

# The Normal Review.

Vol. 2., No. 7.

California, Pa., March, 1887.

50c. a Year.

Entered as second-class matter.

The spring term opens March 28.

The net cost of board and tuition, for the spring term, at the Normal is \$56 to those preparing to teach.

Col. Sanford is expected to lecture in the Normal chapel on Thursday, March 24th, on "The Old Times and the New."

The students of the Normal are signally favored in getting all their text-books at about wholesale prices.

The gas well at Brownsville proves to be one of the best in the country. Preliminary steps have been taken to put down a well at California.

The Junior class will be so large next term as to require a division into two sections.

Prof. and Mrs. Wood recently received a visit from Rev. Mr. Coburn and wife of Detroit, Mich. Mr. Coburn was a class mate of Prof. Wood's at Allegheny College, and is now a prominent minister in Detroit.

The Sunday school exercises at the Normal are held in connection with the other services on Sunday evening. There are in all seven or eight classes.

The Epworth Hymnal, which has been in use at the Normal for a year, is probably the best hymnal for school use extant.

That was a sore blizzard that struck us Sunday, Feb. 27. The faithful steam radiators were well surrounded.

Miss Bell M. Day, a popular teacher at the Normal last year and part of the year before, is engaged as an additional teacher for the spring term.

Dr. C. L. Parkhill, '79, reported in our last number as dangerously ill from blood poisoning, is recovering. He is now at his father's home in Fayette county.

Mr. John F. Mackey, '79, who has been for some time in St. Petersburg, Russia, was recently arrested on the suspicion of being an "English spy."

One mark of a growing and promising teacher is a readiness to believe great improvement possible. It is the petrified or moribund teacher that mocks at reform.

Comenius, late in life, thanked God that he had been a man of aspirations.

"The secret of education," says Laurie, "lies in method, and in the master who wields it."

Model teacher describes the elm tree under which Washington took command of the army, and then asks if this were the same Washington whose birthday we celebrate. "No," said little Johnny Lewis, "it was his pap."

The Carrier Seminary, at Clarion, Pa. has been officially recognized at the State Normal School for the thirteenth district. So we are to have eleven Normal schools hereafter. Schools have not yet been established in the fourth and eleventh districts.

Among the books recently placed in the library, are "Sweet Cicely," "Battle of Bietigheim," "Jo's Boys," "Triumph of Democracy," Geikie's "Hours with the Bible," Alden's "Cyclopedia of Literature," "My Wife and I," "We and our Neighbors," Rozenkranz's "Philosophy of Education," and Fisher's "Outlines of Universal History."

We doubt not it would be a gratifying surprise to graduates of the Normal, if they could see how the studies of the Senior class, (the "A class" as it used to be called) are changed from what they used to be. Fourteen branches were finally disposed of on the Junior examination. The studies pursued this year are psychology, geometry, rhetoric, methods, Cæsar, natural philosophy, general history, history of education, and English literature. In connection with the last named, the class are reading critically, and writing notes upon, four English classics, Evangeline, "Merchant of Venice," "In Memoriam," and "Comus." A thorough

course is taken in general history. The text book issued is Barnes. Much collateral reading is done. In the sciences greater prominence is given to experiments, examination of specimens, etc. The division of the Normal course into Junior and Senior years will prove a great help to the schools and to students.

Miss Sallie R. Graham, sister of Mrs. Noss, of the Normal, was married, Feb. 22, to Mr. C. C. Auld, of Washington, Pa.

## Wise Words.

Choose always the way that seems the best, however rough it may be. Custom will render it easy and agreeable.

However things may seem, no evil thing is success, and no good thing a failure.

False friends are like shadows, keeping close to us while we walk in the sunshine; but leaving us when we walk in the shade.

If you blow your neighbor's fire, don't complain if the sparks fly in your face.

## Thoughts on Books.

Employ your time in improving yourself by other men's writings; so you shall come easily by what others have labored for.—*Socrates*.

Keep your books, and do not despair of my being able to make them mine; which, if I accomplish, I shall exceed Croesus in riches, and look down with contempt upon the houses and lands of the world.—*Cicero*.

It does not matter how *many*, but how *good*, books you have.—*Seneca*.

For whatsoever things were written aforetime were written for our learning.—*St. Paul*.

Why was Eve not afraid of having the measles?  
Because she'd Adam.

### Our School Room.

BY EMILY G. WETHERBEE.

A pleasant spot, within whose ample spaces  
The morning sunshine falls,  
Gilding with floods of light and warmth and  
radiance  
The old familiar walls.

But, brighter than the rosy flush of dawning,  
Shines out so fresh and fair  
The light of ruddy health and youthful beauty  
From happy faces there.

Fair, graceful girls to womanhood advancing,  
And boys with earnest eyes,  
Eager to enter on life's field of action  
And claim the wished-for prize.

O happy hearts, so full of joy and gladness,  
The world to you is fair;  
For radiant hope and trust can give no warning  
Of sorrow or of care.

What pleasant years with quiet duties laden,  
Have passed within this place:  
So filled with youth's bright fancies, hopes, and  
longings,  
Its loveliness and grace.

When'er in song I hear their fresh young voices,  
In sweetest music ring,  
It seems like melody from nature's woodlands,  
A meadow breeze of spring.

Oftimes amid the groups that pass before me,  
More other forms as fair,  
Pressing, like those with eager footsteps onward,  
As bright and free from care.

Pure souls, that early heard the heavenly  
summons  
To higher schools in bliss,  
On whom so sweetly falls the Master's blessing—  
"Of such my kingdom is."

Dear boys and girls, to-day around me thronging,  
With joyous hopes of youth,  
Bear with you ever through the world's broad  
conflict,  
Your loving trust and truth.

That when life's school on earth at last is ended  
You, too, may hear Him say  
The same sweet words of peace and joy and wel-  
come  
On graduation day. —*Journal of Education.*

### Programme.

Among the essentials of good school management is a well-arranged programme. To make provision for all the classes, assigning to each its proper place and fixing for each its proper limit of time in recitation, is a work of some difficulty. A good programme should have the following characteristics.

