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EDUCATIONALIST.

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VOLUME II. BRIGHTON, CANADA WEST, DECEMBER 2, 1861. NUMBER 6

Poetry.

TO THE PRISONER.

I pity thee, poor prisoner, pent
Thy gloomy cell within,
Though now perhaps thou sufferest
But justly for thy sin

Methinks thou sittest in silent grief,
The hard heart broken down;
Deep penitence upon that brow,
Once hardened by a frown.

If so, though pity may not pass
Thy grave to smooth that brow,
Yet couldst thou read one human heart,
'Twould cheer thee even now.

'Twould lighten up those dreary walls,
Make soft that gloomy bed,
And Hope, sweet prophetess, would pass,
Back through the door she fled.

I am a prisoner, too, but oh!
May no such crimes as thine
Within a dungeon's gloomy walls,
This body e'er confine.

From the Scientific American.

THE AGE OF THE HUMAN RACE

At the meeting of the Polytechnic Association of the American Institute, reported in another place, Dr. Stevens read a paper on the geologic period at which the human race was created, which was listened to with the greatest interest. The following is an abstract of the paper:—

The great truth that comes out with most prominence from the multitude of facts collected by geologists, is the creation of successive races and species of animals which have slowly succeeded each other through immense periods of time—constantly advancing from simpler to higher forms of organization.

Nearly all the rocks that form the crust of our own globe were deposited at the bottom of seas and lakes, constituting formations ranging in geographical extent from a few rods to thousands of miles, and varying in thickness from a fraction of an inch to many thousand feet.

When we find one of these rocks deposited upon another, we cannot resist the conclusion that the upper rock has been deposited after the lower one, and thus the relative ages of the rocks are positively ascertained. Now, in the oldest rocks that contain organic remains, we find the lowest forms of life. For a long time the only inhabitants of this earth were shell fish. The seas swarmed with them in immense multitudes; certain species lived, multiplied, and gradually became extinct; these were succeeded by others, and thus species followed species in long succession, their shells falling to the bottom of the ocean, and forming rocks which were miles in thickness. These rocks were slowly raised above the level of the sea by those undulations which are constantly taking place in the crust of the earth, and as they were broken and turned up on their edges, we can now measure their thickness with a rod and line.

After the shellfish had existed alone for a period sufficient for these deposits to be made, fishes were created, and the next strata of rocks in the ascending scale are filled with shells and bones of fishes mixed together. After the fishes came the reptiles, then the mammalia, and last of all man.

The evidence of man's existence in the geologic history of the earth are all confined to the immediate neighborhood of the surface, indicating his comparative recent appearance, but discoveries made within two or three years carry back his origin to times far more remote than had before been supposed. These evidences are of two kinds, first the bones of man; second, his works.

Among the works of man that are found buried in the earth by rocks which have formed over them, are utensils of various kinds, for war, for cooking, &c., excavations, the wounds inflicted by man in the bones of other animals; and buildings either isolated or in cities. The most famous of the buried cities that have been found is Pompeii, in Italy. This city with its inhabitants in the full tide of life was suddenly buried by ashes and mud thrown out from the volcano of Vesuvius in the year 79 of the Christian Era. So completely was it buried that it disappeared utterly from the face of the earth, and its place was lost to human memory. In the year 1713, excavations led to the accidental discovery of its suburbs, and the whole has since been exhumed. The skeleton of a sentinel was found at his post and the skeleton of a miser with his bag of gold clutched in his hand. Buried cities have also been found in Scotland, California and other countries.

Until very recently, all the remains of man or of his works that had been discovered were above the drift formation. The drift is that mass of rounded boulders and gravel which covers most of the surface in this part of the world, a very fine specimen of it may be seen in Broadway, opposite the city hospital. It was evidently not deposited, like the stratified rock, at the bottom of the sea, and there is some doubt in regard to the mode of its formation, but geologists now generally suppose that it was brought down by ice from the cold polar regions. The melting of the ice seems so to have chilled the waters of the ocean in this vicinity so as to kill all the fishes that inhabited them.

Now, within a few years many discoveries have been made of human remains in the drift, either carrying back the age of the human race, or bringing forward the age of the drift. In South Carolina, two human skeletons have been found in a bog iron ore, almost wholly transformed into oxyde of iron. In California, stone chisels, arrow heads, mortars and pestles are found just above the placer formation—the formation that contains the gold. In many places in Europe human bones have been found in caves associated with great quantities of bones of extinct animals, the animals having been killed by the very savage men who lived in the caves and carried in to be eaten. Many of the animals found in regions now temperate are tropical animals, such as the hippopotamus, rhinoceros, &c., and this evidence, with that furnished by the plants, shows that the temperature of some portions of the earth was at one time much higher than it is at present.

The discoveries of human remains in the drift prove, as I have said, either that the drift is newer or that mankind is older than had been supposed. Which of these is the case cannot yet be determined but the present indications are that it will carry back the origin of man to earlier geologic periods. All the new evidences, however, coincide with the old in proving that man was the latest as he is the highest in the creation of God.

NATURAL SPRING OF CARBONIC ACID.

At Piermont, in Germany, there is a natural spring or well of carbonic acid gas The sides of it have been walled, and steps have been laid for entering it. The well is shallow, and the gas fills it to a depth of about four feet, so that the gas rises about to the middle of a person standing in the well. Carbonic acid, in contact with the skin, produces a peculiar prickling sensation, and people visit Piermont for the purpose of taking a carbonic acid bath. The keeper makes a practice of blowing soap bubbles, which fall through the air, but which rest upon the surface of the heavier gas, and dance up and down as the gas is agitated.

