priestly order, and was ordained by Archbishop Dubois in 1834. Shortly after this he went to Rome, and there studied two years, attending the special lectures of the college of the Propaganda, and pursuing other literary and philosophical studies. On his return to America he was appointed to St. Francis' Church, New York city. Not long afterward he was appointed President of the Seminary of St. Joseph, at Fordham, he being the first to occupy that important position. He had not been ten years a priest

before he was ordained an Archbishop, being in 1844 consecrated by Archbishop Hughes.

On the creation of the see of Albany, Archbishop McCloskey was transferred to that city, and for seventeen years remained almost exclusively in charge of the diocese of Albany. When Archbishop Hughes died, nearly twenty years later, Archbishop McCloskey was selected as the proper person to succeed him as ecclesiastical head of the diocese of

many monuments of usefulness and honor. A large number of church edifices owe their existence, in New York city and elsewhere in the arch-diocese, to his efforts, and several institutions of a benevolent character have been established through his zeal. Among them are the Protectory, for destitute children, situated in Westchester County, where upward of 1,700 boys and girls are cared for; a foundling hospital in New York city; an



PORTRAIT OF JOHN McCLOSKEY, D. D.

New York, practically the most important of the Archbishopsrics of the United States. His installation took place on the 21st of August, 1864.

Throughout his career in connection with the Church Dr. McCloskey has shown superior abilities. Most earnest in promoting the growth and development of his church, he has been eminently successful in rearing

asylum for deaf mutes at Fordham; besides homes for aged men and women. One of his most important efforts is the completion of the new cathedral in New York, which was commenced by Archbishop Hughes, and which, when finished, will be the grandest religious edifice on the continent.

The portrait of the new cardinal indicates vigor of constitution and more than ordinary

harmony in the physical development. The various signs of breathing power, circulation, and digestion are amply and harmoniously shown; and hence health, vital energy, and general harmony of manifestation should be expected. Looking at that face one hardly sees which part of it is stronger or weaker than the other parts, or how it could be modified for the better. If there were a little larger development of the nose, which would indicate force of character and power to govern, it would make the expression stronger, but it would take away the signs of delicacy, refinement, sensitiveness, and modesty which seem so marked in his features. The eye expresses kindness, gentleness, and patience; the mouth, fidelity, sympathy, and truthfulness. The forehead is large, indicating a massive intellect, a tendency to clearness and comprehensiveness of thought, and that kind of wisdom which is prudent, judicious, far-seeing, and self-poised. We do not see either in the face or head the elements of great courage, power to rule, or ability to be a pioneer and lead off in advance; but rather the qualities that build up, rectify, regulate, instruct, mold, and consolidate. If he were in a college as an instructor, he would natu-

rally do better, and enjoy the position more, in instructing the Senior class than in struggling with common Freshmen. He is better adapted to lead in intellectual, moral, and esthetical fields than where the fierce elements are more required. He is not, therefore, so well adapted to be a pioneer as he is to give the finishing and consolidating touches to education and character.

He is frank, values property only for its uses, is naturally temperate, devout, conscientious, firm, generous, agreeable, conformatory. He has many of the instincts and intuitions of his mother, and, we judge, resembles her more than his father. It is a head decidedly favorable to morality, intelligence, gentleness, duty, and justice.

He is tall, well-formed, and compact in figure. In manner or in bearing he is easy, yet modest and refined. His reputation, not only as a clergyman, but also as a man, is high for honor, liberality, and benevolence.

The general feeling among those who are conversant with the Roman Catholic affairs in this country is, that a more discreet choice could scarcely have been made by the Vatican than has been shown in conferring the dignity of Cardinal upon Dr. McCloskey.

SCIENCE AND RELIGION.

HAVE DISCOVERIES IN SCIENCE AFFECTED THE BASIC PRINCIPLES OF RELIGION?

(FROM A DISCOURSE DELIVERED BY REV. DR. HEBER NEWTON, MAY 16TH, 1875.)

HAS science disenchanting the world of the marvelous, or convicted the imagination of hallucination in peopling the earth with the shadows of an infinite presence and power? With the first flush of enthusiasm the disciples of the new Teacher fondly expected that at last the world-old secrets were to be read—the Life Sphinx be forced to tell herself her long-kept secret. Men had at last in their hands the key to nature's hieroglyphs. Clergy should tell how the earth came into beginning, astronomy reveal origination in the infinitude around, chemistry resolve man's nature, physiology give us the true psychology, and we should know ourselves and know all nature. It is easy to pardon the enthusiasm which, in the midst of the magnificent discoveries with which

science was flooding creation with light, omened by its dawning splendor a meridian of disclosure in which every secret thing should be made manifest. So overpowering has been the rapid succession of conquests by which, out of the obscurity of space we have wrested the secrets of the stellar elements, out of the entombments of the past, have revived prehistoric ages; so irresistibly does the summons of science force every most silent fact of nature into the witness-box, and draw forth the reluctant confessions for the lack of which the judgment has seemed to drag its slow length along interminably, that the intoxicating hope has been quite natural. Science is far enough along now in her handling of the case to satisfy us as to the limits of truth she is likely to

reach. Is, then, the ancient mystery evaporating from the earth? Now that we have the history of the globe, and can give the geological account of its formation and peopling, is its story all intelligible? What are these earths and minerals and gases, about whose laws of action and combination we have discovered so much? Are they themselves any more intelligible now that we can tell to utmost precision their history, their qualities, the sequences of their interaction? What is electricity, and what is gravitation, that subtle omnipotence, reaching its uncognizable leash out from orb to orb, and binding all creation into a harmony of movement no revolt of most Titanic powers can overthrow? Centuries ago the Edomite poet, watching the most common phenomenon of the heavens, asked: "Canst thou tell the balancings of the clouds?" To-day not even the learned physicist who discourses so eloquently of the forms of water can answer that simple question. In every most ordinary bit of nature there is a segment of the Infinite mystery. So far from removing mystery, science has heightened, deepened, broadened it. It is not now the unusual that astonishes us; the commonplace fills us with awe. We used to think we saw all but the miraculous. The veil now spans the horizon, and droops like a pall above us. We gasp for breath in the cloud that wraps us so closely round.

THE PROBLEM OF THE UNIVERSE.

Mr. Tyndall says in one place: "If you ask me whether science has solved, or is likely in our day to solve, the problem of this universe, I must shake my head in doubt."—*Fragments of Science*, p. 92.

Later on, goaded by theological opponents, and flushed with the triumphs of success in his own studies and in his contest with opponents, he gave utterance to the memorable words of the Belfast address: "Abandoning all disguise, the confession I feel bound to make before you is, that I prolong the vision backward across the boundary of the experimental evidence, and discover in that matter, which we in our ignorance, and notwithstanding our professed reverence for its Creator, have covered with opprobrium the promise and potency of every quality of life." We have only to refer the Philip intoxicated

by success into the belief that he had conquered the mystery of life, back to the soberer Philip confessing failure; we have only to say that when crossing the boundary of experimental evidence his whole authority as a scientist ceases, and his opinion is worth its intrinsic value, which we can judge by his other words to be, as to explaining the origin of things, 0; or we can wait for judgment by the Tyndallian book of Genesis when he gives it with the Lucretian rendering of that immortal first word of knowledge, "In the beginning God created the heavens and the earth." A higher authority in science than Mr. Tyndall, none less than the philosopher who molds the thinking of the school—Mr. Herbert Spencer—repeats in stronger language the confession of the invincible resistance the mystery of nature offers to the researches of science. "Probably not a few will conclude that here is an attempted solution of the great questions with which philosophy in all ages has perplexed itself. Let none thus deceive themselves. Only such as know not the scope and limits of science can fall into so grave an error. The foregoing generalizations apply, not to the genesis of things in themselves, but to their genesis as manifested to the human consciousness. After all that has been said, the ultimate mystery remains just as it was. The explanation of that which is explicable does not bring out into greater clearness the inexplicableness of that which remains behind." In the presence of the mystery, eternal, infinite, all-encompassing, science owns through the lips of this same supreme authority that the heart of man will of necessity and right yield the worship of reverence and awe, hearing wherever it may find itself the voice of old—"Take off thy shoes from off thy feet, for the place whereon thou standest is holy ground." The process of evolution, which has progressively modified and enlarged men's conceptions of the universe, will continue to modify and advance them during the future. Without seeming so, the development of religious sentiment has been continuous from the beginning; and its nature when a germ was the same as its nature when fully developed.

RELIGION FOUNDED UPON REASON.

Religion founds itself also upon the rea-

son—rears itself upon the ideas the intellect finds within it, as forms of thinking filled by facts without, ideas apart from which it can not think at all: by which it interprets satisfactorily the questions nature raises. The mind believes, therefore, that it does not merely read these ideas into nature, but reads them in nature. These ideas are essentially two, cause and design. Looking at any event or thing, men ask themselves instinctively. How did it come to pass? what caused it? The mind refuses to think of anything as uncaused. The common-sense judgment of the reason is that every phenomenon is the effect of some cause; that for the totality of phenomena we must predicate causation. Then, looking upon things which co-operate toward the accomplishing of an end, uniformly, certainly, through minute adaptations, it finds itself attributing this interaction to design. It never regards such phenomena as accidental. It instinctively ascribes each phenomenon of this kind to an intelligence and a will capable of conceiving a purpose and of making matter outwork that purpose. The greater the number the more intricate the inter-relations, the more delicate the interactions, the more uniform the operations of these adaptations, the more certain does it become of design. The familiar illustration of Paley is as good as any. A watch instinctively, necessarily argues a watch-maker. Reason is no longer, so says the great common sense of mankind, when it can sit in judgment upon a watch and render as its verdict "fortuitous concurrence of atoms." These two ideas, cause and design, unite in the construction of the reason's conception of God—the originating cause, intelligence thinking in nature and outworking the purpose of a will. Has science done aught to invalidate at the bar of reason its own judgment? Has it accounted satisfactorily for causation by finding the origin sought, or has it shown that the idea of causation is irrelevant to nature? Has it accounted for design by showing that what looked like design disproves such thought? Has it brought to light any facts which disprove the reasonableness of these ideas, or which deny their truthful report of nature's phenomena? Has it made it irrational or unnecessary for us to believe in "God the

Father Almighty, maker of heaven and earth?" Science has certainly not dispensed with the idea of causation as either superfluous or irrational. On the contrary, its own wonderful discoveries are the fruitage of its impulse. Its eager search, therefore, has been rewarded, if not by the goal sought, by benefits more material. Had it never asked why, it never would have found the how, which is in laws innumerable—the solid fruitage of this questioning of the ancestry of facts. It has gained its fortunes by the study of genealogical tables. Its one fundamental axiom is the validity of the idea of causation. Each phenomenon has an antecedent cause discernible in the effect. Upon the validity of that axiom, science, "the knowledge of sequences," builds itself into a system, organizes information, conquers truth. Neither has science done aught to render the general notion of design irrational or irrelevant. We still act daily upon its validity. If traces of design can be read in nature, science can not bar the way to the reason's legitimate ascent thereby to intelligence. The only disclosures that could demand our renunciation of this belief would be positive facts irreconcilable with an intelligent design. Are there any such brought to light?

THE THEORY OF EVOLUTION.

We may turn to the theory of evolution for answers as to both these ideas. That theory is the most stupendous, and apparently the most irreligious of the doctrines of science. In its general form, *i. e.*, as dissevered from such special shapes as Mr. Darwin has given to it in his announcement of the principle of its action, "natural selection," and as withheld provisionally, from the problem of man's origination being yet unwarranted by facts in this further application, being denied legitimacy in this application by men like Mr. Wallace and Mr. Mivart, it is undoubtedly accepted by scientific authorities generally. It has received such extensive verification in so many different quarters that no reasonable doubt remains that it must be received as in the main a correct interpretation of nature. Physics proper, botany, zoology, astronomy, language, society, every department of study which can be entered scientifically, corroborates the theory. We

stand in the midst of this universal process. Mr. Spencer is working out the philosophy of this latest and grandest conception of science, and by it interprets all things. How does it bear upon these ideas? Evolution has not given us the cause of anything. It has only supplied the conditions and processes. We are carried back through a bewildering reach of processes till we are bidden look at the original source of all things. There in that germ, all of filmy matter, we are told to behold in indistinguishable potentialities the vast material world with all its beautiful and marvelous life, ourselves with all our high thoughts and aspirations, "the interaction of organisms and their environments" has evolved out of that speck. We are to behold in "matter the promise and potency of all life." But is that the origination of all things? What do we mean by the affrighting term "protoplasm" but "first sticking together?" Are our poor, raw English words, in their empty beggary of explanation, to be dressed up in foreign clothes, and palmed off upon us for realities? Are we to be driven from the field by any such Ban-nockburn tactics? Who stuck these atoms together, and how were they stuck together, and wherein is the sticking together which makes out of inert molecules omnipotence? Mr. Huxley tells us that matter will not organize except under the action of pre-existent protoplasmic matter. But shall we go back in the ever-receding sequence, deluded by the "promise and potency of matter" into thinking we have found the force giving that potency and yielding the promise? When the enthusiastic evolutionist says, "Give me but a germ cell and I will reconstruct creation," he begs the whole question and postulates causation before he begins evolution. Is that the disposal of the question of causation? To discern in matter the potency of all life is but to say that therein in the most simple cell imaginable lies germinally all the complex forces and marvelous results of the whole process of evolution. What is evolution but the educing, evolving out of something that which lies wrapped in it? The seed holds the tree in potency; *i. e.*, it is all there in embryo. Interaction of the organism and its environments brings out roots, trunk, leaves, and fruit, the totality which regathers

itself into the seed again. The ancient symbol of the mystery of creation, the egg, still unconsciously handed down from far-off mythologies every spring, in our Easter eggs, no more gives us the origin now than it did in the days of the Greeks, who taught that this primal egg was thrown by the gods upon the earth and left to develop the life which swarms out of it. An admirable letter in the *Spectator* (Sept. 21, 1872) thus sums up the postulates of evolution: (1) Something; for evolutionism has not yet reached the step of evolving something out of nothing, and it will be time enough to consider that theory when it is propounded. (2) Something vital; for evolutionism does not propose to explain the unfolding of life out of dead matter. (3) The power of reproduction; for evolutionism offers no explanation of that delegated power of creation. (4) The power of variation in reproduction, of the laws of which Mr. Darwin confesses profound ignorance; and (5) The power of variations to reproduce themselves and to become strengthened by accumulation. So that this doctrine requires us to assume the great mysteries of creation, of life, of generation, and of variation. * * * The little that that theory demands of God is found to be all that goes to make up the existence of the world."

WHENCE THE PECULIAR SACREDNESS OF THE MORAL SENSE?

Whence, as Mr. Wallace asks, is the peculiar sacredness of the moral sense, a sacredness unaccounted for by this answer? Why the investigation of this function with so supreme and unique an authority? How has it acquired its imperativeness, so singular and irresponsible, men using it so much against man's pleasure? How has it come to be identified so essentially with religion, according to all science the worship of the powers of nature? How has religion, in the propitiation of powers superior to man, appealing to his lowest and meanest instincts of self-preservation, cherished and inspired the loftiest, purest, most disinterested principles? How have the instincts precipitated the evil and selected thus unerringly the good? How has selfishness gendered love, fear inspired trust, cruelty sublimated mercy, competition organized association? Somehow or other this blind groping of matter has struck the

vein which leads out into the beauty of holiness. Organism and environment co-operate in elaborating character. Mr. Spencer says, "The value of the inherited and theologically enforced code is that it formulates with some approach to correctness the accumulated results of past human experience. It has not arisen rationally" (*i. e.*, by fabrication of human reason) "but empirically," (*i. e.*, experimentally.) "During all past times mankind have eventually gone right after trying all possible ways of going wrong. The wrong-goings have been eventually checked by disaster and pain and death, and the right-goings have been continued because not thus checked."—(*Study of Sociology*—"Theological Bias," *Con. Rev.*, xxii., 12.) It is precisely the fact which fits the belief in an over-ruling power of righteousness. It is the very tale history would have to tell if it were the education of man toward character, the kingdom of a moral ruler. If we are asked to abandon this belief, what are we to make of this miraculous drift across chaos into cosmos, beautiful order? What is this blind instinct that sees so divine a light down in the rocky ascidian, and works so unerringly up into the fullness of that light which streams in upon man's consciousness? Be it educating of potentiality in the organism, or inducing of potentiality from the environment, from what marvelous matter has exhaled this aroma of holiness? If so be it is thus developed, what are we to think of the material nature charged with such transcendent qualities? We take the hint of our naturalistic moralists, and look more carefully into the constitution of the nature ordering the principles of social science. Political economy professes itself a science in that it discerns the laws enstamped upon physical nature, and formulates out of them the principles and methods of societary organization and development. As thus enounced by the earlier economists, this system looked little enough like a divine kingdom. It seemed the caricature of a moral order. Selfishness the motivity alone engendering the operation of the social mechanism; competition, the regulator of its interaction; the normal order, strife of individuals, classes, nations; supply and demand dispensing with the use of conscience; the earth unprovided with sustenance sufficient

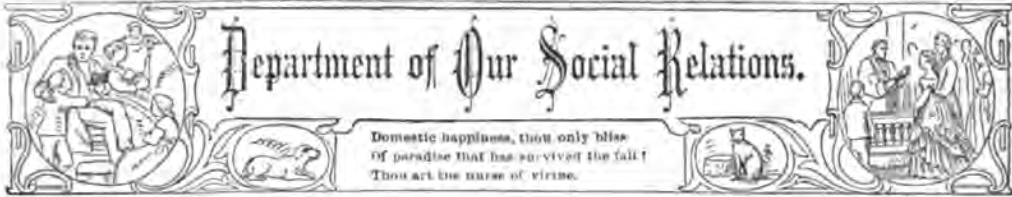
for man, the laws of increase ordaining an ever-heightening ratio of deficit in supply. Man himself his one great curse, elbowing each his fellow upon the crowded estate given him of his Heavenly Father, his gentlest, holiest impulses working evil in the continuance in life of the wretched cumberers of the ground, nature is seeking to kill off. God's tender mercies coming to him in the sword, the pestilence, and the famine; a world physically ordered so as to educate in vice and crime, to reward with woe and misery. Surely this was the revelation of a power making for unrighteousness. I know of nothing in the realm of science more beautiful than the corrections our later economists are making in this godless interpretation of society and nature. Men of all schools, Mill and Carey, Fawcett and Ruskin, are teaching us another reading of this story. The world is large enough. There is supply sufficient. Man's wasteful folly and more wasteful wrong scants the provision and crowds the markets, not with food, but with hungry mouths and idle hands. Our present state need not be. It will not be when men learn the true system of nature. Out of selfishness she constructs fellowship, out of competition rises to association, ranks strife by co-operation. Nature is forcing upon men justice and mercy, brotherliness and helpfulness. In this wonderful nature there struggles upward the law of Christ, "Bear ye one another's burdens." The principles of social science, our own American teacher tells us, are condensed in the golden rule. With a magnificence of generalization which awaits yet its due recognition, Mr. Carey traces for us the "Unity of Law," whose foundations are laid in the principles governing nature's action, whose fruition is in the principles controlling society's development, an evolution of moral order. What is this power? Not ourselves making for righteousness—making through the unconsciousness of nature unto the consciousness in man of this righteousness, and the knowledge that in it lies the secret law ordering all existence into unison. All societies building on other bases topple and fall. Below us still is that foundation upon which conscience builds her faith in God, deep as the instinct of responsibility, secure as the order of nature in which it roots itself, real as

the facts of the laws ordering this throbbing human society. We send to-day our shafts down into the substrata of our religious faith, and find them solid, undisturbed. Emotions, reason, conscience rest still on the old realities. We find still that ancient mystery of power; still those ideas of cause and design which shape themselves into intelligent will; still that authority speaking within us,

that order governing without us, through which we discern the righteous Ruler. Our fundamental religious ideas are all below us. Our religious roots are untapped. Shall we, then, fear?

“Nor dare trust

The Rock of Ages to their chemic tests,
Lest some day the all-sustaining base divine
Should fall from under us dissolved in air.”



GIVE US THE TRUTH.

OUR attention is frequently directed to the manner in which very good husbands “keep peace” with their wives. That common excuse, “only to keep peace,” implies that there is a rebellious tendency on the feminine side of the house, and that an explosion is liable to occur at any hour of the day. When we get a real insight of the domestic machinery, it is apparent that there is a deal of truth in the implication. Woman habitually and consciously acts, speaks, and thinks defensively. Strike a percussion cap with a hammer—crack! it goes off as if it were the smartest thing in the world. Step on it accidentally—and up *you* go, in affrighted thought that Eternity is at hand. Men’s experience with women is very similar to their acquaintance with percussion caps. After these willing acknowledgements, may we be permitted to say that there was never a defensive without an offensive side to the domestic realm? How they are proportioned to each other is all that needs discussion.

Speaking briefly, it is the offense that keeps the rebellious spirit in woman ready to take fire; but it can not be explained without a little criticism of the men—our “natural protectors.” Men—God bless ’em!—are bundles of policy. They are noted—and fêted—for shrewdness, for tact, for everything—but absolute truthfulness. How the progressive creatures have advanced, with electric speed, from their old policy that “the truth should

not be spoken at all times,” until they have caught up to the opinions now prevailing, that white lies are blessings in disguise. The conveniences that we have now-a-days *are* truly wonderful, when we reflect how simply man must have lived in old Adam’s days. Truth did not travel so fast then, as it now does by the aids of electricity and steam; and white lies had not the honor of so primitive an existence. They are modern luxuries. Men respect the truth; but these innocent lies save present bickering and present suspicion. Like sugar-plums among the children, they keep down imminent disturbance, and give us a chance to hope it will blow over. Alas! that present helps should bring future troubles.

Here is a woman remonstrating with her “better half” because he does not habituate himself to speak candidly to her; and he spreads out his plausible reasons with a superior air, but he does not intend to answer her fairly—he has not the time to give exact reasons or opinions to an “unreasoning and unopinionative woman.” Equivocation seems the easier and the shorter way of silencing her doubts, or fears, or protestations. Men say that women are enigmas; that the utmost caution must be maintained to keep on the angelic side of them; that flattery, deception, and discreet policy must be used in abundance to make them tractable. “You are never practical” say they; “and we can

not treat you with the same common-sense consideration that satisfies our fellow-men." "You are too sensitive" they add; "your pretty feathers are too easily ruffled, and you can not be made to accept the ungarnished roughness of our plain, matter-of-fact talk, or ways."

Ah, gentlemen philosophers! If it were plain speech and plain manners all the time, we might have something better than "peace." But when, after your smooth, studied suavity, and your delusive flatteries that were spoken with all the stress of truth, you shift your policy, and come down with severely sarcastic criticism, we are hurt to the heart's core. You think it is the severity of truth that cuts so keenly. It is not that. We are contrasting your former conduct and speech with your later. The blunt truth that is now so impatiently forced from your hearts, gives hateful color to the ungenerous deception that, formerly, you had compelled your lips to give gracefully tender utterances to. Your present truth throws too glaring a light upon your past deceit. To us, it is a heartless sight. You are unconscious of the depth of the wrong; but we are stung with your disrespect. We are maddened with your judgment that you can give us a brace of falsehoods

one day, then give us a contradiction of them the very next, without our recognition or contempt of the discrepancies. You keep us on the alert for equivocation. You have caused us to be suspicious of your assertions and acts. What then? Is it best that we shall grow calmly indifferent to aught which you may say or do? That were the *mockery* of "peace."

Candor is priceless in the domestic relations. If love is not there, candor compels respect. But deception, policy, *management*—at the altar of home—these are abhorrent alike to female and male. They usurp the rights of reason. They turn affection to a bitter hatred, or to a grave. We are profoundly aware of many failings attributed to us. We are fretful. We are suspiciously sensitive, and our reason looks unreasonable. We are morbid—indeed, all humanity has turned insane, and is rushing to artificial rescue. We need censure—but censure is cheap; the meanest of us can dispense it lavishly. We need advice; but unless it is to the point, that, too, is cheap. We need praise—but give us a viper rather than flattery. The truth is sufficient for our needs. Give us that, and we shall have "peace, sweet peace" and "home, sweet home."

ROSINE KNIGHT.

HETTIE MALVERN.

"AND who shall you marry, Hettie, when I am gone—your cousin or Hiram Ellsworth?"

"Neither, father; and you surely would not talk about leaving me if you knew how it troubled me."