2. The length of the recitation must be arranged according to the size of the school and the number of the classes. The shortest time should be given to the smaller pupils, and the longest to those more advanced.

3. The frequency of recitations must be provided for. The primary pupils will need several recitations a day in

most of the branches, in order to keep them interested as well as busy, while the more advanced pupils will need but a single recitation in each branch. Some of the higher branches may even have recitations on alternate days, but it will be found difficult to keep up a proper degree of interest where the recitations are not heard daily.

4. All studies should have their proportionate share of attention. Neither arithmetic nor any other hobby of the teacher should be permitted to occupy a fourth or a third of the time, leaving the remainder to be divided among a half a dozen other studies.

5. All grades of pupils must be provided for. The smaller as well as the larger must receive due attention in class recitation, and a just proportion of time should be allotted to each in the programme.

6. Studies to be prepared in school should not be recited among the first. In general it will be found the most convenient to prepare all mathematical work in school. Classes in arithmetic should not, therefore, be among the first to recite in the morning. The first recitations of the day should be either the lessons prepared at home in the evening or the classes in reading.

7. The school-day should not close with severe mental labor. Classes in penmanship, drawing, spelling, or vocal music should end the day's work. Class exercises needing steady nerves, such as writing or drawing, ought not to follow a recess or any time of physical exertion.

8. The programme must provide a time for general business. The teacher will frequently have remarks to make to the school, reproof may need to be given. None of these ought to interfere with the recitations of the day. A special time, therefore, for this general business should be provided in the programme.

9. The programme should provide for all the school work. Let it be remembered that recesses are for rest and recreation. Neither the pupils

nor the teacher should be employed in work at that time. Both need the recess. Nor should recitations be heard after school. To detain pupils beyond the regular school hours for the recitations of lessons, is both cruel and unwise.

### ADVANTAGES OF A GOOD PROGRAMME.

The chief advantages of a well-arranged programme are the following:

1. It leads to regular habits of study. Study becomes systematized, and students learn to do their work according to a plan.

2. It makes systematic teachers. A fixed plan will make the teacher systematic in his work, and the duties of the school will be performed with less friction and greater regularity.

3. It saves time. No time is wasted in attempting to recite half-prepared lessons. The pupils, knowing the time when they will be expected to recite, are prepared and ready.

4. It makes systematic pupils. It not only leads to regular habits of study, but it makes pupils regular and systematic also in all their other work and in their habits of life.

5. It is an aid to systematic organization. Each new teacher is enabled by the programme of his predecessor to take up the work just where it was left at the close of the preceding term, and carry it on without embarrassment or loss of time.

6. It makes school work effective. No time is lost. Pupils know not only when they will recite, but also when lessons may be prepared to the best advantage. The development is harmonious, and all jarring and discord of conflicting classes are avoided.

In all cases when a new programme is to be used, it is best to post it in some conspicuous place where the pupils may consult it.

Probably no programme can be arranged to suit all classes of schools, but the following is offered as a basis on which to work, and may be modified to suit the requirements of the school in which it is used. In the

following model for a programme, the first column denotes the time for the opening and the close of each recitation; the second, the class which is to recite; and the third, the branch of study in which the recitation is to be conducted:

PROGRAMME.

FORENOON.

9.00		Opening Exercises.
9.10	D	Reading and Spelling.
9.20	C	Primary Geography.
9.35	B	Primary Geography.
9.50	A	History or Geography.
10.10	D	Language Lessons.
10.25		Recess.
10.40	C	Language Lessons.
10.55	B	Language Lessons.
11.25	A	Grammar.
11.50	D	Numbers.
12.00		Noon Recess.

AFTERNOON.

1.00		Roll-call, etc.
1.05	D	Reading and Spelling.
1.15	C	Arithmetic.
1.30	B	Arithmetic.
1.50	A	Arithmetic.
2.15		Writing and Drawing.
2.35		Recess.
2.50	D	Object-Lessons or Reading.
3.00	C	Reading and Spelling.
3.15	B	Reading and Spelling.
3.35	A	Reading and Spelling.
3.55		General Exercises.
4.00		Dismission.

—From Raub's School Management.

**Suggestions for Reading Class.**

Good order, *quiet*, I consider the first requisite in hearing a reading lesson. To avoid distraction, I have all articles removed from sight, except readers. I prefer having the entire class read together, or at same hour, as each pupil is then certain to benefit by the same *oral* instruction.

I usually commence with a good reader, an impetus to class, and these good readers I allow to be more severely criticised than others, as they are usually not so sensitive, and are willing to re-read and correct their mistakes; a poor reader is sometimes ashamed to rectify an error. We

try to make examples of our good pupils whenever we can.

Generally, I take my seat at commencement of lesson, but rise frequently, especially when some portion of lessons demands particular force, or emphasis, or when I observe that the class is becoming weary or *losing interest*.

I sometimes have pupils close books, stand exercise for a few moments, and then resume work.

I call upon pupils indiscriminately, without reference to paragraphs—as an occasional exercise, I allow pupils to read but one word at a time, in quick succession—this is for variety and to secure attention. The inattentive and restless I call upon most frequently.

Pupils are expected to criticise each other's position and style of reading, *when called upon*. One of the most important requirements of good reading is the clear and distinct utterance of words and sentences. Pupils should be taught the importance of breathing through the nostrils, and of opening the mouth at commencement of each *utterance*, in order to acquire a light, sharp style of articulation.

Attention should be paid to the distinct pronounciation of final letters; as *d* in and, *t* in it, etc

I try to encourage in my pupils a love of and admiration for good reading. Sometimes I "match" two pupils and take note as to best reader. Another plan, which delights the class, is to permit *them* to criticise my *own* reading. (Reading matches for entire class are only *occasional*.) As a great favor, I sometimes select several good readers and allow them to read in another teacher's room. The names of most perfect readers are placed upon blackboard at the end of the week.

Supplementary reading is very excellent, and a pleasant diversion for both pupil and teacher, when presented attractively.

Before allowing class to attempt a new lesson, I always read it to them first, explaining or illustrating the

different words or thoughts. When I think that a correct impression has been made on their minds, I call upon them for the substance of the lesson in their own language—the impression must be formed before there can be an expression—a child, or even *we*, must *get* a thought before we can express it.