THE EDUCATIONALIST.

DECEMBER 2, 1861.

TERMS TO CLUBS.

Persons sending us four Subscribers, the cash accompanying the order, will be entitled to one copy of the EDUCATIONALIST for one year.

TO BE ENLARGED.

After the expiration of three months, the EDUCATIONALIST will be enlarged to twice its present size, and its price will be advanced to one dollar per year.

Those of our readers who forward us their subscriptions at once, [fifty cents, its present price] will avail themselves of the benefit of the enlargement of the paper for the remainder of the year. We still urge our friends to *exert themselves* in soliciting subscriptions, while the paper can be obtained at the low price of fifty cents.

TRY, EVERYBODY.

Will not our readers, every one, try to procure *one* new subscriber for the EDUCATIONALIST Try it once. By such an effort our subscription list would be increased to double its present number, enabling us at once to enlarge our paper to twice its present size; so, you see, you would be working for yourselves more than for us. Some teachers have been *so* good as to canvass their school sections, while others are so disinterested in the dissemination of knowledge that they have really refused to become subscribers. We have spent a good deal of time and not a little expense in circulating the EDUCATIONALIST, and have succeeded so far as to maintain an existence, in our somewhat contracted form; but we are not satisfied with this; we want to do more; we want to enlarge and raise the EDUCATIONALIST to that rank which a paper should hold; and we cannot do so without the assistance of the friends of education.

TEACHERS' CONVENTION.

The Teachers' Convention (East Riding of the County of Northumberland) will meet at the village of Warkworth, on the 14th December next.

☞ According to our advertised rules, those of our readers who are in arrears for three months will be charged one dollar. To such we would say, if the dollar is sent immediately you will be entitled to the EDUCATIONALIST for another year.

AMUSEMENT FOR YOUNG LADIES.

The following simple, yet beautiful, mode of occupying "leisure time," is not only very enchanting, but enables the pursuer to lay by a few pleasing and useful mementos of early childhood. It was procured from a foreign source by a teacher of "Fancy Arts," and now first published for the benefit of the rising generation:

I.—INSTRUCTION FOR GRECIAN OIL PAINTING.

List of Materials Used.—1 palette board and knife; 1 flat varnish brush; 3 sizes of sable brushes; 2 oz. Demar varnish; 2 oz. turpentine.

Colors Used.—Naples yellow; silver white; scarlet lake; raw sienna; Prussian blue; Vandyke brown; Emerald and chrome green; ivory black.

Receipt for Grecian Varnish.—Three oz. of balsam fir; 2 oz. alcohol; 1 oz. turpentine.—mix them well together.

Special Directions.—[To make flesh color, mix Naples yellow, scarlet lake and white together; you make the blush of the cheek and color of the lips a little redder than the rest, and dabble them with your finger, so as to blend well; to make blue eyes, mix Prussian blue and white; to make hazel eyes, mix yellow ochre and Vandyke brown, and a very little raw sienna; back grounds are varied according to the taste of the artist; to make sky and water, mix a little blue and white; to make trees, make the trunks with Vandyke brown, raw sienna and a little white, then the foliage is made by mixing a little chrome yellow and Prussian blue, mixed as you lay them on. When finished, varnish on the right side with Grecian varnish.] Turpentine is used to clean your paint brushes, or clean off paint if put on wrong.

General Directions.—First procure an engraving or lithograph, for your design to paint. Second, fasten the same, by pasting or tacking it to a small wooden frame, so as to keep it straight while preparing and painting.—Then take a soft blender, or copying brush, and saturate the picture on the wrong side, until thoroughly wet, with spirits of turpentine. This done, continue to saturate in the same way on the back, by using the Grecian varnish instead of the turpentine, as often as you see spots begin to dry on the back, until it becomes clear and glossy, and transparent like glass. (When your picture is well dried paint it on the wrong side, following your boundary lines in every figure as designated by the engravity or lithograph, using artists colors and brushes—colors used according to the nature of your design, and scenery in the picture. In painting the figure of a person in a picture, first paint the eyes and let them dry, then the flesh color. Lay your colors on heavy, and mix Demar varnish with them as you lay them on)

II.—INSTRUCTIONS FOR CELESTIAL PAINTING.

Special Directions.—In painting the figure of a picture, first paint the dyes and let them dry, then the flesh color, which you make as follows Naples yellow, scarlet lake and white, mix together. Lay your colors on thin, all except the back ground and flesh color, which you lay on heavy. Mix Demar varnish with them as you lay them on, no shading is required, as that is made by your lithograph or engraving: back grounds and draperies are varied according to the taste of the artist; colors generally used for back ground are, Vandyke brown, raw sienna, ivory black, &c. Transparent colors used for the balance; [for red, scarlet or crimson lake; for yellow, yellow lake; for brown, burnt sienna; for blue, Prussian blue; for green, yellow lake and Prussian blue, mixed; for white, silver white, or white flake; for purple, scarlet or crimson lake and blue, mixed.]

