

EDUCATION.

FROM THE MEDICAL REPOSITORY REVIEW.

Sketch of a plan and method of education, founded on an analysis of the human faculties and natural reason, suitable for the offspring of a free people and for all rational beings. By Joseph Neef, formerly a conductor of Pestalozzi, at his school near Bern, in Switzerland. Philadelphia, 1838. 8vo pp. 166.

On a former occasion, we laid before our readers a brief account of the plan of education proposed by the Helvetic teacher, Pestalozzi, (M. B. Hex. II. vol. 4. p. 411) and a sketch of his pupil Chavannes's book in explanation thereof. Our friend Murry's labours to facilitate instruction, are mentioned in Hex. I. vol. 4. p. 307, and in Hex. II. vol. 2. p. 83; and Mr. Webster's efforts to facilitate knowledge, are noticed in the 5th volume of the same Hexade, p. 72. Nor have we omitted to make what are considered suitable remarks, in displaying the natural method of Mr. Dufief, Hex. II. vol. 2. p. 422.

Having heretofore given the origin of Pestalozzi's institution, & a sketch of his system, we have now an opportunity of announcing the arrival of one of his disciples and fellow labourers, in this country. This person is Joseph Neef, who came to Pennsylvania on the invitation, and under the protection of William Maclure, Esq. This gentleman had visited the original seminary at Yverdon, and beheld the scholars of Pestalozzi pursuing their course of tuition under their master's eye. He was so fully convinced of its superior ease & excellence, that he determined if possible to found a school upon the Pestalozzian principles, in his country: and he accordingly engaged the writer of the present book to migrate to Philadelphia, and to prepare himself for a practical display of his skill in or near that city. Mr. N. has employed himself, since his arrival, in learning our language, in composing the present work, and in making arrangements for receiving the requisite number of boys for instruction. The number of these, he says, shall by no means exceed forty; and as soon as he procures them, he will enter upon the business. He will receive none under six, nor above eight years of age. If they are totally ignorant when they are delivered to him, so much the better; for whatever they have learned, they will be obliged to forget it, in order to learn it again in his own way. He declares that the grave, doctored, magisterial and dictatorial tone shall never insult their ears; that they shall probably never hear of a cat-o-nine-tails; and that he shall be nothing else but their guide, school-fellow, play fellow and mess-mate. He believes that for the first year, the studies of his pupils will occupy four hours of the day. They will be conducted considerably in the open air; and the portion of life from the sixth to the twelfth year, will be chiefly occupied by the exercises.

What now, it will be asked, is this reformer of education about to perform? How does he intend to proceed with a number of boys, for an uninterrupted course of six years application? And wherein does he differ from the numerous tribe of his predecessors and contemporaries in the subjects or the modes of puerile instruction? We shall endeavour to state in a concise manner, the method of the author, as we collect it from his publication.

Education is defined to be the gradual unfolding of the faculties and powers which Providence has bestowed on the human species. Mr. N. will not teach his pupils any new things; but they will acquire under him the knowledge of old things in a new way. No attempt is made to introduce any thing into the learner; but merely to develop what the instructor finds in him.

In executing this undertaking, he does not begin with the alphabet and the spelling book. These are reserved for a more advanced part of the course. His first care is bestowed upon the manner of Speaking and the use of Speech, with their application to the four orders of human knowledge, 1. our immediate sensations; 2. our memories; 3. analogies, and four the evidence of other persons. His mode of proceeding with young beginners is thus exemplified. The human body may be the subject of conversation. They are taught to fix their attention on its external form, not on its internal constitution; to divide it into trunk and members; when an object or a part thereof is shown, to name it; and when the name is pronounced, to show it;—to understand the connection between two parts of a thing, or between a part and the whole; to examine the number of every thing they see; to point out the position or situation of an object; to distinguish the qualities of objects, especially their form or shape; to note the various functions performed by organical bodies and their parts; to observe and investigate the use we make of the many things which surround us every where; to point out the resemblance between two objects presented to us; to discover the difference between bodies; and to practise the art of describing things in plain, exact and precise terms. He next makes them acquainted with numbers. Not, however, by the common numerical cyphers, but by sensible objects, such as beans or marbles, and a calculating apparatus of great simplicity, by which he renders them both ready and correct reckoners. The third step he takes is to render the figures and proportions of geometry familiar to his scholars. This he accomplishes by diagrams and models of his own; and after the elementary parts shall have been thus illustrated and comprehended, he prefers the method of Legendre