"I fear you are not doing right in refusing to see my condition as it is, child; and, seriously, I wish you would decide upon some one for a husband. I want you to be settled before I go, and I fear unless you act soon it will be too late."

"But, father, I do not want to marry; now what must I do to make you happy?"

"I do not know what you will do when I am dead, Hettie. My pension dies with me, and I have nothing to leave you."

"I do not want your pension, father; I want to be keeper of the light-house—that is my ambition."

"Keeper of the light-house?" gasped the poor man.

"Yes, father, and one of these days see if I do not. Perrival is old, too old to do duty there much longer, and with his consent I have applied for the position."

"My daughter, come here and tell me what it all means; you startle me—you torture me with your terrible talk."

The young girl sat at her father's feet, but not to listen to the old man's complaints. She talked to him in her vehement way, and yielded no point until she had frankly made out her own case.

"I have looked at every side of this matter, father; pray what else have I been thinking of these past three years, but how to take care of myself. And I am determined upon one thing."

"What is that, my daughter?"

"Not to do as other women in my condition do, and have done."

"How will you do otherwise?"

"In the first place, I will not be afraid of poverty, nor of life in any of its phases. I will not marry any man that I have yet seen, nor will I consent to degrade my womanhood by earning a home through marriage. I will not pine, but work, wait, strive, study, pray, think, hope, and love. And I will do my duty, every day—only, father, I will not believe that my place is at the wash-tub or potato-pot, nor yet as a drudge anywhere."

"But the light-house, what of that, Hettie?"

"Dear father, it is the haven I wish to seek for a few years, until, by hard study and preparation, I have prepared myself for something else."

"Hettie, beware, child! Your mother said just so when I first knew her, and her father had no comfort in her until she was married. I tried hard to do for her, and I hope I did; but when she died—and you were then but two days old—I found under her pillow a book which she had been reading, and in which she had marked opposite the words, 'a disappointed life,' the single expression, '*mine*.' Now, just think of a woman who had a husband, and was a mother, feeling so."

"Excuse me, father, did you marry each other for love, and did my mother choose you of all the world to be her husband?"

The old man stammered and grew painfully confused under the searching glance of his daughter.

"No, not that; but she was not forced; at least I did nothing to coerce her. We were on the frontier, her father was going on a long march, and he had a large family. Mabel was the oldest daughter, and knowing his trouble I offered to marry her, and keep the two boys with us. It was a hurried courtship and a short married life, poor thing! for we were married in the fall, and when the troops returned in the late spring, and her parents with them, she was in her grave."

"And her mother, father, did not my grandmother rebel at the fate of her child?"

"Your grandmother had her own hands full, Hettie, and she was worn out with the

hardships she endured. She died in a year herself."

"So you are asking me to follow the same path that led mother and grandmother to the grave?"

"I want you to be housed and cared for, Hettie, before I die; I can not see you left alone."

"Thank you, father; you need not trouble yourself further on that score. I am not likely to be more alone than I would be as an unloved wife, and I am used to aloneness. She spoke with more bitterness than kindness, and the old man looked greatly hurt."

"Well, well, Hettie, you are strangely like your mother, but you must not forget that my pension dies with me."

"And I do not forget it an instant, father; nor do I care aught for its benefits save for yourself. Trust me to do right," she said, looking him steadily in the face. "But come weal or woe, pain or sorrow, cold, or even hunger, I shall live up to my own sense of truth and right, so help me my mother and my mother's God."

The old colonel sighed deeply as his daughter turned and left the room.

He was never very wise; and he was not to blame that the better nature of his child was an enigma to him. She was the natural product of such a marriage, and possessing her mother's nature and her father's strongest traits, she was his superior in all things, and his inferior in nothing save stubbornness.

The daughter returned to her father, holding in her hand an old manuscript. "This was mother's diary, father; the 'sole confidant,' she says, 'of her wronged, hungry heart.' Hear what she wrote before I was born:

"'I beseech you, Henry, or whoever has the rearing of my little daughter, if such it should be, and should survive me, to teach it wiser lessons than I have learned, and for her future and eternal happiness let her never, never be educated to look upon marriage as her destiny. Tell her, her mother in Heaven will help her aright, if God permits.'"

Father and daughter looked at each other; the latter was the first to break the silence.

"Father," said she, "this is, next to my

Bible, my inspiration. Can you wonder, then, that I am resolved to obey her, and do no evil thing."

"Where did you find that book? I never heard of it," said he.

"It was given me by Aunt Macey when she gave me the box left by my mother for me. Now, father, do not let it worry you; only let my future disturb you no more; it is in higher hands than ours, and I am anchored in that faith, be the hereafter what it may."

* * * * *

Hettie Malvern keeps the light-house in the Atlantic, and in storm and rain she performs the tasks of the patient old keeper, whose time for work is over. A faithful woman, she does her duty with true zeal, loving work for work's sake, and because she would be no drone in the hive. To her this home is safety, rest, occupation, and a stepping-stone to a higher place. In this life which she leads there is nothing grovelling,

nothing false or hollow; she has all its cares, all its trials, but they weigh as naught to its advantages. The great sea struggles without, but within the calm is perfect. The aged old man will soon end his existence here, and then she will be alone in the far-off place, with only the hired girl who shares her work. But she has nothing to fear; life has no terrors for her, and since her father's death, four years past, she has found nothing harder to do than her hands and heart could compass. She is the type of the true, earnest, and honest women who are yet to meet and answer the cruel surface cant of to-day respecting woman's place in the world.

To Hettie Malvern an ocean light-house is home, and to all, who, like her, seek to work out the nobility of their own natures by self-exertion, she is a beacon, shining out in precept and example as bright to others as her great lamp shines out in strong rays over the darkness of the deep, guiding wanderers home.

LAURA C. HOLLOWAY.

SOME PRETTY FLOWERS FOR OUR GARDENS.

ANNUALS.

"To him who in the love of nature holds communion with her visible forms, she speaks a various language."—*Thanatopsis*.

AMONG the beautiful objects of earth which surround man, and command his thoughtful attention, flowers occupy a very high position. Perhaps because of their direct appeal to his superior faculties, they are entitled to rank with the best of the objective instrumentalities supplied by the Creator for the instruction and enjoyment of humanity. He who loves flowers can not be altogether under the domination of selfishness and low propensity, for their influence is in opposition to greed and lust. They inspire impulses of generous, esthetic yearning—thoughts which draw the mind away from the consideration of the sordid and gross. They warm the heart into sympathy with things delicate and refined, and often excite manifestations of character which seem akin to their own delight-giving fragrance.

It is, of course, conceivable that one possessed of large Ideality might esteem flowers for their beauty solely, and not perceive or appreciate the relations subsisting between the living beauty which is theirs, and the emotions

of purity, love, sympathy, and gratitude which they normally awaken. But such an organization must be exceedingly rare. We know from experience that men of rather coarse temperament and of deficient education, when brought into constant association with flowers as gardeners or florists, undergo a change of mental constitution which in some cases, especially if the vocation is adopted for life, becomes marked in their appearance and conversation. A higher tone is acquired, a manhood whose esthetic quality partakes of a better culture than that afforded by the mere money business of every-day life.

Aside from their esthetic influences, flowers exert a moral and physical force which is really great. In the chamber of the sick, flowers are usually grateful to the fevered, pain-wrung sufferer; and many owe their recovery from severe maladies very much to the bouquet or basket of blossoms, which occasionally feast their languid eyes, and shed a soft sweetness around.

We hold that true amusement, or diversion,

strengthens and improves the mind, rendering it the better fitted to perform the plain duties of life, and to meet the stern responsibilities



ADONIS—FLOWER AND PLANT.

which an occasional emergency forces upon us. Certainly among diversions the culture of flowering plants is second to none, and is adapted to the circumstances of every member of society. In the most wretched quarters of London, where the poorest of the poor reside, flowers are to be met with peeping forth from broken dishes or pots, their bright petals and soft aroma appearing strangely out of keeping with the squalid surroundings. But at the same time they tell of lives pent up, of souls



AGROSTEMMA—FLOWER AND PLANT.

whose yearning for the beautiful finds unspeakable solace in the few geraneums, carnations, pansies, or forget-me-nots they can rear in their restricted tenements.

It was our purpose, however, simply to give the reader a few suggestions with regard to what sorts of flowering plants would be found easy to cultivate, and which would abundantly repay, in the charming interest they add to the home, for all the time and labor bestowed upon them. At this time we shall consider a variety of annuals, accompanying them with illustrations, for the use of which we are indebted to Messrs. E. Butterick & Co., of this

city, the well-known publishers of the *Metropolitan*.

One of the most satisfactory of the annual class of flowering plants is the Adonis. Shady places are best for sowing the seeds, and they should be so set that the sprouts will be about twelve inches apart. Every one is familiar with the mythological legend that this flower sprang from the blood of Adonis, when wounded by a wild boar. Its flowers, though not very abundant, are of a deep red color. We adjoin an excellent representation of this flower, which will prove an ornament to any garden.

The *Agrostemma* is another graceful annual, an illustration of which is given. It is easy to



SWEET ALYSSUM—FLOWER AND PLANT.

rear. The flowers somewhat resemble single pinks, and grow profusely on long, slender stems, presenting a very attractive appearance. The plants should be set closely in beds, either by sowing the seeds and afterward thinning out the superfluous shoots, or by transplanting when the growth is sufficient to warrant it.

The Sweet Alyssum, of which the reader has a good representation in the picture, is



DATURA—FLOWER.

well known and very popular. It originated on the shores of the Mediterranean, whence it

was transplanted to English gardens, and at length found its way to this country, where it



ANAGALLIS—FLOWER.

has become a favorite with those who appreciate purity of color and soft fragrance in flowers. The Alyssum is much valued for its utility in the preparation of small bouquets, its delicate white blossoms being a choice addition. It grows easily from seed, either on open ground or under glass, and is specially appropriate as a bordering plant.

The Datura, or trumpet-flower, is a charming annual, with a long trumpet-shaped white flower that is really ornamental. There are several varieties of the Datura, some of which are double, but experts recommend the single. The plants grow to the height of two feet, and should be set about the same distance apart.



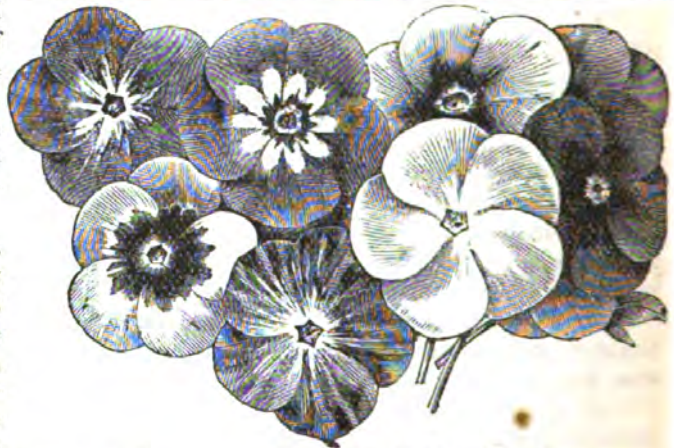
ANTIRRHINUM—PLANT AND FLOWER.

The Anagallis is an annual of which there are several varieties now grown in this country, almost any of which will be found desirable either for beds or borders. Without being particularly handsome, this flower is neat in appearance, and very convenient for making up bouquets. Seeds should be sown under glass, and, when well sprouted, the plants may be set out about six inches apart. This flower

rarely exceeds six inches in height, and when closely arranged presents a thick array of fresh-tinted flowers.

The Antirrhinum, so much more familiarly known as the Snapdragon, is a brilliant specimen of the floral kingdom. It is really a perennial, but as it blooms profusely the first summer, florists have generally placed it among their lists of annuals. Those who prefer that it should display all its beauties only at a more mature age, however, may secure that end by destroying the buds before they are fully formed. The Antirrhinum is easily transplanted, and grows vigorously. A good illustration of it is annexed.

The Phlox Drummondii is one of the most



PHLOX DRUMMONDII—FLOWER.

brilliant annuals, and is unsurpassed as a garden decoration. The hues are various, including white, purple, yellow, and crimson, and always strong in tone. The seeds may be sown in open ground in May, or earlier in hot-beds. In a rich, warm soil the plants will attain a height of a foot and a half, and they should be set well apart. Very fine effects may be produced by planting the different varieties of Phlox in close rows, an arrangement which gives a ribbon-like result that is very pleasing. This annual has been known for some time, but new varieties have been in-



CALLIOPSIS—PLANT AND FLOWER.

roduced, which the reader interested in flowers may be glad to become acquainted with.

The Calliopsis, or Coreopsis, is somewhat peculiarly marked in the center of its flower, which mark originated its name, which means



CANNA—PLANT.

“Beautiful Eye.” It is quite hardy in its nature, and grows on slender stalks to the height of two or three feet. The seeds should be so sown as to produce small clusters of plants, and then their variegated flowers form an attractive feature in any garden. The cuts represent a single flower and a cluster of the growing plants. The seeds can be sown either under glass or in open ground.

For large beds, or for a lawn flower, the Canna, otherwise known by the name of “Indian Shot,” is a rather important addition. Though not so gay as some of its rivals, it presents a stately appearance, with its tall



CLEOME—PLANT AND FLOWER.



stock and broad green leaves. This plant will also be found an attractive decoration for halls and piazzas when grown in pots. The seeds should be soaked in hot water for several hours before planting; and in our climate it would perhaps be safest to sow them under glass, and let the plants obtain some size before transferring to the garden. The roots may be obtained from any good florist. In the fall these roots should be taken up and preserved in sand, until spring comes again.

The Cleome is a tolerably hardy plant, and more noticeable for the singularity of its appearance than for its beauty. We give it a place

here, however, because the occasional display of unique flowers lends an attraction to the choicest garden. The stamens project from the center of the flower like small wires. The Cleome grows to the height of eighteen inches. Seeds should be started under glass, and the plants set about a foot apart.

The Crepis, of which there are several varieties, is a very pretty annual. These may be obtained in yellow, purple, pink, and white, and are all quite hardy. The plants attain the height of a foot, and produce delicate blossoms. Seeds will sprout in open ground, but it is considered safer to plant in hot-beds. The plants should be set about ten inches apart. The engraving represents the flower in its full development and size.



CREPIS—PLANT AND FLOWER.

Another, and the last of our series of annuals in this connection, is the Erysimum, at once quite pretty and very hardy. It grows to the height of about eighteen inches, and has fragrant clusters of yellow flowers, which are used considerably for decorative purposes or for loose bouquets. The cut represents an Erysimum in its full maturity.

There are some withered and crusty cynics who sneer at the gems of the meadow and thicket, and ask, “What is their



ERYSIMUM—FLOWER.

use? They are but vain and empty shows, except when, like the peach and apple blos-

soms, they are promises of a fruitage tempting and satisfying to the appetite."

How cold and void of appreciation are such declarations to the cultured taste and well-developed nature! "There is a deeper significance attached to every plant and flower, indeed to every object in nature, than the mere sensualist or the shallow sentimentalist would imagine." A sweet poet has given us the

essential purport of their creation in a few lines:

"From the first bud, whose verdant head
The winter's lingering tempest braves,
To those, which 'mid the foliage dead,
Shrink latest to their annual graves;
All are for use, for health, or pleasure given,
All speak in various ways the bounteous hand
of Heaven." D.

BLIND FOLKS—WHAT THEY DO FOR A LIVING.

THE number of blind folks in the United Kingdom is stated to be 80,000, and a large proportion of these belong to the lower ranks of life, their blindness having been brought on by exposure to severe weather, overwork, or intemperance and dissipation. Cases of blindness are comparatively rare among the richer classes, they not being so exposed to these causes, and it has also been found that nearly one-half the number of blind people are sixty years of age or over, while of those under twenty years who are blind, a large majority are found to have been so from infancy.

The world of the blind! It is not our world, with sunny paths, brilliant colors, and flowery landscape. "Dark, dark, dark amid the blaze of noon," cried out the great soul of the blind poet, and so groans many a one to-day, groping through perpetual night, upon which no morning can ever dawn save that of the Resurrection.

We are apt to think of the blind as merely sightless, and sometimes have closed our eyes and tried to imagine how it would seem to be deprived of vision, but we can not conceive of it; we can not comprehend what it would be to live continually, day and night, in utter darkness, knowing naught of this busy world save what we hear and touch. How can we convey to a blind man any idea of the broad ocean, the sky above us, decked with fleecy clouds, and the earth beneath us, robed in emerald loveliness?

So the blind dwell in a separate world from ours, yet it should be the grand object of all education for them to blend these worlds in one—to unite the two peoples more and more in feeling and thought, leading each other onward to that realm where darkness shall flee away.

One of the great characteristics of the blind is everywhere found to be intense concentration and individuality of purpose. Whatever they do, whether making a bead purse, weaving a basket, learning a song, or groping through the mazes of a geographical study, all is done with steady, untiring zeal.

The Institution for educating the blind, situated on Thirty-third Street and Ninth Avenue, New York, is well worth going to see. It is open to visitors every Wednesday; they are conducted over the building and into the different classes by a lady herself blind, who walks by your side so firmly and confidently it seems impossible that she walks in darkness. There are 175 pupils here receiving an education which will enable them to support themselves when they go out from their faithful shelter. In one apartment they are taught to sew, both by hand and by machine, doing their work very neatly; in another a class in physiology answer questions promptly and intelligently. They are taught by exercising their memory, all that they learn being read to them by the teacher, and it is wonderful how retentive their memories are. The mental arithmetic classes are very interesting; little ones not over eight or nine years adding large numbers rapidly, and with a look of bright intelligence. Some of the children have beautiful, intellectual faces, the sightless eyes being bright and clear, while others possess a look of cold indifference, and a few there are who wear an idiotic smile.

It is a study to watch them, to see how prettily they have arranged their hair and tied the bright bow at the throat. It is interesting to watch them in their geographical studies. The maps are on a large scale, the plane surface representing oceans, divi-

sions of land are raised above the water, each State separate from its neighbor, while deep grooves are put for rivers, and small brass knobs for cities and towns. Here we see the little ones flitting about, going imaginary journeys, and laughing and chatting with each other as if free from every care.

Music, too, is taught at the Institution, and this is their great delight; there is nothing which so enwraps their senses, sweeping away their sorrow, as music; yet when this talent exists to a remarkable degree, it is generally at the sacrifice of all other means of support, and it is not always easy for genius to earn the daily bread. Still, there are many blind musicians who thrill the soul by their wondrous power, and some have been the best performers of their times—for example, Stanley, the blind organist. Often the intellectual organs are imperfectly developed when the passion for music is unusually intense, as in the case of "Blind Tom," the musical prodigy. While accomplishing wonderful feats of sound, he is idiotic on almost every other subject.

We seldom see such entire possession of every faculty among the blind as Dr. Milburn, the "Blind Preacher," shows. God has gifted him with wondrous power and eloquence. How many eyes he has opened to behold the wondrous riches of Christ! How many feet he has guided to the foot of the Cross!

What can the blind do? We shall learn more and more how to teach them and what they are able to perform. Among the many articles made by them at the Institution and offered for sale, most are bead-work, although there are many very pretty things crotchéted, knitted, and embroidered with worsted on canvas and perforated card board. In viewing what they have accomplished, we are compelled to suppose that they can do more. Why can they not be taught a still greater variety of fancy work, such as bridal baskets,—made by ravelling strips of cotton cloth—wax work, moss crosses, hair work, and much else which would bring higher prices than those usually charged for work now commonly done by the blind. Why could telegraphy not be taught them? Would it be impossible for them to acquire this art? One reason why they accomplish so much which to us seems incredible, is their great *faith*. They *believe*

that they can do a work, and confidence in their abilities carries them forward to a successful termination. Once awakened their interest in an object, and they will undertake the task with their might, and labor for its completion with unwearying zeal.

Then, again, does not the loss of one sense sometimes render another more acute? There is a story told of a blind school teacher who could tell when the boys were playing in a distant corner, although a person with good sight could not detect the slightest sound. Prof. Sanderson could, very soon after entering a room, tell how many occupants it had, and it is said that there was a blind man in England who was a surveyor and planner of roads, his ears informing him of the distance as correctly as the eye to others; and the late Justice Fielding, who was blind, when coming into a room for the first time, could tell the height and length of it through the medium of his ear.

In Egypt, where blindness is so common among the natives, and caused by the terrible disease of the country—ophthalmia,—I saw in Rosetta an old man, "the blind water-carrier," he was called, time after time come to the river on his donkey, and having filled the goat skin which he carried, and lifted it to the animal's back, he would place his hand upon its neck and start off to his customers, led by the donkey, and never led in the wrong direction. "Locality, they say, is strongly marked in a donkey's cranium." "Ya muskun!" (poor thing) the Arabs would cry, as he went along. Yet I have seen, lying or sitting in the doorways of their dwellings, these very same people, the flies swarming in their faces and eyes, bringing the same fatal disease; yet they were too lazy to brush them away, and if warned of their danger, would languidly reply, "It doesn't matter; if the Lord wills us to be blind, we shall be blind."

But in our enlightened land I fear we have, to a certain degree, the same spirit of the Arab. When we see men, day after day, reading the news as they ride from their up-town homes to business in the lower part of the city, we are reminded of the Egyptian, for those black letters dancing before their vision in the jolting of the car are like the flies of Egypt, and sooner or later the effect

will be felt, and the eyes become weakened and diseased.

Children should not be allowed to bend low over their books, to sit facing the light, when they study; and young ladies overworking their sight on some delicate piece of fancy work would be wiser to spend less time upon it, and use their eyes in a less trying, if not a more useful manner.

In summing up the characteristics of the blind, we have found them to be thoughtful and diligent, with a peculiar sensitiveness,

shy when with strangers, grateful for kindnesses, and equally tenacious in remembering an affront, yet often self-conceited and willful. These latter traits are but the natural results of their limited education and narrow field of observation; but as time advances, bringing them into more avenues of learning and leading them on out of themselves to broader thoughts and glorious purposes, may they find, in the patient living of a true Christian life, that earth is not all darkness, even to them. SARA KEABLES HUNT.

THE SEVEN WONDERS OF THE WORLD.

MORE than 800 years B.C. the nations of the then known world had attained great wealth and luxury. Among their achievements were some of such surpassing magnitude and glory that they ranked as *wonders* of the world, till the number grew to seven.

THE WALLS AND HANGING GARDENS OF BABYLON.

This great city, situated in the midst of a vast plain, was laid out in an exact square, and was strongly fortified. Within its limits were the two palaces of Nebuchadnezzar, surrounded by triple walls. The height of the middle wall was 300 feet, and that nearest the palace was yet higher, with watch-towers built upon it. The bricks of which these walls were composed were glazed and richly colored, varying the monotony of the vast façades. The clash of armies, the triumphal return of the victors with their reluctant retinue of prisoners and trophies, the pageantry of the chase, and the deadly encounters of leopards and lions, were depicted in gigantic and brilliant mosaic.

"The more a man has, the more he wants," is the uninspired version of "The eye is not satisfied with seeing."

Amuhia, Nebuchadnezzar's wife, was discontented in the midst of the royal profusion and display of her husband's court. She was a Median princess, homesick and unhappy, and she longed for the beautiful hills of her native country. All this pomp could not displace the pictured memories of its sunny slopes and the quiet loveliness of its valleys;

of morning light upon the mountains and evening peace beyond their darkened tops.

The king, indulgently inclined, took council of his engineers, and they planned the hanging gardens. They built terraces of wood, beneath which was concealed the machinery for irrigating. They probably drew their supply of water from the river which flowed through the city. An immense quantity of soil covered this eminence, which was planted with trees, shrubs, and flowering vines, and rare and fragrant exotics. Little mountain streams flowed down its sides, fountains tinkled in its shady recesses, the birds came there to build and sing, and the queen cherished it as a fragment of the life that lay beyond the weary plains of Babylon. It was the wonder of nations, but it has vanished.

THE TEMPLE OF DIANA, AT EPHEBUS.