General Directions.—[First take an engraving or lithograph you wish to transfer to glass, and cut the margin off around your picture, in the shape you desire it; then lay your picture in a pan of clear water until it sinks, after which remove it and lay it between the leaves of a book, or between paper, so as to absorb most of the water: this done, clean your glass and well varnish with a heavy coat of pure Demar varnish, the size of your picture, and in the place where you want it on the glass; varnish on the crowning side of your glass; and use a bristle brush to lay it on. Lay your glass level and let the varnish flow, and when it has remained long enough to become tacky, that is to say, it will not run, then lay your picture on the table, with the face side up, and hold the varnished glass over it with the varnish side down, in the place where you want your picture, and lay it down carefully, pressing lightly; this done, take a piece of dry paper or slip and lay on your picture, where you see blisters or air bubbles, and press them lightly from the centre of your picture, outwards. These must all be pressed out until there is none to be seen between the surface of your picture and glass. You must always keep a slip of dry paper between your fingers and the picture, or you will roll up the paper on the picture and spoil the same. This done, set it aside, and let it remain until the varnish is dry and hard; after this, wet your picture, and rub it with your finger until all the paper is removed but the print; this you will see by its being dark colored; then varnish again with Demar varnish until clear as the glass, which generally requires but one coat.

Here follow the directions given in No. 1,

under "general," and included in parentheses.

When your picture is painted, back ground and all, let it dry; then cover it on the back with a smooth sheet of tin foil, between your glass and back board, and this will render all your transparent colors brilliant. You can make any color you wish transparent, by mixing a great quantity of Demar varnish with it, as you lay it on.]

III.—Instructions for Italian Painting.

This is a mode of glass painting and performed by following those directions, "special" and "general," included in brackets in Nos. 1 and 2.

IV.—Instructions for Crystaline, or Oriental Painting.

First draw or get your pattern on paper, such as flowers and vases of fruit, &c., then with wafers or otherwise fasten the same to the glass so as to prevent it moving—the pattern of course on the under side; then with a fine pencil brush, or with a common writing pen, trace all the out-lines of your picture, such as leaves and veins of the same, stems and flowers, &c., as near as possible on the glass, over your pattern, the same as you would trace a pattern for embroidery; this done, fill or paint the back ground of your picture, and spaces not occupied by leaves, flowers, stems, ornaments, &c., with the same when you want a back ground; using for that purpose, asphaltum varnish with lamp black, mixed—add a little turpentine if too thick,—but if any other color is desired, paint it with oil-colored paints. When your ground work is dry, then paint your flowers, leaves, stems, ornaments, &c., their respective colors, using artist's colors and brushes.

For coloring, use "special" directions included in brackets in No. 2.

Lay your colors on thin, and mix them with Demar varnish. As you lay them on shade with extra coats, after the first becomes dry; and after all is well dried, crinkle copper or tin foil, and cover the back of your picture with the same as you frame it. This will give it the spangle.—[School Visitor.

THE SPECTRUM.

(*From the Scientific American.*)

In the year 1701, Sir Isaac Newton published his work on optics, and in it made known to the world his great discovery of the analysis of light. He had found that if a beam of light was passed through a triangular prism, it was refracted or bent from its course, and separated into seven beautiful colors, which falling upon a wall or screen produced an elongated oval image that is called the spectrum. For the last 160 years the spectrum has been the subject of an immense amount of study and observation among all civilized nations, but it never before occupied the prominent position in the world of science which it holds in this year 1861.

It has been discovered that the prism, besides separating the sunbeam into seven colors, also divides it into three elements, viz., light, heat, and the chemical or actinic rays; the last being those that produce the picture in the daguerreotype and photograph, as well as all the other chemical effects of what is called light. The luminous rays are refracted more than the heat or thermic rays and less than the actinic, though both the heat and actinic rays mingle with the luminous at their respective ends of the spectrum. Hence, violet and blue light acts very energetically on the photograph sheet, while the yellow light does not act at all. Every photographer has a room with the windows glazed with yellow glass, or shaded with yellow curtains, in which to work on his sensitive paper.

In 1801, just a hundred years after the publication of Newton's work, Walloston discovered that if the ray of light, before entering the prism is passed through a narrow slit, the spectrum is crossed by several dark lines. These were subsequently examined by Fraunhofer, who named seven of the principal ones from seven letters of the alphabet, B C D E F G H. A more careful examination of the spectrum, by means of magnifying lenses, has revealed the existence of several thousands of these dark lines, and an investigation of these has given us the new method of spectral analysis, the results of which are among the most wonderful of all the marvels of science. This method, not only enables us to detect the presence of elements in quantities of inconceivable minuteness, but it has led to the sublime discovery that some of the substances with which we are familiar on this earth also enter into the constitution of the sun and stars.

When any metal or other element is burned in a colorless flame, like that of an alcohol lamp, it gives a peculiar color to the flame, and if the light is passed through the triangular prism, each element produces its own peculiar spectrum, and the spectra of several of the elements are crossed by bright lines in the same position as some of the dark lines of the solar spectrum.

The next great step in this most wonderful investigation, was the discovery that if the flame of an artificial light is interposed in the path of the sun's ray, then passed through the prism, the bright line of the spectrum from the artificial disappears, and its place is occupied by the corresponding dark line of the solar spectrum, which is deepened by the passage of the light through the colored flame. The flame of every substance seems to have the power of absorbing, or rather of dispersing, the rays which produce its own bright line or lines, so that light passing through a flame has a dark line across its spectrum in the same place as the bright line of the spectrum from the flame.

This fact last stated, led to the discovery of the composition of the sun. It is inferred that the light comes from the solid body of the sun, and passes through an atmosphere of flame, or of highly heated vapors of various substances, each of which absorbs the light that would produce the bright line in its own spectrum.—Hence the solar spectrum is crossed by dark lines corresponding to the bright lines in the spectra of various substances. As there is a dark line in the solar spectrum in the same position as the bright line in the spectrum of burning potassium, it is inferred that there is heated vapor of potassium in the sun's atmosphere; and as there is no dark line in the solar spectrum corresponding with the bright line in the spectrum of lithium, it is inferred that there is no vapor of lithium in the atmosphere of the sun.