to that of Euclid, for the remaining branches of the sciences. The fourth part of this plan, consists in teaching boys to delineate figures, or in other words, to make them proficient in the art of drawing. To make horizontal lines, to divide them into equal parts, to cross them by vertical lines, to form rectangular figures, and progressively triangles, circles, polygons, cones, cylinders and pyramids, will be the tasks of the pupils. And from these exercises they will pass on to the more difficult and exquisite expressions of form in all natural and artificial bodies.

Thus far this bold instructor conducts his little learners, without any ability to read, write, or even say their letters. He will render them good speakers, arithmeticians, geometers and limners, before he introduces to their acquaintance any species of literary performance, even the horn-book. And, when he is about to initiate them into the mysteries of literature, he chooses to instruct them in writing, before they are taught to spell and read. The practice of drawing mathematical and other figures, is an excellent preparation for writing. In the method of nature, writing must have preceded reading; and as writing existed before there could possibly have been a reader, so in the Pestalozzian plan, the formation and connection of the letters must precede the knowledge of their uses and powers. As soon as these are acquired, spelling and reading accompany writing, and give the teacher an opportunity to unfold the production of articulate sounds, the manner of signifying them by written characters, and of combining the letters into syllables, syllables into words, and words into sentences, with so much skill as to express the most recondite as well as the most obvious thoughts, in a manner that shall be intelligible to a person who shall be separated by the greatest distance of time and place.

The sixth great object of Mr. N. is to render his boys grammarians. But he roundly rejects all the books of grammar as unfit to be put into the hands of learners. He disclaims the whole of these laboured and erudite compilations as magazines of lumber and trash.—He makes a grammar of his own: to consist of three parts, *ideology, lexicography and syntax*. He divides his ideology into four sections, or four classes of words, substantives, adjectives, conjunctives, and super-adjectives; and banishes all the ordinary parts of speech, as they are termed, utterly from his presence. Thus ideology will make them acquainted with the materials of speech, lexicography shall dissect them, and syntax shall employ them.

The seventh department of Mr. N's method consists of ethics or moral discipline.—Considering all systems of religion as composed of two parts, their dogmas and their morals; and reflecting that the dissensions which exist between religious societies originate in matters of doctrine, rather than of practice; he refuses all interference in the articles of faith, or peculiar tenets of any religious sect. But he frames for them a manual of morality, or an ethical catechism, by which they are instructed in the knowledge of themselves, their relations to property, and their dependence on a Creator. The examination of their faculties will lead to a discovery of their rights; and these will conduct to a development of their duties and social concerns.

Natural history occupies the eighth place. Instead of making his pupils masters of mere nomenclature, or adepts in any particular classification or system, Mr. N. proposes to encourage in them all manner of attention to the various species of animals, to the changes of the atmosphere, to the different forms of water, to soils, earths and stones of every kind, to the numerous families of plants and vegetables, and to every thing that the face of creation presents to an observing eye. The instructor encourages his scholar to scrutinize every thing; and in his turn he explains to them all that is necessary for them to know, concerning the specimens they present to him for his opinion.

The science which follows next in order is Chemistry. This he derives from the common processes in the arts, and from the operations going on every day in the great laboratory of nature. And he performs the part of a ready and faithful interpreter in expounding them to his curious and listening audience.—The kitchen fire, the chimney, the boiling of the tea-kettle, a snow-ball, a fragment of ice, or a plate of soap, are, each of them, subjects of useful discussion. The true theory of heat and cold is derived from the observation of ordinary phenomena. With these, artificial experiments will be duly mixed or discreetly interwoven.