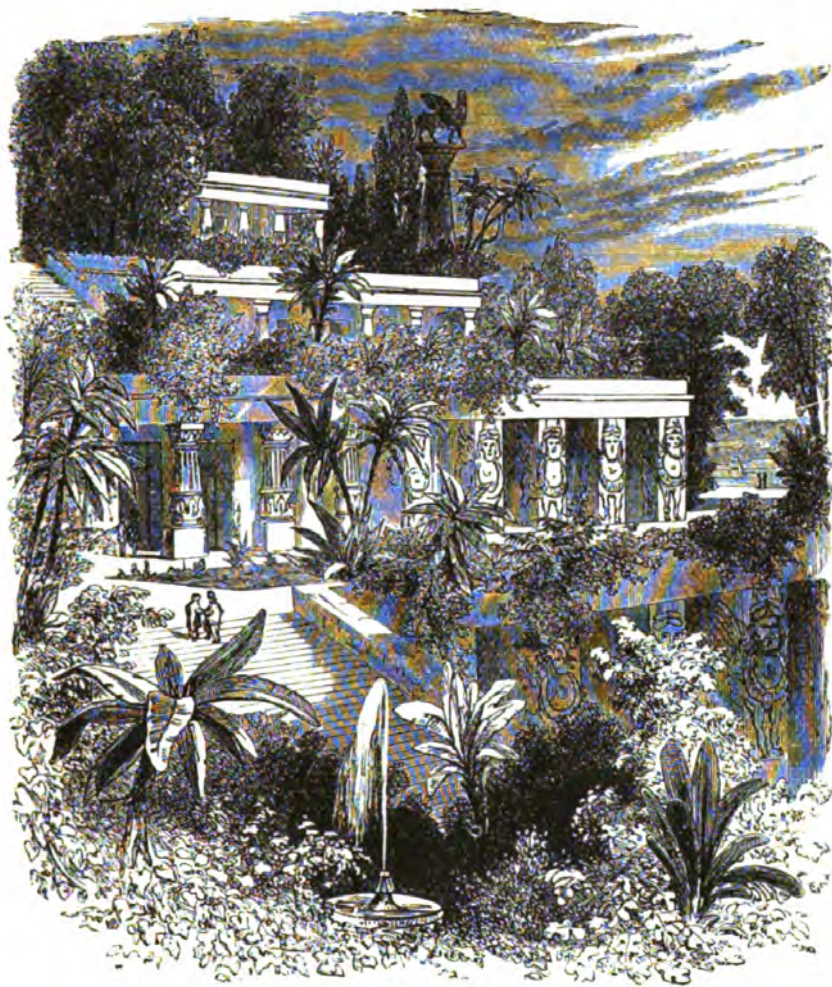
The first temple, a superb structure, fired by the fanatic Eratostratus, was burned on the birthnight of Alexander the Great. The second temple, built of purest marble, was a stately edifice, standing on an elevation commanding the harbor of Ephesus; a magnificent Salvé to ships sailing into port, and a beautiful memory to the outward bound. The united resources of the Ionians built it, and 220 years passed before its completion. It was approached by a flight of lofty steps and a colonnade of marble pillars, each the gift of a king, surrounded the shrine of the goddess.

The roof of this temple within a temple, of which the chapels in European cathedrals

are an imperfect parallel, was of cedar, and was upheld by columns of green jasper. It was adorned with statuary, and its walls enriched with paintings from the easels, if they had them then, of the most skilled artists. Like the "cities of refuge," it was an asylum for all who sought its sanctity, and treasures of immense value were deposited within its precincts for safe-keeping; there was no hand sacriligious enough to rifle it; the idolatrous

from heaven; presumably an ærolite. Its successor was an ebony statue, tall and uncouth, but invested by superstition with most beneficent attributes. Like the statue of the Olympian Jupiter, it was secluded from a too familiar gaze by a curtain falling from the roof to the floor, and drawn aside only on high festivals.

Within the last twenty years very interesting discoveries have been made at Ephesus,



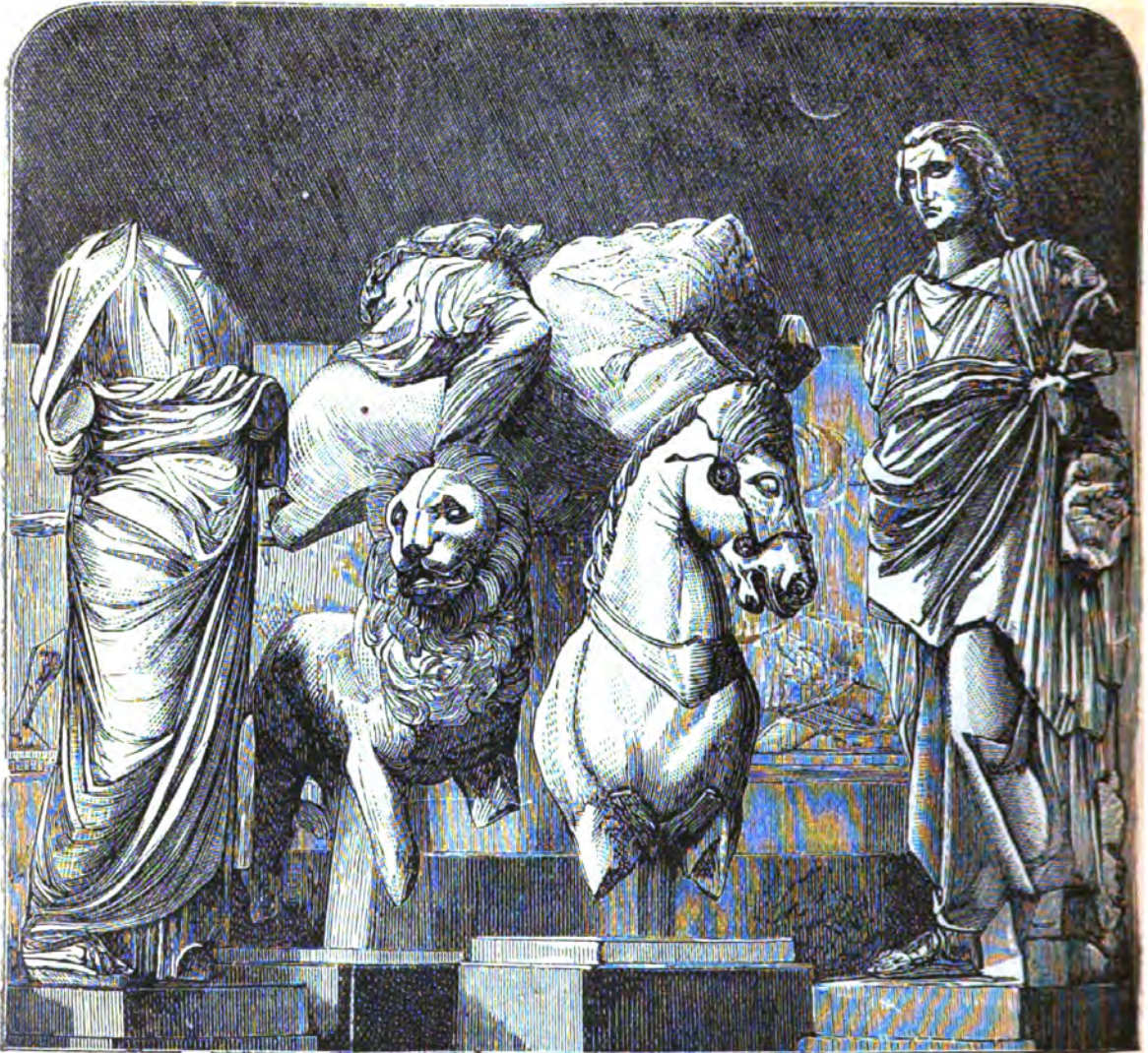
THE HANGING GARDENS OF BABYLON.

reverence of these heathen was a stronger guard than bolts or bars.

And she, about whom centered art, beauty, and the treasures of kings, whose silent influence was so powerful—what was she? Not as you would imagine, a creature of transcendent grace; beauty was not a characteristic of the Ephesian Diana. The original image was a black stone, said to have fallen

conducted by Mr. John T. Wood, with the assistance and patronage of the British Government.

Twenty feet under ground he came upon the pavement of the Temple, white marble laid in solid masonry. While he was at work the Pacha's curiosity was so stimulated by the reports that reached him that he paid Mr. Wood a visit.



RELICS FROM THE MAUSOLEUM OF ARTEMISIA.

Regarding the columns and blocks of marble and the *débris* that had been exhumed, he inquired to what building they belonged. Mr. Wood explained quite elaborately that it was a church built many years ago, before the Greeks knew of the one God, when their religion comprehended the worship of many gods and goddesses, and that this had enshrined a colossal statue of a goddess.

"Ah!" he responded, placidly, unconscious of the satire, "I understand now, I understand perfectly. They were Protestants!"

Many tons of these sculptured marbles have been deposited in the British Museum. Mr. Wood says they all bear traces of color, the prevailing tint being red.

STATUE OF THE OLYMPIAN JUPITER, BY PHIDIAS.

On a small plain in the southern peninsula of Greece stood the sacred grove of Jupiter. Within the peaceful shade of "tall cypresses, laurel, myrtle, and palms," rose the temple of Jupiter; near it was Juno's temple, and clustered about them were altars and fanes of other gods and goddesses. The Greeks were a people rejoicing in all that was beautiful and grand, and whatever could enrich their edifices was lavished on them. This temple of the father of the gods was surpassingly magnificent. His throne of cedar wood was inlaid with gold, ivory, and ebony, and decorated with designs richly painted.

The august image sitting upon this throne

was wrought of gold and ivory, and, in accordance with the latitude of art in that era, the sculptured drapery was colored with royal dyes, and a profusion of jewels of inestimable value sparkled among their folds. He was crowned with the conqueror's wreath of olive; in his right hand stood a statue of Victory, and his other hand held up a golden scepter, encrusted with jewels, on which perched an eagle, Jove's bird, with plumage exquisitely carved. The insignia of his power, his thunderbolt and ægis, were laid aside, and he sat in the benign majesty of a conqueror.

This statue was visible only at great festivals, being concealed at other times by a cur-

lying on the south-western coast of Asia Minor. His death occurred about 350 B.C. His sister and successor, Artemisia Second, mourned his loss excessively, and to perpetuate his memory erected at Halicarnassus, the chief city of the province, a magnificent temple. Some fragments of the sculptured marble are preserved in the British Museum, memorials of the love and sorrow that wrung a heart twenty-two hundred years ago.

THE COLOSSUS OF RHODES.

The Island of Rhodes, with the blue, sparkling Mediterranean flowing about it, a shining sky above it, and delicious airs that carried the mingled scents of a varied and luxuriant vegetation, was the chosen seat of the wor-



THE PYRAMIDS OF EGYPT.

tain of wool from the famed Assyrian looms. It was soft and fine, dyed a rich Tyrian purple, resplendent with embroidery of gold and finished with a deep fringe of purple and gold. This statue of massive proportions was nearly sixty feet in height. It was considered not the master-piece of Phidias alone, eminent as he ranked among sculptors, but it crowned all Grecian art. So profound was the feeling of the ancients toward it, that they regarded it as the actual impersonation of the mighty Jove. It was carried a trophy to Constantinople by Theodosius First, where it was destroyed by fire in the year 475.

THE MAUSOLEUM OF HALICARNASSUS.

Mausolus was king of Caria, a province

ship of the sun. An altar was raised to him here. There is a legend that when Jupiter and the other immortals divided the earth, the sky, and the water among themselves, the Sun was absent—it must have been at night. Dissatisfied with his portionless lot, he brought the matter before Jupiter, who suggested another allotment. To this the other immortals harmoniously assented, when the Sun mentioned a fair country lying beneath the waters. They all assured him of an undisputed title to it, when this blooming island rose out of the deep.

Two hundred and ninety-two years before Christ, Chares, a famous artificer in bronze, commenced the work that has brought his

name down to moderns, an image dedicated to the sun, and familiar to us as the Colossus of Rhodes. It wore its title honorably, for it was 105 feet in height, and twelve years passed before it was completed. It guarded the entrance of the harbor. It had stood but thirty-five years when a terrible earthquake shook the island and prostrated this magnificent statue. It was eventually sold for old metal. *Sic transit.*

THE PHAROS OF ALEXANDRIA.

The city of Alexandria, for a long time the greatest known, was crowned as "the city of cities," "the queen of the East." Its harbor was secure, but difficult of access, and a magnificent *pharos*, or light-house of white marble, was built upon the island Pharos, at the entrance.

"Fetched a compass" has no allusion to the needle mysteriously faithful to the north, but means *making a circuit*; the timid mariner always held his course within sight of

land when possible. He thought that when the circuit of day was completed, and the sun passed from view, that it took passage in a magic bark, which bore it around the rim of the earth to its appointed place in the east. Gazing westward over the billowy waste toward the unknown boundary of light, he reassured himself with a glimpse of the low shores, and hailed the white glistening shaft that was his welcome to port. And when the tempest-darkened sky hid sun and stars from his anxious eyes, the beacon fires guided him to the place where he would be.

Its cost was estimated at over \$800,000, and the amount has been doubled by some. A castle called Farillon replaces it.

THE PYRAMIDS OF EGYPT.

They alone have resisted the subtle wear of time, and decay has seized even them. They are so familiarly known they need only to be mentioned to complete the list.

H. E. G. PARDEE.

JOHN QUINCY ADAMS' MIND.

IN the Memoirs of this great man published by his distinguished son, there occur many passages which possess much interest to the student of character. One memorandum, which bears the date of Christmas, gives us a glimpse of his own estimate of himself, and how he regarded his children's aptitudes for knowledge. We quote:

"No attendance at the office. I gave the day to relaxation, and, with a view to make an experiment upon the taste of the younger part of our present family, after breakfast I read aloud Pope's Messiah, a poem suited to the day, and of which my own admiration was great at an earlier age than that of my son Charles, the youngest person now in my family. Not one of them, excepting George, appeared to take the slightest interest in it; nor is there one of them who has any relish for literature. Charles has a great fondness for books and a meditative mind, but neither disposition nor aptitude for public speaking or correct reading. Charles must teach himself all that he learns. He will learn nothing from others. Literature has been the charm of my life, and, could I have carved out my own fortunes, to literature would my whole life

have been devoted. I have been a lawyer for bread, and a statesman at the call of my country. In the practice of the law, I never should have attained the highest eminence for the want of natural and spontaneous eloquence. The operations of my mind are slow, my imagination sluggish, and my powers of extemporaneous speaking very inefficient. But I have much capacity for and love of labor, habits, on the whole, of industry and temperance, and a strong and almost innate passion for literary pursuits. The business, and sometimes the dissipations of my life, have in a great measure withdrawn me from it. The summit of my ambition would have been attained by some great work of literature, to have done honor to my age and country, and to have lived in the gratitude of future ages. This consummation of happiness has been denied me. The portion of life allotted to me is that of my mortal existence; but even in this failure of my highest objects, literature has been to me a source of continual enjoyment, and a powerful preservative from vice. It would have been a great comfort to me if all or either of my children inherited this propensity. George is not entirely without

it. The others have it not, and I have found every effort to stimulate them to it, hitherto, fruitless. Pope says, 'Tis education forms the common mind,' and so it is; but the common mind will be always groveling in common objects. Then common mind must form itself."

CARELESSNESS IN CONVERSATION.

IN the colloquies of every-day life we are much too careless in the use of language. The phraseology of politeness is particularly faulty. A very common series of errors may be instanced thus:

It is raining, and a lady and gentleman pass out of a house in company, the latter having an umbrella under his arm.

"Dear me!" says the lady, on noticing the wet street, "won't you be kind enough to hoist the umbrella?"

"Certainly," says the gentleman.

Now, if "won't" means anything at all, it means will not; and, therefore, according to a fair interpretation, the gentleman tells the

lady that certainly he will not be kind enough to hoist her umbrella!

But no. Even while he speaks, he opens that useful article, and holds it gracefully over his companion.

"Thank you," says she, earnestly.

"Not at all," replies he, still more earnestly. And on they go. Has not the fellow flatly contradicted the lady?

Yet there is no appreciation of discourtesy evident in the manner of the lady. On the contrary, she appears to regard her escort's response as eminently kind and polite.

Well-educated people are constantly telling others that they *are mistaken*, when they mean that they are in error, not that some one has misunderstood or misapprehended *their* meaning. Surely, when I say to a friend, "You are mistaken," I really mean that *I* have obtained a wrong impression of a statement or act of his, not that *he has* mistaken a statement or act of mine.

And so of many other phrases common in our social life. ED.



Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a fanatic; the intellectual only, and you have a diseased oddity—it may be a morose. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

LONGEVITY OF BRAIN-WORKERS.

IN the volume recently published of the papers read before the American Public Health Association is a valuable paper bearing the above title, by Dr. George M. Beard, showing careful and thoughtful research for several years past, and he gives evidence to illustrate and sustain the following views and conclusions:

First. That the brain-working classes—clergymen, lawyers, physicians, merchants, scientists, and men of letters—lived very much longer than the muscle-working classes.

Second. That those who followed occupations that called both muscle and brain into exercise were longer lived than those who lived in occupations that were purely manual.

Third. That the greatest and hardest brain-workers of history have lived longer on the

average than brain-workers of ordinary ability and industry.

Fourth. That clergymen were longer lived than any other great class of brain-workers.

Fifth. That the longevity increased very greatly with the advance of civilization, and that this increase was too marked to be explained merely by improved sanitary knowledge.

Sixth. That although nervous diseases increased with the increase of culture, and although the unequal and excessive excitements and anxieties attendant on mental occupations of a high civilization were so far prejudicial to health and longevity, yet these incidental evils were more than counterbalanced by the fact that inflammatory diseases have diminished in frequency and violence

in proportion as nervous diseases have increased; and also that brain-work is, *per se*, healthful and conducive to longevity.

Of the method by which he arrived at these conclusions he says:

"I have ascertained the longevity of five hundred of the greatest men in history. The list I have prepared includes a large proportion of the most eminent names in all the departments of thought and activity.

"It would be difficult to find more than two or three hundred illustrious poets, philosophers, authors, scientists, lawyers, statesmen, generals, physicians, inventors, musicians, actors, orators, or philanthropists, of world-wide and immortal fame, and those whose lives are known in sufficient detail, that are not represented in the list. My list was prepared, not for the average longevity, but in order to determine what time of life men do their best work. It was, therefore, prepared with absolute impartiality, and includes, of course, those who, like Byron, Raphael, Pascal, Mozart, Keats, etc., died comparatively young. Now, the average age of those I have mentioned I found to be 64.20-100

"The average at death at the present time, of all classes of those who live over twenty years, is about fifty. Therefore, the greatest men of the world have lived longer, on the average, than men of ordinary ability in the different occupations by fourteen years; six years longer than physicians and lawyers; nineteen or twenty years longer than mechanics and day laborers; from two to three years longer than farmers, and a fraction of a year longer than clergymen, who are the longest lived class in our modern society.

"The value of this comparison is enforced by the consideration that longevity has increased by the progress of civilization, while the list I prepared represents every age of recorded history. A few years since I arranged a selection of one hundred names, comprising the most eminent personages, and found that the average longevity was over seventy years. Such an investigation any one can pursue; and I am sure that any chronology comprising from one to five hundred of the most eminent personages in history, at any cycle, will furnish an average longevity of from sixty-four to seventy years.

"Madden, in his very interesting work, 'The Infirmities of Genius,' gives a list of two hundred and forty illustrious names, with their ages at death. The average I found to be sixty-six and a fraction."

He says that great men who are permanently successful have correspondingly greater *will* than common men, and that force of will is a potent element in determining longevity, and that the highest seats in the temples of art and poetry, as well as of science, are given to those only who have earned them by the excellence that comes from *consecutive effort*, which everywhere tests the vital power of the man.

That which Dr. Beard terms *will* is derived from, and dependent upon, a combination of phrenological faculties and a nervous temperament, and they all create enthusiasm, which inspires will, and thus gives force of character and self-control in the direction which it leads them. It has long been recognized by writers on mental philosophy that the chief differences in the success of men consists in the *power of attention*. Other observers of human nature also acknowledge it. Sir Arthur Helps, in *Macmillan's Magazine*, for June, 1870, said:

"It was one of Mr. Dickens' theories, and, I believe, a true one, that men differ hardly in anything so much as their power of attention. Lord Lytton—himself an indefatigable worker—was of the same opinion. 'What men want,' he wrote, 'is not talent, it is purpose; in other words, not the power to achieve, but the will to labor.' And Lord Chesterfield had observed before him: 'The power of applying our attention, steady and undissipated, to a single object is the sure mark of superior genius.'

"Take the testimony of two schoolmasters of the highest class. Dr. Arnold, of Rugby, wrote, as the result of his great experience: 'The difference between one boy and another consists not so much in talent as in energy;' and his successor, Dr. Temple, in one of his sermons (third series), says: 'Nothing can be a greater mistake than to suppose that genius dispenses with labor. What genius does is to inspire the soul with a power to persevere in the labor that is needed; but the greatest geniuses in every art invariably labor at their art far more than all others, because their go-

nus shows them the value of such patient labor, and aids them to persist in it.'"

It is this enthusiasm which is the groundwork of their increased longevity, as well as of their success. Many persons overwork, and thus wear out life's machinery prematurely; but many more rust and rot to death. Idleness engenders the morbid humors that speedily disorganize the body. The conditions of health and life are constant transformations, and functional activity within limits tends to vigor and the self-preservation of an organ, and of the body to which the organ belongs. It is as much the function of the brain to cerebration as of the stomach to digest, and cerebration, like digestion, is normal, physiological, and healthful. Anything that arrests the motion of the blood corpuscles, proportionately injures the body and all related to it. Some of the manifold advantages that all active and industrious persons have over the torpid and indolent are, the great inability of disease to fasten itself on them, and their speedy recuperation from the effects of hard work or disease, because the principle of self-preservation is the basis of all vital action, and the first law of life. If we are well, it is because of normal action, that is, absence of disturbing causes. If we are sick, it is because of abnormal action, the presence of disturbing causes. If these disturbing causes are rapidly thrown off, health is soon restored.

Enthusiasm also naturally leads most men to observe and study the most available means by which they can reach the object for which they are laboring. Hence brain-workers must and do endeavor to understand the physiological laws of health, and obey them more than muscle-workers, and although they may be given to extremes, and sometimes disregard these laws, yet their power of rapid recuperation, to which we have referred, will render its effects less injurious to them than to others.

Dr. Beard says:

"The nervous temperament, which usually predominates in brain-workers, is antagonistic to fatal, acute, inflammatory disease, and favorable to long life.

"Comparative statistics have shown that those in whom the nervous temperament prevails live longer than those in whom any one

of the other temperaments prevail, and common observation confirms the statement. Nervous people, if not too feeble, may die every day. They live, but they do not die; they talk of death, and each day expect it, and yet they live. Many of the most annoying nervous diseases, especially of the functional, and some even of the structural varieties, do not rapidly destroy life, and are, indeed, consistent with great longevity. Many men and women who were nervous invalids for a half a century or more have died at an advanced age.

"It is one of the compensations of nervousness that it protects the system against those febrile and inflammatory diseases that are so rapidly fatal to the sanguine and the phlegmatic. The nervous man can expose himself to malaria, to cold, and dampness, with less danger of disease, and with less danger of death if he should contract disease, than his tough and hardy brother."

The mental peculiarities of eminent men have been observed and noted by Disraeli in his series of "Curiosities of Literature." In one of them, entitled, "The Literary Character Illustrated by the History of Men of Genius Drawn from their Own Feelings and Confessions," he has a chapter on the "Enthusiasm of Genius," and after giving numerous examples of it in the lives of great men in literature, science, and art, he says:

"Other great and similar labors attest the enthusiasm which accompanies their progress. They have sealed their work with their blood; they have silently borne the pangs of disease; they have barred themselves from the pursuits of fortune; they have torn themselves away from all they loved in life, patiently suffering those self-denials to escape from interruptions and impediments to their studies."

With close and constant mental occupation evil days are passed over, and the little annoyances of ordinary life are not felt or heeded. Such a life is like a big ship which can not be affected or disturbed by the ripples which come from every breeze. In strength there is happiness—to be weak is to be miserable.

Enthusiasm is the foundation and parent of heroism.

Among the heroes in science we can refer

to J. N. Augustin Thierry, the French author of many historical works of great value. His labors and researches were so great and constant that at the age of thirty he became, from loss of sight, unable to read and write, and one year later he was entirely blind and paralytic; but even then his labors did not cease, and he continued on in his works for more than twenty years, and died in 1856 at the age of sixty-one. His life was one of continual physical suffering and affliction, yet Solomon in all his glory did not equal him in happiness; for the king, after devoting a large portion of his life to sensual enjoyments, at last appreciated that it was all vanity. This hero of science, in his autobiography, tells a different experience of himself. He says:

"Blind and suffering, without hope, and almost without intermission, I may give this

testimony, which from me will not appear suspicious: *there is something in the world better than sensual enjoyments, better than fortune, better than health itself—it is devotion to science!*" * * * "This is what I have done, and would do again if I had to recommence my career; I would choose that which has brought me where I am." * * *

"If, as I delight in thinking, the interest of science is united in the number of great national interests, I have given my country all that the soldier mutilated on the field of battle gives her. Whatever may be the fate of my labors, this example, I hope, will not be lost."