Each star appears to have its characteristic spectrum, revealing to man the knowledge of its composition. Chemistry, following in the sublime path of astronomy, is extending the field of its investigations over the visible universe. Every ray of light that comes from the distant worlds above, beneath and around us, through its swift flight continue, through years or through centuries, bears in its constitution the ineffaceable record of its origin, and conveys to human intelligence, across inconceivable distances, a knowledge of the substance from which it issued forth.

☞ All kinds of soft porous stone become hard by whitewashing them with fresh slacked lime. The lime absorbs carbonic acid from the atmosphere, and is converted into carbonate of lime. A portion of this remains in the pores of the stone, and ultimately becomes marble.

☞ Marriages are often called "matches;" yet, of those who are married, how few are matched! Temper, taste, and disposition should be well studied before marriage. Husbands and wives are like locks and keys, that rather break than open if the wards be not answerable.

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THE EDUCATIONALIST.

DECEMBER 2, 1861.

HINTS ON THE QUALIFICATIONS OF THE TEACHER.

It has been truly said by one of the greatest scholars of the age—Lord Brougham—that a knowledge of reading, writing, arithmetic and English Grammar, does not qualify an individual for the teaching of youth. To read well, however, is essentially necessary to every one who proposes to teach, and no man or woman can teach reading who does not from habit pronounce the English Language with accuracy and ease. This qualification which stands at the threshold, and may be called the foundation and the key of knowledge can only be acquired by untiring industry and persevering application. To be able to pronounce well, then, is a most important qualification required by every teacher. Children, and men too, are creatures of imitation, and they will imperceptibly imbibe the peculiarities of the teacher and especially his pronunciation, and if that pronunciation be inaccurate and corrupt, no after cure or training in mature years will prevent involuntary blunders. A young man of sound mind may obtain as much knowledge of Arithmetic in six months as would be sufficient to qualify him to cast up the accounts of the largest mercantile house in Canada, but every man who at the age of puberty has commenced to qualify himself for teaching will admit that a period of six months would be too limited to learn to read accurately the works required in a third rate school. Counsellor Haydon, in his autobiography, states that he suffered much inconvenience when he entered into society at the close of his school career, from the trifling attention that was given in the school to reading and pronunciation, compared with arithmetic. The domine, as he calls him, was considered the best arithmetical scholar in the city—Philadelphia. He could solve all the arithmetical puzzles from the "scuffle to the cube root," yet this same domine could not read accurately five lines of a common newspaper, nor would he in any place, even among his private friends in a social circle, read aloud, from the dread of being laughed at. If he had devoted the extra time which he wasted in puzzling arithmetical questions in the Chinese language, it might eventually have been more profitable to him in a pecuniary way.

It will be admitted that every teacher ought to be acquainted with English Grammar. And in what does an acquaintance with English Grammar consist? It most certainly does not consist in being able to parse any, even the most involved, or obscure sentence in the language. English Grammar is the ART AND SCIENCE of Speaking and Writing the English Language correctly. This definition is logically a good one, and from the time of Lowth to the present, it has never been disputed by any competent authority. This part of the qualifications of a teacher is one of the most difficult to be acquired, and it is at the same time one of the most practical importance and the most useful for the every day business of life. The exercise of attention, thought, and memory, in studying the English language, has always been allowed to be one of the most effective means for training and invigorating the mental powers. It turns the mind inward upon itself, causes it to reflect on its own operations, and aids in forming and strengthening that habit of self-examination which is so valuable to man as a moral, intellectual and religious being. A particular knowledge of our language is requisite before we can fully appreciate and enjoy the beauties and delicacies of our rich and varied literature, whether in the rude and simple ballads of old, or in the more refined writings of modern periods, such as those of Shakspere, Milton, Addison, Robertson, Gibbon, Cowper, Burns, Burke, Scott, Byron, Wordsworth, Dickens, Macauley.

By this particular knowledge of our language I do not mean as I have already stated, the ability to parse an English sentence, but an ability to write with ease and accuracy our thoughts and feelings, and present them to the minds of others in living language, which will be a faithful mirror of our own minds. The subject of language is intimately interwoven with that of history, and the student of the latter finds at every turn, the advantage of being acquainted with the general nature and structure of languages, and of his own language as a foundation. A teacher who would instruct his pupils faithfully in English Grammar, should in addition to the ability of teaching them to parse, as it is called, be also qualified to instruct them in the principles of English composition, and in order to be successful here, he must have practised the art himself. It would be preposterous for a teacher to expect his pupils to excel in the composition of a familiar epistle, while said teacher had never exemplified by his own practice this useful acquirement which every man who claims to be educated should undoubtedly possess. He is the best instructor who devotes most time in the school to those objects of study which his pupils will require in the daily pursuits of life, and which if not learned at school must either remain unknown, or be acquired at great disadvantage amidst the absorbing cares and employments of manhood. I shall conclude these observations by a quotation from a recent London Periodical of high literary fame: "By the term 'educated classes,' we are too apt to consider those only who can read, write, parse and cast up accounts, and possess such other knowledge as may grow out of these primary elements,—which are not knowledge but simply the tools of knowledge, and by no means comprise that education which is essential to independence and life."

THE TOAD AND HIS REPAST.