Gymnastics or the rules of exercise are then treated of at considerable length. He trains his boys to an exact employment of every muscle, joint and limb. He forms them into companies and sections, trains them to the use of arms, initiates them into tactics, and teaches them the art of defending themselves, their liberties, their possessions and their friends, against assailants and invaders. And he justifies this procedure from a conviction that there ever has been, is now, and ever will be a great mass of error, mischief and crime, against which a prudent man ought to provide; and instead of joining with the philanthropists and benevolent visionaries, who are ever judging of man in a sort of abstract state of perfectibility, such as they wish him to be, or as they think he ought to be, our author very correctly concludes, that the wiser and safer

course is to contemplate him with all his vice and depravity about him, and to guard against him accordingly.

This brings us to his twelfth section, wherein he treats of the learned languages. And in this he rejects the study of the Latin and Greek tongues, as neither necessary nor useful to a rational education, nor to a rational man. Though he consents to teach them to his pupils, for fashion's sake, as he wears a hat; yet on no account any further than to understand and translate the writings of Cicero, Demosthenes, Homer and Virgil. In explaining his mode of teaching French, the author passes some severe strictures upon Mr. DUFIER'S *Nature Displayed*. But on a point in dispute between rival teachers, we pretend not to interfere.

Music is treated of in the thirteenth, poetry in his fourteenth, and geography in his fifteenth sections. The most remarkable circumstance relative to the former is, that it shall be vocal, and uttered without the aid of the gamut; in respect to the second, he is vehemently opposed to rhyme; and concerning the latter, he insists that his pupils shall make their own maps, and that he will give them further lessons upon a globe of his own construction.

Lexicology is the knowledge of which he treats last of all. This is intended to settle the right and true meaning of words. The causes of the misunderstandings among men as to language, are referred to, 1. our not examining an object well before we speak of it; 2. our not calling things by proper names; and 3. our not knowing the real power of the words we employ to express our sensations and sentiments. He considers that his plan of education would be very defective, if it did not include a chapter or treatise on the *science of words*, or lexicology. In this he attempts to trace compound words to their radicals, and criticises Mr. Tooke for his rage for, and abuse of, etymology.

We conclude by quoting from Colonel Duane's letter to Dr. Mitchell, a sentiment concerning this work:

"I hope you have read Neef's System of Education; if not, permit me to send you one, and invite your curiosity to a perusal of it three times. This is an apparently whimsical request; but I have read it six times myself, with an increase of admiration, and a better understanding of the human mind, as well as of the degeneracy of the human intellect for a long course of ages. We shall set the system in motion here this summer; and if we can only keep it going one year, the nation will have acquired something more precious than the mines of Mexico, or than

"All Bochara's boasted gold
Or all the gems of Samarcand."



AGRICULTURE.

"The first of Arts, source of Domestic ease,
Pride of the Land and patron of the Seas."

INTERESTING TO FARMERS.

It is now sufficiently certain that the horse-botts, or grubs, by which so many valuable horses are annually destroyed, are produced from eggs or nits, which are deposited chiefly on the knee and back part of the shoulder of the horse, by a certain species of fly. The fly is called *Oestrus equi*. These eggs or nits become ripe in the course of 4 or 5 days. When thus ripened the slightest application of warmth and moisture is sufficient to bring forth, in an instant the latent larva, that is the insect in the first form. At this time, if the tongue of the horse touch the egg, its lids door (operculum) is thrown open, and a small active worm is produced, which readily adheres to the moist surface of the tongue, and is from thence conveyed with the food into the stomach.

Any person who chuses, may reduce it to experiment for himself.—In the season for it, let a few hairs be clipped off having these nits adhering to them—moisten the inside of the hand by the application of a little spittle, and close it upon the nits, and he will find them hatched in a few seconds.

It is therefore recommended, to be careful to remove these eggs by scraping them off with a knife, or washing them off with an infusion of Tobacco every third day throughout the season in which they are deposited.

If this be done, there is no doubt but the destruction, which is made by this hateful insect may be completely prevented.

A pint of tar, warmed and given to a horse deeply affected by the grubs, is lately recommended as an effectual remedy. We think it probable, that this article, by its adhesive quality, may so obstruct their organs of respiration, as to distress the insects, and cause them to loosen themselves from the stomach. It might be well to give half an ounce of Ales about an hour or two after the tar. This last would tend to convey off, before they recover from the embarrassment occasioned by the first.—*Lynchburg Press.*

FRUIT AND FRUIT TREES.

