VOL. 2.

FEBRUARY, 1898.

No. 2.

EDITED BY

BATTLE CREEK, MICH., U. S. A.

FORTY CENTS.

## The Christian Educator

IS DEVOTED TO

The Thorough, Systematic, and Symmetrical Culture of the Hand, Head, and Heart, in the Home, School, and Church.

#### ISSUED MONTHLY.

Entered at the Post-office in Battle Creek, Michigan,

CHARACTER is not transferable.

MISTAKES will often be made, but truth lies close beside error.

THE Lord does not purpose to do the work which he has given man to do.

CHILDREN would be saved from many evils if they would be more familiar with their parents.

THE cultivation of the mind will bring tact and fresh incentives to the cultivation of the soil.

THERE are few who realize the influence of the little things of life upon the development of character.

Wisdom will be learned by failures, and the energy that will make a beginning gives hope of success in the end. It is a law of the mind that it will narrow or expand to the dimensions of the things with which it becomes familiar.

Miss what you may in the line of human attainments, but you must have faith in the pardon brought to you at infinite cost, or all wisdom attained on earth will perish with you.

#### PRACTICAL EDUCATION.

THERE is no other subject, with perhaps the exception of religion, in which all people are so deeply interested as that of education. Ever since the first settlers landed on the New England shore, the school has been the center of the active life of the community, and in most localities, in order to ascertain the intellectual status of the community, you have but to visit the school.

In America, and perhaps in all civilized countries, we are safe in assuming that parents love their children better than all the world besides, and are willing to do for them whatever will be of the most service and value in the future. If parents were fully convinced that education was worth more to their children than money or property, they would unhesitatingly give it to them.

We all look into the future with hope and expectancy. We dream of things to be and build our castles in the air. We plan for our children a much easier life than it has been ours to enjoy. We sometimes would be almost foolish enough to wish them free from care and labor, and able to sip the nectar of life without knowing anything of its cares and sorrows. We are so prone to forget that there is but one road to success, and that it does not lead through green pastures and by the side of still waters, but through rugged byways and over Alpean heights. That success is won only by sacrifice and toil, is a universal law, and it is true that "he is not worthy of the honeycomb who shuns the hive because the bees have stings."

Does an education pay? is the question asked by most parents, taking into consideration, of course, only the financial or commercial view of the propo-They refer usually not to technical or practical education, but to general education, such as is given in most high schools and colleges. are not surprised that such questions are often asked, and from the standpoint of the inquirer they are not easily answered. If an education was to be measured only in dollars and cents, evidence would not be wanting to show that higher education was not worth the money and time spent in its getting; yet on the whole, I believe that from the commercial standpoint alone education pays, -- even the study of Latin and Greek, in most cases, will pay in dollars and cents. Of course, man must earn a living, and unless he is prepared to do so honorably, he will not make a good parent nor a good citizen; but character and intelligence and noble aspirations are worth more than money. An education can no more be measured in money than can a mother's affection or the nobler motives which lead to high thinking and pure, upright living. It is one thing to have enough food and clothing for comfort and to care for nothing beyond, but it is an entirely different thing in addition to these to open up a mind to the full development of all those powers of intellect and soul with which an all-wise Creator has endowed man. Yes, an education does pay. It would be worth all it costs if the outlay were ten times as great. When once possessed, money can not purchase it, fire can not burn it, and thieves can not steal it. The only question is, What kind of an education pays best? and. What should be the trend of education for the masses?

Our system of education is very largely a product of the last century. At that time only the few could even hope to secure a higher education, and, as nearly all literature and science were locked up in the Greek and Latin, it was only natural that these languages should be made the principal part of college courses of study. They were studied at that time not so much for the disciplinary effect they had n the mind as for their immediate practical value.

Academies were established as preparatory schools. These, of course, taught the Latin and Greek in order that their pupils could enter like classes in the colleges and universities. The modern high school had taken the place of the New England academy as a preparatory school. Its courses of study are dictated by the colleges and universities. The high school, to have a good standing, must be able to enter its pupils into the Freshman class of the universities and colleges without examination. This means that they must have the dead languages, although United States history, civil government, physical geography, and other important studies are entirely omitted, which is the case with one course of study pursued by many of the high schools of this State. The courses of study are perhaps all right for the few who expect to enter a college or a university, but in comparison with the number that enter the high school this number is very small - not one in twenty. Why should the interest of the many be sacrificed to the interest of the few?

The old idea that mental discipline and knowledge were all that a course of study should seek to provide, may have been all right in its day, but that day is certainly past. The school now claims so much of the child's time and is such an important factor in his growth and development that it must not only train him to think, and to store his mind with knowledge, but this knowledge must have reference to the future needs of the pupil. The great majority of people must work for a living, and public-school education should recognize this fact, and instead of giving pupils a distaste for work, or leading them to believe that there is some easier way of getting a living, they should be trained to work and taught that labor of the hands is just as honorable as labor of the head. There is nothing honorable nor dishonorable in labor either of the hands or of the head. It is the motive which prompts the labor and the spirit in which it is done that makes it either noble or ignoble.

The ordinary country child now starts to school at six years of age and continues right along until about the age of fourteen or fifteen. During these years he has mastered reading, writing, spelling, geography, arithmetic, grammar, and United States history. This is all very well, but he has received nothing bearing directly upon his home life on the farm. In every-day life he is surrounded by flowers, plants, shrubs, and trees. Vegetation in all its forms smiles to him a welcome, and from plant and flower, tree and shrub, come forth insect life in its various forms

to greet him. His work and interest is with the farm crops, the domestic animals, the poultry, and the garden. Yet none of these are touched upon in any way by his school instruction or school life. Why should not his education in some way and in some degree touch the life which he is compelled to live after leaving school? Is not a knowledge of the different breeds of live stock and their distinguishing characteristics worth more to him than a knowledge of the rivers and mountains of Asia? Would not a knowledge of the plant and insect life about him bring him more pleasure and service than a knowledge of cube root and much else that he has been taught in school? These things could be taught just as easily as much that is already taught. Each country school could have a garden spot with a little expense and effort. Such a plan is carried on in some of the foreign countries with great satisfaction and success.

The objection may be made that our teachers can not teach these subjects. If this is true it is not the fault of the teachers. They have always been willing to prepare themselves to teach whatever there was a demand for, and if you express a desire to have your children taught these subjects, there will soon be teachers prepared to teach them.