Few of our readers, most probably, have ever observed the toad at his repast. It is performed with electric rapidity, and with more than telegrammic precision. The tongue is doubled back upon itself, and is tipped with a glutinous secretion. The moment the beetle comes within range, the tongue is shot forth with unerring aim, and, quick as lightning, the captive is withdrawn. They are invaluable in a garden. Mr. Jessee, in his gleanings, complains of gardeners destroying them, of savagely cutting them in two with their spades.—We hope not. Horticulturists of such "gross ignorance" ought themselves to be extirpated. The beauty and vigor of our flower-borders we have long ascribed, in a measure, to a select family of toads, which we tenderly protect, and some of which have now reached a patriarchal age. Mr. Jessee mentions that Mr. Knight, the eminent nurseryman, keeps a large number of toads in his stoves, for the purpose of destroying the woodlice that infests his plants, and that they do not seem at all affected by the heat, even when it reaches 130 degrees. We are surprised at this statement, which does not agree with our observation. We have observed that the toad in very hot weather seeks shelter under foliage, or buries himself amongst the soft mould. In the evening he emerges from his concealment, and no doubt then employs his protusile tongue.

Mr. Buckland mentions a curious use of toads. They are employed as insect-traps. A brigade of maraunding toads are conducted the into garden in the evening. They make a famous supper, but in the morning their entomological employer, by a gentle squeeze, compels them to disgorge their evening meal, and in this way many curious and rare specimens of rare and minute nocturnal insects have been obtained. "There is just now," says Mr. Buckland, "a plague of ants in many of the London houses, which defy extermination. I strongly recommend those who are troubled with these plagues to try whether a toad or two won't help them." Most certainly. They clean melon frames of these insects, and why should they not perform the same friendly office in the drawing-rooms of London citizens?—Nothing but ignorant prejudice can prevent the adopting of the excellent suggestion. And yet the prejudice exists, and they are a loathed species. Toads, time immemorial, have been persecuted by school-boys, and you cannot wander through a village on a summer day without seeing defunct and flattened specimens of these unoffending creatures. Innocent of literature, it would be tracing the cruelty of the urchins to too high a source to ascribe into the "ugly and venomous" toad of Shakspeare, or the yet more odious imagery of Milton. And yet from the erroneous natural history of the two great national poets, the idea may have originated, and thus handed down from one race of school-boys to another.

While toads are not truly venomous, and lack the specific apparatus for producing venom which really venomous reptiles are endowed with, there is an irritant secretion in the glands of their skin which is more or less injurious. When a dog seizes a toad, this glandular fluid is squirted out, and his tongue and lips are burned, as with a strong acid.

The metamorphosis which frogs and toads undergo is complete and remarkable. In their tadpole condition the respiration is performed by gills, and is aquatic. In their adult state their gills are converted into true lungs, and can breathe atmospheric air alone. The spawn of frogs and toads is very distinguishable. The spawn of the former is found distributed through the whole mass of jelly, while that of the latter is seen arranged in long strings, and generally in double rows.—"*Curiosities of Natural History*," *in Blackwood.*

☞ A man's force in the world, other things being equal, is just in the ratio of the force and strength of his heart. A full-hearted man is always a powerful man; if he be erroneous, then he is powerful for error; if the thing is in his heart he is sure to make it notorious, even though it may be a downwright falsehood. Let a man be ever so ignorant, still if his heart be full of love to the cause, he becomes a powerful man for that object, because he has a heart-power, heart-force. A man may be deficient in many of the advantages of education, in many of those niceties which are so much looked upon in society; but once give him a strong heart that beats hard, and there is no mistake about his power. Let him have a heart that is right full up to the brim with an object, and that man will do the thing, or else he will die gloriously defeated, and will glory in his defeat. Heart is power. —*Spurgeon.*

THIS is certain, that a man that studieth revenge keeps his own wounds green, which otherwise would heal and do well.

HOW SHALL WE MAKE GOOD READERS.

This is an important question, and should engage the fixed thought of all workers upon minds. A good reader commands the undivided attention of all listeners. But how rare is such a treat? To what shall we attribute the *cause* of so few good readers? We answer, that it is for the want of proper discipline of the voice, "that most wonderful of all instruments."

As teachers, we hasten over the elementary basis, so essential to make good readers, to repeat *words, words*, as though that was the key to attain what we so much desire. Pupils need to be drilled for weeks upon the elements, so that the organs of speech will perform involuntarily almost, the slightest elemental sound in articulation. If beginners begin regularly in the elements, articulation would be nearly faultless. A faulty articulation cannot be overcome, except by a daily discipline in the utterance of the elemental sounds. Vocal gymnastics, as a regular exercise, will not only secure a good articulation, but help to develop the physical structure, so important to the well-being of the child. The teacher should start with the monotone, or "*reading in a horizontal line.*" When that is thoroughly mastered, then the shades of the voice will naturally follow, and all errors are quickly detected. Then *accent, emphasis, modulation*, and *pitch* of voice, with their various examples illustrative of each, will succeed each other legitimately. Difficult consonant combinations, and sentences of like character, should be repeated with every exercise, for this is not the production of an hour, a day, or a month; but the work of successive months and years, and will ultimately produce glorious results. The teacher should give interest to every exercise. He should be able to re-create into life each day, what most teachers consider a *dry, dull* and monotonous task. So it will be when the teacher fails to *thrill* the learner with the importance of the subject, and evidence the same, all over his own being. From his heart to the heart of his pupils the telegraph must be established, and among the unseen wires, such communications must pass as will make teacher and scholar a *unit.*—Then progress will be attained, and good readers an inevitable result.—*New York Teacher.*

IT is true greatness to have in one the frailty of a man, and the security of a God.

REVERENCE CHILDREN.

Juvenal says: "The greatest reverence is due to a boy." Plutarch relates of Cato the Censor, that, when his youthful son was present, he was careful of his words as though he was conversing with the Vestal Virgins, whose life was devoted to perfect purity. Juvenal adds that nothing unseemly, either in words or appearance, should ever touch the thresholds within which a boy dwells. These sayings commend themselves to every one, and they scarcely need illustration or argument to enforce them.

