THE WORLD'S FAIR.

Columbia, puzzled what she should display
Of true home make on her Centennial Day,
Asked Brother Jonathan; he scratched his head,
Whittled a while reflectively, and said,
"Your own invention and own making too?
Why, any child could tell ye what to do;
Show 'em your Civil Service, and explain
How all men's loss is everybody's gain:
Show your new patent to increase your rents
By paying quarters for collecting cents;
Show your short cut to cure financial ills
By making paper collars current bills:
Show your new bleaching process, cheap and brief,
To wit: a jury chosen by the thief;
Show your State Legislatures, show your Rings;
And challenge Europe to produce such things
As high officials sitting half in sight
To share the plunder and to fix things right;
If that don't fetch her, why, you only need
To show your latest style in martyrs—Tweed;
She'll find it hard to hide her spiteful tears
At such advance in one poor hundred years."

J. R. L. *in N. Y. Nation.*

THE INTELLECTUAL AND MORAL TRAINING OF TEACHERS.

A Lecture Given before the Teachers' Normal Institute, Salt Lake City, Aug. 4th, 1875, by O. H. Riggs, Superintendent of Common Schools.

Children are flowers in the gardens of the world, placed there to be nourished, trained, and developed. Nature teaches us that sunshine is necessary for the blossom, the bloom, and the development of flowers. Experience teaches us that sunshine is necessary for the blossom, the bloom, and the development of children. Children sometimes flourish in the unnatural heat of the nursery, and are beautiful in the whiteness of fine linen and the jewels of wealth, but, without the pure air and sunshine required by nature for their development, they grow up pale and sickly, wearily dragging their life's work behind them, or an early death kisses them away to the sunlight of the upper world, that they may bloom there as they could not here. The morning sunshine that sparkles in the *face* and the deportment of the teacher, smiling a bright good-morning to the gladdened flowers of the school-room, exhilarates them to fresh brightness and beauty, while the thunder cloud that may hang upon his distorted brow, causes them to shrink and hide their effulgence. That teacher is the most successful in his proud vocation, who carries, on each succeeding morning, to the class, a bright and smiling face and a happy heart. Much more can be accomplished by a firm but gentle discipline with the pupil, than by either ridicule or uncalled for severity. The dunce of the school can be converted into a hard-working student by a kind word, after floggings have failed; the dullard made an eager learner by encouragement, when all other devices known to the profession have been found useless; and the laggard in the race can be spurred into competition by a smile when the unsuccessful *rod* has been laid aside. Honest, persistent, and earnest effort, in a kindly way, will win for the teacher a success in that vocation that will come in no other way. It is so in all the varied forms of life. It is true in the nursery of the home, and true in the nursery of the school. A kind word—a soft answer—will sometimes form a character into nobility and usefulness, that would otherwise sink into the slough of despond, and be lost in the mire of crime and ignorance. Well do I remember the *rattan* in the hands of the hasty *school-master*, and the vows of vengeance on the part of the boys, that often would have become realities, but that the *boy* is *weaker* than the *man*. The class-room is not a battle-field, save for the good contentions of intellect, where mind against mind shall flash out the bright thoughts of cultured genius. Teachers, the mind of the pupil is in your keeping, that you may culture it, and foster it, and develop it—a flower to bud and bloom and blossom under your care, till, in the beauty of its development, its fragrance permeates the air around, and spreads a high and holy influence to the outermost circle, blessing you and your work, or hangs on the stem a lifeless, withered thing, devoid of both beauty and fragrance, a monument to your indiscretion or want of heart. Do not think for a moment that I deem the school-room the place for merriment, or the study hour the time for jokes. Nay, I believe in discipline firm and steady, but the discipline of affection, and I find far better disciplinarians among my *sunshiny* friends than among those *bears* who snarl, and growl, and show their teeth at every circumstance that ruffles them. Are there such *bear* teachers in Utah? There were once. Those who believed the chief end of the pedagogue to be to flog his scholars, and drive knowledge to the brain through the medium of the back, or drop it into stinging palms from the end of a rod or a terrific ruler. This world is not a "vale of tears," save to those who would make it so. It is a light and beautiful world, filled with loved and loving hearts, with good and noble men and women. It is the bright and beautiful threshold to that better world "over the river" where angels and the spirits of good men dwell, and the sun always shines, and the flowers bloom, and the children are all full of joy and happiness. The true teacher comprehends the great effect of the sympathy that exists between himself and his pupils, hence he *presents himself before* them in such a manner that they may catch from him at least a reflection of his pleasure, and be joyous with him. You cannot always praise, and without an effort you cannot always be happy; but let your praise be frequent, and your blame judicious. I would have even your censure mixed with praise. Seek for words of commendation and reward, and so mix the medicine, sometimes necessarily given, with honey, that though the disease be reached, the patient flinches not at the dose. There is something more in teaching than the paltry dollars and cents received for service rendered. Your compensation is *often much too little*, and *often grudgingly given*; but as the public educational sentiment becomes more healthful, the labors of the teacher will be more appreciated. You are preparing those around you for the great work of their lives; you are brightening up the weapons with which they shall fight great battles and achieve noble victories; you are writing thought on hearts that shall in after days develop in noble, golden deeds; you are engaged in a work that is grand and important, and in this the day of work, of earnest, persistent effort, when the sluggard drags in the race and dies by the wayside, if you would succeed in that work you must carry with you bright faces, bright eyes and contented hearts, remembering that from the ranks of our school children are to come the fathers and mothers of another generation, the eloquent men who bear the messages of God, the orators, the physicians, the inventors, the scientists, the merchant princes and the masters of skilled labor, the men into whose hands shall fall the government of this commonwealth, and still greater, the future mothers of the republic. The work of the teacher is a grand and glorious one—nothing less than the development of minds that shall make the world better and sweeter by their presence, the preparation of the youth of our Territory for the great conflicts of the life that opens to them on their entry into manhood.