So far I have been dealing with the boy who attends only the district school. But if his parents desire to give him more of an education and send him to the village high school, what is he taught there? Nothing - absolutely nothing - that will bring him into closer sympathy and touch with the farm and rural life. He starts off with Latin and algebra; he is at once directed toward the university and professional life. High-school education all tends in that direction, although not one out of every ten pupils in the high school expects to enter a higher institution. Public schools are for the masses, and they should strive to be of the greatest good to the greatest number. It is a fact, however, which can not be denied successfully that our system of publicschool education tends to lead pupils away from the industrial pursuits. Education for culture is all right for those who can afford it, but education should have some bread-winning value. The state is not interested particularly in either culture or the professions. It is interested in good citizenship, and I submit that any system of education which enables its recipients to gain a living honorably and honestly will produce for the family the best parents and for the state the best citizens. J. L. SNYDER,

Pres. Mich. Agricultural College.



## General Articles



# THE EDUCATIONAL AND MORAL VALUE OF MANUAL TRAINING.1

Having thus passed in review some of the principal advantages which the system of education by production carries with it, it will be readily perceived that they are calculated to accrue to the children of the rich as well as of the poor; to those who will later in life enter the professions as well as those who are destined for a trade; to those who will be merchants and scholars as well as those who will be compelled to do the hard physical labor of the world.

But for the class last mentioned, certain additional advantages will result from the method we have described; and a few words concerning these may not be amiss. I count among the peculiar benefits which the working class will reap from the introduction of manual training into schools, first, the circumstance that, becoming possessed of superior skill, they will turn out superior work; that they will enhance the value of their country's manufactures in the great markets of competition, and will secure a larger share of the general wealth for themselves. But this pecuniary benefit, important as it is to the wage-earning class, we distinctly refuse to recognize as the chief aim and end of work - education; and we regard it as insignificant compared with a higher mental and moral good which superior training will place within reach of the future workmen. The worker in the factory at the present day too often moves like a machine among machines. He does not comprehend the wonderful processes which occur around him, and his mind is blunted and degraded by constant contact with operations of whose principles he is ignorant. Far otherwise would it be if he could be so far educated as to understand the nature of the material with which he deals, the laws which the gigantic forces that he utilizes obey, and if the mechanical contrivances among which he labors should become so transparent to his eyes as to reveal their underlying plan. The worker becomes truly independent when he has intellectually mastered his work. And it is one of the fairest promises of manual training that it will ultimately help to build up such intelligence; that it will give a new dignity to labor by putting more mind

Continued from the January number.

into it; and that it will saturate the daily toil of the masses of mankind with understanding. There is another point of importance. Manual training opens a new avenue for exploring the individuality of the pupil. It will offer a new opportunity for the nature of the child to declare itself and to reveal its bias. The progress of all modern education is in the direction of greater individualization, and wise educators welcome any new test of individuality as an invaluable help.

Manual training affords a wholesome alternation between work and study, and thus provides an additional means of mental and bodily recreation. Change of occupation is often better than entire rest. When pupils pass from the class room to the workshops, and from these back to the class rooms, they will experience a new zest and relish for all their school duties, and every faculty will become brighter and keener.

It is a noteworthy fact that in England the results achieved in the half-time schools, which are attended by factory children, are on an average as high as in the ordinary day-schools. The work of the factory tends to quicken the observation, to concentrate the attention, and to stimulate the mental activity of the children, so that they learn in half time what others learn in full time. This experience may well serve to refute a persistent objection which the opponents of improved methods of education are in the habit of urging; namely, that the young are already sufficiently purdened, and that it would be injurious to impose new loads upon their already overtaxed brains. system of education by work will have no such tendency; on the contrary, the exercise of their creative instinct will be a genuine refreshment for the young, and instead of imposing an additional load, we shall in reality make all their other studies easier by the salutary influence which variety of occupation can not fail to exert.

Furthermore, manual training often affords us the means of rescuing an intellectual life that seems already past redemption. It is necessary to the mental health of adults, and deeply important in the education of children, that they should be able to do some one thing thoroughly well. The being able to do one thing well is the starting-point for doing other things well. Now it happens not infrequently that children, and especially those whose memory is weak, fall hopelessly behind in the ordinary branches of a public-school course. In consequence, they are set down as dunces: and hearing this opinion constantly repeated by others, they gradually adopt it

themselves, settle down to the conviction of their stupidity, and fall into a dull, brooding condition from which they may never emerge. Cases of such children have occurred to me frequently. A great change is observed in them when they are taken into the school workshop, especially if they happen to be exceptionally endowed with manual skill. workshop they have often easily performed the tasks set them, and even excelled their fellow pupils. a consequence, their crushed self-respect re-arose; their attitude became manlier, their look more confident; they had done one thing well, and this gave a favorable turn to their whole development, and a new impulse to their exertions in every direction. It is assuredly no slight argument in favor of manual training that it affords us a means of building up the self-respect of children who are mentally backward, and thus furnishes a point where the lever may be applied in order to raise their entire intellectual status.

The purpose of manual training is to build up a more complete humanity for the young. The total humanity of the child is the ideal aim; and in the interest of no base or mercenary end, but of this highest spiritual purpose, the school workshop and atelier are demanded. Over their portals should be inscribed, "SACRED TO THE LARGER HUMANITY."

G. BAMBERGER,

Supt. Chicago Jewish Training-School.

#### THE PHILOSOPHY OF EDUCATION.1

I HAVE already suggested that we may look upon a child as being three things, or three different aspects of the same thing; first, as a machine; second, as a personality; and third, as an incarnation. I wish now to call attention to a few physical things which the teacher has to deal with in the education of a child considered as a machine.

The teacher's duties are supposed to have some special reference to the brain of the pupil; so it becomes important to know what, and where, the brain is. A large part of the brain is located in the head, but it is not altogether in the head. The Chinese used to think the brain was in the stomach. The ancient Greeks supposed the seat of the emotions was under the ribs; and so when a man has "the blues" we still say that he is hypochondriacal. Instead of being "down in the mouth," with the Greeks it was

<sup>1</sup> Continuation of a lecture by J. H. Kellogg, M. D.

literally "down under the ribs." Every part of the body is an index to the character and mental make-up. We can tell a good deal about a man by the way he walks, because part of his brain is in his legs. In fact, there is more brain outside the skull than inside. If we could take away from a man's body all the flesh, bones, muscles, glands,—everything except his brain,—we should still have left the perfect semblance of a man. The main nerve trunks and the multitude of microscopic fibers which spring from them, are all as much a part of the brain as the fingers are a part of the hand, or the hand a part of the arm and the whole body.

Some interesting discoveries have recently been made regarding the structure and functions of the brain. The brain- and nerve-cells are not in permanent contact with one another. They are of various shapes and sizes, all with branches and filaments, many of which terminate in minute, brush-like appendages. On the ends of these hair-like fibers are many tiny buds or "gemmules." Corresponding to these on the arms of other cells are similar buds called "contact-globules." Temporary connection between various cells is made by the contact of the "gemmules" of one cell with the "contact-globules" of another.

Now, I want to call your attention to a few suggestions as to how we think and feel. How do we remember? How do we recall? How do we store facts and incidents in the memory?