When we consider the comparative purity of a child's mind, his truthfulness, and his ignorance of evil, we feel that there is a sacredness about it which may well command our reverence; and there are few who do not feel under some restraint in a child's presence. We do not indulge in quite the same license of action, when we know that a child is observing us.—But there are few who are careful enough, few who give the subject sufficient consideration. We do not keep its importance enough before us, nor weigh as we ought the effect which our words and actions have on the young. Children do not retain their purity as they advance in years. Little by little they become contaminated, as we allow them to be exposed to the touch of evil; and some parents have to mourn through all their latter years that they were so careless of their children's youth. When we have on white garments we are obliged to use great care to keep them from being soiled. So much care, and far more, should we have of children, for the purity of their minds is soiled with a breath, and we cannot, when we would, wash them and make them clean.

We are all prone to evil, children as well as those of riper age, and in addition to this, children are creatures of imitation, and if they become acquainted with vice, they will be almost sure to fall into it.—We see their tendency to imitate developed at a remarkably early age. Indeed, it is almost the first faculty of the mind which shows itself, and from the first few days onward we may every day notice its power. What we do one day we see reproduced in our children the next. They grow up with our characters, modified by the external influence we have permitted them to feel; and from their tendency to evil, they will have our follies rather than our wisdom, our weakness rather than our strength, our vices rather than our virtues.

Parents must be careful not only to train up their children aright, that is, to give them good instructions and to enforce their obedience to it, but also to set before them nothing that is not worthy of imitation. A parent who desires his child to be virtuous, has always before him the best persuasive to the daily practice of virtue; and how can one who has an interesting family of loved ones growing up around them, fail to feel the importance of circumspection in regard to his own character and conduct.—*S. S. Times.*

DROPPING THE FINAL VOWEL.

(*From the American Journal of Photography.*)

Voltaire used to say that language was invented to conceal the thoughts of men. Lawyers, politicians, and many theologians practically illustrate the dictum. Mathematicians, and other men of science, however, who have ideas worth communicating, and moreover have a policy and practice of telling precisely what they conceive to be true, look upon the matter in quite a different light. They have seen the unsuitableness of ordinary language for their purpose, and have found it worth while to create a speech for their peculiar use.—The botanists, conchologists and ologists generally, have adopted a great deal from the dead languages, for the reason no doubt that what is so very dead as Latin and Greek cannot change.

The chemists in the latter part of the eighteenth century made a new language for their new science—the nomenclature, the most perfect of its sort of anything ever conceived. The most perfect, yet still in future to have its revision and finish. It has come only gradually into use. Even at the present day the doctors, who of men know better and ought to set a better example, are still using some of the outlandish names of things coined in barbarian times, and they have been slower than most other men in adopting obvious improvements in the modern system.

A WORD FOR FARMERS' BOYS.

Boys, improve the moments which you catch for reading something useful. However busy you may be—planting, cultivating, haying, harvesting—find something, during the twenty-four hours for reading some item which will do you good in future life. Ten minutes each day, for the six working days of the week, give you one hour. Sands make the mountain, minutes the year.—J. R. J.

LIGHT IN THE SEA.

A paper on the nature of the Deep Sea Bed, by Dr. Wallich, was lately read at a meeting of the Royal Institution of Great Britain. The following passage occurred in it.—"Light, or rather the absence of it, can hardly be said to determine, in any important degree, the distribution and limitation of the lower forms of animal life. Light is not essential even in the case of some of the higher orders. A large class of creatures, both terrestrial and marine, possess no true organs of vision, although there is good reason for believing that they do possess some special sensory apparatus susceptible to the influence of light; whilst creatures, whose habitation is in subterranean caves or lakes, as in the Magdalena near Adelsburg, and the Great Mammoth caves in Kentucky, either possess no organs of vision or possess them in so rudimentary a state, as to prove clearly that the absence or imperfect development of the sense may be compensated for by the higher development of other senses. It is impossible at present to say to what depth light penetrates in the sea. The photographic art will, no doubt, one day solve the problem. But it is almost certain that a limit is attained, and that, moreover, long before the deep recesses gaged by the sounding machines are reached, where the light-giving portion of the ray cannot penetrate even in its most attenuated condition; and yet, as shall hereafter be shown, creatures have been found down in those profound and dark abysses whose coloring is as delicate and varied as if they had passed their existence under the bright influence of a summer sun."

ADVANTAGES OF LABOR.

The rich man pays dearly for health—the laboring man is paid to be healthy.—Exercise is the best physician. Those who have strength, and a good pair of legs, need not to be drawn about in a carriage. Carriages are fine thing for doctors. The more they increase the more need there will be of medical men and drugs; and those who never work, create for themselves weak arms, delicate hands, and infirm or crooked spines. Labor has its joys as well as its sorrows, and a far higher reward than that of wages. If this fact were better understood, no one would be idle. Far better is it to work for no pay at all, than to suffer the ills of having nothing to do. A good appetite, a healthy digestion, and a free circulation of blood, are among the blessings of labor.—*Elliot.*

AN EARNEST APPEAL TO MOTHERS.

A distinguished physician, who died some years since in Paris, declared "I believe that during the twenty-six years I have practiced in this city, 20,000 children have been carried to the cemetries, a sacrifice to the absurd custom of exposing their arms and necks."