When a child has grasped a thought and can tell it, he is ready to put himself in the writer's place, and he will then have no difficulty in reading the thought, unless he meet with obstacles; such as strange words, of whose meaning he has no idea—he should never be allowed to meet with a word that has not been previously made familiar to him—he should greet each word with a feeling of welcome, as he would a friend, and not meet it with the cold, unfamiliar reception which he would extend to a stranger. The illustration of words is very interesting, and children learn rapidly; this requires much time. I often think that books in the hands of children are a draw-back to our teaching, for the children will precede us in our work, and we find, that before we are half through a book, they have finished reading it in their own imperfect style, which is hard to correct. I think that children would acquire a better style, if printed reading matter, in small quantities, were distributed each day—they could not, then, precede us in our work, and we could at least have the satisfaction of knowing that the lesson was not only interesting to them but new—fresh! something they had never seen before, until we presented it in its most attractive light.

I do not approve of, nor do I allow the copying of reading lessons on slates. I think it is of no benefit to children's reading and very detrimental to their writing, at this age. First grade pupils, I think, copy their reading too much. We are told not to allow children to *imitate* in reading; it is better not, of course; but, in many instances where children can not lose their own identity sufficiently to put themselves in the writer's place,

I insist that it is necessary for children to imitate, else, why is good reading an essential in a good teacher?

A natural enthusiasm, even if feigned, should accompany each lesson. Turn leaves with an eager expectancy as to what follows, letting pity, joy, admiration, as the subject suggests, be depicted upon our countenances during the reading lessons. We should never appear to know these Second Readers by heart; rather, refer to the book when there is any special point at issue. We must try to be enthusiastic, for whatever fails to interest us, our pupils will soon deem beneath their notice.  
GALVESTON. MAY L. REDMOND.

#### Elementary Music Education.

The problem of vocal music in this country is by no means an unimportant one, especially among the masses, both from a social and religious standpoint. It is a well-known fact that very few people sing in church, even when the quartet is dispensed with and congregational singing is desired. It is also well known that a very small portion of the population of any city or town can or will take an active part in vocal societies. There are several causes for this state of things. The two prime causes are a lack of elementary education, or the ability to read music, and bad voices.

Those of us who teach music in the public schools know that ninety per cent. of the children love to sing, and are always ready for the singing lesson.

In the course of time when these children become the majority of society, a better state of affairs, musically, will undoubtedly be the result, provided the necessary elementary education is given, and the voices of the children are properly cared for by those who are responsible for their training.

Here is where the problem of our musical future must be solved.

Elementary education is the foundation on which must be built the super-

structure. This is just as true in music as in any other branch of education.

In order to improve musical affairs vocally; and, indirectly, instrumentally, in this country, we must teach the children to read music, and we must do all that possibly can be done to protect their voices. It would take me beyond the limits of this article to thoroughly discuss the methods of teaching these, the two points which are the foundation of all our musical development. A great variety of opinions have been expressed as to which of these two points is of the most importance. My own opinion is that they are of equal importance, and should receive equal attention. I do not believe in the theory that the voice is the trunk of the tree, and that elementary education, or the ability to read music, is one of the same branches. You may take a class of fifty children and teach them by rote all the songs Carl Reinecke or any body else has ever written, and with ever so much beauty of voice, if they are not taught the elements of music, if they do not acquire the ability to read music, their musical education and interest will end with a few songs which they have learned parrot-like. Practical observation teaches us that the interest in this "beautiful" rote-singing soon dies out, and all interest in music is at an end. Teach children to read music. This can and should be done without any neglect of the voice. Taught thus, their interest in music will never die out. This rote-singing, no matter how classical the songs, or how beautiful, or how well rendered, is but a small part of the work necessary for a practical musical education.

From an educational point of view, music is not unlike any other branch of study in its practical development. To learn music by rote is no more practical than to learn arithmetic or any other study by rote. The object of a practical education in any subject is to enable the student to deal with the facts in any and every variety of

form. I do not care what beautiful figures a child can make, nor how glibly or eloquently he can repeat all the rules in his arithmetic, if he has not mastered the principles and learned to deal with the facts, he has not been practically educated in arithmetic. What is true in this study as to the practical results is equally true in music. Good voices alone will not solve the problem of our musical future, but good voices and a thoroughly practical elementary education, or the ability to read music at sight, not alone mechanically, but understandingly, will make us a musical people.  
—*The School Musical Journal.*

The following extract from the inaugural address delivered at the annual meeting of the State Teachers' Association of Pennsylvania, in Allentown, Pa., July 6, 1886, by Hon. John Q. Stewart, Deputy State Superintendent of Public Instruction, is worthy of more than ordinary notice:

The teacher who regards, in its true sense, the responsibility of his office, will not lightly esteem and undervalue the influence of his own example in the school, nor in the community where he is called to labor. Having a proper appreciation of his duties as a teacher not in name only, but in reality, he will at all times, avoid even the appearance of evil and the suspicion of wrong doing. In speech and behavior, and in all that goes to form character and develop true manhood and womanhood, his scholars will have an example worthy of their admiration and emulation, which may prove a noble incentive to their youthful aspirations. Such a teacher will live long and well in the minds of those who have been his pupils; and when his scholars have taken their place in the jostling ranks of the busy throng outside of the school room, and away from the old home, it may be, to engage in the sterner duties of the practical affairs of life, the good example and kindly admonitions of their teacher will be to them an open book from which life's lessons will still be learned, while the passing events of the day may be forgotten. A distinguished American statesman has fittingly portrayed, by a striking comparison, the lasting impressions of the teacher's work in

these words: 'If we work upon marble, it will perish; if we work upon brass, time will efface it; if we rear temples, they will crumble into dust; but if we work upon immortal minds, if we imbue them with principles, with the just fear of God and love of our fellow-men, we engrave on those tablets something which will brighten to all eternity.'

\* \* \* \*

"The duties to be discharged by the citizens under our government are not surpassed in importance and influence by those of any other. As an instructor of youth, the teacher is a potent instrumentality in the Providence of God in the work of mind-training and character building that must make its impress on the future destiny of our republic.