The Agricultural Society of Philadelphia, desirous to collect facts on the subject of *fruit and fruit trees* will be much obliged by answers to any or all of the following queries.—As their object is to obtain and promulgate

information relative to fruit and fruit trees, the best adapted to our climate and circumstances, they hope those of their fellow citizens, who have experience in their culture, will favour them with their assistance in a design of general utility.

1. What kind of fruits are the greatest and most certain bearers?
2. Which are those coming soonest to perfection, and times of blooming and ripening of those within your knowledge?
3. Which are the hardiest, and most easily propagated; and the different modes of culture; and the times and manner of planting and propagating, both as respects season and state of sap?
4. What enemies assail fruits, and modes of destroying them, or guards against them?
5. Modes of recovering decayed trees, which are most subject to injury, and the best means of preventing disease or decay?
6. What soils, and what manures or dressings are proper for the respective kinds of fruit trees, and their proper aspects? In what situation do they thrive most, and what are the general causes of injury or decay?
7. What trees require the scie-knife, and which are best left entirely to nature?
8. What fruits will bear gathering before maturity, so as to ripen in the house, or under other cover; and the best mode of preserving ripe fruit for use?
9. What insects or vermin are enemies to fruit, and the means of repelling or destroying them?
10. How long since the bitter rot first seized the Vandever, and House Apples? Is there any mode of prevention, or has situation or soil any influence on the disease?
11. Apples generally fell off the trees in great numbers before maturity, last autumn near Philadelphia. In many no mark of decay appeared. What is the cause of this early falling, and what the means of prevention?

It not being expected that any individual will be enabled to answer all these queries, it will be seen that it is left to each correspondent who will be pleased to attend to them, to give information as to that species within his knowledge. Communications to the Secretary of the Society will be gratefully received.

MONITORIAL.

"Unto one he gave five talents, to another two, and to another one."

A most important talent is *Moral Influence*. Mankind are governed by influence more than by laws. *Parental influence* is of all the most powerful. The tender minds of children, like soft wax, are easily stamped by any impression, and moulded into any shape. They naturally imbibe the sentiments, copy the manners and follow the example of their parents. It is therefore infinitely important, that parental influence should be directed by the unerring line of prudence and virtue.

Female Influence, in respect to the forming of morals and manners, is much greater than most people are aware. It would be in the power of women to raise the tone of public morals. By their frowns and smiles properly directed, they might banish from society profane swearing, obscenity and foppery—they might put an end even to the murderous practice of duelling—they might in no small degree, animate the other sex to a decent, manly and noble conduct, if they were only to make it a necessary condition of obtaining their approbation and favour. *Wealth* enlarges the sphere of *moral influence*. The rich, who lead the fashion, have it in a great measure in their power to render meanness and vice contemptible in the public view, and to make decency and virtue fashionable. Men *high in office*, and even *ordinary magistrates* have moral influence proportional to the degrees of their elevation; and according to the aggregate influence of their example, virtue or vice will be likely to prevail among the people. Their characters will be critically scanned and more or less of the people will copy their manners and examples, whether good or bad.

The *clerical office* has attached to it a great degree of moral influence. A correspondent life in a preacher is the best enforcement of the doctrines he preaches; whereas morality and religion are more injured by one vicious clergyman than they can be promoted by a thousand good sermons. All men of *learning and superior knowledge* have an enlarged scope of moral influence, and according to the use they make of it, they will promote good morals, or will be like the blasting Bohon Upas to all around them.

As *moral influence is a talent*, we are accountable for the use of it. We are accountable for all the evils which others are led to commit through our means. If even one single person and much more if many have been rendered vicious by the influence of our conversation and example, we have a sad account to give. Or tho' vice has not been directly encouraged by us, if we have not uniformly used our influence against vice and for the promotion of morality and pure religion, we have acted the part of unprofitable servants.—*Bal.*

To dread no eye, and to suspect no tongue, is the great prerogative of innocence; an exemption granted only to invariable virtue. But guilt has always its horrors and solicitudes; and to make it yet more shameful and detestable, it is doomed often to stand in awe of those to whom nothing could give influence or weight, but their power of betraying.