It would not be wide of the truth to say that fifty thousand children are every year immolated upon the altar of capricious fashion, in civilized society. However much intelligence they may be possessed of, it is an undeniable fact that our women—especially mothers—are the slaves of senseless and outrageous fashion. Health, comfort, and happiness are each in turn sacrificed to the all potent query, "What will Mrs. Grundy say?" Children must be models of style, whether they live or die. Short dresses, low necks, and bare arms make our daughters look more angelic than their grandmothers did in their homespun wrappers, but not half so cozy and loveable. A sweet face peeping out of an ample hood, and limbs covered up from the smiting blasts of our northern climate, are altogether more bewitching than the shrivelled and bloodless forms with their goose-skin pimples. A correct taste is seldom over-demonstrative. A living President of one of our oldest medical schools always gave this parting advice to his classes on their graduation day: "Young gentlemen, take good care of the *old ladies*—there never will be any more." This sensible advice was predicted on the destructive nature of prevalent fashions. Let our women break away from the enchantment of custom this winter, and dress up their darlings to the ears in warm apparel, and their increased health and vigor, together with the diminution of doctor's bills, will more than compensate for the frowns of the whole school over which dame Grundy presides.—*Fall River News.*

A HOME THRUST FROM FLAVEL.—"Two things a master commits to his servant's care," said one, "the child and the child's clothes." It will be a poor excuse for the servant to say at his master's return, "Sir, here are all the child's clothes, neat and clean, but the child is lost!"—Much so with the account that many will give to God of their souls and bodies at the great day. Lord, here is my body, I was very grateful for it. I neglected nothing that belonged to its content and welfare; but for my soul, that is lost and cast away forever. I took little thought and care about it.

NOT TOO MUCH AT ONCE.

Sir Edward Bulwer Lytton, in a recent lecture in England, said.—"Many persons seeing me so much engaged in active life, and as much about the world as if I had never been a student, have said to me, 'Where do you get time to write all your books? How on earth do you contrive to do so much work?' I shall surprise you by the answer I make. The answer is this. 'I contrive to do so much by never doing too much at a time. A man, to get through work well, must not overwork himself, or, if he do too much work to-day, the reaction of fatigue will come, and he will be obliged to do too little to-morrow.' Now, since I began really and earnestly to study, which was not till I had left college, and was actually in the world, I may perhaps says that I have gone through as large a course of general reading as most men of my time. I have traveled much, and have seen much; I have mixed much in politics, and the various business of life; and in addition to all this, I have published somewhere about sixty volumes—some upon subjects requiring much research. And what time do you think, as a general rule, I have devoted to study—to reading and writing? Not more than three hours a day; and when Parliament is sitting, not always that. But then, during these hours, I have given my whole attention to what I was about."

DELICACY.

Above every other feature which adorns the female character, delicacy stands foremost within the province of good taste.—Not that delicacy which is perpetually in quest of something to be ashamed of, which makes a merit of a blush, and simpers at the false construction its own ingenuity has put upon an innocent remark, this spurious kind of delicacy is as far removed from good taste as from good feeling and good sense, but that high minded delicacy which maintains its pure and undeviating walk alike among our women as in the society of men; which shrinks from no necessary duty, and can speak, when required, with seriousness and kindness, at things which it would be ashamed indeed to smile or blush. This is the delicacy which forms so important a good taste, that where it does not exist as a natural instinct, it is taught as the first principle of good manners, and considered as the universal passport to good society.

PARADISE is always where love dwells.

WRITING.

To think rightly is of knowledge, to speak fluently is of nature, to read with profit is of care, but to write aptly is of practice.—TUPPER.

What a *multum in parvo* is contained in the words "to write aptly is of practice" Writing is said to be the "world's messenger." Through its medium we are enabled to treasure up the wisdom of the present generation and hand it down to generations yet to come. Through its medium we are enabled to drink at the fountain of knowledge, learn of nations and governments that were, but are no more; nations once second to none, now known only in history. By it we are enabled to chain the mighty thought ere it escapes from the mind, and its foot prints are forever erased from the tablets of the memory. "No talent among men hath more scholars and fewer masters." Many there are who have dabbled in both poetry and prose, and yet have never become proficient in either, for want of that "practice" which makes perfect. How many there are that converse fluently and learnedly upon the topics of the day that are mere novices at writing. That instrument, more powerful than the sword—the pen—is weilded but by few successfully.

THE TEACHER AND HIS PUPILS.

"Joseph, where is Africa?" "On the map, sir." "I mean, Joseph, on what continent—the Eastern or Western continent?" "Well, the land of Africa is in the Eastern continent; but the people, sir, are all of 'em down South." "How do the African people live?" "By drawing." 'Drawing what—water?" "No sir, by drawing their breath." "Set down Joseph." "Thomas, what is the equator?" 'Why sir, it is a horizontal pole running perpendicular through the imagination of astronomers and old geographers." 'Go to your seat Thomas.' 'William Stigg, what do you mean by an eclipse?' 'An old race horse, sir,' Silence. 'Next, Jack, what is an eclipse?' 'An eclipse is a thing as appears when the moon gets on a bust and runs against the sun; consequently the sun blacks the moon's face.' Class is dismissed.

☞ Truth is always consistent with itself, and needs nothing to help it out; it is always near at hand, and sits upon your lips, and ready to drop out before you are aware; whereas a lie is troublesome, and sets a man's invention on the rack, and one trick needs a great many to make it good. Truth can live in all regions, flourish in all soils, and become naturalized in all climes.