Truly no person can read his record and testimony without feeling nobler and better. The history of literature, science, and art is made up of similar heroes. And to them the world owes its progress. R. S. GUERNSEY.

VACCINATION FOR SMALL-POX.

THE favor with which vaccination is regarded at the present day renders it more or less hazardous to ask questions. Brow-beating is the first argument employed against the doubter; and legislation, which is the aggregating of brute force, is the ulterior logic. Children going to school are vaccinated perforce; and now, as if there must be no protection for the skeptical, their attendance and, in sequence, their vaccination, are made compulsory. Perhaps if there were no ground of doubt in regard to the premises, we ought to accept the deductions un-murmuringly. The impulse of the period has been to devolve all upon the Government, and curtail the freedom of the individual, and to subject the private to the public conscience, as is done in the religious establishments of the Old World.*

* Education and old-school medical practice, constitute our hierarchies; and the latter seems to be a sort of Brahmanical or sacerdotal caste, that aspires to all power and tolerates no questioning of its edicts. Poor Mani, the apostle of Gnosticism, was flayed alive for differing from a council of Magi; John Huss was burned alive, and the bones of John Wickliffe dug up for the fire, by order of the Council of Constance; and a similar temper often seems to pervade the governing circles of old-school medicine. Fifty years ago it was a penal offense to treat a sick man without their consent; and

Orthodoxy in medicine, however, is not alike in all ages or countries. It is fortunate for men persecuted in one city to have another whither they can flee. Homœopathy and animal magnetism have derived benefit from such a state of facts. The times, too, change, and so men, and especially medical men, change with them. In 1830 a physician who would not bleed and deplete was accounted eccentric, irregular, and empirical; now only the Bourbons do it—so that when they die these methods of treating the sick will be enumerated by some future Wendell Phillips—we hope by the present one—among the "Lost Arts."

Medical men have their *manias*. Under this head we class venesection, and their madness in the employment of mercury. Tyndall and his fellow-laborers are developing a new hobby, a germ-theory—which possibly future savans may show to belong to the same category. Charles II., of England, was dosed with a salt extracted from

they are now welding new chains for an analogous object. State Boards to license physicians, and Boards of Health, State, local, and national, to which only old-school physicians are eligible, are part of the machinery of a similar dispensation of Pope, cardinals, and ecclesiastics.

human skulls, and George Washington bled beyond power of recuperation, and blistered till the poor old man begged his medical attendant to cease the barbarous torturing and let him die in peace. The humbug of counter-irritation is not yet unlearned, but it will be.

Dr. William A. Hammond, in his able work on Nervous Diseases, has given us some valuable suggestions in regard to the treatment of *intellectual insanity*. "If," says he, "the individual accepts his false perceptions as facts, his intellect participates, and he has delusions. A delusion is, therefore, a false belief. It may be based upon an illusion or an hallucination; may result out of false reasoning in regard to real occurrences, or be evolved out of the intellect spontaneously by the result of imperfect information, or of an inability to weigh evidence, or to discriminate between the true and the false." In such cases, he assures us, "there is no fault in the intellectual processes after the first step is taken. It is this first step which constitutes the disease—it is the delusion which enslaves the intellect.

Now, we can tolerate these observations, while they are confined to the individual, and occasion no interference with the volition and freedom of others. But when men, under the influence of delusion, are invested with governmental authority, the matter requires correction. Caligula became insane when Emperor of Rome; Paul of Russia was slaughtered, and George III. was caged for a like infirmity. In this country, where majorities are said to rule, we need to assure ourselves that men afflicted with a delusion, though, perhaps, having "no fault in the intellectual processes after the first step is taken," do not incorporate their aberrations into our statute laws.

Hammond suggests a valuable routine of moral treatment, such as the companionship of sensible people, etc. Conceding that it is useless to attempt to reason a lunatic out of his delusion when there is serious structural lesion of the brain, as "the false intellectual conception is then a fixed result of the altered brain-tissue," he proposes that the end may be sometimes attained "by never for an instant admitting the truth of an insane delusion, and, at suitable times, urging such

arguments against it as would be convincing to persons of sound minds." The hope may be entertained that the individual may come to see the falsity of his ideas, and though he may, and very likely will, take up with another delusion, the last will be held with much less tenacity than the first.

We would like to see this treatment applied to the medical hobby of vaccination, which is now the rage. We do not assert that it is a delusion, but are of opinion that it would be well to apply the peculiar moral agencies suggested by Dr. Hammond, so that in case it is such, it may be removed before the mischiefs of a general inoculation with blood-poison shall have been incurred. As we are addressing intellectual men, we are conscious that their logical faculties must be exercised in the matter, and that any attempt to arouse popular prejudice, in lieu of convincing, will react and ultimately defeat our purpose.

Is it a proper method of protection from any malady to infect the patient with another? Does not such an expedient reveal ignorance of proper prophylactic knowledge?

Does not the contracting of a disease so far mar the integrity of the constitution as to render the person liable to attacks of various complaints, from which he would otherwise have been relatively exempt? If this is admitted to be the fact, is not the exemption from small-pox dearly purchased, when, by being once infected with vaccine disease, the patient is rendered liable to exanthema, abscess, glandular, and perhaps pulmonary disorder? We waive the diseases actually communicated, such as syphilis, and blood-poisons of other character, though such occurrences are so frequent as to constitute a greater calamity than small-pox itself. But, of course, they can be obviated by the use of bovine lymph; and the question ought to be determined upon its merits.

Is not vaccine virus itself a substance so contaminating in its nature that it ought never to be introduced anywhere? It has been affirmed that it was originally the product of a species of contagious horse-consumption, and was communicated from infected animals to the teats of cows by dirty grooms in milking. We do not know whether this statement is correct, but it is very sug-

gestive. The propagation of such an ailment would be likely to eventuate in the diffusion of malignant pulmonary or glandular disease. Indeed, is it not worthy of inquiry whether the extraordinary prevalence of consumption in Great Britain, New England, and other parts of this Union, is not to be attributed, in a considerable degree, to this vaccine contamination?

But, again, is not the exemption from small-pox, which the vaccine disease is supposed to assure to a great extent, a delusion? Are not a large proportion of our population safe from its attack because of being in normal health—a condition which more or less precludes the invasion of any contagion, or spore of infection? Is it not a notorious fact that many persons who have been vaccinated and had all the symptoms of the disease—the raised and perfected pustules from which virus was procured that successfully infected other patients—have, nevertheless, been attacked with small-pox from contagion?

Are we not justified, therefore, in presuming that in those cases where vaccinated individuals have secured apparent exemption from small-pox, there was not some reason, some law or condition with which we may not be acquainted, to which they were actually indebted for such exemption, so that they would not have been attacked by it at all? We all know that there are always such persons in every neighborhood who seem to bear a charmed life, and to be proof against specific contagion.

Has small-pox ceased to be epidemic since vaccination was introduced? If it is in any degree less mortal, is not the amelioration due, in a large degree, to the better care now given to the sick since attention has been directed to hygienic conditions?

Indeed, does small-pox itself, once contracted, exempt the patient recovering from it, from its recurrence? We have read of second attacks, and an accomplished medical writer in England recently stated that he had met with an instance where the person had the disease the third time. If this is the case, have we reasonable ground for hope that the vaccine disease will let us off on any ground more assured than small-pox itself?

If, then, neither vaccinia nor variola can be depended upon to assure a person against

small-pox, without other prophylactic measures, will it not be well for us to depend upon hygienic and sanitary precautions, as we ought in other diseases, which threaten to become epidemic?

If the physician is a philosopher, rather than an empiric or a man of expedients, will he not strike out for the actual averting and healing of small-pox and other maladies instead of resorting to blood-poisoning or any contaminating of the body of his patients, thus rendering them liable, if not to the disease from which exemption is sought, than to other maladies, more or less intractable, because of the vitiation of constitution which has been created?

Is not vaccination empirical, and its employment a confession of professional ignorance and incompetency, which every physician emulous of the honor of his vocation should labor to obviate?

There has been of late years a great sensitiveness to zymotic, eruptive, and tuberculous disease, as though there had been induced a great degeneracy of constitution. In Massachusetts one person in every two hundred and fifty dies annually from pulmonary phthisis; the mortality in Connecticut and rural New York is a little less, but yet sufficiently great to resemble a persistent epidemic. If we are purchasing our supposed exemption from small-pox by an increased liability to such diseases equally deadly, we are driving a hard bargain.

It is a problem that has not been conclusively determined. Instead, it has merely become a hobby of the time, which will, if not proved more definitely than it yet has been to rest on a sound scientific foundation, go out after its predecessors, and be classed among the delusions which had their day and then were forgotten.

According to Dr. Gregory, late of the London Small-Pox Hospital, there is no perfect vaccine protection. "The doctrine of proto and deuto-vaccination will soon merge into trito, and, ultimately, as time creeps on, into poly-vaccination." He further asks, "Will a man be perfectly safe who is vaccinated or subjected to vaccination every year?"—*Braithwaite's Retrospect*. Part II., page 59.

A MORE EXCELLENT WAY.

I am perfectly aware that no impeachment

of the practice of vaccination will weigh with the public, except some equally sure protective against small-pox is proposed. Popular prejudice has set in that direction; and though we believe that the contamination of vaccine disease is a worse evil, and sure to entail a train of diseases in its way, we are aware that most persons will regard small-pox as the immediate peril to be escaped, and risk the chances on fifty others which they have not learned to fear as they ought. They will hardly heed that small-pox itself will recur a second time, and even oftener, and that the vaccinated often have it under the fictitious appellation of *varioid*. It will be of little use to assure them, further, that even three vaccinations will not protect persons of a peculiar diathesis or condition of body; and that experienced physicians of small-pox hospitals doubt whether an annual infliction of the vaccine pest will answer that end. The law-makers have adopted the popular notion, and the time may not be far distant when we ourselves, as well as the wretched children at school, will be required to submit to this blood-poisoning by force.

The surest prophylactic against small-pox is found in the maintaining of a proper degree of health. A well man can not be infected. Whether the contagion be from spores, fungus, or, as we apprehend, from an emanation from the body of the patient, it can find no *nidus*, or field for propagation except where the integrity of the physical constitution has been impaired. Fear and apprehension, everybody knows, do this. So does excessive fatigue. So does the spending of considerable periods of time in an unwholesome atmosphere, the eating of unwholesome food, and neglect of physical conditions. A person who is not in a condition inviting contagion, has no ground for fear.

We would call attention, first of all, to the condition of the skin. Its foulness is enough to find a lurking-place for the spore of every contagion that a pathologist ever dreamed about. Bathing in warm or tepid water every night will not only remove every such contaminating entity that may have lodged, but will enable the skin to unload the blood and relieve the lungs and mucous surfaces of whatever noxious element they may have absorbed. Good food, well digested, will

enable every lymphatic to do its part toward keeping the body in tone, as well as in separating for elimination whatever ought to be rejected. Every reader of the *Science of Health* and *PHRENOLOGICAL JOURNAL* ought, by this time, to be thoroughly indoctrinated.

In short, due attention to hygiene and proper sanitary conditions will keep small-pox at a distance, and prevent it from becoming epidemic anywhere; while without it there is no security whatever. Vaccination is a rotten stick, dirty at that, and not strong enough for even a toddling child. The resort to it is a humiliating acknowledgment of medical ignorance. ALEX. WILDER, M. D.

HEALTH AND TALENT—"It is no exaggeration to say that health is a large ingredient in what the world calls talent. A man without it may be a giant in intellect, but his deeds will be the deeds of a dwarf. On the contrary, let him have a quick circulation, a good digestion, the bulk, thews and sinews of a man, and the alacrity and unthinking confidence inspired by these, and, though having but a thimbleful of brains, he will either blunder upon success or set failure at defiance." So writes some one in the *Merchants' and Manufacturers' Bulletin*, but if he had a thimbleful of—observation—he would have known that it takes a good deal more than a thimbleful of brains to drive such a carcass as he has described. Setting aside all questions of honesty and other qualities of a good character, the late James Fisk, Jr., was one of the most thoroughly energetic men this country has ever known, and after his death it was found that his brain weighed some four ounces more than the brain of Daniel Webster, and only about four ounces less than the brain of Cuvier, who is said to have had the largest brain ever weighed. It takes brains, as well as muscle, to drive the business of this busy world.—*Mining and Sc. Press*.

[Fisk died in the full flush of health, and in the strength of his strong manhood. Webster's brain was diseased and weakened by the excessive use of stimulants, and he had attained to over seventy years of age, when the brain had lost, not only weight, but size. The bodies of stalwart middle-aged men might as justly be compared with those of advanced age, and in a state of disease and decay, as to compare their brains.—ED. *PHRENOLOGICAL JOURNAL*.]



True philosophy is a revelation of the Divine will manifested in creation; it harmonises with all truth, and can not with impunity be neglected. — C. G. L.

THE SUN'S DISTANCE AND THE PYRAMIDS.

SOME of the results of the observations made by astronomers during the recent transit of Venus have already appeared, and they are peculiarly interesting, because of a certain archæological relation. M. Puiseux has communicated to the Academy of Sciences in France the conclusions based upon late observations of the transit at the Island of St. Paul and at Peking. The solar parallax is given at $8''.879$, the remarkable feature of which is its exact correspondence with certain dimensions found in the great pyramid in Egypt, and which for a long time has been thought by astronomers and antiquaries to have been founded upon an extensive knowledge of astronomy possessed by the people who built that pyramid. Heretofore, among moderns, the solar distance has been estimated at two and three per cent. more than the recent investigations show it to be, and, of consequence, the dimensions in the pyramid did not closely accord. Now, the correction of the error in our calculation of the sun's distance shows an almost perfect agreement. The conclusion from this goes to prove the height to which astronomical science had been carried at the period when the pyramids were constructed, whether four thousand years ago—which the Usher chronology asserts,—or from ten to twelve thousand years ago, as is believed to be more nearly in accordance with historical fact. Old readers of the PHRENOLOGICAL may recall an article on the "Pyramids of Egypt," in which allusion was made to the learning of ancient Egyptians in the departments of engineering and astronomy; but it is not out of place to append the following interesting statements, which we find in the *Scientific American*:

"Several features in the Egyptian pyramids, especially the large one (that of Cheops), have long been a matter of surprise to scientific visitors; for instance, of having the

sides of the square base exactly in the direction of the cardinal points of the compass—north, south, east, and west; of having the long tunnel leading from the side at the mouth obliquely down to the center of the pyramid, inclined under an angle exactly corresponding with the latitude under which the pyramid is placed, so that when looking from this center outward through this long hallway or tunnel, the polar star is always seen. This induced investigators to find more peculiarities having relation to astronomical data, and it was found that the pyramid abounded in these; for instance, the distance and size of the interior chambers, gangways, etc. At every step most curious relations were found, which certainly could not have been the result of accident.

"The solar parallax means the angle under which the earth's radius is seen from the sun. As we know the correct dimensions of our earth, it becomes a simple geometrical, or, rather, trigonometrical, question to find the distance; it is simply the problem to find the height of a very long triangle, of which the small base and opposite angle at the top are given. This angle at the top is the parallax, and if it be 8 seconds and 879 thousandths, we have only to find the Sine of this angle, which will be to the Radius as the radius of the earth is to the distance of the sun. For very small angles the Sine is equal to the arc, and we have only to divide $8''.879$ (or, for simplicity sake, $8''.88$) into $360 \times 60 \times 60 = 360 \times 3,600 = 36^2 \times 1,000 = 1,296 \times 1,000 = 1,296,000$, the number of seconds contained in the whole circumference, and the quotient $145,946$ shows the fraction of the circumference corresponding to the Sine of the arc of $8''.88$, and this is equal to $2 \times 3.1415926 \div 145946 = 0.00004305145$; accepting now the radius of the earth in round numbers as 3,950 miles, we have the proportion that the Sine of the

earth's parallax is to the Radius as the radius of the earth is to its distance from the sun, or Sine $8''.88$: R—3,950 : solar distance, or 0.00004305145 : 1—3,950 to solar dist-

ance, we have therefore only to divide 3,950 by the decimal fraction 0.00004305145, which is equivalent to $3,950,000,000,000 \div 4305145$, which gives 92,000,000 miles very nearly.

OUR CURRENCY AND HOME INDUSTRY.

THE following letter from our subscriber, M. E. V. de Boissiere, of Kansas, corrects a statement respecting his private history given in the December number of the PHRENOLOGICAL JOURNAL, page 414; and also gives his views of the plan of representative money issued on combined State, county, and private security contained in the essay by Charles Sears, a sketch of which appeared in the article entitled, "The Money Unit—Representative Money," in a recent number.

That M. de Boissiere is a benevolent man, will appear from his letter; but he is more than this, he is a philanthropist in the best sense; not of the vague, dreamy sort, but practical and scientific.

Regarding the present modes of industry as a mingling of chaos and order—chaos in the absence of organization, a measure of order where organization prevails, as in government, church, education, mining, manufactures, transportation, etc.; regarding the relations of men to each other as hostile in their economic interests; and regarding the system of hireling servitude as but one remove from chattel slavery, M. de Boissiere, for a large part of his life, has sought to extend organization to all the labors of life, particularly where it is conspicuously absent, as in agriculture and domestic labor; and to abolish the hireling system by instituting co-operative labor and a ratable distribution of profits; and so enfranchise the laborer—woman as well as man—and reconcile the interests of capitalist and laborer. With these views he purchased, about nine years ago, an estate of 3,000 acres, near Williamsburg, in Franklin Co., Kansas, and is there devoting his life and fortune to the work of preparing the material conditions of the orderly, adequate commonwealth.

"DEAR SIR: I think that an amount of currency large enough for a first issue would be caused by the demand from the country and cities wanting to build improvements, at such cheap rate of interest; and that the present depression would be so well relieved by the demand for labor and the demand of laborers for goods, that an enthusiastic movement would follow for other plans of reform. * * *

"My story as given by the PHRENOLOGICAL JOURNAL is not quite correct; I did not sell any part of my property near Bordeaux. I went to New Orleans in 1866, after the war, and gave ten thousand dollars toward the purchase of a plantation for providing an asylum for colored orphans, that is all. During slavery no colored foundlings were left destitute; but directly after the war many were to be provided for, and there was no institution for that purpose in existence.

"I agree fully with your plan for distributing currency in sinking fund loans. The bonds pledged by the counties and States will be a complete security against over-issue, and will guaranty the 3.65 bonds and exchangeable currency as the most sure investment. John Bull himself would accept them at par with his own consols (3 per cent. at 92), and our paper currency would be accepted by Europe, giving the lie to the axiom that gold only can be employed as means of exchange with foreign nations.

"What rejoicing there would be in Kansas if the farmers could get money at seven per cent. for building improvements, and at this rate pay off principal and interest in sixteen years! They are not able now to borrow at twelve per cent. interest; and have to repay the principal besides. Their capital is absorbed by usury.

"This question is certainly the most important ever agitated, and the present condition of affairs makes the present time important for its discussion. If your plan were adopted, its organization would be succeeded by a period of prosperity unprecedented in the history of nations.

"Then the plan proposed by Thomas J. Durant ought to be discussed, because it is the only one adapted, with modification of details, to the creation of a currency proper to float the necessaries of life from producer to consumer at the least cost.

"I would like to have it well understood that the 3.65 bond exchangeable currency is intended only for the creation of improvements—of things realizing their value by annual income, that is, for permanent investments not destined for consumption. The currency de-

signed to float products of consumption must represent such products; must be issued against deposit or attachment of such goods sufficient to cover fully the currency issued; must be exchangeable at sight for any goods of like value, and be canceled or kept from circulation when the consumer gives it in payment for supplies. * * *

"Our neighbor, Mr. Leutsk, told me lately that he would try rye as a crop in Kansas, because he thought the straw would become hard before the chinch bug would be ready to suck the sap. Flax for seed, and castor beans are chinch-bug proof; but the last declined in price since last year in St. Louis, being quoted at only \$1.50, and flax at \$1.68.

"Cheese factories are multiplying around me, and probably I will start one in the spring. At Lindon the cheese-maker said that he got a cheese weighing 340 pounds from 1,050 pounds of milk, which cost him one cent per pound. Milk at a cent a pound makes eight cents a gallon, and the farmers eight miles around find the price satisfactory. The cheese is very good, and sold in October at 12 cents, now at 14 cents a pound. Lindon ships to Galveston, Texas. * * * Yours, truly, C. V. BOISSIERE.

"WILLIAMSBURG, KANSAS."

Our correspondent evidently mistakes the theory of the advocates of the 3.65 bond recip-

rocaly convertible with greenbacks, if we comprehend their views. They argue that a nation so fearfully indebted as we are, can not, with any show of propriety, be a loaner of money. They especially condemn the loaning without interest to the national banks of \$354,000,000, while the same liberal loaner, the Government, is paying the same borrower an usurious rate of interest, aggregating, with exemption from taxes and premium on gold, fully nine per cent. per annum, which is just three times what England pays on her consols, of which she has repudiated the principal.

What they do claim is that every dictate of common sense and patriotism should induce us to give our own citizens the privilege of being their own Government creditors by holding the small bonds called greenbacks, without interest, with the privilege of converting the same into larger bonds bearing 3.65 interest, payable in currency, instead of hawking bonds bearing usurious interest in gold all over Europe, and taking pay for the same (as per testimony of Bonamy Price) in carpets, dry-goods, and nick-nacks, our own furnace-fires being extinguished and our factory wheels stopped while our consumers are using up those fabrics which should have been produced at home, thus forcing our workmen into idleness, beggary, starvation, and suicide.

UNCONSCIOUS FASCINATION.

THE influence which some people possess, almost unconsciously, over others is so marked as to be undoubted. There are people so constituted that their opposites in temperament seem to have a perfect control over them, leading them, at times, into by-paths against their better judgment. For my part, I never condemn the boy or girl, man or woman, who is thus led astray. One might as well blame the bird that flutters into the serpent's mouth to become food for the monster. It is conscious of its danger, and is in mortal terror of its adversary, and seems unable to resist the fascination that is leading it to destruction. The serpent knows its power over the bird; so some men and women know their power over other men and women. Again, this power is used unconsciously, sometimes for good, and sometimes for evil. How often do we listen spell-bound to a speaker, and wonder afterward why it was

so; recalling nothing but commonplace remarks, and feeling conscious that we have wearied while hearing better discourses. To illustrate the power of fascination possessed by some people over others, I intend to give a bit of life-history, which may set the reader to thinking, if it does no greater good.

Some twelve years ago, in a small city in northern Wisconsin, resided a McCann family, the proud but poor descendants of a once famous house of Scots. It had a long lineage of ancestors, which its present members delighted in rehearsing to the few people whom they called friends. This family consisted of the parents, one son, and four daughters, all grown-up with one exception; though the third daughter, Belle, whose history I am about to give, was scarcely more than a child in years, only fifteen of which had been counted in her life. She was large for her age, and well developed, inclining to

be rather stout and fleshy. She was a blonde of the fairest type, possessed of an easy, loving disposition, and had more than average intelligence for a girl of her years. The elder sisters were married, and had homes of their own. Ella, the oldest of the four, resided in the town of S—, and Lillian, the second, on a farm ten miles from S—.

After the marriage of her sisters, Belle found her home lonely. Mrs. McCann mourned over her lost wealth and station, and was so harsh that she became an uncongenial companion for her children. Mr. McCann was kind, but he was an easy sort of a man, who never interfered with his wife in any of her moods; and though the children loved and clung to him, he had no power to ward off the mother's harshness from them. Strange as it may seem, Mrs. McCann's ill-will fell most upon the gentlest of the flock, her daughter Belle, who was never brave enough to contradict any one, or even to set her will against that of her mother. She was fair to look upon, had light, curling hair, blue eyes, and small features. She was given to romance, and delighted in novels which had robber heroes. She had some talent, of a literary character, which might have won for her, if improved, some notice in the world. She was not a gloomy person, but was unhappy at home. Her very meekness only angered her mother. The married sisters, seeing how matters stood, resolved to take her to S—, and there educate her. They had great hopes for her future. Though they had married common-place men themselves, they prophesied a golden future for her. The proposition pleased the mother, and the change was made.