It is a fundamental fact of physiology that all the organs of the body are modified or changed by the work they do. A shoemaker's hands or a blacksmith's arms are much different than those of other persons who have not done the same kind of work. The same thing is true of the brain-cells. changed by the work it does. When a man has heard, seen, or done something, the brain-cells involved in that activity are so changed that this particular experience is stored up in the physical modification of the cell. In this way, through the experience of ages, the civilized man has acquired a "reading center" in his brain, while the savage man, who can do many other things that the civilized man can not do, can not read until he has actually built up a "reading center" by prolonged or inherited experience in reading.

This storing-up capacity of the brain-cells is the foundation of memory. When we desire to recall anything, the act of our wills sets all the brain-cells into active effort; the brain becomes a mass of stretching, wriggling cells and filaments. If it is a particu-

lar melody we wish to recall, that is, to re-excite in our consciousness, we are able to do it only because it has been stored up in the experience-modifications of some particular cell or cells. The will to recall this sets all the other cells to feeling after these particular cells; and as soon as the "gemmules" of one touch the "contact-globules" of another, the recollection is complete, and the thing remembered is restored to our consciousness.

It is only when these various nerve-cells are in contact that there is consciousness. In sound sleep or in a condition of fatigue, the nerve branches are contracted so as not to remain in contact with each other. Sleeplessness results when the nerve-cells and branches are so excited that they do not let go their hold on each other. An opiate paralyzes the nerves so that they contract and let go, and thus consciousness lapses. Normal sleep results from gradual nerve fatigue, through which the cells lose the power of projecting their arms and filaments, thus breaking the physical nerve contact which is the basis of consciousness.

At some future time I wish to speak of the brain more particularly; then about personality, and how the teacher can teach personality and character. After that I shall take up another branch of the subject,—man as an incarnation,—a consideration that must have a very important bearing on all our educational ideas and methods.

#### OBSERVATION.

JESUS CHRIST drew his great lessons from nature. The study of the deepest spiritual truths was introduced by such expressions as, "Consider the lilies," "The wind bloweth where it listeth," "A sower went forth to sow," "The kingdom of heaven is like to a grain of mustard seed."

All the spiritual laws find their counterpart in the natural world. The things themselves which are created for man naturally appeal to him with greater force than what some one may say of these things. They speak with a clear voice of the love and power of their Maker: "The heavens declare the glory of God; and the firmament showeth his handiwork. Day unto day uttereth speech, and night unto night showeth knowledge." "He that hath ears to hear, let him hear."

The Lord intended that man should love truth, that he should seek and discover truth for himself; and he endowed him with the powers to do this. Man, on the contrary, wishes his fellow man to accept what henimself regards as truth, and upon the authority of his word. Here is the ground of a conflict which has for ages been carried on in education.

I wish to make a plea for observation as a means of study, which is often opposed by a blind adherence to books and definitions, because I firmly believe that it is the purpose of the Creator of man that man should arrive at truth in such a way that the truth shall become a part of his very being. This can result only when his study is conducted in such a manner as to develop his originality; and observation employs and develops the originality of the student, and results in independent thought.

We live in an age of progress in invention and The wonderful inventions and acquisitions of scientific knowledge are almost entirely the result of observation. Observation may be defined as the continued action upon the mind of some external object. It may employ one or all of the The result of observation is a mental senses. picture or concept of the object under observation. Thus when we observe an apple, the color appeals to the mind through the sense of sight and gives to it a percept which corresponds to the color of the apple; the senses of taste, weight, smell, and feeling each give to the mind percepts corresponding to those tributes of the apple which appeal to these various The mind then combines these percepts into a concept, or mental picture, which corresponds to the apple as a whole. The correctness of the mental picture, as a whole, depends, then, upon the accuracy of the percepts which form the concept. It may be said that the purpose of education is to develop the power to form correct mental pictures, and if this be true, how necessary then is accuracy in the training and use of the senses, for primarily all our concepts come through the senses.

The illustration which I have here given of the formation of concepts is one which is true of imagination, as well as observation. The imagination is that power of the mind by which we can go outside the grasp of sense, and picture that which lies beyond our immediate environment. In the act of imagining, we build up concepts according to the same general law as in observing; but we build them from what we have in the mind—that which we have got by observation; and, therefore, upon a correct observation of that which lies within our environment, depends, to a large extent, our ability to form correct pictures of that which lies without our environment. The results f imagination bear a very close relation to those of

observation. If the concepts derived from observation are vague and ill-defined, those resulting from imagination will probably be incomplete and indefinite.

Many prominent educators seem to think that reading is the open door to knowledge. But if there be but one door, it seems to me that it is observation rather than reading. In saying this, I do not in any way undervalue the marvelous usefulness of the press in diffusing knowledge. But unless the mind be possessed of the power of imagining,—building up a correct mental picture or concept,—what is read can not be of the highest value; and this power, as we have seen, comes from observing the phenomena of one's environment.

In a future article some suggestions will be offered as to the practical applications of these principles.

FREDERICK GRIGGS.

#### CHILDREN AND OTHERS.

ONE of these days, when the first fury of child study has spent itself, it may become safe to attend what is called a literary afternoon at a women's club. Just now a plain, honest mothers' meeting is preferable. At a mothers' meeting you know exactly what you have to expect, and if you do not like it, you can But the clubs invite you to discuss "Modern Movements," and the movement toward the nursery excludes all others from discussion. Or the topic is "Egyptian Architecture," and some fond creature thinks the fact that "my little grandson, aged three," builds pyramids with his blocks, quite germane to the subject. "Requirements for Citizenship" opens the door of debate to kindergartens, Froebel, Stanley Hall, and opens it no wider. on psychology or philosophy are quickly brought down to their anecdotage by speculations over "a deep, deep question asked me by a six-year-old pupil."

Even fairly patient women are beginning inwardly to make deep, deep replies, the kind spoken of by the poet as "not loud, but deep." — Chicago Times-Herald.

Happily the great truth is spreading, that education is not a matter of external surroundings and conditions, but of internal motive and inspiration. Given a sufficiently powerful motive, a youth will win education for himself despite the most adverse circumstances.— The New Education (Battle Creek, Mich.)



## Physical Education



#### CLASS WORK IN PHYSIOLOGY.

THERE is scarcely any limit that can be set to the mental, moral, and physical development of the human The body has been poetically described as a harp of a thousand strings, and the more we learn of its wonderful mechanism, the more wisely and delicately we may touch its chords, and thus produce more exquisite music. The study of physiology must necessarily be one of the most important studies in true education; but taught as it very often is, it is merely a reiteration of certain theories, the learning of certain facts in a mechanical way, and the belaboring of the mind with the requirement of Latin names the significance of which is not understood by the average student when he has finished his studies. The teacher must become enthusiastic over the study, and then the student will contract this enthusiasm from him as a necessary consequence of their contact with each other.