SELF-MADE MEN

We hear occasionally a remark made that such a distinguished person is a *self-made man*. Perhaps there are some who do not understand fully what is conveyed by that expression Every man must, to a very great extent, be self-made. He is one who has arrived at intellectual excellence and distinction by his own unaided labour and perseverance, one who has trained the faculties of his own mind; not one who has received no education, but one who has educated himself. This fact, in general, indicates not extraordinary intellectual talent, but unusual moral firmness. Without that quality of mind, the best education may be thrown away, and with it all instruction, all the offices of a teacher, may be dispensed with.—Every man that has arrived at any degree of distinction in the scale of intellect is indebted for it to himself. To teach is not to educate, unless such teaching brings out the faculties of the mind, awakes to active and patient thought, and causes the person instructed to employ his own understanding; all that the very best teacher can do is "to aid the mind's development." Nor is that little. The greatest judgment and caution are necessary in affording that assistance. In respect to the amount of such assistance, I believe it may be laid down as a maxim that the benefits derived from studies is inverse proportion to the assistance received. Goldsmith, under this impression, recommends that students should be taught facts and required to study out the cause themselves. "*Quisque suæ fortunæ faber*," was the maxim of the ancients, and truly none were more capable of judging of this matter than the great men of antiquity. They were in a peculiar sense self-educated men. Without the advantages of books, teachers, and seminaries of learning, they were obliged to substitute for them, extensive observation, great industry, and intense application of mind. It would not have been possible to have said to Socrates and Aristotle, as we can to many of the great lights of literature at the present time, "show me your library and I will tell you the source of your ideas." They had recourse to unwearied reflection and drew them forth from the capacious recesses of their own minds.—*The Teacher's Advocate.*

MEN fear death as children fear to go into the dark; and as that natural fear in children is increased with tales, so is the other.

A NATION OF PIGMIES.

To the south of Kaffa and Susa there is a very sultry and humid country, with many bamboo woods, inhabited by the race called Dokos, who are no bigger than boys of ten years old, that is, only four feet high. They have a dark, olive-colored complexion, and live in a completely savage state, like the beasts: having neither houses, temples, nor holy trees, like the Gallas, yet possessing something like an idea of a higher being called Yer, to whom, in moments of wretchedness and anxiety, they pray—not in an erect position, but reversed, with the head on the ground and the feet supported upwright against a tree or stone. In prayer, they say: "Yer, if thou really doth exist, why dost thou allow us to be thus slain? We do not ask the for food and clothing, for we live on serpents, ants, and mice.—Thus thou hast made us; why dost thou permit us to be trodden under foot?"—The Dokos have no chiefs, no laws, no weapons; they do not hunt, nor till the ground, but live solely on fruits, roots, mice, serpents, ants, and the like, climbing trees and gathering the fruits like monkeys; and both sexes completely naked. They have thick, protruding lips, flat noses, and small eyes; the hair is not wooly, and is worn by the women over the shoulders. The nails on the hands and feet are allowed to grow long, like the talons of vultures, and are used in digging for ants, and in tearing to pieces the serpents, which they devour raw, for they are unacquainted with fire. The spine of the snake is the only ornament worn around the neck, but they pierce the ears with a sharp pointed piece of wood.—*Dr. Krapf's Travels in Eastern Africa.*

THE ablest men that ever were, have had all an openness and frankness of dealing, and a name of certainty and veracity.

MEN are too cunning to suffer a man to keep an indifferent carriage between both, and to be secret, without swaying the balance on either side. They will so beset a man with questions, and draw him on, and pick it out of him, that, without an absurd silence, he must show an inclination one way; or if he do not, they will gather as much by his silence as by his speech.

DISSIMULATION is but a faint kind of policy, or wisdom—for it asketh a strong wit and a strong heart to know *when*, to tell truth, and when to do it—therefore it is the weaker sort of politicians that are the greatest dissemblers.

A SITUATION WANTED.

Times being hard in the Federal States, and a cold winter at hand, many really clever persons are at their wit's end for some means of keeping the wolf from the door. Desperation has driven one of them to the dire extremity he so forcibly portrays in the following advertisement.

WANTED—A situation as SON-IN-LAW in some respectable family No objections to going a short distance into the country. For references and particulars address FRANK STUART, Post Office, Williamsburgh, New York.

Mr. Stuart ought to have stated whether he can or cannot endure average boarding house coffee, and whether he stands or revolts at West India molasses on his slap-jacks. It is well to have these matters clearly understood from the start, and thus avoid those domestic bickerings and other evidences of blighted affection which are the bane of married life.—*Free Press.*

The above individual should be mated to the young lady who, on one of her evening rambles, was met by a gentleman of her acquaintance, who addressed her:

"Good evening, M——; are you looking after the fashions?"

"No, sir," replied she; "I am looking after a son-in-law for my mother."

☞ When we place our estimate upon individuals, the first thing to be considered is moral principle. All other possessions sink into insignificance when taken in connection with this. It it the real, genuine stamp which characterizes individuals, keeping their memory sacred in the hearts of others. No person can be truly *educated* without it. He may have all the knowledge of books which one mind can contain, and still, without correct principles—a keen and just perception of right, and a desire to do that right—there is a great *mental* deformity marking such a person just as perceptibly as *outward* deformity.

CONVERSATION.—Conversation may be too timid and respectful to be either pleasant or profitable. It is the collision of the flint and steel that brings the fire out. Southly says, finely and truly:

"There is a pleasure in frank dialogue,
When mind meets mind in free and full debate;
Men may live years and never know the strength
That is in others or within themselves."

HERCULES, when he went to unbind Prometheus (by whom human nature is represented), sailed the length of the great ocean in an earthen pot or pitcher, lively describing Christian resolution, that saileth in the frail bark of the flesh through the waves of the world.