While at school in S—, Belle made remarkable progress in her studies, proving herself to be a steady and an apt pupil. But she continued her novel-reading, and dreamed of a daring hero who should snatch her from her friends, and make her queen of a pirate's castle.

"There he goes!" she exclaimed, one summer evening, glancing up from a novel she was reading.

"Who?" I asked. (They were neighbors of mine, and I had "run in" for a short call.)

"My hero," she answered with a laugh.

I looked out. In a sulky, driving leisurely

along, was a man answering to her description of her heart's hero—slim, straight, and tall, with black kinkey hair and whiskers, and eyes black and flashing. His gaze was resting on the girl at the window, in a way that said, I shall know her better some day.

"Who is he?" I asked.

"I do not know," she replied; but she did not take her eyes from his face all the while.

"Come away, Belle," said Ella. "He will think you have fallen in love with him."

"I have," responded Belle with the utmost simplicity. "He is my hero, and he is my destiny."

"Hear the child talk!" exclaimed the elder sister.

"He is, and I know it!" persisted Belle, now turning her face toward us, for the stranger had passed out of sight.

"Don't talk to me about destinies. If you dare say 'beau' for five years to come, I'll disown you. We want to make something of you besides a husband-hunter. A girl of your age should think of nothing except her books and work."

There was a spice of bitterness in Ella's tone as she said the last. Belle made no response. She heaved a little sigh, and went on with her reading.

Ella and I had conversed some five minutes on some unimportant topic when Belle interrupted us—

"There he goes again!"

We both looked out now, and both saw the man in the sulky, driving in the direction from which he had come a few minutes before. His black eyes were fixed on Belle's face, and her gaze rested on him.

"Come away! You are making yourself ridiculous," cried Ella, angrily. But Belle moved not until the sulky and its occupant were out of sight; then she heaved another sigh, and, rising, left the room.

"Strange conduct," commented the sister.

"What is strange conduct?" asked a blue-eyed, brown-haired girl, who at that moment danced into the room.

"Why, a chap in a sulky staring in at the window."

"Oh, Harvey Williams, you mean, I guess. Can't expect anything better of him. He is a drinking, gambling *roué*, to make the best

of him. But some girls think him splendid. He 'minds me of a snake, and charms like one. He has his eyes on some of you, likely; and if he has, you will think him splendid, too.'

She struck into a gay tune, never noticing the uneasy expression on Ella's face. For my part, I was mystified.

Mary Dale was the daughter of a neighbor, and an intimate friend of mine. She was also one of Belle's friends.

"I am going home; can't you bear me company, Mary?" I asked. I wanted to tell her about Belle's strange conduct.

She nodded her pretty head in reply to my question, and followed me into the street. Then I told her how Belle had acted.

"She will rue the day that she ever saw him," was the response. "I knew one poor girl that he drove to ruin, despair, and death. A hero, indeed!"

A week later Belle informed me that she had meet her hero at the house of a friend, the previous evening, and had had an introduction to him. He was a "duck" of a man, and she was already in love with him. Ella found this out, and forbade her sister to speak to Harvey Williams. But it did no good. Soon afterward Belle came to Mary Dale and me, and, with tears in her eyes, informed us that she should die if deprived of Harvey's society. He loved her and she loved him, and she could not give him up. We were sorry for her, and were soon won over to her cause. The meetings were continued. When two make up their minds that they *will* meet, they are very apt to do so. In this instance, Mary Dale and I helped the lovers, just out of pity for Belle. The two elder sisters grew furious whenever they chanced to hear of the meetings, and berated Belle for her ingratitude. They had even now selected a husband for her—a John Wilson, who was well-to-do in the world, and whose heart was already entangled in the meshes of her golden hair. Together these sisters had decided to marry her to this John Wilson as soon as she had completed her education. But it was not to be, for one evening, when both sisters were out of S—, Mary and I helped the infatuated girl to clope, a thing that both of us have regretted ever since. It was not really an elopement,

either, for she was married secretly, and after the ceremony was ended, she went back to her sister's house, and remained there for several days so quietly that Ella never imagined that what she was trying so hard to prevent had really taken place.

The following Sunday, Williams walked uninvited into Ella's parlor. John Wilson was there, and so were Mary and I. We had expected a *denouement* on that day, and were watching for it. But John Wilson was as ignorant as Ella of the marriage.

"Introduce me!" said Williams in a commanding tone to Belle.

She turned white and faltered, but his dark eyes were on her, and she did not dare to disobey him.

"My husband," she said faintly.

The consternation of the party can better be imagined than described. John Wilson turned deathly pale, and Ella threw up her hands with a loud scream.

"I congratulate you," said the young man to Belle in tones of bitter irony. "May you be as happy as you deserve to be."

He then bowed himself out of the house.

Mary and I were sorry that we had had anything to do in the matter, and, following John Wilson's example, we took an unceremonious leave.

Half an hour later, Belle came to us with the information that her sister had ordered her husband and herself out of the house, and that Williams had gone for a carriage in order to convey her to his mother's residence.

Mary and I saw Belle sometimes after that, but not very often. The family breach was soon healed, but Belle kept closely at home in attendance on her husband. She pretended to be very happy, but she grew sad, pale, and dispirited, becoming, in a few months' time, a mere wreck of her former self.

At last we found that our friend was ill-treated by her husband. Her life had become one of torment, hopeless and aimless. Her husband never addressed a kind word to her, but was jealous, tyrannical, and abusive, treating her like a mere slave. He not only required that she should stay entirely at home, but he banished all books and papers from his dwelling, thus removing all means of recreation and improvement. He

was very ignorant himself, as were all of his family, and he was not willing that his wife should excel him in knowledge. He spent his days in driving fast horses and his nights in gambling. Two children were born to this ill-mated couple—a boy and a girl. The girl died in early infancy, and the wretched mother thanked God that it was so.

We advised our friend to break her chains, and begin a new life away from the tyrant; but she told us that she could not do so. She did not love him as she once had done, but he possessed a power over her that she could not resist. What the power was, she could not tell, but that it did mold her every action she could not deny. He had ruled her thus since the first time that his eyes fell upon her, and she feared that he would always rule her thus. We had much advice to give; but advice is so easy to give and so hard to follow. A cold philosophy is of little benefit to a woman's heart. It cheers about the same as the sun does a frozen plant—withering instead of refreshing. Here men are grander, better fitted for life. Its coldness does not freeze, its sun does not wither their souls. Belle clung to her husband through several weary years, living a life that was a curse and longing hourly for death—clung to him until, one morning, when she discovered that he had eloped with a widow, who had resided in the same

village. Then, woman-like, she wept for him and for her lost happiness. But her child demanded her care, and she was obliged to seek employment in order to support herself and him. The work was a panacea for her sorrow, and her health began gradually to improve. As the months came and went, without bringing word from her husband, her eyes began to brighten. Fully removed from his influence, she despised him, and hoped he would never return. "I will never live with him again if I can help myself," she would say. "I think his influence is gone, but I fear that it is not. I hope he will never return; if he does, and I show a disposition to follow him, I hope that somebody will shoot me, for I would sooner die." But he did return, after a two years' absence, and demanded that she should accompany him South—yes, returned just as she was thinking about asking for a divorce.

"I must go with him—I can not help it," she said in a broken-hearted sort of a way; and she went.

If his power over her is not fascination, or psychological influence, what is it? If it is fascination, then how is she accountable for her acts? Again, if one person can exercise such an influence over another, is not the wrong person often condemned for a crime? How great our charity for the erring should be!

BELLA FRENCH.

A NEW AND HUMANITARIAN INDUSTRY.

HOW GOOD MAY BE DONE AND PROFIT REAPED TO CAPITALIST AND COMMUNITY.

FROM the San Francisco *Chronicle* we obtain the following:

"At the corner of Sixth and Berry streets, workmen are now raising the frame of a new building 60x240 feet. This building is intended for the manufacture of agricultural implements—a new industry here, for all our agricultural instruments have been hitherto made in the East, or at the State Prison. Yet, had it not been for the public spirit and liberality of one man, the application of free labor in San Francisco to this branch of industry might have been much longer delayed. The way workmen come to be now putting up the frame of this new building, is this: Mr.

Soule, who is to have charge of the new factory, is an old resident of this State, who was for many years a valuable and honored citizen of Sacramento City, where he was known as a most energetic and worthy mechanic. For several years passed, Mr. Soule has been superintending convict labor at San Quentin, which has been repugnant to his feelings, and he has often so expressed himself to his friends. He has often been heard to say, that his ambition would be filled if, instead of teaching convicts, he could be so situated as to impart his skill to the boys of California, before they were contaminated by vice and branded as criminals.

"These facts were recently brought to the knowledge of W. C. Ralston, who, with that prompt decision which characterizes all his actions, said, 'Send him to me.'

"The party to whom this was said soon communicated with Mr. Soule, and in a few days he and Mr. Ralston were brought face to face, when the the following dialogue took place:

"'Mr. Soule, I know something of your antecedents, and have been told that it is your ambition to devote your energies and skill to making mechanics of our boys.'

"'Yea, sir, you have been correctly informed. I am at present directing one hundred convicts at San Quentin, and am imparting to them my skill as a mechanic, and though profitable to me, it is repugnant to my feelings, and I would greatly prefer to be training hundreds of the youths of this city.'

"'What amount would enable you to carry out your plans and make the enterprise self-sustaining?'

"'With an investment of say twenty thousand dollars I can, I am sure, make the institution not only self-sustaining, but a dividend-paying enterprise within a year's time after it is under way. I will, in addition thereto, within five years, turn out hundreds of skilled mechanics, and, in the meantime, save to the State of California hundreds of thousands of dollars, which would otherwise be sent out

of the country to pay for such articles as I can produce.'

"'I see it. *You can have the money.* Secure a good location and commence operations at once.'

"Thus ended the brief interview. The great banker turned his thoughts upon other matters requiring his attention, and the hopeful mechanic, at last on the road to the gratification of a noble ambition, wended his way in quest of a lot suitable for his purpose. Five minutes conversation with another energetic and public-spirited man, Henry F. Williams, settled this matter, by a lease from Mr. Williams of a suitable lot on the most satisfactory terms, and the erection of the building is now going on.

"Thus starts a new enterprise; but who will venture to estimate the harvest of good to be reaped from this small planting of seeds sown by a generous capitalist, and nurtured by a no less deserving mechanic? Are there not others in the community who will imitate this example?"

The proprietors of a large establishment in the city of New York afford educational advantages to the young men employed in its different departments, and is of great service to society on that account. And are there not others who will follow so good an example, and give American industry a help in a most profitable way?

A NEW VIEW OF SPIRITUALISM.*

A VOLUME of somewhat remarkable interest has just been issued. It consists of the notes of a special inquiry concerning the etiology of certain phenomena called spiritual, which are now attracting the attention of the most alert scientific minds, both in this country and in England.

The author of this work claims to have settled, by facts of observation and by actual experiment as to their nature, that the phenomena of Spiritualism are constantly associated with the epileptic temperament, and are really transformed epileptic paroxysms. His method of

investigation, as regards this issue, has consisted simply in a careful and minute inquiry concerning the early history, parentage, and hereditary tendencies of professed spiritual mediums, among them Mr. Home, Foster, Andrew Jackson Davis, the late Judge Edmonds, J. R. Brown, and many other noted exponents of the system. In the well-known case of the Eddy Brothers he traces the hereditary taint for two generations in both the father and the mother of the mediums. He has, he thinks, collated a sufficient number of cases to establish this point as an undoubted scientific verity, and boldly asserts that, from this aspect, the phenomena, whether purely psychic in their attitude, and consisting of clairvoyance, trance, and prevision, or of a more dynamic type, as in table-tipping, induced rappings, and writing

* "Ten Years With Spiritual Mediums." A inquiry concerning the etiology of certain phenomena called spiritual. By Francis Gerry Fairfield. Published by D. Appleton & Co., New York. Price, \$1.25.

with phantom hands, are to be regarded as the exponents of perversion of the nervous system, and as having no ascertained or ascertainable relation to true spiritual culture. His view is that trance of the higher type is the exponent of morbid function of the cortex (or convolutions) of the brain; and this view he supports by the fact that, in persons of this temperament, trance generally supervenes under the action of anæsthetics, particularly those of the ether class, after the ordinary motor and sensory functions of the nervous system have been completely extinguished. He gives several instances in which this has occurred, and one in which the habitual use of sulphuric ether was instrumental in developing spontaneous and periodical attacks of this kind. He, therefore, regards somnambulism as an initial stage of the same disorder, quotes instances in which it has coexisted with clairvoyance, and, what is more singular, states, as a fact of personal observation, that in the several instances he has had an opportunity of observing, the somnambulist attack has been invariably heralded by slight but perceptible nocturnal convulsions. If these facts are universal, the presumption that somnambulism, with all its singular psychical phenomena, is in the nature of a nocturnal epileptic spasm, is certainly a very strong one. Pursuing this aspect of the subject, he adduces facts to show that the literature of Spiritualism is the product of an intellectual aura engendered by nervous disorder.

According to his view, the particular portion of the cortex of the brain, in which this morbid function is set up, determines the type of the phenomena that result. If, in the convolutions of the anterior lobes, the extinction of consciousness is not necessarily complete, and the morbid sensorial impressions may coexist with conscious cognition of enviroing facts. If, in the convolutions of the coronal region, the impressions take the type of morbid religious or spiritual imagings, and more definitely participate in the preternatural. Or, depending upon the centers affected, the trance medium may paint strange interior pictures, or break into gusts of music, which he could no more imitate in the normal condition of his nervous system than he could produce something from nothing. The author instances cases in which the trance activity has taken these specific forms.

Another point which Mr. Fairfield regards as an established verity is that the trance phenomena of Spiritualism are invariably associated with the cerebral temperament, while ta-

ble-tipping, rappings, spirit-materializing, and the kindred dynamic phenomena are invariable in their association with the vital temperament. To enforce this point, he carefully specifies the temperament in each case, and concludes by stating that he finds not a single exception to this rule in the many instances he has personally investigated.

And this leads to the discussion of the third main point of the volume, namely, that the nervous perversion of epilepsy develops in many instances, simultaneously with the attack, a true sensory and motor aura (or nervous influence), which he traces to the molecular disturbance of nervous tissue. This, in common with medical psychologists, he styles nerve aura, meaning by that term the specific molecular influence of nervous tissue under conditions of extreme excitation such as occur in epileptic disturbances of the nervous system. His claim is that the psychic force insisted upon by Dr. Crooks, as concerned in these states, is an incorrect term to apply, and that the force concerned in them is a nervous influence specifically resulting from extreme molecular disturbance of the nervous centers of the brain and spinal cord, or both. In accordance with ascertained facts of nervous physiology, he refers this nervous influence to the gray excitor tissue of these tracts, and being himself an amateur experimentalist in physiology, supports his views both by pathological observations and by experimental data. The nervous influence is, he claims, of the same nature and genetic origin in all instances—that is to say, the direct and immediate exponent of molecular disturbance of the gray excitor tissue. The question whether it exhibits itself in psychical phenomena and morbid sensorial impressions, or in dynamic and motor phenomena of the table-tipping class, depends purely upon the temperament of the medium. If the temperament is cerebral, the sensory class will follow; if, on the other hand, it is vital, the motor class will follow. If, again, it is evenly balanced, both may occur, but neither in its most extraordinary development.

For the facts that support these somewhat extraordinary and subversive views, the reader must scan Mr. Fairfield's volume, which is a museum of facts, with very little theorizing, except such as the nature and bearing of the facts themselves have required. It should be added that Mr. Fairfield expends no ingenuity in attempting to deny that extraordinary phenomena are really associated with Spiritualism, or in trying to explain them by vague electrical

theories. The detection and exposure of fraud was not within the scope of his plan, which seems to have been to collect, sift, and record such phenomena as are undoubtedly genuine, and to offer the simplest physiological explanation of them.

The *Homs Journal*, of this city, has the following brief biography of Mr. Fairfield, which will both answer for his competence to discuss these issues, and tell what manner of man one of the frequent contributors to the PHRENOLOGICAL JOURNAL is:

"Mr. Fairfield is a native of Connecticut, and was born August 18, 1839. His first lessons in Latin and Greek were taken at Monson Academy. Passing through the collegiate course, he finally graduated in the theological class of 1862, at the Lutheran Institution, Hartwick Seminary, having been in the seminary less than two of the prescribed three years. In his seminary days he was known as a promising

mathematician, metaphysician, and philologist rather than for literary talent, and more particularly distinguished for his knowledge of German literature. When, in 1864, he came to New York, it was with the purpose of supporting himself as a journalist, while devoting his leisure to physiological and psychological studies. In the latter pursuit he has made successful progress. For knowledge from actual dissection and from preparation of specimens of the comparative anatomy of the nervous system, from the ruder forms of insect life, to the higher forms of animal, and for range of experiments on living bodies, he has gained a high place among professional physiologists. His powers of analysis and subtile thought are extraordinary, and he has a memory so tenacious of facts and ideas that he may almost be said to absorb a volume at a single reading, and never to forget the details of an experiment or the general statements of a scientific author."

NEGRO LIFE IN FLORIDA.

ORANGE SPRINGS, FLA.

DEAR PHRENOLOGICAL: Let me show you a few phases of African character; we have here a good opportunity for studying their oddities and absurdities. I have one unique specimen about the house as help, who, as she frequently expresses it, has a "hanful ob chillens," the eldest named Chance, and subject to epilepsy. The mother causes the trouble, I think, by her inhuman treatment. Only last night she tied him up by his thumbs, and gave him (as she said) 150 lashes. These blacks are, as a class, very cruel, and beat their children savagely. Our Mary is one of the most enlightened of the community, and greatly looked up to because she owns forty acres of land, and possesses a small house thereon. She seems to have an absorbing thirst for knowledge, which is sometimes inconvenient, as she is given to roving around, book in hand, after me, when busy about my household duties, never considering a half-made pudding or a partly kneaded loaf the slightest obstacle to my wishes or teaching. I assure you she makes a picture out in her kitchen, when curled up on the floor beside the dog, in front of a huge pine knot fire, and bending over her books with the fire-light flickering around her dusky

face. She is in the choir of her church, which is quite near, and when not there joining in the "mighty chorus," and causing us sleepless nights, she is practicing at home the wildest and most dirge-like refrains; for example:

"Yus I've triuls *truberlations*
Oh! *yus*, triuls—I'm boun to leave dis worl."

H——, in desperation the other morn, asked her "why (in thunder) she did'nt *go*, then?"

Another of our *attachés* is a boy of fourteen, who styles himself Willie Sam; he dresses in any tatters he can find, but on Sunday is resplendent in a pair of bed-tick pants, red flannel shirt, lost in a coat H—— bestowed in pity for his rags, and wears a cap that is so capacious as to leave but a small section of chin visible. The combined effect of his costume borders on the ridiculous.

We attended the colored church last Sunday; its ceremonial was rich. How we laughed when we saw the *preacher* "heave" in sight, mounted majestically on a solemn cow, the reverend gentleman looking most profound under a tall beaver, a blue cotton umbrella in hand, blue goggles upon his nose, and a white choker around his neck.

The text was, "Get out ob de door ob de Kingdom, fur you don't go in yourself nor let in any oder brudder." Some of the remarks

were these: "I'se no coward, but its berry hard to preach to a runnin' or a walkin' congregation. I hab plenty ob time to worship de Lord, as dere's only me and my ole woman. I tries to lay close under de feet ob Jesus, as I donno how soon I may be called off de field; so listen chillens, as when I see you agin I may be gone; but I tells you dat whereber you goes, either to Heben or hell, I'll watch fur ye and meet ya. What is puttier dan to see a man an' woman goin' togedder on de Lord's day to de church house to 'wash up.' De walls ob Jerusalem tumbled down wid a shout, but good ole Methusalum was saved by lub to Jesna, so ought all you sinner men."

After a half hour's discourse he said: "Does you tink I'se preachin' to you now? No; I hab'nt begun yet. I'se only preparin' ob my mind to preach. I don't look at de book, cause why? I hab catracks ober my eyes, and de Doctor say I mus'nt look at *black and white talkin'.*"

Then after some characteristic singing, all beating time with one foot, a brudder led in prayer, during which the sisters chanted in an under tone. He closed by pathetically imploring de Lord to "see us all to our *watery* graves in peace."

After more singing a brudder rose and said: "Dey was a berry poor church, but dat last year a white lady *threw up* five dollars for their benefit, and he would be glad if we would do something too." So a hat was passed and we "threw up" to their great delight.

The services closed with the "Holy dance," all singing and jumping about to the tune, and shaking hands with owl-like solemnity. One preacher has been known in his fervor, to leap over the pulpit and "shin" up the posts to the roof, whence he triumphantly watched the proceedings below.

Now orange trees look very beautiful, being white with blossoms, the golden fruit of last season here and there peeping through the green leaves, while the air is heavily laden with fragrance.

The birds are of gorgeous plumage; blue jays, red birds, black birds, and pink and white cranes abound. I believe Europe boasts the sweetest songsters, and America the most beautiful birds.

Quail and doves are numerous, sometimes

a dozen are brought down at a single shot; while deer hunting affords great sport for the gentlemen. I had the pleasure of roasting a sixteen pound wild turkey for dinner, but as my oven is small, was obliged to do it in *sections.*

The soil of Florida is so sandy that it requires a vast amount of fertilizing to raise anything besides the orange, which will grow anywhere in Florida. With skilled cultivation, however, one can have crops the year round. The changes of weather are sudden and tremendous; I dressed this morn in a thick winter dress, by a log fire, and am now, at noon, sitting with the windows and doors open in thin summer clothing, having in six hours seemingly traveled from December to June. Some of the children here eat clay, and have even been discovered devouring the plastering on the walls. I suppose the climate engenders such a morbid appetite. [It is the need of phosphatic matter felt by the system.—ED.]

Inland towns are by far the most beneficial as a residence, as along the coast and rivers the fogs are dense, and dampness almost continuous; while in this high pine country the atmosphere promises the best for invalids.

Yours, sincerely,

M. H. WIDNELL.

SUGAR AS A REMEDY FOR WOUNDS.—A correspondent of the *Rural New-Yorker* sends the following recipe:

The inclosed is excellent, and ought to be published once a year. I found it in a paper sometime ago, and have tried it and can recommend it from experience: Take a pan or shovel with burning coals, and sprinkle upon them common brown sugar, and hold the wounded part in the smoke. In a few minutes the pain will be allayed, and recovery proceeds rapidly. In my case, a rusty nail had made a bad wound in the bottom of my foot. The pain and nervous irritation was severe. This was all removed by holding it in the smoke for fifteen minutes, and I was able to resume my reading in comfort. We have often recommended it to others with like results. Last week one of my men had a finger-nail torn out by a pair of ice-tongs. It became very painful, as was to have been expected. Held in sugar-smoke for twenty minutes, the pain ceased and promised speedy recovery.

HOW TO DRAW THE FACE, ETC.

CHAPTER III.

THE FACE AS A WHOLE.

WE will now take up the features in that combination of them which constitutes the face, and comprise in our consideration the entire head.

With the same diagram as a general basis, we will commence with the *profile* view, as

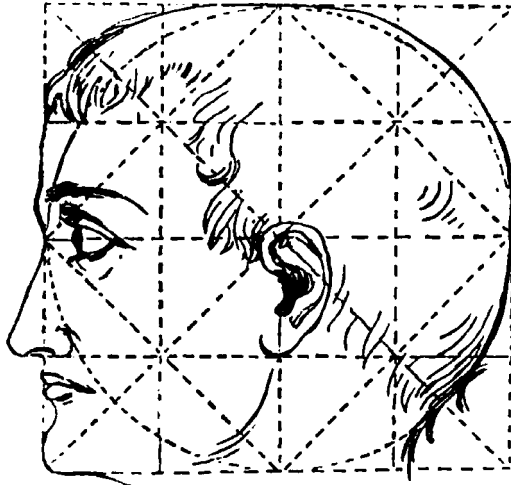


Fig. 30.

most serviceable, we think, for preliminary illustration; and, as in the eye, we shall still adopt the left-hand perpendicular for the facial line, or direction from the forehead to the chin, only here we will use the outside line of the whole square for our guide, instead of the line of the smaller inside square.