Although enthusiasm and consecration are such necessary requisites on the part of the teacher, they are not alone sufficient. The teacher must have a full storehouse upon this subject from which to draw. is well to have a good text-book in the hands of the But only such text-books as make thorough and practical application of the subject taught are of any service. Simply learning that certain things take place in the human body, without the student learning in what way his own happiness is connected with the right performance of physiological functions, is absolutely of no value. Dr. Kellogg's first and second books in physiology are both valuable, because the author recognizes these principles from the beginning to the end. The First Book is especially simple in language, and could be adopted with great profit as a reading-book in many schools, thus teaching the simple truths of physiology while acquiring the art of reading. The Second Book deals with the more profound truths of physiology, and is written in such a simple, forcible style that persons with only a superficial knowledge of it might consider the book very elementary; but those who have had the privilege of using it the longest in the class room will be more and more convinced of its depth and thoroughness.

But the teacher should not look upon this book as complete, because confining the student to one book,

no matter how well written, becomes monotonous. Unless there is a school library to which he can send his students, definitely directed as to the sources of information, he should have in his own possession a number of standard works that could be put into their hands at each lesson. I have found that bound volumes of Good Health of the last five or six years are very serviceable for this purpose. Also some numbers of Modern Medicine. Several bound volumes of the Dietetic and Hygienic Gazette and Currier's Practical Hygiene will also be found of great service. Other works, such as Dr. Kellogg's "Home Hand-Book" and "The Stomach," would be very valuable.

If the teacher goes through all these journals and classifies the leading articles bearing upon such subjects as he considers in his physiology class, he can then appoint a committee of the students to present abstracts of these articles, and have the merits of them discussed by the entire class. Very often some bright member will be able to point out what seems to him a weakness in the positions taken. Then will follow a spirited discussion out of which the teacher, if he is careful, can always guide the class aright.

By following this method, the student gradually becomes familiar with some literature of the leading writers upon the subjects which he is studying. He learns to discriminate for himself between truth and error, and the class hour, instead of being dull and formal, comes to be regarded so much a pleasure that he has a feeling of regret when the hour is past and he must return to the common routine of other school duties.

David Paulson, M. D.

#### THE CARE OF THE EYES.

MUCH has been written concerning the environment of school children with regard to its influence upon their eyes; of ample illumination, whether natural or artificial, that should be had from the left side of the desks; of the situation of blackboards, maps, etc., so as to be readily seen; of frequent changes of study, and of intervals of intermission to avoid the harmful effects of continuous work of one kind.

These and many other suggestions have been offered for the recognition and possible removal of the causes of eye mischief. But as to the means to be adopted for the discovery of defects and for the remedy of existing ocular evils little has been offered, notwithstanding the fact that a large percentage of those attending schools already have defects of vision. The following case is one of many:—

A young lad ten years of age was brought in by his father with the statement that something must be the matter with the boy's eyes; for the teacher had sent him home with a note suggesting that an examination of the eyes be made, as he was very backward in his studies and did not appear to comprehend as much as the average child of six or seven years of age. reply to the question whether he or his wife had ever noticed anything peculiar about the child's eyes, he said: "Nothing special, - only the habit he has of bending up almost double in his chair when he reads; and we are always scolding him to make him sit up straight like other boys." As a matter of fact, the boy was utterly unable to distinguish a person over fifty feet away. Putting on proper glasses, gave the child normal vision. As he walked out on the street, the first thing that struck him was his ability to read names on sign-boards across the street. amazed him that he asked his father if he could read As he walked up the street, he amused himself by reading letters as far off as possible. way home tears ran down his cheeks; his father afterward said that the boy cried for joy. For the first time, he saw the line of lamps on the streets and the stars in the heavens. From that day he became one of the brightest boys in his class. The most noticeable feature of this case was the obliviousness of the parents to the boy's former condition.

Before the fifth year a child's perceptive powers have begun to unfold. He is gradually learning the power of attention. Slowly but surely his mind is being filled with a desire to know. His former uncontrolled inquisitiveness is gradually giving place to acquisitiveness. He asks for the meaning of things, his mental horizon expands, he originates, thinks.

During this period of receptivity the eyes should be capable of seeing the most accurately. At this period of life, should there be errors of vision, they are the most early and satisfactorily corrected, but become the most mischievous, if neglected.

The study of anatomy and physiology teaches us that the child may suffer not only physically and mentally, but that his whole character may be greatly modified or even radically changed by the condition of the eyes.

This brings us to the thought that the educator should have an equal, if not greater, interest in this subject than has the ophthalmologist; for the latter usually looks upon the eyes as only an optical apparatus, subject to errors of refraction and to disease. But the educator, on the other hand, usually considers

the child's eyes — if he thinks of them at all — solel as an optical instrument through which he receives his knowledge of the external world. He generally disregards their possible inaccuracy in receiving visual impressions. Of all persons the educator should clearly understand that the child's eyes should be optically correct at the very commencement of his educational career.

In a subsequent paper we may deal with a few of the most common errors, and offer a few suggestions as to how they may be recognized and remedied.

> J. R. LEADSWORTH, M. D., Healdsburg (Cal.) College.

#### TIMBER FOR THE WORKSHOP.

SOME SELECTED OBSERVATIONS ON INDUSTRIAL EDUCATION.

Our present school exists on the presumption that it is the product of our present civil society. Hence, each form of society begets its form of education, and each stage of the economic development of mankind implies a definite system of education and instruction.

So surely as with civil society the ideas of the culture of mankind, natural development, and observation made their way into the pedagogy of the time, so surely will a new order of society with its principle, labor, achieve its citizenship in the system of education. Struggling against it is vain. The future in the state, as well as in pedagogy, belongs to labor.

Industrial instruction is in no way opposed to general education, but is itself a means for securing the same. We are not dealing with home labor as a Utopian means for removing social calamity, but with the highest and deepest pedagogic questions. But "preparation for life," when prosaically expressed, is nothing else than bread-winning instruction.

Industrial instruction, however, is not intended to be professional instruction, but only a general preparation for practical training, just as intellectual school instruction is a general preparation for theoretical training. This, however, is not its principal aim; its principal aim is the harmonious development of the future man.

All labor is not educative; that only is so which is pursued pedagogically; that which is pursued mechanically is stupefying; and mechanical employments, even when pedagogically pursued, are of comparatively little educational value.

Arranged by

· C V. N. BOETTGER.