With this introduction upon the necessity of sunshine in teaching, and the great responsibility of the teacher, we shall proceed with the theory of intellectual and moral education. The first inquiry that naturally presents itself is, "What is the character of this human soul that we propose to educate?" The mind is a living essence, with powers and processes of its own. There seem to be two periods in its development which are sufficiently distinct to be marked, but which are not capable of being entirely separated from each other. The *first* and the earliest period is that during which the objective elements are in the ascendency, and the knowledge acquired is, in the main, of the concrete. The *second* and later period is that during which the subjective elements are in the ascendency, and the knowledge acquired is, in much the larger proportion, of the abstract. The perceptive faculties and consciousness first set the mind into operation, and during this first period of development these faculties are much more active and acute than at a subsequent stage, indicating that nature designed this to be the period during which these faculties should be most carefully educated. At a later period the reflective *faculties* become more active, and the susceptibility for perceptions more sluggish. Then in forming our theory of a true education, we must not lose sight of this two-fold nature of the mind itself, and must perceive that the same theory cannot apply to both periods. The mind, during this first period, is plastic and more susceptible of impressions than later in life. An eminent Catholic priest once said, "Give me the education of the children for the first ten years, and I shall have no fears of their ever leaving Catholicism." Pestalozzi, who initiated a great and successful educational movement, which is, this day, bearing fruit in the intellectual culture and advancement of millions, may be said to have turned the traditional car of school routine quite around, and set it in a new direction. In examining his views on the subject, we find that he proceeded according to the natural order of development, from the near, the practical, the actual, to the remote, the abstract, and the ideal. We shall see his views more clearly in a few quotations from a work which he wrote, entitled, "The Evening Hour of a Hermit," which are sentiments of gold in words of silver. In these few sentences we recognize all that is most characteristic in his educational principles. He says—

1. "Nature developes all the human faculties by practice, and their growth depends on their exercise."

2. "The circle of knowledge commences close around a man, and thence extends concentrically."

3. "Force not the faculties of children into the remote paths of knowledge, until they have gained strength by exercise on things that are near them."

4. "There is in nature an order and march of development. If you disturb or interfere with it, you mar the peace and harmony of the mind. And this you do, if before you have formed the mind by the progressive knowledge of the realities of life, you fling it into the labyrinth of words, and make them the basis of development."