This line, we perceive, is divided into four equal parts, on which we will locate the features in reference to each other. The first division from the top will comprise that portion which the hair generally occupies, and may be called the top-head proper. The second includes the forehead to the center of the eyes, the root of the nose, and is on a line with the top of the ear. The lower extremity of the third division will mark the end of the nose, and the bottom of the ear, and may be called the face proper. The fourth, or lowest, extends from the end of the nose to the bottom of the chin, or beginning of the throat, and includes the mouth and lower jaw, and may be called the lower face. The mouth is about one-third of the space from the nose to the bottom of the

chin, and the ear occupies the same longitudinal space as the nose, and is parallel to it in position.

The ear we mark on the center perpendicular line, the opening being on the line, as a standard. Deviations express their own significance. The nose projects beyond the square, and the mouth and chin are independent in outline of the *circle*—which, though not absolutely essential in this view, we would yet recommend to be used at first. It shows that the general form and dimensions of the side-head are, as a standard, nearer the shape of a circle than the front view, which we shall next consider. Retaining the square as at first, on drawing our circle as for the side-head, we at once see that it is a poor standard of reference. The square is evidently too wide in proportion to its height for the symmetry or character we require. It may express some phases of childhood consistently with a true ideal, but in adult subjects it makes the face too round, squatty, or moon-faced, and can therefore only express deviations from the true standard, which are usually mere caricatures (figs. 32, 33.)

Let us, then, get at the true proportions. As the square for the standard side-head was

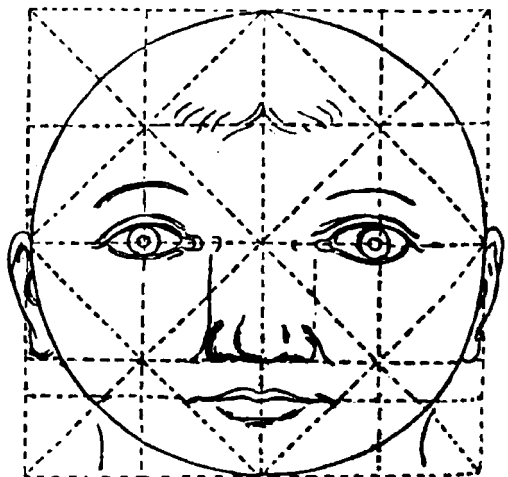


Fig. 31.

appropriate, but for the front face is too broad, we see that symmetry calls for a mod-

ified form, and we obtain that by cutting off one of the compartments, leaving the figure



Fig. 33.

only three-fourths as wide as it is high—an upright parallelogram.

This, however, we will re-divide, as in the case of the square, and use the divisions, as in the side-face, for locating the features, only using the center perpendicular instead of the side for the prominent features, the nose, mouth, chin. This will bring our curved



Fig. 32.

form into that of an ellipse or oval, which looks more like our true idea of a standard of proportion.

We can here express the three prominent types or temperaments all within the standard proportions, according to the sweep or form of the curved figure.

If its widest part is on the center horizontal line (fig. 34), it forms a regular ellipse, and well expresses the vital temperament. If the widest part is on the upper horizontal line (fig. 35), it is of an oval, or egg-shaped form, and expresses the cephalic-mental, or nervous temperament. This is the pyriform type. If the widest part is on the lower horizontal (fig. 36), it expresses the abdominal, gastric, or lymphatic temperament, and is a low form or type of character and conformation.

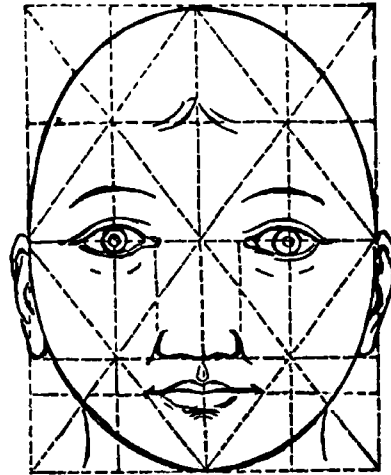


Fig. 34.

The prevailing tendency of each of these may be united, or augmented to extreme instances, by modifications of the square and oval, according to the end aimed at.

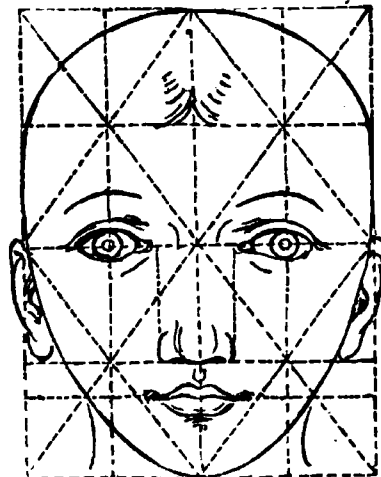


Fig. 35.

The width between the eyes is, as a standard, equal to the width of the eye itself, and

the same as the width of the nose at the lower part or wings of the nostrils.

The eyebrows should be about the same distance above the iris as the mouth is below the nose, say one-third of a space.

The three-quarter or diagonal view of the face is also deducible from this method by

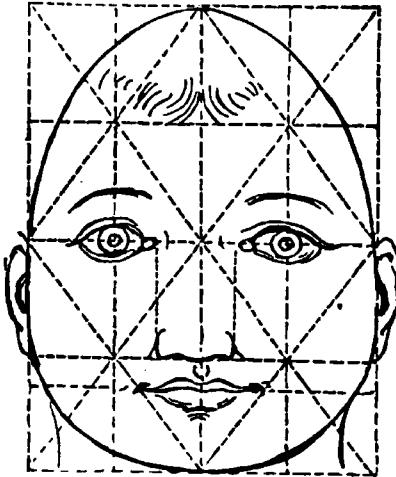


Fig. 36.

making the facial line a curve from the top of the center perpendicular to the horizontal center, either right or left, as the face may be intended to look, and then back again to the corresponding point at the bottom. Or, for still further looking off, to half way between the outside and the next inside line in the same way. Or, at any other point between the outside and the center perpendic-

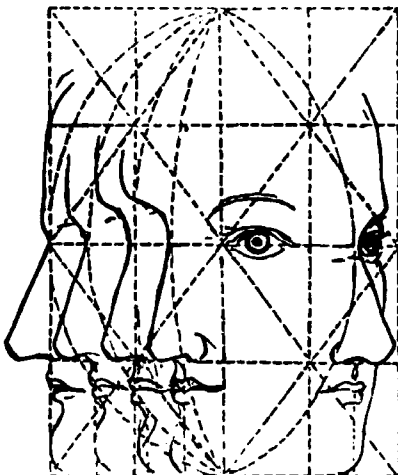


Fig. 37.

lar decided upon, for the angle of incidence or vision. Of course when it reaches the

outside line it will form the half of the ellipse used for the boundary of the head, and

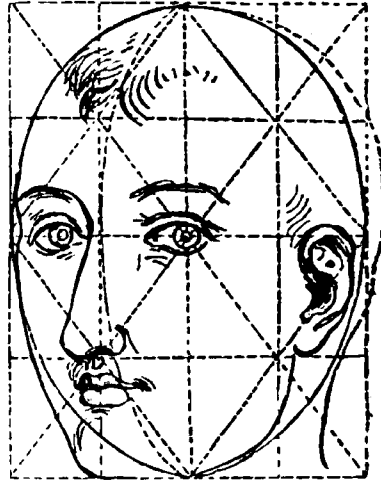


Fig. 38.

the view will then be a perfect profile (see fig. 37).

Mark the features generally on this line, as in the case of the front face, only giving that aspect of them as they are represented in that position in the preceding chapter. The ear will be removed backward or forward, in accordance with the angle to which the face is turned (see diagrams 38, 39, which will

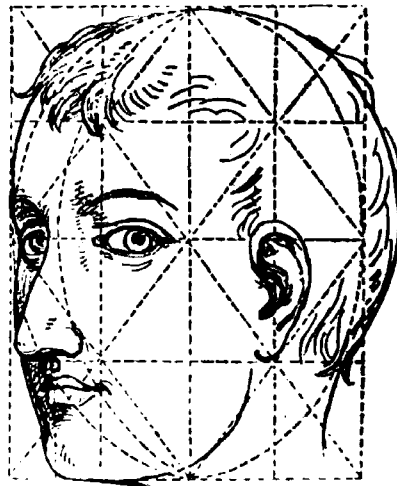


Fig. 39.

explain better than any language, perhaps, the idea aimed at).

In this way the face can be analyzed and drawn to a great extent, and foreshortened, either looking up or looking down, in front or oblique views (figs. 40, 41, etc).

The square and oval are constructed in the same way, only different lines of horizontals are adopted for the location of the features, as in looking up in the full face the eyes are on the upper horizontal instead of the center, or may be on any space above the center line, according to the degree of elevation.

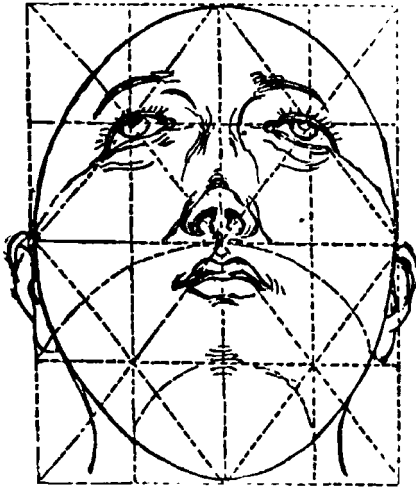


Fig. 40.

So in looking down, the eyes may be on the lower horizontal, or any space below the center; and in the diagonal or oblique face the same, with the rule for the angle of incidence, as stated in the level view. For the location of the ear a curved line may be drawn between any of the horizontal lines, corresponding to the spaces of the other features and

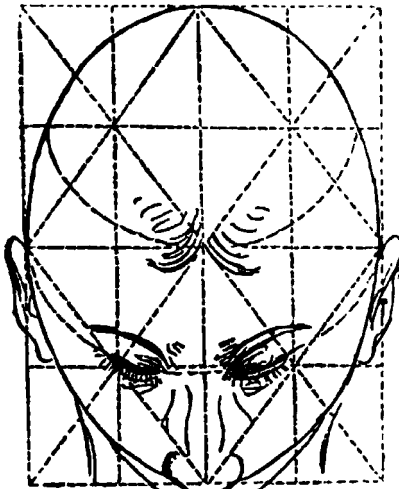


Fig. 41.

its relation to them, remembering that the head is not only round like a sphere, but

also like an egg, which it most resembles, and which is an excellent object for practical illustration of this subject.*

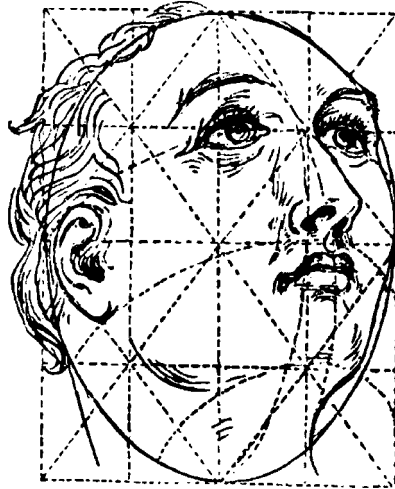


Fig. 42.

Inasmuch, however, as the features are projections or depressions, which a smooth surface would not exhibit, lines for their aspect, when changed from the level front-view, may be drawn, as shown in the diagrams. As when the face is turned to one side, as in figs. 40, 41, the mouth and chin are not



Fig. 43.

on the curve of the oval, and a line is dropped from the center of the base of the nose

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* Take an egg, or egg-shaped object, and draw the horizontal and longitudinal lines—as the parallels, etc.—made on a globe—and marking the features, turn or hold it at various angles to the eye, and observe the apparent positions of position that the features will present.

pendicularly to the lower line of the square, to mark the position and relations of those features.

So, also, the lines of the cheek, forehead, and back-head deviate from the oval according to the degree the face is turned toward the profile, which, as shown by our standard (fig. 30), would fill the equal-sided square.

In the faces looking up and down (figs.

40, and 41), the end of the nose may be marked in the first and third by upright triangles, the base on the center line. In the others by an inverted triangle from the lower line, modified in the oblique cases, within which the nostrils and the tip of the nose may be described in accordance with its form and position. In other, and perhaps in these respects the diagrams will best explain themselves.

WOMAN'S RIGHTS, MORALITY, AND RELIGION.

EDITOR OF PHRENOLOGICAL JOURNAL:

AS one who has for more than twenty years made the disenfranchisement of women a prominent life-object, I am pleased to see by what the PHRENOLOGICAL says upon that subject that it is not blown about by every wind of doctrine, but keeps on the even tenor of its way, without yielding to the temptation to win public favor by morbid sensationalism. But I hope to see it "lengthen its cords and strengthen its stakes" preparatory to covering more ground in the directions indicated in my title.

After a long process of disintegration, reformatory people are showing more disposition to aggregate, to gather into cliques, the differences of whose views are sharply defined. It is becoming more and more necessary for the true friends of woman's rights, for instance, to show their colors, and make known their positions. They behold strange phenomena presenting themselves to view among the prominent and the notorious promoters of this cause. On the one hand they see many friends of woman's emancipation, who had been also decided friends of evangelical Christianity, turning their backs upon latter, and wandering off toward utterism. On the other hand, they behold and women of unblemished lives lending encouragement to views of the sexual re- is which seem to them calculated to rather than to improve these relations. would like to see the PHRENOLOGICAL om forth, in the fullness of time, into oost thrilling illustrated periodical of lar defay, full of the most exquisite pen and or vial sketches, and holding up before the old, among other attractions, such enchant-

ing pictures of pure religion and pure marriage as it never saw before, and which would charm it into goodness and purity almost unconsciously. I notice that there is a large Christian illustrated paper in circulation now, which makes a very pleasing and touching exhibit of "pure religion and undefiled." But never will such papers attain the height of their possibility until they boldly take the position that marriage is a thing of the heavens and the eternities; that next in importance to the love of the Creator is the love of the conjugal companion. All thinkers and close observers know that this is the strongest element of human nature. The great success of novels and of periodicals which treat of this emotion in its normal or abnormal developments, is sufficient proof that this is a fact. Such being the case, we must "fight the devil with fire." If we find old and young fascinated by such vile pictures and stories as are found in some of the illustrated papers, we must determine to make pure love and pure marriage more attractive to the commonest minds even, than impure love and scortations.

But I would especially dwell now upon the religious question. Though fully in accord with Mrs. Stanton and Parker Pillsbury, who edited the *Revolution*, as to the need of our breaking woman's chains, "bringing deliverance to the captive, and the opening of the prison doors to them that are bound," I was always sorry to see that neither of them appreciated "the unsearchable riches of Christ." I was grieved, also, to see that Mrs. Stanton has assumed an apparently untenable position with regard to the nature of the equality of the sexes. I think Mrs. Farnham's doctrine that woman is superior to

man (in the adroit way in which she puts it) is more tenable than Mrs. Stanton's doctrine that woman's equality with him consists in parity of creative and ratiocinative faculties, as well as others. If woman is really our equal in these respects, she is in the average vastly our superior; because she is so far ahead of us in her religious, intuitional, and affectional nature. It was because of Mrs. Stanton's small estimate of woman's religious nature that she made these mistakes.

For one, though not a *sacerdos*, I consider the old world-wide coalition between women and priests is a natural one, and that those who try to break up this relation will be found fighting against God; and no periodical will meet all woman's demands for mental pabulum which does not furnish an abundance of such material as her strong religious nature craves. I know well, without seeking evidence, that thousands of devout, cultivated women are weeping in secret this day over the religious declension of the times, and especially over the fact that the men and women who most loudly denounce the wrongs of their sex are so generally indifferent to all but the barest outlines of Christianity. Such, prostrating themselves in secret, are crying out in bitterness of spirit, "They have taken away my Lord, and I know not where they have laid him."

Whatever else, then, the PIRENOLOGICAL does, by the way of a new departure, let it make a more steadfast effort than ever to present to its readers "whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report" in the way of religious truth, incident, and doctrine.

S. L.

—◆◆◆—
 WAS IT CLAIRVOYANCE?—Mr. T. S. Cox, a resident of Macon, visiting Rome, Georgia, had a most remarkable dream last Sunday. He was in this office Monday morning and repeated it at that time as follows: He dreamed that his house in West Macon, occupied by his wife and family, was entered Sunday evening and a certain bureau drawer robbed of some silver ware, and that a woman committed the theft; that she was a dark-complexioned, dark-haired, blue-eyed woman, and a stranger to him. Yesterday morning he received a letter from his wife confirming his dream, and that a package

of silver spoons was stolen from the bureau drawer sometime during Sunday afternoon. A description of the suspected party was also given which coincided with his dream. This is no fancy sketch. The dream was repeated to us early Monday morning and the letter from Mrs. Cox was received yesterday morning.—*Rome Commercial*.

[Another incident in our mental wonder life, which awaits an explanation.]

—◆◆◆—
 PAPER.—It is estimated that the Russians consume paper at the rate of 1 pound per head per annum; the Spaniards 1½ pounds; the Italians 3½; the French 7; the Germans 8; the English 11½; the Americans 17. There are in the world 3,960 paper-making establishments, the aggregate annual product of which is estimated at 1,809,000,000 pounds of paper. One-half is used for printing, one-sixth for writing, and the remainder for packing.

—◆◆◆—
 OCEAN STEAMERS.—The total number of steamers running between the United States and Europe is 216, of which 187 sail from the port of New York.

ACRES.—The total number of acres in the United States is 2,273,719,680, which would furnish 7,579,065 farms of 300 acres each—an interesting fact for agriculturists.

TEMPERATURE.—The mean annual temperature of New York City is 51° Fahr., and that of New Orleans 70° Fahr., which is an increase of 1° for every forty miles of southern approach.

INDIANS.—The cost of maintaining the Indians in comfortable savaghood for the year ending June 30th, 1874, was \$6,602,462.00. If they could be made producers as well as consumers, they would be less expensive.

IMMIGRANTS.—The number of immigrants into the United States for the past four years is stated as 1,499,298, of which number 492,501 were from Germany, etc., 321,830 from England, Scotland, and Wales, and 257,222 from Ireland.

PINE LEAVES — UTILIZATION OF PINE LEAVES.—Pine leaves are largely utilized in Europe. They are converted into a kind of wadding, which is used for upholstering, instead of hair. A kind of flannel is also made from this fiber. Vests, drawers, loose shirts, etc., are made of this material.



MRS. C. FOWLER WELLS, *Proprietor*.
H. S. DRAYTON, A. M., *Editor*.—N. SIZER, *Associate*.

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JULY, 1875.

VOLUME SIXTY-ONE.

THIS number begins Volume LXI. of the PHRENOLOGICAL JOURNAL. The reader has noticed the announcement, doubtless, already. But does he realize fully the fact that this magazine is one of the oldest monthlies now existing in the United States? If so, he will respect its age, since that age is certainly a guaranty of its success. For no publication could endure a career of failure for upward of thirty-six years.

And there are among the readers of the PHRENOLOGICAL men and women who have been its supporters from the beginning—how few publications of equal age can say as much!—and who have rejoiced in its steady development from a small periodical with a scattered and weak constituency into a large, well-furnished monthly, with a subscription list in which every country having commercial relations with the United States has its representatives.

The cause of Phrenology as advocated by this JOURNAL is of universal application in the affairs of mankind. This truth is becoming more and more apparent to the thinking world, and scientific minds, consequently, are giving more attention to the subject than ever before. An article in the June number answered the question so often addressed to us, Do scientific men generally believe in

Phrenology? in the affirmative, giving most cogent reasons for the opinion so entertained by the author, himself an ardent investigator in cerebral anatomy. It is the skepticism and doubt of people which have raised the most serious obstacles to the extension of our circulation. But as the public have become acquainted with the character and scope of the PHRENOLOGICAL JOURNAL and of the other related publications of this house, the opposition born of disbelief or doubt has weakened, and the current of opinion has turned more in the favorable direction.

This JOURNAL has been foremost in popularizing scientific knowledge, and can claim much credit to having broken down the old barriers between technical learning and the masses. But it is not the verity of phrenological principles only which has gradually obtained in popular esteem, but also the fact that our columns are made the vehicle for conveying to the reader information of a general character, that especially being prominently set forth which serves to instruct the mind and give it a higher, nobler tone. The useful, the good, the true, are sought in the ever-active current of affairs, and made contributory as instrumentalities in promoting the best interests of society, so far as it is possible, through the influence exerted by our publications on their readers. That this influence is far from weak, is evidenced by letters which we receive daily from men and women, old and young, who feel actuated to do something more as an expression of gratitude for benefit experienced than merely to renew their subscription when the time comes round. Here is one from an old Kansas reader:

Dear Editor—The JOURNAL is, to me, the most valuable of all journals, magazines, or papers. I love to read stories, but nothing suits my fancy so well as the solid, sound, sensible facts in the AMERICAN PHRENOLOGICAL JOURNAL. I have let others read it, and they express themselves highly pleased with it, and promised to send for it—but I am tired of

waiting on them; but I will use my efforts to have them take it immediately. Ours is a young State, and people think more of making money than improving their intellect; yet I believe they read more, as a mass, than they do in the older States. I hope the day may come when the JOURNAL will be a visitor to every family in the land—when every man and woman shall be what they should be, splendid animals, as well as noble-minded and pure.

The JOURNAL makes me more manly every time I read it, and I would not be without it a year for twice its price. No money I spend during the year brings me more benefit than that which you get; and you may look for it every year while I live.

EMPORIA, KAN.

T. C.

Encouragement of this kind has done much in the past toward keeping us braced up to our work, and now that there have been so much assurance and confirmation of success, it seems to us that our course can not be otherwise than well sustained.

Our work is representative. All who have a sincere charity for their fellows are as much interested in it as ourselves. Therefore, subscriber and reader, we feel that we are warranted in looking to you for continued co-operation in helping to disseminate those grand principles of mental and moral reform which lie at the basis of true social prosperity. Don't draw back from your place in the ranks of the workers. God expects every man and every woman to do their duty. So take a stronger hold and give a bolder pull for truth and humanity.

INDEPENDENCE DAY.

PROBABLY no event in human history has been more important to mankind than the Declaration of American Independence, July 4th, 1776. It lacks still one year of a hundred since this great event occurred. Practically the continent of North America was then a howling wilderness; a little line of settlements and rude culture existed along the Atlantic coast from Maine to Georgia, but the Alleghanies were substantially the western boundary; now populous cities smile on the Pacific, and the hum of industry and the strifes of enterprise are to be

met with from ocean to ocean. The network of railroads and telegraphs, unknown a hundred years ago, not only covers our broad continent, but vibrates under the seas, and almost belt the earth.

The results of the American Declaration have been scattered like leaven throughout the earth, and are taking root and bearing fruit elsewhere. The millions of emigrants from the Old World that have established themselves in the New have, by their letters to the various countries from which they came, inspired the minds of millions in the father-lands with ideas of liberty, human rights, the possibility of the poor who are industrious and moral rising to intelligence, wealth, and respectability. France and Spain, England and Germany, Russia, China, and Japan, are to-day feeling the influences of American civilization. Laws are modified, the rights of the people more respected, and, as a consequence, human liberty and happiness have been greatly enhanced.

Is it claiming too much to say that the impulse through this progress and improvement has been radiated from America and her institutions? We have furnished a home for the struggling sons of toil in every land and clime, thus disburdening the Old World of its surplus population, and transforming ignorant boors and serfs into free men, and making them missionaries, at least with the pen, to enlighten their brethren who are left behind. This experiment of popular government could never have been verified except in a new country. Where there are crowns, and vested rights, and titles of nobility, and consolidated wealth in the hands of a few, the poor have no chance to assert their capacity for improvement.

On the broad bosom of the fertile West the American people have learned the lesson, and taught it to their ancestors beyond the seas, that liberty and law, freedom and virtue, self-government and righteousness, are not incompatible; that earnest, industrious, honest men need neither king nor noble to preside over and govern them.

We have no doubt that a year hence, when our centennial of liberty shall be celebrated, every nation in the world will have ample reason to rejoice in the settlement of this country, and the establishment here of popu-

lar liberty and equal rights; and doubtless this sentiment will be largely and cordially expressed by millions of the common people, whose brethren in this country are illustrating the principles of the Declaration of American Independence.

Not a few of the great thinkers of all foreign countries appreciate the greatness of the subject, and many of them will cordially respond in acts and language to the great, throbbing sentiment of America: "Liberty and Union, now and forever, one and inseparable."