"Permit me, in conclusion, to express the hope that the teachers of the Commonwealth may realize to its fullest extent their personal responsibility in the work with which they are publicly identified. With earnestness and diligence may they attest their fidelity and devotion to the cause of education in its true sense and spirit, a cause very dear to the hearts of parents, everywhere solicitous for the welfare of the children whom they have prayerfully and trustfully committed to the care of the public schools."

Teachers, do we meet the requirements of this ideal?

A moment's thoughtful reflection will prompt the proper answer.

T. J. ITELL.

#### Teachers Test Questions.

1. ARE the pupils all quietly busy at work?
2. Is the noise in my room the noise of confusion or the hum of business?
3. Am I interrupted by questions during recitation?
4. Am I sure that the annoyance which that boy causes me is solely his fault; or am I not partly to blame?
5. Am I as polite to my pupils as I require them to be to me?
6. Did I scold?
7. Is the floor clean?
8. Am I orderly—  
In personal habits?  
In habits of work?
9. Am I doing better work to-day than I did yesterday?
10. Am I making myself useless to the pupils as rapidly as possible by teaching them habits of self-reliance?

#### How to Secure Attention.

BY EDWARD BROOKS.

1. MANIFEST an interest in the subject you are teaching.
2. Be clear in thoughts, and ready in expression.
3. Speak in your natural tone, with variety and flexibility of voice.
4. Let your position before the class be usually a standing one.
5. Teach without a book as far as possible.
6. Assign subjects promiscuously, when necessary.
7. Use concrete methods of instruction when possible.
8. Vary your methods, as variety is attractive to children.
9. Determine to secure their attention at all hazards.

Parrot work, imitation, following in the ruts of the past, is the unpardonable educational sin.

"So you did not succeed very well with your school in Illinois?" "No; I had to give up at the end of the first month." "Did you use the blackboard much?" "No; it was too large. But I used all the other furniture in the room that wasn't nailed down."—*Graphic*.

#### Practical Suggestions on Teaching.

NOTES FROM AN INSTITUTE.

*Teachers' Qualifications, by Dr. E. E. White.*—Necessary qualifications: (1) Good scholarship; (2) skill; (3) heart-power; (4) will-power; (4) backbone; (6) organs of sense well cultivated; (7) good character. Without these qualifications a teacher cannot attain satisfactory results in the school-room. The teacher is a missionary and must perform his duties for the love of the work. Some children have no friends in this world; it is, therefore, the teacher's duty to make friendship with them. No man or woman should enter the school-room whose life and character is not a fit model for imitation.

*Physiology, by Prof. W. H. Shelly.*—Physiology should be made an object lesson. Let pupils examine the bones, muscles, veins, etc., of animals. Teach the use of the thermometer. Teachers should open the doors and

windows during recess in order to have the air perfectly pure by the time the pupils enter the room again. Teach pupils the bad effects of alcohol on the system.

*Supplementary Reading, by Prof. W. H. Shelly.*—Supplementary reading should be introduced as soon as the pupil can read. It should alternate with the regular reading, or should be used in connection with each reading lesson. It should not be confined to the school alone, but taken to the homes; not to be used in the class alone, but at the seat also; to be read from the blackboard or from printed page. Every teacher, aided by the scholars, should keep a scrap-book, in which should be collected some choice reading adapted to each grade. Other readers, if the same grade, can be used to good advantage. Teachers might interchange their scraps and readers with each other. A regularly published magazine will, in many districts, be subscribed for by the pupils. Entertainments could be held, and the proceeds taken, to furnish the school with general reading matter. A subscription might be taken up among the patrons for the same purpose. The teacher may read and the pupil reproduce, when nothing better can be done, but this will not reach the end claimed for supplementary reading. Teaching is, to a great extent, failure, if a desire is not created in the child for good reading.

*School Government, by Dr. E. E. White.*—The aims of school government are: (1) self-reliance, self-control, and self-direction; (2) Good order and right conduct in school. The conditions are: (1) Confidence and co-operation of school officers and patrons; (2) pleasant and attractive school-room and surroundings; (3) proper heating and ventilation. To secure good government the teacher must have his pupils well seated. This will enable him to secure good order and properly prepared lessons. A program should be placed in a conspicuous place. This must be so formed as to regulate the time of study, as well as the time of recitation. The teacher ought to appeal to the conscience of his pupils before resorting to any corporal punishment.

*School Punishment, by Dr. E. E. White.*—1. Objects: (a) To reform the wrong doer; (b) to deter others from wrong doing; (c) to condemn wrong doing. 2. Nature: (a) Certain; (b) just; (c) natural. 2. Improper: (a) Degrading; (b) personal indigni-

ties, etc.; (c) epithets, etc. 1. Punishment has for its object the prevention of wrong doing. The first question is, What effect will this punishment have upon the offender? Will it have a tendency to amend or make worse? 2 A mild punishment severely inflicted does more good than the uncertainty of a severe one. Punishment should be certain to follow every offense, but not exceed it. In punishments justice must be kept in view. Too severe punishments are not effective. Punishment, to be effective, ought to be natural, such as forfeiture of rights or privileges. As we increase in power and character we can administer milder and more natural punishments. Punishments intended to degrade should never be inflicted. Personal indignities, such as boxing ears, pulling ears or hair, should never be resorted to. Epithets should never be applied to pupils, such as dunce, liar, and blockhead. They have a tendency to create a bad feeling toward the teacher.—*Journal of Education.*

#### Copy-Book Writing.

The teacher who can show at the end of the term a set of writing-books with copies neatly imitated and free from blots and other blemishes so commonly found, has been a success in this department of her school work.

No other subject save drawing requires as much care, and with this exception no other subject so quickly reveals the character of the work done. *Good, bad or indifferent* is written on its face; our criticism of it is instantaneous, and in most instances correct.