5. "The artificial march of the ordinary school, anticipating the order of nature, which proceeds without anxiety and without haste, inverts this order by placing words first, and thus secures a deceitful appearance of success at the expense of natural and safe development." These are the fundamental principles of Pestalozzi's theory of intellectual as well as moral education, and I need hardly say that they resolve themselves into the principles of human nature. He conceived that the pupil's intellectual training was to be considered as part of his moral training. Whatever increases our knowledge of things as they are, leads to the appreciation of truth; for truth, in the widest sense of the term, is this knowledge. But the acquisition of knowledge, as requiring mental effort, and therefore exercising the active powers, necessarily increases the capacity to form judgments and moral questions; so that, in proportion as you cultivate the will, the affections, and the conscience, with a view to independent action, you must cultivate the intellect, which is to impose the proper limits on that independence; and on the other hand, in proportion as you cultivate the intellect, you must train the moral powers which are to carry its decisions into effect. Moral and intellectual education must consequently, in the formation of the human being, proceed together, the one stimulating and maintaining the action of the other. Pestalozzi, therefore, instructed as well as educated; and indeed educated by means of instruction. The teacher, says Socrates, "is the accoucheur of the mind; he brings it out into the sunlight of life, arouses its dormant powers, and makes it conscious of their possession." The great strength of the teacher lies in his ability for developing the faculties of his pupils, to set the intellectual machinery in motion, to make it work and keep it working; this is the sole object at which the true teacher aims. The mind is a living power: it is acted upon by stirring up its own activities. The operative upon mind, unlike the operative upon matter, must have the active, voluntary co-operation of that upon which he works. The teacher is doing his work only so far as he gets work from the scholar. The very essence and root of the work are in the scholar, not in the teacher. The old Romans, in their word education (*educere, to* draw out), seem to have come nearer to the true idea than any other people have done. The teacher is to draw out the resources of the pupil. Yet, even this word comes short of the exact truth. The teacher must *put in* as well as *draw out*. No process of pumping will *draw out* of a child's mind knowledge which is not *there*. All the power of the Socratic method, could it be applied by Socrates himself would be unavailing to draw from the child's mind, by mere questioning, a knowledge, for instance, of chemical affinity, of the *solar system*, of the *temperature of the Gulf Stream*, etc. Teaching is causing any one to know. No one can be made to know a thing but by the act of his own powers. This self-development is the consequence of the self-activity of the pupil's own mind—of the experience which his mind goes through in dealing with the matter to be learned. This experience must be his own; by no other experience than his own can he be educated at all. The education, therefore, that he gains is *self-education*; and the teacher is *constituted as the stimulator and director* of the intellectual processes by which the learner educates himself. This I hold to be the central principle of all education, of all teaching. The most important part of an edifice, as to its strength and durability, is its foundation. Our educational strength, in a great measure, depends upon the construction of its foundation.

Therefore, elementary education should have the teacher's special attention. Elementary education means not definite instruction in special subjects, but the eliciting of the powers of the child as preparatory to definite instruction — it means that course of cultivation *which the mind of every child ought to go through, in order to* secure the *allsided development of* its powers. It does not mean learning to read, write, and cypher, which are matters of instruction, but the exercises which should precede them. Viewed more generally it is that assiduous work of the pupil's mind upon facts, as the building materials of knowledge, by which they are to be shaped and prepared for their place in the edifice. After this is done and not before, instruction proper commences its systematic work. We might lay this down as a rule for our guidance—*Always make your pupil begin his education by* dealing with concrete things and facts, never with abstractions and generalizations, such as definitions, rules, and propositions couched in words. Things first, afterwards words—particular facts first, afterwards general facts or principles. He has eyes, ears, and fingers, which he can employ on things and facts, and gain ideas, that is, knowledge, from them. This employment constitutes his elementary education—the education which makes him conscious of his powers, forms the mind, and prepares it for its after-work. Pestalozzi recognized *observation* as the absolute basis of all knowledge, and in doing so he doubtless established the first and most important principle of instruction. The idea, perhaps, corresponds rather more closely to our word perception. We *see* a thing which merely flits before our eyes, but we *perceive* it only when we have exhausted the action of our senses upon it, when we have dealt with it by the whole mind. The *act* of perception, then, is the act by which we *know* the object. If *observation* is the absolute basis of all knowledge, and we have the best of reasons for believing it is, it must be the prime agent in elementary education. The demands of this theory can only be satisfied by educating the learner's senses, and making him, by their use, an accurate observer; and this is not merely for the purpose of quickening the senses, but of securing clear and definite perceptions; and this again with a view to lay firmly the foundation of all knowledge. The habit of accurate observation is not taught by nature. It must be acquired by experience. Miss Martineau remarks, "A child does not catch a gold fish in water at the first trial, however good his eyes may be, and however clear the water." Knowledge and method are necessary to enable him to take what is actually before his eyes and under his hand;" and she adds, "The powers of observation must be trained, and habits of method in arranging the materials presented to the eye (and the other sense organs) must be acquired before the student possesses the requisites for understanding what he contemplates."