It is not mere national growth and strength which we have occasion to remember with thankfulness and pride; it is not merely liberation from the thralldom of kings, and lords, and lazy drones who suck out the products of industry, and leave the poor poorer and hopeless, but as moving machines, stimulated by poverty, and enforced by necessity; it is not merely that we have liberty to act without external restraint, and the paralyzing influences of ancient custom. The progress in mechanism or in industry, and the freer acquisition of wealth, are not to be ignored or lightly esteemed, but the free diffusion of knowledge—the public-school, the basis of our Republic—ought to stand among the first and most signal triumphs of government for the people and by the people. The sublime spectacle of a great people freely taxing its property and its citizens for the support of schools that offer education to every son and daughter of the people, is worthy of a place on the brightest page of universal history.

Freedom of religious opinion, or what is sometimes called free toleration of all persons in respect to their religious opinions, is another grand fact nowhere else exemplified. The growth of literature, the progress of science and art, take eminent rank in the list of things to be thankful for, as the fruit of the ninety-nine years just ended.

In our own field of inquiry—Phrenology—which is now but eighty years old, we may proudly stand in the center of the realm of reform, and claim that our theme, since it treats of the mind, which is the master of all things, should stand first in the regard of all who prize education and human progress. The world has suffered more from a lack of

a true mental philosophy than from any other cause.

When true Phrenology is thoroughly understood, the springs of human action will be comprehended, and jurisprudence, and theology, and education, will be more wisely and effectively administered, and the whole race thus lifted to a higher plane, may go on its way rejoicing and achieving, illustrating better than ever before that man is made in the image of God, that he is not the mere animal that he has for so many ages seemed to be, but destined to a career of wonderful development on earth in the ages to come, and a blessed immortality hereafter.

AN AMERICAN CARDINAL

THE American religious world has been much exercised upon a recent event, that of the appointment of an American clergyman to the dignity of the cardinalate by the Roman pontiff. This being an entirely new experience in the life of the vast body of Roman Catholics resident in the United States, and its importance in their ecclesiastical system being only inferior to the pontificate, it can not be considered strange that so much interest has been awakened. On the part of the Roman Catholic the investiture of Archbishop McCloskey with the *beretta*, or red cap, indicative of the princely station to which he had been raised, was an occasion for extraordinary ceremonials, festivity, and rejoicing.

On the part of the Protestant this affair has been viewed with various feelings, according to his opinion of the religious and political relations of the Roman Catholic Church in American affairs. For our own part, and we must confess to being ranked among those who do not consider that great hierarchy as filling up the measure of a perfect religious system, we regard it as but one of the leading sects into which the visible Church on earth is divided. As a contemporary says, and with all truth, the Roman Catholic Church claims for itself, as each of the other great sects, Baptist, Methodist, Presbyterian, Episcopalian, a special superiority over all others. "It claims a Divine authority, which gives it peculiar sacredness:

but so do its competitors, each for itself." The assumption of peculiar privilege and of special relations to the Divine favor, is the basis of sectarian distinction. This is undeniable. "My church is better than your's," is the sentiment, whether men declare it or not, which segregates them in their small or large communities. With the increase of intelligence and the advancement of society in refinement and culture, however, men become more appreciative of the principle that religion is a matter of personal, individual account, and that man's relations to his Maker are such as admit of no human interposition, except, perhaps, in the way of assisting one toward the clearer recognition of his duty and accountability, and, as a consequence, there is more toleration of religious differences.

We believe, with the *Christian Union*, that "the prosperity of religion demands that Christian sects should treat each other with respect, and suffer each to exercise its rights of government, of worship, and of belief, in its own way, without molestation or reproach;" and that "there is no reason why the Roman Catholic Church should be exempt from the Christian toleration accorded to all other sects."

Therefore we do not participate in the apprehension entertained by some ultra-Protestants, if their utterances through the press are evidence of their real sentiments, that in having a Cardinal among us we are, as a Christian people and a nation, suffering the establishment of a precedent whose influence can not be otherwise than dangerous, politically and socially. Besides, if what we have heard concerning the character of Dr. McCloskey be all true, we have little ground to fear that his sudden elevation will affect materially the current of his life in its relations to those who recognize rules of faith and discipline different from what he represents. We can not think that he will imitate the excessive zeal which Cardinal Manning, of England, has shown in behalf of his Church, but will, as heretofore, exercise prudence and sagacity in the untried relations which his new position may develop.

In another part of this number the reader will find some account of the new Cardinal, with his portrait.

TRADES FOR BOYS.

A CORRESPONDENT propounds the great question of occupation, by asking if "a person should follow the trade or pursuit for which he seems to have a liking?"

The liking which a person seems to have may be based on insufficient knowledge; in fact, on fallacy.

All persons are influenced in their feelings and tastes largely by public sentiment. In New Bedford, Mass., where whale-fishing has been the business of the people, everybody who was ambitious to succeed, saw in whale-fishing the probable source of success, and therefore the smell of whale-oil was always grateful to him who was carried by the tide of sentiment, as a floating log is carried by the stream, not because he was best qualified for that work necessarily. Those who were by nature qualified for it, had, perhaps, inherited, from fathers engaged in that business, the required courage and aptitude. New Bedford boys are probably more frequently fitted by nature for that pursuit than boys elsewhere. In Northampton, Mass., every boy who knows enough to get an education is ambitious for but one thing, and that is, a place in the pulpit; and they go to the pulpit as readily as boys in New Bedford go whaling. In some other towns which we could name, the successful and wealthy men all have factories, and boys who seek wealth and success in those places, think only of factories as a means, for they have before them no other examples of success.

A desire, then, for a particular pursuit does not naturally pre-suppose talent for it; but if a young man, uninfluenced by particular circumstances, visits one department of business after another, and sees the processes and has a chance to think for himself, he may be likely to have awakened in him desires for particular pursuits by the natural excitement of the faculties which would insure success therein. But Approbativeness often leads people to wish for a nice, respectable business, simply because it is nice and respectable, when their talents are by no means well adapted to it.

In regard to inheritance and circumstances, persons are influenced mainly by inheritance. We inherit fear, reason, integrity, ingenuity,

affection, or fail to inherit these, and no amount of training, or culture, or circumstances can overcome altogether the effects of such inheritance. In regard to circumstances, we may say that these are very influential. A child may be born into a philosophic family, and transferred at once into the family of an Indian; and though he, by inheritance, will be superior to the Indians, their training will lead him to use his superior talent in low and narrow channels. If such a person should be compared with his ancestors, it would be seen that Indian circumstances had done the business for him; but when compared with the Indians, it would be seen that he had inherited something which made him more than an Indian; that inheritance from his white ancestors had made him superior to Indians; and on the other hand that circumstances among the Indians had made him less than a white man should be.

It requires good inheritance to lay a good foundation, and favorable circumstances to build the proper superstructure. When both combine, we have the best results. When both are adverse, the unfortunate person rises but little above the brute.

TO THE FRIENDS OF PHRENOLOGY.

IT had long been the desire of my husband, and I heartily approved the object, to place Phrenology on a solid and self-perpetuating foundation. His labors for this life are now closed, and the work is left for me to accomplish. To carry into effect this object, money will be needed to purchase or build a plain, substantial, fire-proof edifice, say five stories in height, which shall serve as the depository of our large cabinet—which it is my object to contribute to the enterprise and of the valuable additions which may be donated by travelers and scientists, thus forming a perpetual Museum of Phrenology and the related sciences, open and free to visitors.

This Museum should be so arranged as to include a large auditorium of circular form, with tiers of seats rising one above the other; the walls and panels of the hall containing pictures of eminent persons and objects of interest illustrative of Phrenology and kin-

dred sciences. Space should be given, also, to crania, busts, etc., arranged in glass cases for observation and reference. Such a room or hall would be exceedingly well adapted for lectures.

There should be connected with the Museum, the American Institute of Phrenology, holding its lectures at stated seasons in each year as heretofore, the various objects of science and art now in the collection being admirably adapted to the full illustration of its curriculum of study. Every city and town throughout the country needs a practical phrenologist, hence the necessity of such an Institute as ours to instruct and train young men and young women of intellectual culture for the purpose of disseminating the valuable truths which the science of Phrenology and Physiology inductinates.

The object of this announcement is to bring the subject to the notice of the friends of Phrenology, and to ask their advice and aid toward obtaining the means to procure such a home for Phrenology and a place wherein our cabinet can be on perpetual, free exhibition.

We would invite all who are interested in Phrenology and the kindred reformatory sciences to contribute as liberally as they are able toward the accomplishment of this important work. Who will offer a thousand dollars toward the establishment of the Institute? Who five hundred dollars? who one hundred dollars? who fifty dollars, or twenty-five, or ten, or five, or even less? Small amounts given heartily are just as acceptable to the "eye that seeth all things," as the large sums. Let no man despise the day of small things. The beautiful Masonic Temple in this city, recently dedicated, is the result of a few remarks made by Mr. Herring twenty years or so ago, which were to the following effect:

"Gentlemen—Something must be done for the widows and orphans of our departed brethren; and as a pledge of my sincerity, here is one dollar to start the subscription list!" Within the memory of many of our readers a mission ship was purchased, and sent out through the aid of Sunday-school children. A story is told of a little boy who visited the ship while she was lying in port, nearly ready to sail. He asked the privilege

of going aboard and examining the vessel, asserting that he was part owner in her, as he had contributed ten cents toward her outfit.

There is a no-better time than *now* to do good. Delay till a more convenient season is usually fatal to the accomplishment of good resolutions.

I should like to hear from our friends with regard to this project. It lies very close to my heart, and I have determined to devote much of my time and resources in its accomplishment. For myself, I would not ask outside help if I could secure the desired end without it. In the next number of the **PHRENOLOGICAL** more shall be said on this subject. CHARLOTTE FOWLER WELLS.

THE WAY TO LOOK AT IT.

THE study of the science of human nature is becoming more and more interesting to the public, and not a few earnest souls are anxious to learn all that may be known of it, and to devote their thought and effort to the promulgation of this great theme.

In the February number of the **JOURNAL** we gave an account of the closing exercises of our recent course of instruction, which found its way not only throughout the older settlements of the East, but through the great and growing mountain district of the far West.

We received from a friend in one of the Territories a letter on the subject, from which we make an extract:

"When my eyes fell on the notice of professional instruction in practical Phrenology, and the class programme for 1875, I could not help crying for joy; as I read the article through, every word seemed to give me fresh courage. For years in my own family I have been called an enthusiast on the subject of Phrenology and human nature. When I was a child I had access to some works which I studied thoroughly, and I came to the conclusion that nature had not done as much for me as I might desire; but I determined that if cultivation could help make up the deficiencies, the fault should not be mine. I have not been idle. I have made effort to obtain instruction

as I could, but thus far I have not been able to obtain that which I need; but the desire has been burning strongly within me, and would burst forth occasionally. When I read your notice to my husband and proposed to him that I take a scholarship in the American Phrenological Institute, he told me to do as I thought best. I then resolved for the ten thousandth time to devote the rest of my life to that cause. If I had been fully qualified, I would have visited every school in the United States. I did so in San Francisco, and was surprised to see the interest manifested by the children, as well as teachers, amounting to enthusiasm. There is certainly a very great and growing demand by old and young for more light and familiarity on the subject. I wish to join your class on the first of October next, and shall look forward to it as the greatest joy of my life. In the meantime, I will study the works recommended by you.

"MRS. L. A. B."

Thus we are encouraged in our good work, and we shall make an effort to enhance this woman's power, to do good by imparting to her all that we have been able to acquire by close study and extensive practice. Those who have any desire to enter this glorious field, and wish for such aid as we may be able to render, may send to us for a circular entitled, "Professional Instruction in Practical Phrenology." We expect our class, commencing in October next, to be the largest and best we have ever had.

OUR TREE BOOK.

A SUGGESTION which we published a few months back in the **PHRENOLOGICAL JOURNAL**, with regard to the preparation of a book on the trees of America, has found much favor with the press. Some of our contemporaries have seen fit to give the matter a pretty thorough ventilation, particularly those publications which are related specially to agricultural interests.

The *Christian Intelligencer* recently devoted a column or so to the subject, and pronounced it as a most valuable thought, and one which should be acted upon. We feel it our duty to urge the consideration of the tree question, for the palpable reason that our great timber-

bearing sections are rapidly being denuded of their splendid growths, and measures must be set on foot speedily, if the trade in woods is to be kept up, and continue, as heretofore it has been, a most prolific source of national wealth. The *Intelligencer* cordially agrees with us on this point, saying:

"The production of such a work would have a most valuable effect in stimulating a love for and a knowledge of arboriculture. Already many of our trees are doomed to extinction by the inroads that are made upon them for purposes of building, fuel, and railroads. Like the Indian, these aboriginal inhabitants of our woods and forests are fast vanishing before the white man. And unless something is done to create a taste for, and to spread a knowledge of their propagation and culture, the time is not far distant when they will be, far more literally even than now, like angels' visits, 'few and far between.'"

We are promised papers on arboriculture by writers well informed in that branch of science, and shall keep the subject before the people.

THE NEW POSTAL CHANGES

THE legislation of the late national Congress will not redound to its credit, distinguished as it was for the consideration of measures having in view chiefly the advantage of capitalists, railroad schemers, official jobbers, and other persons who seek to aggrandize themselves at the expense of the national treasury and of the people. One of its latest evidences of incompetency, if not of malignancy, was the amendment to the postal law, by which some of the rates are increased in such a way as to strike directly at many important features of the every-day business and social relations of the public.

By this amendment the speeches of members and other stuff are to be sent free, while the postage charged to the people is doubled in price. Instead of half a cent an ounce, the scale is now altered to one cent an ounce on every one of the following articles: Books, pamphlets, maps, prints, engravings, transient magazines, periodicals and newspapers, circulars, handbills, posters, occasional publications, prospectuses, book manuscripts, proof-sheets, blanks, patterns, samples, and,

in fact, all articles sent by mail except letters, and newspapers and periodicals sent by publishers. The new rate imposes an enormous expense on those who use the post-office as a means of transmission for articles more bulky than simple letters.

As a contemporary says, it appears that this burdensome imposition was brought about chiefly through the influence of lobbyists in the interest of express companies. Evidently not a few of our sagacious "statesmen" were on the lookout for themselves. We trust the new Congress will more wisely and faithfully represent the people, and legislate for the country in real earnest.

OUR PREMIUM ESSAYS.

THE Committee to whose judgment the manuscripts were submitted which have been offered in competition for the premium announced in our December number, has at length been heard from. The essays were read by the gentlemen of the Committee entirely apart from each other, and their opinions were rendered in such a manner as to preclude any form of bias, if it were at all reasonable to entertain the thought that such could be the case in any relation. These opinions are so nearly alike in expression that they may be deemed unanimous, and are to the effect: that they find the Essay of "Philanthropos," entitled "Reason and Religion, including the Functions and Relations of the Religious and Intellectual Organs in Mental Phenomena," and the Essay entitled "The Psychological Basis of Religion," to which no signature is appended, to be about equally entitled to primary consideration. That the treatment of his subject by "Philanthropos," in presenting the principles of phrenological science and their relation to religious life, is eminently philosophical and clear, and well adapted to the intelligence and instruction of the general reader; while the author of the second essay named has presented the deductions of extensive reading and experimental observation, making up a treatise in which much technical learning and ratiocinative ability are displayed, and which is admirably suited to the careful examination of minds cultured in the higher walks of scientific thought.

The Committee recommend the publication of both essays, and as they have but one premium to bestow, they suggest its division, should the writers of the essays mentioned offer no objection to such a course.

THE GRASSHOPPER PLAGUE.—The deprecations of the grasshoppers in some of the far Western States so early in the year have awakened serious apprehensions for the safety

of the cereal crops in those vast regions where the major part of our bread-stuffs are raised. From Kansas, Nebraska, Missouri come reports of the destructive ravages of the terrible insect multitudes. We trust that these reports are greatly exaggerated, and that our Western friends who have been visited by the plague will find nature on their side after all, making compensation for apparent losses. We believe that there is a *providence*, even in grasshoppers.

AGRICULTURAL HINTS.

Farm Profits.—A writer in the *Rural New Yorker* thus furnishes a year's experience in figures: Below you will find the product sold from 100 acres of land, too rough to be worked scientifically, but what was done was well done and in season. The amount is of actual sales. We have on hand for use of team, family, and seed, 100 bushels oats, 100 bushels corn on ear, 100 bushels potatoes, 1,200 pounds pork and beef; also, hay and rough fodder for wintering 10 head of cattle:

Eggs, 20 cents per dozen.....	\$14.48
Butter, 25 cents per pound.....	208.65
Pork, \$9.50 per 100.....	161.43
Potatoes, 63 cents per bushel.....	243.55
Hay, \$10 per ton.....	90.00
Beef, \$10 per 100.....	74.76
Rye straw, \$14 per ton.....	78.23
Rye, 85 cents per bushel.....	112.15
Poultry, 15 cents per pound.....	25.00
Buckwheat, \$1 per bushel.....	36.00
Oats, 50 cents per bushel.....	45.00
Total.....	\$1,069.87
Expenses for help.....	\$250.00
Rent and taxes.....	400.00
	<u>\$650.00</u>
Profits.....	\$439.87

Flour for Bees.—A correspondent of the *Massachusetts Plowman* says: As bees will not be able to gather natural pollen much earlier than the 20th of April, they should have flour supplied them. This can be done by putting about a pint in a box eight inches deep, and placing it in some sheltered spot where the sun will shine directly into it.

In the stomach of a valuable horse that recently died at East Nantmeal, Chester County, Pa., were found half a pint of cinders or sand, six fourpenny nails, seven pieces of horseshoe nails, one carpet tack, a rooster's spur one inch and a quarter long, six stones the size of beans, and one cent bearing the date of 1864. Was it the fault of his groom?

A Charming Fruit-Farm.—N. Ohmer, of Dayton, O., sends the *Horticulturist* a lithographic sketch of his well-known fruit-farm. The editor

says of the picture: It is really a beautiful sight, and tempts us to go there for a long visit. His place is very systematically laid out; and being already so well grown and developed, the trees make groves of dense regularity. Upon his place are 2 acres of grapes, 2,125 pear trees, 1,364 apple trees, 300 quince trees, 1,244 peach trees, 1,500 dwarf pear trees, with a large space which is devoted to small fruits.

The *Philadelphia Press* publishes reports from more than one hundred places in the fruit regions of New Jersey, Maryland, and Delaware, which give promise of an abundant crop of peaches. The season is likely to be late, but the harvest now promises to be abundant.

Cheap Pots for Small Plants.—As small earthen pots are somewhat expensive, we have been making a supply in this way: A billet of timber, or stick of fire-wood about four inches in diameter, is secured in the vice of the work-bench, into one end of which a hole is bored with a two-inch auger to the depth of about three inches. A piece about three and a half inches in length is then sawed off, which makes a neat little plant-pot. A half-inch hole is then bored through the bottom to facilitate drainage and ventilation of the soil. A single tomato or other plant is transplanted into such a pot with rich and mellow soil, and the pots are kept in a warm apartment, growing luxuriantly until the weather becomes sufficiently warm for the plants to be transferred to the open ground, which is performed simply by splitting the wooden pots and dropping the contents carefully into a mellow seed-bed. When plants are started in the house in such small pots, they continue to grow rapidly after they are put out in the garden. As the roots are not mutilated, they never experience injury as those do which are taken up in the usual way, and transplanted with roots badly mutilated. If one has a quantity of tin cans, rich soil and a little stable manure may be put in, and one plant transferred to each can. A few holes should be punched in the bottoms to

allow surplus water to escape. Such cans may be unsoldered and the contents turned out bodily, when the time has arrived to put the plants in the open ground.

Cheap and Good Bed-Stuffing.—A most soft, comfortable, and wholesome lining for beds or for mattresses can be procured in most country places by getting a farmer to allow oat chaff to be saved. It is soft, light, elastic, and very sweet. The cost is very little. Oat chaff is so very light that a slighter kind of bed-tick than is necessary for other kinds of filling is quite sufficient. Another advantage is that the chaff can be changed with so little cost that it is within the reach of every one. For children's beds it is perfectly satisfactory. It is only necessary to keep a sack or two stuffed full of oat chaff in a dry place, and thus new and fresh filling is at hand to make a good bed, whenever accident may have befallen the cot mattress.

Relative Value of Manures.—At a recent meeting of the Franklin Harvest Club, John W. Hubbard, of Northampton, a market gardener of experience, said he was no friend to commercial fertilizers, but preferred barn-yard manure for every crop. It should be finely broken up, and if he could afford it, he would not use any until it had been stored or composted two years, mixing some ingredient with it to keep it from heating. If he was obliged to buy, he would prefer to pay

ten dollars per cord for stable manure than to invest in commercial fertilizers. Spinach, lettuce, and celery must have rapid growth to get the good quality. His method of cultivating celery is to make a trench twelve inches deep, and fill up six inches with fine manure before setting the plants, and to fill up with earth as fast as they grow. He always sold it in the fall, and has had no success in keeping over the winter.

Sugar.—The foreign sugar trade appears to be concentrating at New York and New Orleans; Boston, Philadelphia, and other ports showing a heavy decline. In 1874 New York received 431,315 tons, an increase from the previous year of 54,746 tons; New Orleans received 27,141 tons, an increase of 10,903 tons, or more than 50 per cent. The production of maple sugar in this country is 15,000 tons annually. The annual consumption of sugar of all sorts amounts to about 40 pounds per head of our population, which is, say 40,000,000.

Crops in Utah.—In Utah, last season, fruits of almost all kinds yielded 25 to 50 per cent. above the average; sweet potatoes yielded in some places about four tons to the acre; wheat, corn, cotton, sugar-cane, and all other crops, were a full average. Farmers in almost all parts of the Territory are forming co-operative companies, and those who worked on that system last year did well. This is a wise move. Co-operation should characterize all our industries.



[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

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

THE MINISTER.—What organs should be large, or what should be predominant to qualify a young man to enter the ministry?

Ans. We can not, in this department, do justice to the subject here proposed. The minister, in

the first place, ought to have a good body and excellent health. He ought to have a strong base of brain to lay the foundation for courage, energy, and force. Combativeness and destructiveness need not be small in him. They were not in the disposition of St. Peter. He should have strong moral and intellectual faculties, for he has to lead the moral, and ought to be able to lead the minds of his congregation. He should not be second in intellect to any of his congregation. He should have the organs of memory, so as to be able to carry knowledge in abundance in his thoughts. He should be very affectionate, especially to children, so as to make him the natural teacher of the young, that he may mold their characters and guide their energies in the right channel. For a full analysis of the calling and qualities required for the clergyman, and for seventy-four other professions and trades, see "What to Do and Why." Price, by mail, \$2.

FARMING.—Why is farming generally looked upon as an inferior pursuit?

Ans. If this be the case, we should look for the reason in the fact that there is not generally brought to the business of farming so much culture and intelligence as is brought to most other pursuits. Men go into it without much information as to soils, fertilizers, and the adaptation of particular crops to different soils, and they bruise their way along ignorantly; and whatever pursuit is followed largely by men wanting in culture, is very apt to take its complexion from the attainments and character of those who follow it.

In neighborhoods where men are intelligent, educated, and high toned, if they follow farming, it very soon rises in the scale of reputation. A poor woman who goes out to wash and does for the community one of the best and most needful things, in ministering to cleanliness—if she be ignorant, the vocation does not seem very attractive to others; but let some man of sense and intelligence start a laundry on scientific principles, and a dozen respectable men would like to take stock with him, or set up a rival establishment.

The intelligent, educated farmer elevates the business he follows, and we regard the cultivation of the soil a noble pursuit, when it is liberally mixed with brains; and no other pursuit that does not carry a good share of that ingredient, is very reputable. Muscular force does not always demand a great deal of intelligence, consequently mere muscular labor, without intelligence, does not rank high, and never will.

TELEGRAPHY.—What intellectual development is necessary for a telegraph operator?

Ans. Full or large Individuality and Time, and as many other qualities as may be convenient to have; but no one makes a good operator with poor Time; and we think Tune helps, if one reads by sound.

CURLY HAIR—ELECTRICITY.—What is the philosophy of curly hair? I have seen it stated that it is the absence of electricity in the hair. If so, then straight hair must be the result of its presence. Is there any uninjurious means of abstracting this fluid from the hair by means of an electric comb? If so, where can this article be obtained.

Ans. The claim is arrant quackery. Be thankful for the hair you have, whether straight or curly, black or white, red or gray. If you have a straight, honest character, a spirit of submission to the will of God, it will not matter whether your hair be straight or curly. But avoid the quack, who spoils the hair, the health, and who often destroys human life.