The beginning is everything. "Well begun, half done," applies here with special force. I dread to start my class in their copy-books, and never have yet been satisfied with the result of the first lesson. Some careless boy or heedless girl will begin in the wrong place, write too much, or in some way disfigure the page. John or William are anxious to place their names prominently on the cover or otherwise blemish it. The whole tendency on the part of the teacher, at this time, is one of repression. With fear and trembling, and at a snail's pace, begin this work. Tell the pupils at the very beginning what you want them to accomplish. Show them a well-written book saved from last year's work, contrast it with one blotted and otherwise abused, and then

make it the object of their term's work to equal the best one.

If the pupil is going to write in a copy-book for the first time, great care must be taken in showing him how to use it. Teach him in what position to place it upon the desk, how to turn the leaves, and where to place the left hand. Repeat these exercises several times, till all are familiar with the movements, and can, if the class be properly graded, move in perfect unison. Tell them what a column means, and have them point to the first and second ruled columns. Remember that all the implements of writing are new to the child, and that his future success greatly depends upon knowing how to use them.—*American Teacher.*

#### On How to Examine.

BY J. G. FITCH.

1. Do not undertake to prepare the pupils of your school for more than one external examination, and make sure that the scheme selected corresponds to your own aim and ideal of school work.

2. Having selected it, look its requirements well in the face a good year beforehand, arrange all your work so that a small but distinct approach shall be made toward your end every day. Refuse to allow any pupil to present himself unless he has had time and opportunity to do his work well.

3. Do not let any part of the preparation be considered exceptional, but incorporate the whole of it as far as possible into the daily programme of the school.

4. It is a good plan to hold a fortnightly or monthly examination in writing, extending over the principal subjects to be taught, and conducted under the same conditions of silence and complete isolation which are observed in public examinations. Besides this, it is well much more frequently to give, in connection with each subject, a single question to be answered fully in writing. The teacher should read some of the answers aloud, and point out their several defects, and then invite the class to watch him while he gives a model answer, as complete as he can make it, both as regards matter and style.

For school purposes it is often well to use a form of examination which would be impossible in public competition; viz., to give more time, and to allow the use of books. Afetr

all, some of the best efforts we make in after life are made under these conditions, and the art of using authorities and of referring to them, is one which a school ought to teach. Some subjects lend themselves better to this form of exercise than others; e. g., biography, the description of a country, the explanation of the theory of a mathematical line, the preparation of an essay on some familiar subject of fact or moral speculation. Here you do not want to test memory, but the power of using all the resources at one's disposal,—books as well as thought. So a teacher may wisely say now and then, "Here is a question which wants a little thinking; I will give you two days to answer it, and you may get the answer where and how you like."

In drawing up a paper of questions, or determining how many you should set, you will be guided by circumstances. If you have to examine a number of persons, not your own pupils, it is always well to give more questions than can be answered, and to require the student to choose a limited number of those he can answer best. In the Indian Civil Service, where the competition is absolutely open, and where it is the business of the examiners to do full justice to men who have different tastes and have been differently taught, I have accustomed to set a long paper,—say of twenty questions,—and require that no candidate shall take more than six. We thus give a wide range of choice, and at the same time forbid a man to attempt a good many questions and so to accumulate marks by superficial knowledge. But in a school where the teacher is himself the examiner, and where he knows exactly what has been taught and what ought to be known, it is not desirable to offer any choice or to set more questions than can be answered easily in the time.

As a rule, it is not desirable to sit down to frame a paper of questions all at once. If the examiner relies on his memory or general knowledge of the subject, his questions will have a sort of family likeness, will deal with what his pupils know to be his special fancies, and so will probably be anticipated. And if he sits down to prepare a paper by the help of a text-book, he is tempted to select such questions as turn on obscure or isolated details, matters easy to question upon, but of little real value. So he should usually have his note-book with him, and from time to time, as

experience in teaching suggests to him some good form of question, he should jot it down, so as to have a store of such questions ready for use when they are wanted. You are much more likely to adapt your questions to the actual knowledge of the scholars if you do this, than if you attempt to recall the whole subject at once.

(1.) The first requisite of a good paper is that it shall be clear and unmistakable in its meaning. All obscurity, all pitfalls, and all ambiguity should be avoided, for they defeat their own purpose.

(2.) The next thing necessary is that the paper should be perfectly fair; *i. e.*, exactly adapted to the scholar's age and attainments, and to what he may reasonably be expected to do. The moment you allow yourself to think of the effect that your questions will have on the parents or on the outside public, you are in danger of proving unfair to the scholars. *The object of the paper is to draw out their knowledge, not to detect their ignorance.* You want to encourage them to do their best with the materials they have, and there is a want of perfect candor toward them when you present them with a paper which you have framed rather to display your own knowledge than theirs, and rather to impress other people with the width and excellence of your curriculum than to correspond to any reasonable requirements you can make of your pupils.

(3.) Then a good proportion of the questions in every paper should be on matters of fact and of memory, plain, straightforward questions in a familiar form, such as the average scholar, who has merely been diligent, but who has no genius and not much talent for composition, may feel encouraged to answer. Simple questions are always best, for they help you to do full justice to commonplace pupils, and yet there is scope enough in them for difference in the manner and the substance of the answer to distinguish between such pupils and the best. Still, over and above these simple questions, I should always put two or three which require a little thought to interpret, and which will afford opportunities to the best scholars to distinguish themselves. Say I draw up a paper of ten questions on arithmetic; I would let seven of them be straightforward, honest sums, in the form which the scholar would naturally expect, but I would add three which required an explan-

ation of principles, and which, without being puzzles or conundrums, were designed to call forth the ingenuity and thought of the best scholars. Every paper you set has, it must be remembered, an educational value, over and above its office as a test. It is liable to be referred to and read again, and it helps to set up among your scholars the ideal which you are aiming at. So let us bear in mind that a good examination, when it has fulfilled its first duty as an honest scrutiny of what the pupils ought to have learned already, has also to fulfill the second purpose of showing what you think they ought to aim at, and in what way you wish their own thoughts to be brought to bear upon their work.

There is a kind of examination which has a sad tendency to beget untruthfulness on the part of both teachers and scholars; I mean that in which young or immature students are encouraged to use language which they do not understand, and which presupposes a speculative and philosophic power which they do not possess.—*Lectures on Teaching.*

#### A Number Dream.

A primary teacher sat alone by the dying firelight in the gathering gloom of an autumn evening. She had been searching the scattered books around her for the right way to teach numbers in the first year of school. • Of course these authors knew all about it, but what a pity they didn't agree!