It is scarcely necessary to show in detail what is meant by the education of the senses. This education consists in their exercise—an exercise which involves the development of all the elementary powers of the learner. Any one may see this education going on in the games and employments of the kindergarten, and indeed in the occupations of every little child left to himself. It is therefore in the strictest sense of the term, self-education. But it should also be made an object of direct attention and study, and lessons should be given for the express purpose of securing it. The materials for such lessons are abundant on every hand. Earth, sky, and sea, the dwelling house, the fields, the gardens, the streets, the river, the mountain, supply them by thousands. All things within the area of the visible, the audible, and the tangible, supply the matter for such object lessons, and upon these concrete realities the senses may be educated. Drawing, and moulding in clay, the cutting out of paper forms, building with wooden bricks of cubes to a pattern, are all parts of the education of the senses, and at the same time, exercises for the improvement of the observing powers. Also, measuring objects with a foot measure, weighing them in scales with real weights, gaining the power of estimating the dimensions of bodies by the eye, and their weights by poising them in the hand, and then verifying the guesses by actual trial—these are valuable exercises for the education of the senses. It is needless to particularize further, but who does not see that such exercises involve not merely the training of the senses, but also the culture of the observing powers as *well as the exercise of judgment*, reasoning, and invention, and all as parts of elementary education? It is impossible to exaggerate their value and importance.

But elementary education, rightly understood, applies also to the initiatory stage of all definite instruction. If we accept the doctrine that all education must begin with the near, the actual, the real, the concrete, we must not begin any subject whatever in the case of children with the remote, the abstract, and the ideal—that is, never with definitions, generalities, or rules; which, as far as their experience is concerned, all belong to this category. In teaching physics, then, we must begin with the phenomena themselves; in teaching magnetism, for instance, with the child's actual experience of the mutual attraction of the magnet and the steel bar arithmetic must begin with counting and grouping tangible objects, not with abstract numbers; geography, not with excursions into unknown regions, but with the schoolroom, the houses, the playgrounds, etc., then proceeding concentrically; language, too, with observing words and sentences as facts to be compared together, classified and generalized by the learner himself. In all these cases the same principle applies. The learner must first gain personal experience in the *area* of the *near* and the *real*, in which he can exercise his own powers; this *area* thus becomes the *known*, which is to interpret the *unknown*, and thus the principle is established that the learner educates himself under the stimulation and direction of the educator.

"Pour in knowledge gently" (says Plato), who was one of the wisest men of ancient Greece. He observed that "the minds of children are like bottles with very narrow mouths. If you attempt to fill them too rapidly, much knowledge is wasted and little received, whereas with a small stream they are easily filled." Socrates (who was Plato's teacher) made it the great business of his life to *draw out* or educe truth, by questionings and analogies. But to day we neither use the *pouring in* nor the *drawing out* systems, but a more perfect development of the principle propagated by Pestalozzi. It is based upon the knowledge of the fact, that the mind is an independent living intelligence, susceptible of growth and capable of originating