# The Mother's School

#### HOME EDUCATION.

THE work of mother is an important one. Amid the homely cares and trying duties of every-day life, she should endeavor to exert an influence that will bless and elevate her household. In the children committed to her care, every mother has a sacred charge from the Heavenly Father; and it is her privilege, through the grace of Christ, to mold their characters after the divine pattern, to shed an influence over their lives that will draw them toward God and heaven. If mothers had always realized their responsibility, and made it their first purpose, their most important mission, to fit their children for the duties of this life and for the honors of the future immortal life, we would not see the misery that now exists in so many homes in our land. The mother's work is such that it demands continual advancement in her own life, in order that she may lead her children to higher and still higher attainments. Mothers are often drawn away from the duties of home and the careful training of their little ones, to the service of self and the world. Vanity, fashion, and matters of minor importance are allowed to absorb the attention, and the physical and moral education of the children is neglected.

If she makes the customs and practises of the world her criterion, the mother will become unfitted for the responsible duties of her lot. If fashion holds her in bondage, it will weaken her powers of endurance, and make life a wearing burden instead of a blessing. Through physical weakness she may fail to appreciate the value of the opportunities that are hers, and her family may be left to grow up without the benefit of her thought, her prayers, and her diligent instruction. If mothers would only consider the wonderful privileges that God has given them, they would not be so easily turned aside from their sacred duties to the trivial affairs of the world.

The mother's work begins with the babe in her arms. I have often seen the little one throw itself and scream, if its will was crossed in any way. This is the time to rebuke the evil spirit. These little ones can not discern what spirit is influencing them, and it is the duty of the parents to exercise judgment and discretion for them. Their habits must be carefully watched. Evil tendencies are to be restrained,

and the mind stimulated in favor of the right. The child should be encouraged in every effort to govern itself. . . .

Parents should provide employment for their children. Nothing will be a more sure source of evil than indolence. Physical labor that brings healthful weariness to the muscles, will give an appetite for simple, wholesome food, and the youth who is properly employed will not rise from the table grumbling because he does not see before him a platter of meat and various dainties to tempt his appetite.

Jesus, the Son of God, in laboring with his hands at the carpenter's trade, gave an example to all youth. Let those who scorn to take up the common duties of life remember that Jesus was subject to his parents, and contributed his share toward the sustenance of the family. Few luxuries were seen on the table of Joseph and Mary, for they were among the poor and lowly. . . .

Those children who are the most indulged become wilful, passionate, and unlovely. Would that parents could realize that upon judicious, early training depends the happiness of both the parents and the children. Who are these little ones that are committed to our care? - They are the younger members of the Lord's family. "Take this son, this daughter," he says, "nurse them for me, and fit them up 'that they may be polished after the similitude of a palace,' that they may shine in the courts of the Lord." Precious work! Important work! Yet we see mothers sighing for a wider field of labor, for some missionary work to do. If they could only go to Africa or India, they would feel that they were doing something. But to take up the little daily duties of life, and to carry them forward faithfully, perseveringly, seems to them an unimportant thing.

Why is this? Is it not often because the mother's work is so rarely appreciated? She has a thousand cares and burdens of which the father seldom has any Too often he returns home bringing with knowledge. him his cares and business perplexities to overshadow the family, and if he does not find everything just to his mind at home, he gives expression to his feelings in impatience and faultfinding. He can boast of what he has achieved through the day, but the mother's work. to his mind, amounts to little, or is at least undervalued. To him her cares appear trifling. She has only to cook the meals, look after the children, sometimes a large family of them, and keep the house in order. She has tried all day to keep the domestic machinery running smoothly. She has tried, though tired and perplexed, to speak kindly and cheerfully, and to instruct the children and keep them in the right path. All this has cost effort and much patience on her part. She can not, in her turn, boast of what she has done. It seems to her as though she has accomplished nothing.

But it is not so. Though the results of her work are not apparent, angels of God are watching the care-worn mother, noting the burdens she carries from day to day. Her name may never appear upon the records of history, or receive the honor and applause of the world, as may that of the husband and father; but it is immortalized in the book of God. She is doing what she can, and her position in God's sight is more exalted than that of a king upon his throne; for she is dealing with character, she is fashioning minds.

The mothers of the present day are making the society of the future. How important that their children be so brought up that they shall be able to resist the temptations they will meet on every side in later life! — Mrs. E. G. White, in "Christian Education."

#### HOME SCHOOL LESSON. - NO. 6.

BLACKBOARD WORK.

God called the dry land earth. The waters called he seas.

And God said, let the sprays forth fruit-tree, yielding seed fruit-tree, yielding fruit.

And it was so.

And the evening and the morning were the third day. God said, Let there be lights in the heavens To divide the day from the night.

> signs seasons days years

And let them be for | lights in the firmament

and to give light upon the earth and to divide the light from the darkness.

And God made two great lights.

The greater light to rule the day;

The lesson light to rule the night

The lesser light to rule the night.

He made the stars also.

And the evening and the morning were the fourth day.

Light is come into the world.

Every one that doeth evil hateth the light. John 3:19, 20. God is light: in him is no darkness at all.

If we walk in the light as he is in the light,

We have fellowship one with another, and the blood of

Jesus Christ his Son cleanseth us from all sin. 1 John

1:5, 7.

This lesson is capable of being made very much alive by object-lesson helps. Take a shallow box of good dimensions, filled with sand, and a series of pans, basins, and cups for holding water. Form the sand into continent shapes and place the dishes of water for seas, lakes, and wells; and with a little evergreen for borders, and such devices as any average mother would be able to invent, a very beautiful illustration of this division of land and water can be arranged. In the spring-time when the earth is full of water, this can be done by working in the ground so as to let the children see the actual division, as the earth is piled up into the channels made for the water to drain into.

The "lights" can be illustrated by lamps and candles as well as by observation in the heavens, so as to make the division of darkness from light very clear even to the beginner: and, from their own little experiences, you can illustrate the fact that every one that doeth evil hateth the light.

You will see that I have detached sentences from the Bible narrative for the reading lesson; but the children should by this time be able to read the context, with a little help on the untried words, and so get the connecting portions.

One aim of the lesson as arranged is to bring the truth within range, as well as to teach words. Have the children commit the entire Scripture verse with which the lesson ends; in fact, they should have the whole lesson on the tongue's end.

Be careful in keeping the work of these creation days clear and distinct, each by itself, for the sake of accuracy. In teaching little children, do not lay great stress on the fact of evil, of darkness, of death. Pass lightly over this shadow side of the gospel; and magnify the light, the good, the life, which Christ came to be to a dark world. As the little ones grow, they will find out about the evil fast enough; and we want them to be so filled with a knowledge of the good by that time that they shall not have to meet the evil empty-handed. My heart goes out to the mothers, fathers, and little students in the homes to which the Educator is taking these lessons, and I hope there is a real "Home School" in each one.

MRS. S. M. I. HENRY.

That parent is not wise who would free his child from care and labor; and they who educate their children with the hope that there is some easier way of getting a living than to work for it, will be sadly disappointed in the end.— President Snyder.