She was teachable, sensible, ambitious and anxious for the right. Could there be a more fertile, mental or temperamental soil to tempt the most sanguine proselyters in the numerical kingdom?

Gazing into the glowing coals, with deepening intensity of thought, she was not surprised to see issuing from a tiny fire-castle a little child of five years, happily ignorant of the target it was to be in this nineteenth century discussion. Instantly there followed an upspringing army of "number" magnets, figuring in martial array around the wondering little victim of first-year practice, looking appealingly up to the spell-bound teacher.

"I never teach a child figures the first year," exclaimed a fire-king, so wonderfully dwarfed by the reduced proportions of everything in this fire-light battle that he would never have recognized himself except for the oracular wisdom of his words.

"Teach figures as soon as the num-

bers which they represent are learned," answered back a host of voices, with a common-sense ring in the tones that struck an answering chord in the teacher's heart.

"Teach all the processes of adding, subtracting, multiplying and dividing at the same time," proclaimed a tone of authority, and armies of loyal subjects were seen dancing complacently in the dim fire-vistas, as the number-machine went on "measuring" and "comparing" in endless repetition.

For a time quiet reigned, save the hum of children's voices all over the fire-country chorusing, "two ones," "less two," "taken twice," "half of two," "contained twice," and so on, as they made their own discoveries(?) in just the way to fit into the prescribed formulas. But it was only a temporary lull. Wise men began to abridge, cut out, and substitute, till the machine was out of tune, and new inventions merged into each other.

Just here rose a voice, so calm, so quiet, and so accustomed to be listened to, that the buzz ceased an instant to hear: "There is nothing in the relations of the inverse processes of addition and subtraction, multiplication and division that necessitates or justifies the teaching of them from the first as correlatives."

At this last utterance the chorus of children's voices died down; teachers all over fire-land breathed easier.

After all, a child of six years did did not have to agonize over that dreadful sign ;, which must be twisted and pulled about in every conceivable shape to mean everything and be called nothing. Is the number fiend really exorcised by this proposition to wait till the child grows to a thing, before it must be compelled to accept it?

Here the little child crept up close to the teacher, and both dropped into a happy sense of relief. The child could be a child a while longer, and the teacher be allowed to wait for sufficient mental maturity to grasp the subjects taught.

Here a book dropped upon the floor, and the teacher woke. Glancing to where it opened as it fell, her eyes met these words: "Correlative relations mutually assist each other in comprehending each relation." With a hopeless sigh at the contradictions, she looked into the coals to see only interrogation-points. To-morrow's work was coming, and she was no better prepared by either study or dream.—*Mrs. E. D. Kellogg.*

# PHILOMATHEAN GALAXY.

MOTTO—*Non Palma Sine Pulvere.*

JOSEPH F. MAYHEW, Editor

Washington's birthday was remembered at the Normal, although it was not kept as a holiday. Dr. Noss and Prof. Hertzog made addresses at the morning chapel, and Senior Brant's recitation, in the afternoon, related to the "Father of this Country."

The Normal was visited a few days ago, by a party of Kickapoo Indians, who were stopping in town for a week.

A flow of gas was struck near Brownsville, the light from which illuminated the eastern part of Washington county.

Teacher—"What do we call those scientific men who have adopted the germ theory?"

Pupil—"I know, Germans."

Teacher—"If you were President of the county fair, and wanted a gate tender, what would you do?"

Pupil—"Boil it."

All higher education is essentially self-education. Teachers do not make the scholars. The impulse comes chiefly from within, and the student becomes the scholar when he ceases to confine himself to prescribed tasks and spontaneously reaches out beyond.

## Mother's Picture.

(BY EDDIE H. MAYHUGH.)

It will hold its place securely,  
That picture hanging there;  
These are larger, costlier, but  
Not to me so fair.  
That picture, that old picture,  
It is dearer far than all;  
My own dear Mother's Picture  
That hangs upon the wall.

The scientific class in Latin and Greek under Prof. Smith are progressing rapidly.

The smallest Post Office in the world, perhaps, is the one which hangs from a projecting rock over the Strait of Magellan, opposite Terre del Fuego.

Teaching by object lessons should not be confined to children, for it is really the basis of all scientific training.

As ninety-nine hundredths of all the reading done by men and women, is done silently and mentally, it is evident that the main purpose of the teacher, in all the higher grade classes, should be to train pupils to think when reading, and to gather up all the thoughts of the writer from the printed page—*John Swett.*

"How is Johnnie doing at school?" asked Johnnie's mother during a call. "Splendidly," replied the teacher, "he talks in two languages." "Dear me! what are they?" asked his mother, "English and profane," replied the teacher.

One thing which seriously weighs against teachers, of the present day is that they think they know a great deal. Socrates, the most skillful teacher of ancient time, did not profess to know anything, further than that he was aware that he did not know anything.

The following officers have recently been elected: President, N. W. Phillips; Vice-President, Josephine Mellon; Secretary, Sadie Lilley; Attorney, F. H. Underwood.

Philo Society continues to do its work with untiring energy. The members are all earnest workers, and are resolved to place the Society in the lead and keep it there.

Mr. Gough thought it is better for a woman to be laughed at for not being married, than to be unable to laugh because she is married.

Sir Isaac Newton had, among his acquaintances, a philosopher who was an atheist. It is well known that this great mathematician, philosopher, and astronomer was, at the same time, a Christian. He had in his study a celestial globe, on which was an excellent representation of constellations and the stars which compose them. His atheist friend, having come to visit him one day, was struck with the beauty of the globe. He approached it, examined it, and said to Newton: "Who made it?" "No one!" replied the philosopher. The atheist understood and was silent.

"In matter of great concern, where delay is fatal, there is no surer evidence of a weak mind than irresolution—to be undetermined, where the case is plain and the necessity

urgent; to be always intending to lead a new life, but never finding the courage to set about it."