PROCRASTINATION.—What organs are deficient in the brain of a person given to procrastination? Might not this habit arise from nervousness or physical ill health, independent of mental faculties?

Ans. Large Cautiousness sometimes produces procrastination; moderate Combativeness has a similar effect; large Continuity leads one to stick

to things he is at, and leave the things which he ought to adopt. A dull temperament and lazy spirit, or a weak condition, might lead to procrastination.

MENTAL TELEGRAPH.—If two persons at great distances apart who have sympathetic feelings toward each other, and one earnestly thinks of the other, will it awaken a corresponding state of mind instantly, or at all?

Ans. There are many persons who claim that they can have with each other mental sympathy and intercommunion, while they are widely separated. We have heard many extraordinary cases, in which there seemed to be such telegraphic sympathy, but it does not seem subject to the ordinary laws of investigation. They would be considered psychological; some would call them spiritual. In the "Library of Mesmerism" there are a great many such topics treated.

EMBARRASSMENT.—What kind of development accompanies a person who always feels embarrassed in cultivated society, and who, when among those who are his equals or his inferiors, can talk with ease and success?

Ans. Large Cautiousness and Approbativeness, and moderate Self-Esteem, would produce this result, especially with the mental temperament.

TO MAKE THE BEARD GROW.—Will you please inform me if there is any preparation which will cause the beard to grow on the face; I am a young man of twenty-one years, have been shaving once a week for about two years (or, rather, going through the performance), but the hairy part don't amount to much yet. Will more frequent shaving have any effect toward "hastening them forward?" My father and brother have heavy beards. My brother commenced shaving when about fifteen years old. Any information on the subject will be gladly and most thankfully received by your humble servant, * * *

P. S. If you make any charge for information on the subject, which in any way will be beneficial to me, state charge and I will gladly remit.

Ans. Wait. There is no "preparation" save the blood in the human system which will hasten the growth of the beard. Throw away your razor, and be thankful that you have a face on which the beard will some time grow. Be patient.

AGES OF CANDIDATES FOR MATRIMONY.—Is it advisable in matrimony that the wife should be older than the husband? Or, in other words, if a young lady of twenty-three say, shows a disposition to accept the advances of a man of twenty-one, would there be any impropriety (writing phrenologically) in their uniting their fortunes for life, if everything else be in harmony and love? For heaven's sake (as well as my own) lend a helping pen with your advice, for this is a serious case.

Ans. If there be no greater difference than two or three years, the match may be consummated, all other things being as they should be. But it would be *better* if the difference were the other way. We have given full information on all similar questions in our work on Wedlock.

CHARLIE ROSS.—This unfortunate youth has not been restored to his parents. It is generally believed that he is dead.



FAST.—This is a fast country and a fast age. The term "fast" is particularly applicable to the Yankee nation. All Christendom feels and manifests the quality; but the impatient Yankee, ever poking his nose forward in everything, feels it his privilege to be first in being fast. He works fast, travels fast, eats fast, sleeps fast, lives fast, dies fast. He does not live in the hope or on the principle of living happily, and enjoying a tranquil old age. He has no time to think of quiet and repose; no time to waste on the decline of years. He lives to do the most that he can in as little time as he can, and to die as quickly as he can when he can do no more. On the journey of life, as on every other journey that he takes, he prefers to be whirled along at the craziest speed, and detests all stops and hindrances, and slow stages at the end. If the wheels want greasing and the journals heat, he has no time to stop for repairs. He hastily dashes at them some lubricating fluid, and speeds on; as much as to say "You may burn out, but I can't stop."

Your impatient Yankee must go and must push things along with him. He is fast wherever he may be. He is content with nothing as it is; everything is too slow. The great desideratum with him is speed. If he be on a farm, he looks out for the fastest working machinery; no old sickels and flails for him. If in the work-shop, he does more work by extending the application of machinery, than by working according to the old methods. If in the pulpit, he preaches fast—must do it, or his audience will get done listening before he gets done preaching.

Speed is the great object of the present age. A difference of two hours in the time made by one of two railroads between New York and Omaha, would be likely to enrich the one and ruin the other. Safety is but a secondary consideration. Men would rather risk their lives at a rate of forty miles an hour, than ride in safety at half the speed. An occasional "smash-up" passes with hardly a reprimand; but a slow train is the detestation of all American travelers. E. T. BUSH.

A CLERGYMAN'S VIEWS.—*Dear Editor:* As a minister, I, of course, look with interest into all that is said of and with reference to us as a class. I am glad that you speak out so nobly and faithfully. Go on; don't spare!

I take my stand as a believer in and an expounder or teacher of the natural laws. The Gospel, based on the true constitution of man, and considered in its relation thus, is what I am endeavoring to teach. Preached and accepted in this, its only true light, it will be the "power of God unto salvation," physically, intellectually, and spiritually.

A studious reader of the JOURNAL for several years, I owe, in large measure, my corrected and truer notions of the Gospel to it and kindred writings. I look with the utmost interest for the JOURNAL as it comes each month, so heavily freighted with such valuable merchandise. It has become a necessity to me. The light within is as yet, in some things, dim and hazy. Thoughts, new and strange, yet high, are struggling to give themselves form and shape. The chaos within has been long in motion, and strata after strata of rectified thought have been forming and developing; and I look to the JOURNAL and to kindred scientific writing for the motive inspiration under God of this necessary activity. Thus the Spirit of God is moving upon the great deep within and light is developing. "The truth as it is in Jesus," based on truth as it is in our constitution, is what the world needs. This is the divine arrangement. How slow we have been to discern this fundamental, this necessary connection! J. CLEMENTS.

THE DUTY OF PARENTS TO WATCH THEIR CHILDREN.—The struggle in behalf of temperance has suggested some thoughts which I submit to the reader. While we would encourage every consistent public effort to stay the progress of the greatest evil in our country, we earnestly entreat mothers to watch and pray at home, especially watch lest the serpent, in an hour they think not, wind his poisonous folds around the child of their love, and he enter upon the path of ruin ere they are aware.

One such case comes so vividly to my mind. 'Tis, with but a little variation, the old story of a broken-hearted mother, who had, as she thought, guarded her son from vice with peculiar solicitude. He was her only one, and surrounded by all the attractions a home of wealth and affection could give.

While a boy at school, he was induced by those who value gold more than soul, to drink first of soda-water, and again of a little stronger drink, and so on, till one night he was taken home in a state of deep intoxication. This was the first that mother knew of his unfortunate habit, so artful and stealthy had been the work of the destroyer. It was sure! She says she has buried him now, not in the grave—perhaps it were better if he were quietly resting there—but he is lost to her in this world; she may find him in the next—God knoweth.

This lady, almost frantic with grief, and possessing an unusual amount of courage, resolved to investigate this matter of thus deluding unsuspecting youth. In disguise she visited saloons and drug stores in various places, and should the names of some of those respectable and religious (?) rum-sellers be given, their friends and admirers would shrink away in horror. O wretched men! Have ye ever read in the Book of books, "Cursed is he who putteth the bottle to his neighbor's lips and maketh him drunken?"

We rejoice in the aid many of our clergymen are conscientiously and faithfully giving to the work of reform. We honor them for it, and thank and bless them from our hearts. May the time soon come when our sons and daughters may breathe a purer atmosphere than now.

A FRIEND TO HUMANITY.

DISCOVERY OF IRON ORE AND HEALTH.

—We have received the following letter, which must be its own orthographic, mineralogical, and psychological exponent, as we are not sufficiently versed in the profundities it treats of to interpret it satisfactorily.

Dear Sir to make a long story short I discovered two beds of Iron ore last July magnetic Iron, and to go where the beds of iron ore is it seems to linger my health and herts my memory the last time I went thare I was not able to do any work for three weeks and my memory is hardly recovered yet, I think it was a bout the last of September that I was thare the last time

Thar is not but one man in this town that knows that I have discovered this ore that I know of I am a Beshilder (?) and my helth has not been good for 14 years or more

thar was a man discovered a magnetic Iron ore beed in this County and thare was an other man went in Pardenner Ship with him and that man was a bashilder (?) and they went to the mine a good many times and folks sed that they was crazy

thare was Iron Pyrtces in the ore and they thought it might be gold, weather the thoughts of gold was the caus of it or the magnetic influence of the Iron ore I do not know. My gbject in Writing this letter to you is know how to go up where the ore beed is and not have it hert me. I do not hardly think you can tell me

Yours Respectfully
D. S. Lewis Co. N. Y.

WISDOM.

"Think truly, and thy thought
Shall be a fruitful seed."

WHEN we read, we fancy we could be martyrs; and when we come to act, we can not bear a provoking word.

If we lose a piece of good money, we may find it again; but if we lose a piece of good temper, it is lost forever.

MEN are often accused of pride because their accusers would be proud if they themselves were in their places.

As bees breed no poison, though they extract the deadliest juices, so the noble mind, though forced to drink the cup of misery, can yield but generous thoughts and noble deeds.

CHARACTER grows; it is not something to be put on, ready-made, with manhood or womanhood;

but day by day, here a little and there a little, it grows with the growth and strengthens with the strength, until, good or bad, it becomes almost a coat of mail.

We are apt to mistake our vocation in looking out of the way for occasions to exercise great and rare virtues, and by stepping over the ordinary ones which lie directly in the road before us.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

A SUNDAY-SCHOOL scholar, being asked what became of men who deceived their fellow-men, promptly exclaimed, "They go to Europe."

AN Irish lawyer, in a neighboring county, lately addressed the court as "gentlemen," instead of "your honors." After he had concluded, a brother of the bar reminded him of his error. He immediately arose to apologize thus:

"May it please the court, in the hate of debate I called yer honors gentlemen. I made a mistake, yer honors." The gentleman sat down, and we hope the court was satisfied.

BIG TREES.—Those of our readers who have never made the overland trip to California, may, perhaps, need to be informed that at a distance of exactly one thousand miles from Omaha, there is a tree which has been adorned by a sign board, and is known as the "1,000 mile tree." This is one of the features of the Union Pacific Railroad, and is illustrated in the guide books and time tables, together with other notable places on the route.

A young lady lately made the trip across the country, and having read of the wonders of the western part of the continent so "modestly" described in the guide books, was evidently prepared to accept as truth anything which might be pictured by the most vivid imagination. Not fully comprehending the significance of the name of the famous tree, she inquired of the writer, with all sincerity, if it was true that there was a tree on the line of the road which was a *thousand miles high!*

It was cruel to be obliged to reduce her visions of miles to a few feet, but it was unavoidable.

On being correctly informed as to the facts, she remarked, "I have heard of the big trees, but didn't believe there could be one as high as that."

PHRENOLOGICAL ENIGMA.—A problem for our young readers to solve: I am composed of 28 letters. My 16, 21, 5, 17, 23, 8, 10, 25 is one of the organs of the head; 11, 9, 6, 14 is a city; 20, 24, 1, 8 is a bird; 2, 15, 4 is enjoyed by most young people; 7, 27, 22 is found in every kitchen; 26, 18, 13 is what no one wishes to be; 23, 12, 19 is disliked by all business men. My whole is taught by Phrenology.

M. H. W.



In this department are given the titles and prices of such New Books as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

LONGEVITY: The Means of Prolonging Life after Middle Age. By John Gardner, M.D. Third edition, revised and enlarged. 12mo, cloth. Price, \$1.50. Boston: Wm. F. Gill & Co.

The purpose of the author in giving this work to the public is worthy enough, and is stated briefly in the preface to the first edition, thus: "To call attention to those peculiarities of the constitution which distinguish age from youth and manhood, to point out those symptoms of deviation from the healthy standard which are usually disregarded, or considered unavoidable incidents of age, but which insensibly glide into fatal diseases if neglected."

The important causes of prolonged life Dr. Gardner properly states to be public sanitary improvements, wholesome and provident habits, good food, sufficient clothing, good ventilation of dwellings, cleanliness, drainage of lands, progress in the arts of medical treatment, and he urges their application in youth as well as age.

The epoch of the commencing decline in life he places at sixty-three years, which "corresponds to what the old philosophers designated 'the grand climacteric'—seven multiplied by nine," and advises a persistent watchfulness on the part of those who have gone beyond this period, if they would preserve a firm state of health.

As an experienced medicist, the author takes into account the influences of race, family, and peculiar constitution, and enjoins habits of "*sobriety* as most congenial to health and life." But we can not approve his suggestions with regard to the use of wine. He says "a judicious use of wine" is beneficial to the aged, to be sure with the hinted proviso that a physician should prescribe the kind and quantity, but does not tell us that few old men can be controlled in this matter, and that persistent moderation with the aged is exceedingly rare.

He speaks rather disparagingly of farinaceous food, and as far as we can learn from the context, bases his opinion on "arrowroot, some forms of starch," etc. So far as such farinacea are concerned, we are ready to agree with him. But if "aged persons require a diet containing most nutrition in least bulk," it seems to us that they will find it in pease, oatmeal, cracked or crushed wheat, and other grains from which the vital principles have not been taken by the processes of the mill. The latest analyses of oats, wheat, pease, barley, and maize compare not unfavorably with the best beef and mutton.

Dr. Gardner's advice with regard to the use of

water is in most respects valuable, and we approve heartily what he says with regard to rubbing-baths, and the avoidance of excitement.

Of course, the author being a physician of what is called the regular school, his counsel in the consideration of many states and maladies peculiar to old age now and then, includes the use of medicaments, mineral or vegetable, as the case may appear to his experience to require. But his prescriptions are tempered with so much moderation and appreciation of the necessity for care in the use of drugs, that we feel confident that the aged who read his book and follow closely his precepts will receive benefit.

THE ADVENTURES OF THE CHEVALIER DE LA SALLE AND HIS COMPANIONS. In their Explorations of the Prairies, Forests, Lakes, and Rivers of the New World, etc., two hundred years ago. By John S. C. Abbott. Illustrated. 16mo, cloth; pp. 384. Price, \$1.50. New York: Dodd & Mead.

In the field of biography Mr. Abbott has been too well known for the past twenty-five years to need any new commendation to the reader. His style is of that pleasant, simple order which engages and keeps the attention of youthful inquirers for more substantial reading than the story books of the libraries. In this fresh book the author has opened a new vein of interest, and we invite all our young friends to invest in it, if they are given to conning the adventures and trials of fictitious pioneers and hunters. They will find in its pages enough of exciting incident, startling emergency, and hair-breadth escapade, and at the same time much historical instruction. The author says of his hero: "Fear was an emotion La Salle never experienced. His adventures were more wild and wondrous than almost any recorded in the tales of chivalry."

"In these adventures the reader will find a more vivid description of the condition of this continent and the character of its inhabitants two hundred years ago than can be found anywhere else. Sir Walter Scott once remarked that no one could take more pleasure in reading his romances than he had taken in writing them. In this volume we have the romance of truth."

THE BROOK, AND THE TIDE TURNING. 16mo, cloth. Price, \$1. New York: National Temperance Society and Publication House.

Two stories in one cover, and both of the purest moral tone. "The Brook," by Sarah K. Hunt, is of a charming simplicity and naturalness. It relates the struggle of a young wife with the drink demon for the possession of Edward Clifton, and how that struggle terminated in victory for the devoted wife, restoring a gifted man to his normal place in society and in the business of life.

"The Tide Turning," by Miss L. Bates, relates the efforts of a band of men and women in a Western city for the moral and religious conversion of poor victims of appetite. It is a well-written and powerful story.

HOME TALKS. By John Humphrey Noyes. Edited by Alfred Barron and George Noyes Miller. Vol. I. 18mo, cloth; pp. 358. Oneida: Published by the Community.

This is a volume of the social talks of Mr. John H. Noyes, the well-known leader of the Oneida Community. The topics are numerous, and their discussion covers a period of nearly ten years. Many of them without professing to be *verbatim* exhibits of their author's thought, nevertheless are very close photographs of what he said in the gatherings of the Community in Putney, Vt., in Brooklyn, N. Y., Oneida—at the beginning of the enterprise which has so successfully been developed there—at Wallingford, Ct., and at Java, on the Oneida Lake.

Mr. Noyes is a man of very strong individuality, and that quality utters itself sharply in all that he says and does. Witness some of his statements. For instance, under the topic of "A Healthy Appetite," he says: "Whoever abandons himself in natural love, or even in science, special or general, thereby loses his appetite for other things, and is diseased in the same way as the drunkard is." In another place, in speaking of "Home Spoilers," he says: "The terrible agencies that are always busy in this work of baffling men's attempts to rebuild paradise, are marriage and death. These are the twin fatalities of human existence as every newspaper bears witness by coupling them in standing records."

His sayings are chiefly of a religious nature, exponents of his views of the life of man on earth in relation to duty, to God, and his future state. He says, in his "Hygiene for the Head:" "Our health and peace depend, not on the communication to the external world, but on the communication with the internal world. Thus we hear that the overworked head gets into a false spiritual position, and the true order of our faculties is inverted. The world prevails over the head, and the head prevails over the heart, which is the same thing as having the children rule the woman, and the woman the man."

Besides those noticed, the topics which appear to us to contain the more vigorous strokes of thought are "Full Growth," "Improvement of Character," in which he states some views in thorough harmony with phrenological precept; for example: "The idea prevails generally in the world that character can not be radically changed, that the peculiarities of the mind and spirit, that persons have received by chance or inheritance, must be retained through life. In this theory, unbelief has one of its terrible strongholds. If it were true, there would be little hope for humanity; the whole theory of Christianity is based on the assumption that character can be improved—yea, radically change;" "Out and Back," "The Law of Fellowship," "Salvation from Sin," "How and Where to Pray," "Grace Better than Suffering," "Help Yourself," "Heaven Coming."

Those people who are very much given to berat-

ing the moral atmosphere of the Oneida Community should read Mr. Noyes' "Home Talks" to obtain an appreciative view of the great Communist's inner life—of what we believe have been the motor principles of his outward conduct.

CONDITIONS OF SUCCESS IN PREACHING WITHOUT NOTES. Three Lectures Delivered before the Students of the Union Theological Seminary, New York, January 13th, 20th, 27th, 1875. With an Appendix. By Richard S. Storrs, D.D., LL.D., of Brooklyn, N. Y. One vol., 12mo; pp. 333; muslin. New York: Dodd & Mead.

This book is literally what it purports to be, and should be studied by all who are to become public speakers, whether with notes or without them. Dr. Storrs believes in keeping the mind active, discharging the last subject or topic when the next is taken in hand; thus, with all the faculties alert, and the body constantly in high health, come before the audience charged with your subject, and you will meet with a stimulating response that will make speaking without notes more easy and acceptable than if the mind had to work against the negative influences of prejudice, and an excited brain unsustained by a healthy condition of body. Of faith he says: "It is the true power of heroism over the world; not in religion only, but in all common and secular affairs. It gives the power that moves mankind."

AMERICAN NEWSPAPER DIRECTORY. Containing Accurate Lists of all the Newspapers and Periodicals published in the United States and Territories, and in the Dominion of Canada. Large octavo; pp. 984; cloth. New York: George P. Rowell & Co., Publishers.

This edition of the "American Newspaper Directory" for 1875 is the seventh in order of issue, and contains a description of 774 daily, 100 tri-weekly, 121 semi-weekly, 6,287 weekly, 27 bi-weekly, 108 semi-monthly, 850 monthly, 10 bi-monthly, and 71 quarterly publications; in all, 8,348 American publications. Considering this grand aggregate of enterprise in the line of the publication of newspapers and miscellaneous literature, it is not to be wondered at that more printing paper is used by the American people than by any other nation on the globe.

Besides this tabulation of newspapers, the "Directory" contains other interesting features. The increase of periodical publications in 1874 over 1873, was 1,057; the increase since the Directory of 1874 was published has been 564. A great many newspapers and magazines which started into life with a good deal of vigor, after an existence of a few weeks or few months, suspended. One newspaper in particular, the New York *Republic*, which commenced with a capital of \$500,000, failed after less than a year's existence. Many merchants, men in professional life, teachers, clergymen, lawyers, and physicians, are found among the list of unfortunate investors in literary enterprise. They commenced, probably, full of hope and ardor,

thinking that the making of a successful paper or periodical was not so great a matter after all; but after a short experience, ruefully concluded that there were many obstacles in the way of progress and pecuniary profit in the use of types and ink.

We are told by the publishers of the Directory that circulations have materially decreased during the past year, and that, with the exception of two Sunday-School papers, no periodical issued west of New York City sustains a claim to a regular issue of 40,000 copies. Failure of crops in the West, what are known as providential visitations in the way of tornadoes, heavy rains, floods, extensive fires, and the general depression in commercial affairs, have operated very unfavorably upon publishing interests. The outlook now, however, seems brighter. We trust that the intellectual growth of the people will demand further and better supplies of good reading material, and that they who publish good papers and periodicals will have the support they deserve.

GOD'S WORD THROUGH PREACHING.

The Lyman Beecher Lectures before the Theological Department of Yale College. (Fourth Series.) By John Hall, D.D. One vol., 12mo; pp. 274; muslin. Price, \$1.50. New York: Dodd & Mead.

This book embraces ten lectures, and an appendix—"written to be spoken, not read." Wherein Dr. Hall hits right and left the follies to be met and overcome by our teachers of morals. He counsels the pastor to notice the poor and the children, to look up the wanderers, help the needy, and comfort the burdened; or, in other words, to attend to all the small amenities of social and pastoral duties, and not leave any to feel that they are not recognized, and their absences and requirements unnoticed by him. He believes in *working clergy*, and that they should make themselves needful in their position, so that their place need not be supplied by a substitute while they have life and health to perform their pastoral duties.

THE GRANGE MAKES CHANGE; or, the Farmers' Candidate. Such is the title of a drama just completed by Col. A. J. H. Duganne, who has favored us with a perusal of the original manuscript. It is timely in its production, and, it seems to us, that should any of our theatrical managers produce it in the style which its merits justify, it would have a most successful run. The *dramatis personae* are:

PAUL FERRIS, railroad president, bank director, and candidate for Congress.

MARK MEADOWS, a young, enterprising farmer, ultimately the successful candidate as opposed to Paul Ferris.

BAGSLEY, an unscrupulous lawyer and wire-pulling politician.

BOB CANNON, an overgrown lubber, whom an injudicious father has so educated that he considers farmers and farming as very "low."

CANNON, Bob's father.

HOGAN, RUSSELL, and VAN TINE, Farmers' delegate to convention to nominate Congressmen.

PHILLIP, servant to Ferris.

Sheriff's Officers and Auctioneer; **Mrs. Meadows**, Mark's mother; **Emily Meadows**, Mark's sister; **Pauline Ferris**, the banker's daughter.

The characters are sharply defined, and such as every one recognizes as among his acquaintances. The incidents are mostly those of every-day occurrence, the plot natural, and the interest sustained without flagging.

THE LAND OF THE WHITE ELEPHANT, (Frank Vincent), which Bayard Taylor called a real contribution to the literature of travel, saying that the field it embraced possessed a very rare and genuine interest which had here been described in the right manner, the simplest and frankest style—seems to have met with unusual favor both from press and people at home and abroad. It is now in its fifth edition, and has received the honor of translation into German and French. It has also been republished in England, where it was commended by the leading English reviews—merciless critics where they do not approve. Thus, the *Examiner* assigned it "a place of foremost interest among the travel books of the year;" the *Saturday Review* thought it "a welcome addition to our knowledge of the Indo-Chinese peninsula;" and the *Pull Mall Gazette* styled it "a model book of travel."

MAGAZINES, ETC., RECEIVED.

BRAINARD'S MUSICAL WORLD, for June, with a good variety of discussion and gossip on current musical topics, besides several vocal and instrumental compositions. Price, 25 cents; \$3 a year.

TENTH ANNUAL REPORT OF THE NATIONAL TEMPERANCE SOCIETY AND PUBLICATION HOUSE. Presented May 6th, 1875. This document shows marked progress in temperance affairs generally, and will be read with interest and gratification by all who favor true reform.

THE CATHOLIC WORLD, for June. This number contains a vigorously written article under the title of "Specimen Charities," in which a comparison of work alleged to be done, with the expenses of its performance by certain Protestant societies, is a leading feature. Perhaps the *C. W.* is right in some of its strictures.

THE MONTHLY WEATHER REVIEW, for April, 1875. Gen. Meyer has our thanks for his monthly remembrance of us. The number for April is noteworthy as a record of many remarkable meteorological occurrences.

SCRIBNER'S MONTHLY, for June, abounds, as usual, with miscellaneous information, wit, and amusement, and with finely executed illustrations. It has gobbled in another periodical, *Old and New*, late of Boston.