## The Farm



[It is the purpose in this department to offer various suggestions and experiments, adapted to the season, that can be used by teachers and parents as object-lessons in education and in the improvement of farm practise. We should like to know how this feature pleases the readers of the EDUCATOR. Call the attention of your friends to it, send in their subscriptions with your own, and give the paper all the assistance you can by original contributions and selections.]

#### WHAT IS AN EDUCATION FOR?

PERHAPS at no period in the world's history has there been more attention given to the subject of education than the American people are giving it at the "The little red schoolhouse," as a present time. popular means of education, is in reach of every child within the borders of this Republic, and the higher educational institutions are increasing in numbers and in facilities for meeting the demands of the multitudes who may apply. They are also encouraged by great endowments, especially in the line of the ornamental in school attainments. The idea seems current that a certain kind of "culture" is all that the people need, in the way of education. That the school work has, or should have, any relations to the life work, is entirely ignored by the masses, if not disputed by the leaders in public opinion, as being entirely impracticable.

Literary attainment and a knowledge of the abstract sciences are desirable as far as they are useful, and as a means of earning an honest living. Beyond that, such knowledge is in the main ornamental and not necessary to the perpetuity of the Republic nor to good citizenship. Public sentiment is entirely too indifferent upon this subject, and the few progressive people who contend for more practical systems of education are submerged beneath the sarcasm of the leading newspapers, published by men who class everything among the "fads," if it interferes in any way with their old-fogy, dust-begrimed ideas. With all these hindrances, improvement in our educational, social, and economic conditions is made slowly and with difficulty. . . .

Public sentiment should be radically changed for the improvement of home influences, for the more thorough preparation of teachers for their work, and for the improvement of the schools themselves. Until farmers' sons are supplied with some of the rudimentary principles of science in agriculture, in their work on the farm and in the district school, there is little hope that many of them will ever graduate from an advanced course in agricultural education, with the purpose of returning to the farm. They prefer rather to get as far from it as possible, by entering some of the professions. As long as the pursuit of agriculture is followed by young men who are kept entirely ignorant of the great underlying principles of this noble industry, and ignorant of the sciences and laws upon which it must depend for success, they will continue to look upon it as an experience of drudgery and unrequited toil. These conditions explain why so many farmers' sons leave the farm, and why the experiment stations connected with the State universities and agricultural colleges, are not more generally patron-When will the people and their educators learn wisdom, to the extent of being able to impart it in a reasonable degree to the rising generations?— The Farmers' Union and Agricultural Review.

#### TREE SURGERY.

An interesting article in Vick's Illustrated Monthly Magazine describes how defects in tree growth can be corrected by surgical means. In the case of a tree that was much bent over by the prevailing winds, the experiment was tried of heroically amputating all the branches which projected on the offending side. After five years of this treatment, the tree had attained an almost perfectly symmetrical appearance. (This may serve to illustrate the pedagogical fact that the child-gardener often needs to prune and rectify as well as to cultivate the natural tendencies of growth.)

The writer goes on to show the harm that comes from leaving the nursery labels bound around the young branches with wire. (Another excellent pedagogical lesson.) When it is necessary to stay two branches together that are in danger of splitting apart, never use a wire or even a flat band of iron that encircles the bark. It is far preferable to bore through each branch and insert an iron rod provided with a head at one end and a nut at the other. In this way the two branches can be drawn as close together as necessary, and in a few years the ends of the rod will be completely covered by the bark, and without interfering with the growth of the branches.

Another very interesting operation in tree surgery is borrowed from dental practise. It often happens that when the lower branches of trees have been pruned away without sealing, holes are found in the

unk, caused by decay of the stump of the amputated branch. If these holes are neglected, the decay extends inward and downward, and frequently causes the trunk to become hollow. The remedy is to cut out all the decayed tissue with a half-round chisel or gouge, so that the surface of live tissue will be clean and smooth. The hole is then filled with stiff hydraulic cement, snugly pressed in and finished on the outside even with the inner bark. This filling immediately "sets," thus excluding all air and germs from the cavity, and its exterior surface acts as a bridge on which the inner bark may unite its broken edges. In a year or two the cavity is entirely closed. Many trees have been saved in this way. And herein is another excellent lesson for the educator.

#### A FARM WHEEL.

THE average high-school or college graduate, no matter how long a course he may have taken in football or other athletics, is usually averse to much productive manual labor. So it should not be surprising that the daily press indulges in such items as the following: -

"And so you want a wheel, my son? Well, you'll find one in the front end of that wheelbarrow; and ere is a big pile of coal ashes back of the house that will have to be moved. The handle bars are of white ash, and are adjustable so that you can get any style of hump on that suits your fancy. It is regulated largely by the load you put on. The bigger the load, the more you will have to hump yourself. Be careful and don't mar the enamel on the frame, and keep the ball bearings well oiled, so they won't cut the cones. The tire is absolutely punctureless, so you won't have to take a pump and repair kit with you. By the time you have removed that pile of ashes, I think you will have made a century run,also the perspiration. Take a flying start, and scorch to the finish." - Selected.

#### WHO KNOWS?

How many seed cells an apple has?

Which way the seeds point? How many in a cell? The color of green seeds? Of ripe ones?

The color of sweet-apple blossoms? Of the blossom of sour apples?

How many petals the blossom has?

How many parts to the calyx?

What the "sepals" are? - Northwestern Journal of ducation.



## The Reading Circle



#### "THEORY AND PRACTISE."

QUESTIONS ON CHAPTERS VI - VIII.

Is the sculptor's block of marble the best illustration of the child in the hands of its teacher? How about the "waxen tablet" metaphor? The child as a plant? (Meaning of "kindergarten"?)

What is the value of teacher apprenticeships?

What is the most important qualification of the teacher? Is knowledge the sole end of education?

How much does true education embrace? What is "the law of growth"?

What are the three limitations of education? The three purposes of instruction?

What is the "pouring-in process"? The "drawingout process"? "The more excellent way"?

Describe Page's use of an ear of corn.

What are the advantages of the "waking-up process"? How important is it for the teacher specially to prepare each lesson?

Do you keep a "commonplace-book"?

Importance of attention in recitations.

What methods of recitation have you found most successful?

[All teachers are specially invited to answer questions as to their own practise and experience, and to furnish references to their reading in other books that confirm or differ with Page's. Send these contributions for publication in the EDUCATOR.]

#### USE YOUR DICTIONARIES.

WHAT is :-

- 1. The lily of a compass?
- 2. The origin of the word boycott?
- 3. The shoe of an anchor?
- 4. The reason we speak of food as board?
- 5. Used in England instead of the phrase, "He has the floor"?
  - 6. The newel of a staircase?
  - 7. A sister-hook ?
  - 8. The fourchette of a glove?
  - 9. A railroad frog ?
  - 10. The Portland vase?
  - 11. The origin of the word "schooner"?
  - 12. A "magazine dress"?
  - 13. The heel of a rafter?
  - 14. The stile of a door?
  - 15. The atlas of your neck?
  - 16. The thistle crown of England?
- 17. Look up boycott, cinchona and quinine, and gerrymander. - The New Education.