## Anonymous Communications.

That world renowned scholar and theologian, H. W. Beecher, has said, and very truly too, that any one who would write an epistle, or a communication of any kind without signing his own name to it, was capable of greater crime, "more especially," he says, "should we be particular not to sign any other person's name, nor even an assumed name, unless it be a regular one and known to every one; even then it is best to accompany it with the real name.

## Seven Laws of Teaching.

I. Know thoroughly the lesson you wish to teach.

II. Gain and keep the attention and interest of your pupils upon the lesson.

III. Use words understood by the teacher and pupils,—language clear and vivid to both.

IV. Begin with what is already well known to pupils in the lesson and proceed to the unknown by single, easy and natural steps, letting known explain unknown.

V. Use the pupils own mind exciting his self-activities, and leading him to think out the truth for himself.

VI. Require the pupil to reproduce in his own thought the lesson he is learning.

VII. Review, *review*, REVIEW, reproducing correctly the old, thus dispeping his impressions with new thought.

The following oft quoted, but much garbled sentiment of Garfield's is here given in correct form:

"Give me an old school house, and a log for a bench; put Mark Hopkins on one end, and let me as a student sit on the other, and I have all the college I need."

Avoid extremes, superlatives and gush. Don't exaggerate the importance of trifles. Don't describe mole-hills as mountains. If a rain-drop wets your face don't describe it as a terrible storm.



# CLIONIAN REVIEW.

MOTTO—*Pedetentim et Gradatim.*

J. A. BRANT, Editor.

Mr. C. J. Potts, of the class of 1880, is a candidate for county superintendent in Bedford County.

An address by Rev. Mr. Coburn, a friend of Prof. Wood's, in the chapel, Feb. 28, was well received by faculty and students.

The present president of Clio is a lady, Miss Ethel Ward. Suffice it to say Miss Ward is ruling with an iron hand.

The senior class is now diving down deep amongst the pearls of ancient history under Dr. Noss, and soaring through trackless ether for metaphors and similes under Miss McPherson.

Miss Cleveland's name has been added to Clio's list of honorary members.

The seniors have begun their work of giving recitations in the chapel each evening. The work was begun just in time to provide each one with an evening during the winter term.

Miss Lo'a Griffith, an active Clionian of last year, and one of the successful members of the Junior class, has accepted a position as nurse in one of the hospitals of Pittsburgh.

Mr. Van. J. Abell, a former Clio, and who is, at present, with Harris & Co., wholesale druggists, of Pittsburgh, was a recent guest of Clio.

The Clio Society has been steadily improving since the opening of the winter term, and at present is noted for the vigor and earnestness of its performers, and the responsibility each of her members seems to feel for her welfare.

## Plucked in Budding.

Be a specialist.—*Rev. Coburn.* The homes of a nation are its strongest forts; its mothers are the commanders in chief.—*Clionian.*

Why are balloons in the air like vagabonds? Because they have no visible means of support.

"A man who takes an eel by the tail or a woman at her word soon finds he holds nothing."

Men who do the noblest deeds

Never say can't.

He who lacks the strength he needs,

Tries his best and ne'er gives o'er,  
Surely will at last succeed.

There is much more honor than pleasure in being editor of this page of the NORMAL REVIEW, especially when appointed at the 11th hour.

## Some Noted Sayings.

Millions for defense, but not a cent for tribute.—*C. C. Pinckney.*

Our country! In her intercourse with foreign nations may she always be in the right; but our country right or wrong.—*Stephen Decatur.*

I am not worth purchasing, but, such as I am, the king of Great Britain is not rich enough to do it.—*Gen. Joseph Reed.*

Westward the course of empire takes its way.—*Bishop Berkley.*

I propose to fight it out on this line if it takes all summer.—*Gen. Grant.*

With malice toward none, with charity for all.—*Pres! Lincoln.*

## Things not Generally Known.

A Creole is any native born person in, or near, the tropics.

Sugar cane matures nowhere fully in the U. S., so that it produces seed. It is raised from the cuttings.

One man can spin more cotton or woolen yarn now than 400 men could have done before Arkwright took out his patent.

A whale lives to be a thousand years old.

Elephants come next, living to the age of 400 years. When Alexander the Great had conquered Porus, King of India, he took a great elephant, which had fought very valiantly for the king, naming him Ajax, and dedicated him to the sun and then let him go with this inscription: "Alexander, the Son of Jupiter, hath dedicated Ajax to the Sun." This elephant was found with this inscription 350 years afterward.

Cicero made his great speech when he was 27; Demosthenes distinguished himself at 27; Napoleon was 27 when he led his army into Egypt; Washington was 23 when he conducted the famous retreat after Braddock's defeat; John Quincy Adams commenced his public life at 27.

About the age of 36 a lean man begins to grow fatter, and a fat man, leaner.

Martin Luther was nine years old when America was discovered.

[America was discovered in 1492. Keep this fact fairly before your mind. EDITOR.]

A grasshopper, flea or locust can jump 200 times its length; equal to a quarter of a mile for a man. This beats the Normal boys all to pieces. Don't it?

The most independent man or woman ought to be that man or woman who was once a member of the Clio Society.

We have just been informed that C. M. Smith, a graduate of '85, will return to the Normal at the opening of the spring term and enter as a post graduate student. Also J. C. Longdon, of '84.

The work an unknown good man has done is like a vein of water flowing hidden under ground, secretly making the ground green.—*Carlyle.*

The Clionian Society may well be proud of her present choir. Never, under our observation, has the society been so well off for musical talent. This is undoubtedly the outgrowth of the efficient training in the musical department of the school during the past two years by Prof. W. K. Stiffey to whom we are indebted for frequent songs interspersed here and there among the routine work of the society giving an extra flavor to the work and rendering the same more pleasant and agreeable.

Prof. Hall has taken part in fourteen local institutes during the winter. Who can say as much?

A grain of living faith is worth more than a pound of historic knowledge; and a drop of love, than an ocean of science.

Mr. R. L. Cochran, a loyal Clio, informs us that as soon as the school year closes he intends taking a trip to the Yosemite Valley, California, for his health.

Prof. Bryan, principal of the Brownsville schools, paid the Normal a brief visit a few days ago.