## School Notes



THE students of Healdsburg College spend twentyfive minutes each week in answering the EDUCATOR'S "Queries for Students." Next.

THE total enrolment of Keene Academy is one hundred and ten, with one hundred and fifty additional pupils below the eighth grade. The school has recently purchased a piano for the Music Department.

It is reported that several children in Boulder, Colo., have been expelled from the public schools for refusing to participate in a flag salute that seems to require a religious pledge. Is this in harmony with the principles for which the flag is supposed to stand?

The academies located at Graysville, Tenn., and Huntsville, Ala., seem to be established on the right basis. Both have incorporated the industrial idea in their work, both strictly avoid going in debt, and both have been full of earnest, appreciative students during the entire year.

THE Battle Creek College has issued a very handsome leaflet announcing the special courses of its Normal Department for the spring and summer quarters. It offers special advantages to teachers who desire to prepare for work in "church schools, mission schools, public schools, private schools, and home schools." Send for a copy.

SIXTEEN ladies and twenty-nine gentlemen are attending the Keene Academy for the special purpose of preparing to labor in some department of Christian work. Fourteen are ministers, or have the ministry in view. The average age of the academy students is above twenty, and twenty of the students are above twenty-five years of age.

THE Good Health Publishing Company is offering a free three months' scholarship in the Normal and Commercial courses of Battle Creek College to any one who sends fifty subscriptions for Good Health at one dollar each. Thirty-five or twenty-five subscriptions will be accepted on this basis if the balance of the fifty dollars is paid in cash. The scholarship covers all expenses for room, board, and tuition.

THE Graysville Academy Board are planning the erection of a new dormitory, which will accommodate about forty boarding students. This in addition to their present accommodations will put the school in good condition for a large attendance next year.

THE Healdsburg College Mutual Improvement Club is the title of a little company organized for the purpose of cultivating their abilities in public speaking. At each of the weekly meetings several students discuss some thesis previously assigned. These discussions are so conducted that each gets an excellent practise in preparation and delivery, while avoiding the objectionable features that usually accompany the rivalry of debate.

AND now the Keene (Tex.) Academy is in the field with a journal of four pages about two thirds the size of the Educator, called *The Keene Academy News*. The opportunity of developing this enterprise involved no financial outlay, and so was taken advantage of as "a means of improving the entire school." The little paper is not exactly a soliciting agency, but it is bound to keep the needs and advantages of the Academy prominently before its patrons.

The faculties and students of Battle Creek College, Union College, and Healdsburg College have recently ordered good-sized Educator clubs for their respective schools, to begin with the January number. The special yearly and half-yearly rate made to school clubs explains it. The Educator's discussion of "The Educational Problem" is of special interest to college teachers and students, and many of them are offering their personal commendations of it.

TWENTY-SIX young men in Healdsburg College are taking special training under President Owen, preparatory to the Christian ministry. Besides their regular college work, they have an extra session of two and one-half hours each week for special Scriptural study, criticism, and sermonizing. The instruction received is put to practical application in the conduct of cottage meetings in the community, each directed by a group of students. Twenty-four lady students are taking a similar line of study for family mission and Bible work.

[The attention of the students is particularly directed to the advertisement on the last page of this paper. Persuade your parents to subscribe for both journals immediately.]



### Observations



THE happy mean is always found not by steering between the extremes, rejecting both, but rather in taking one's bearings from either side and trimming the ship with increments of truth from every landing. Reject no good; if it can not be stowed at once, take it alongside until the cargo has settled down.

WE are wont to excuse ourselves for the small advancement we have made in educational and other lines, by saying that we have lacked faith in the new ideas and new truths. The fact also is that we have lacked ordinary business sense and respectable ambi-In neglecting the larger motive we have missed also the legitimate stimulus of practical affairs. This we ought to have had, and not to have been without the other. In the fancied security of an advanced position, we have allowed ourselves to be surpassed by those who did not possess our own original advantages. What is the remedy? - Obviously it is to lay hold of truth, and then outstrip our competitors by making the best use of it. But we must first catch up with the world's progress before we can lead it. And that means that we must be receptive, diligent, and grateful students of every thought and method that can advance our own work. The progressive Christian is the true cosmopolitan, intolerant of nothing but evil, catholic in spirit, discovering and using truth from every source through which God has manifested it to the world.

WE have been asked if we would object to the "flag salute." provided the word "God" were left out This is a question too indefinite to be answered definitely. As has been said, however, we do not object to a flag salute, in itself; but we do object to the salute in its present form, and it might be objectionable without containing the word "God." salute which embodies nothing more than a recognition of the principles of liberty and justice upon which this government was established, and for which the flag is supposed to stand, might be proper enough; and certainly the flag can claim no higher honor than to be recognized as the emblem of that which is noblest in human government. There is nothing more essential to the welfare of the country than that the principles of civil and religious liberty should be recognized and put in practise by all the people, both old and young. But if the flag salute contributes anything to this end, we have no evidence of it. More over, as an indication of real patriotism, the salute is of no value; it stands only on a par with formalism in religion. Principles—the principles of right and manly conduct—are the things of value. Besides these all sentimental forms and ceremonies sink into insignificance.—The American Sentinel.

WE deprecate the study of the Bible merely as literature; but if reverently studied from this point of view only, it can not fail to chasten the taste and vocabulary of the student. And we should hear less cant, slang, and provincialism even in the pulpit if the Bible were better appreciated as literature.

I would define Christian education as a process of culture under Christian influences, and from Christian motives, resulting in Christian character. — Dr. W. A. Chandler.

CHRISTIAN education is the foundation of opinions, character, and habits on Christian principles, with the Bible as a text-book, as espoused by some evangelical church.— Bishop Fitzgerald (M. E. Church South).

THE aim of Christian education is to force and develop Christian character upon the doctrines and by the methods of Christ. It therefore assumes that the Bible is a divine revelation of the supreme body of truth, revealing the only true God, the origin of all things, the nature of man, the moral condition of human nature, the only method of human salvation, and the divine doctrines of social and civil life. Christian education interprets material nature, human nature, and life by the doctrines of the Bible, and science, literature, and philosophy are to be subordinated to the doctrines and aims of the word of God. Christian education places the Bible in the regular course of study as the supremest truth to be taught, not simply as history and literature, but as the only doctrines of human redemption. - The Christian Educator (Durham, N. C.).

As between the two it is perhaps better to know things to say than to know how to say things you don't know; but the ideal condition is in knowing the best things to say and the best way to say them.

God holds us responsible for all that we might be if we would improve our talents. We shall be judged according to what we ought to have been, but were not; for what we might have done, but did not accomplish because we did not use our powers to glorify God. For all knowledge that we might have gained, but did not, there will be an eternal loss, even if we do not lose our own souls.— Mrs. E. G. White.

#### "THE EDUCATIONAL PROBLEM"

Proposed in the last number of the EDUCATOR has attracted earnest and wide-spread attention. So many personal responses to the questions connected with it are now coming in from the teachers in our various Christian colleges and academies, that it has seemed best to defer any further discussion of the suggested "Scheme of Education" until all have had opportunity to forward their criticisms. Those so far received have been strongly commendatory. Many have offered valuable additional suggestions. All have expressed a strong interest in a further development of the plan into its detailed adaptations to the actual work of the class room.

As preliminary to the consideration which will be resumed in the March number of the Educator, it should be observed that a system of college education which differs so widely, as this does, from the popular ideals, almost necessarily implies an equally radical system of primary and preparatory schooling. Indeed, this scheme of education implies an affiliated system of training in the home of every Christian parent. This ideal, when carried out, would make the school simply an auxiliary of the home, and the Christian college would become the institutional apex or capital of a comprehensive system of education that should continuously embrace the student from his earliest years.

So the proper way in which to discuss the proposed scheme of college education would be to outline, first, the ideal education of the child at home during the first eight or ten years of its life; then, the education it should receive in the primary and secondary schools; and lastly, such a finishing education as is implied in a thorough-going Christian college. The entire organic system of education thus contemplated would constitute as close an approach to the Christian university as it is possible to achieve in this world. And without such a recognized system or plan the education of the individual is bound to be less perfect and symmetrical than the actual possibilities of this

world permit and require. It is a Christian duty to be as perfect in our education as we can be here and now, and the opportunities of improvement remain as sins of omission until we have exhausted all available means of reaching a higher theory and practise. This much is urged for the obligation of carefully and constantly studying the problem of progressive improvement in our educational work.

Only a few further observations will be offered here in respect to some special items in the "Scheme of Education" proposed in the January EDUCATOR. Concerning the order of relative importance of the various "groups" of studies, it would be obviously impossible to suit the minds of all educators who might otherwise agree as to the content of each group : the difficulty would be increased by the fact that in the minds of some, two or several of these groups might seem to be co-ordinate in rank, as, "Wisdom" and "Life," "Science" and "Industrial Work," etc. It is, nevertheless, an important exercise to seek the best approximate order of subordination among the various groups, as this order has an important bearing on the amount of time that should be given to each.

In the "Fifth Group" attention has been called to the fact that "Mind Culture" would seem to be the object of all intellectual effort. The item was first written "memory culture," and if this is not interpreted as meaning a mere gymnastic with various mnemonic systems, this term would perhaps be freer from objections than the other. Many other improvements in arrangement and terminology may appear later.

The editor wishes to acknowledge the receipt of many valuable suggestions on incidental points. It is also a matter of satisfaction that few, if any, criticisms have yet been received that call for any radical revision of the main divisions of the proposed scheme. None have yet condemned the plan as a whole or any material element of it. The way is open for improvements to be offered, and the Educator welcomes the most vigorous constructive criticism.

During the present month it is especially requested that all who are engaged or interested in the kind of home and primary training that would fitly prepare for this scheme of college education, will immediately send their suggestions to the Educator, either for incorporation or separate publication in a future number.

None are under the necessity of becoming tares because every plant in the field is not wheat.



PUBLISHED MONTHLY AT

BATTLE CREEK, MICHIGAN, U. S. A.

PRICE, 40 CENTS PER ANNUM.
SEND BY POSTAL MONEY-ORDER

FRANK W. HOWE,

Editor.

#### EDUCATOR CLUBBING RATES.

CHRISTIAN	EDUCATOR	and	Fouth's 1	Instr	uctor			81.25
44	4.6		Gospel of	Hea	lth			.70
44	**	4.6	Vick's Me	agazi	ne .	1		.50
**	** 1	n clu	ibs of 5 to	10 t	o one	addr	ess.	
**	••		10 to		44	++	-	.30
44			25 u	pwar	d	44		.25
Special t	erms to sch	ools	and agent	s. I	Free s	ampl	e co	pies.

We wish there were room to print all the letters of commendation which the Educator is receiving. Many come with every mail, and we can only make this general but earnest acknowledgment of appreciation for the kindly sentiments expressed in them. After reading one of these cordial epistles, we like to find a postscript which says, "I enclose \$ub\$cription\$ from a club of my neighbors who want the Educator." That means more kind letters and pleased "\$ub\$criber\$," increasing in geometrical ratio.

# Queries for Students

Where is the Michigan Agricultural College?
 your State Agricultural College?

2. Difference between "inquisitiveness" and "acquisitiveness"? depreciate and deprecate"? "Alpean" and Alpine? "refute" and confute?

3. Pronunciation and meaning of "mischievous"? "detail"? "conversant"? "opthalmologist"?

4. What is the "M. E. Church South"? The A. M. E. Church? a saturate solution? What society has popularized "the little red schoolhouse"?

5. What is a "century"? an "evangelical" church? a "secondary" school? "terminology"?

6. Who was Pestalozzi? Froebel? Stanley Hall?

7. Can you answer all the questions on page 126?

A NOTABLE characteristic of superintendent Bamberger's article is the large number of striking, quotable extracts that can be taken from it. It is the product of a profound thinker and practical educator. It sets forth a fundamental theory and method of education that should be carefully studied.

THE excellent article from President Snyder will be continued in the March number.

Please notice the mailing label on your paper. If it shows that your subscription is in arrears, we expect you to renew promptly, or else order the paper discontinued.

# SPRING IS COMING,

THE TIME FOR PLANT-ING YOUR GARDEN AND FLOWER SEEDS. T MATTERS NOT whether you have only a hanging-basket, a window-sill, a few square yards of ground in a city lot, or a whole farm at your command,—flowers will beautify it, and your own fresh garden vegetables are always better than can be bought in the market. At a small expense every home may blossom like the rose, every table be enriched by the choicest products of the soil.

Be tasty, intelligent, progressive: raise the finest fruits and vegetables, and have the handsomest flower garden in the neighborhood.

#### WE WILL HELP YOU.

The Christian Educator alone costs 40 cents a year; VICK'S ILLUSTRATED MONTHLY MAGAZINE, the famous authority on flowers, fruits, and vegetables, costs 50 cents a year alone; for a limited time we will send both one year for only 50 cents, either on renewals or new subscriptions.

The object of this remarkable offer is to help you, and also to increase the circulation of the EDUCATOR as rapidly as possible. We expect all our friends — parents, teachers, and students — to assist themselves and us in this effort.

Send Fifty Cents, We Do the Rest.



THE CHRISTIAN EDUCATOR, BATTLE CREEK, MICH.