### A Few Queries.

Our Normal School students and graduates will perhaps get a definite idea of the culture they need to properly equip them for their duties, by looking over and *answering* the following questions.

The careful reading of this article as an *opening exercise* in our Colleges, Normal Schools and High Schools, might do good.

These queries are propounded by President Gilman, of Johns Hopkins University as indicating a *test to do* as well as to be. We select the following:

"Are the youth who are trained within these walls, honest lovers of the truth—are they learned, are they ready, are they trustworthy? When they leave the classes, do they soon find a demand for their services? Do they rise in professional life?

Are they sought for as teachers? Do they acquit themselves with credit in the public service?

Do they win repute among those who have added to the sum of human knowledge? Have they the power of enjoying literature, music, art?

Can they apply the lessons of history to the problems of our day? Are they always eager to enlarge their knowledge?

Do they become conservative members of society, seeking for progress by steady improvements rather than by the powers of destruction and death?

Are they useful, courteous, co-operative citizens, in all the relations of life?

Do the charities, the churches, the schools, the public affairs of the community, receive their constant consideration?

Are there frequent manifestations among them of unusual ability in science, in literature, in oratory, in administration?

As the roll of the alumni increases and the graduates are counted by hundreds and not by scores, does it appear that a large proportion are

men of honorable, faithful, learned, and public-spirited character?

It is not the *number*, but the *quality* of students which determines the character of a school. It is important to count; it is better to weigh."

### My Language Class.

The first day of the term finds me with forty-two pupils whose average age is thirteen, and with thirty-five minutes to be devoted daily to language work, both oral and written.

What shall be my aim in conducting the written work of this recitation? Shall it be the production of a certain number of formal, kiln-dried compositions, carefully written and minutely corrected, or the daily writing of informal, brief exercises, with occasionally one more fully and carefully treated?

Many of the wise and prudent will unhesitatingly declare themselves in favor of the first; modestly but confidently, I advocate the second. I believe that the first great end to be sought in written language work is to create a fondness for expressing one's thoughts in writing. It lies with the teacher whether she arouse in her pupils an eagerness and zest for writing, or an uncontrollable dislike. The aversion, once established, can seldom be overcome; the fondness, once created, will carry the pupil triumphantly through subsequent dry details or uninteresting teaching. I have seen pupils who, while the teacher was explaining the nature of the exercise to be written, seemed completely imbued with eagerness to begin,—their faces glowing, their eyes bright, their minds already thronged with ideas impatient for utterance,—the whole attitude and aspect showing that they could hardly wait for the signal to write. I have also seen a class who, with dull, bored faces, heard their subject announced; some then began writing listlessly or laboriously, while others silently bit the ends of their pencils.

I quote from a recent daily: "Dr. Wendell Holmes feels, at seventy-

five, as much pleasure in composition as he did when he contributed, as an under-graduate, to *The Collegian* at Harvard. Writing has always been one of his greatest gratifications; without it, life would be incomplete and unsatisfactory; but all the indications are that he will retain his happy gift while he retains anything. He ascribes much of his youthfulness of feeling, it is said, to his ease and abundance of expression, and the habit of indulging in both with tongue and pen."—*Journal of Education*.

### Striking Balances.

BY SAM RUDIMENT.

Many book-keepers in our large banks become remarkably proficient in their calculations. Those who have charge of the Individual Ledgers or depositors' accounts enjoy special facilities for becoming experts. The use of the Depositors' Balance Ledger or the Depositors' Daily Balance-book gives practice from which one with any natural talent in this direction cannot fail to be benefited. A bank employe said to me the other day:

"Have you ever observed the rapidity with which some of our boys strike the balances in their Depositors' Balance-book?"

"I have not," I said. It was true, however, I knew that great mental power in calculations was often acquired by persons in such positions. I had seen the clerks in Claffin's and other large houses extend the calculations in making out long bills of goods with lightning rapidity. "One hundred and fourteen and a quarter yards at fourteen and a half cents," they would say and put down the result while I was fumbling for a pencil—by instinct, I suppose—for they never calculated it, I am sure. But they didn't tell me how they did it, only that the ability was the result of great practice—it had become almost mechanical with them. But I must confess I was somewhat surprised when shown the skill manifested "striking balances" of depositors' accounts.

"For example," said my friend, picking up a small pad and twirling his pencil in his fingers, "here are a number of accounts, we will suppose, in the Depositors' Daily Balance-book. First comes the column of 'Balance'; then one of 'Checks Paid,' and a third

of 'Deposits,' running along in this way:

BALANCES.	CHECKS.
345.71	261.32
218.95	214.75
745.25	386.42
DEPOSITS.	BALANCES.
346.94	
350.80	
721.75	

We will leave the last column of balances blank. This column is to be filled out by the book-keeper from other three columns. The amounts in the column of checks are to be subtracted, the deposits added, and the result written in." Then he commenced the operation, saying, as his pencil glided over the figures: I'll show you how the boys do it, and you'll see how simple it is, though I don't profess to be an expert myself. They say 4, 12, 13; 9, 16, 23; 7, 16, 21; 5, 9, 13; 3, 11, 14; but, dropping the 1, we have 431.33. You see, I did nothing but simple addition, and I'll guarantee that is the correct result. But let us see:

Balance.....	345.71
Checks subtracted....	261.32
Difference .....	84.38
Deposits added.....	346.94

Result.....431.33

You see, it's just as easy as falling off a log. Next, 0, 5, 10; 8, 11, 20; 1, 7, 15; 5—"

"But, just go a little slow, I interrupted. "Give me the wherefore you say 0, 5, 10; 8, 11, 20; 1, 7, 15, etc. I don't see any sense in such talk as that. I see you get the result, but show me now how you run that off, and where the figures are for that you are adding; they must be in your head, I suppose for I don't see them on the paper."

"You see, there is one subtraction and one addition to be performed," said the bank man; "and, instead of subtracting, we want the example reduced to simple addition. We take advantage of the principle that subtracting a number is equivalent to adding the difference between that number and a unit of the next higher order, provided we pay back the borrowed higher unit. Now, if we want to add 8, subtract 4 and add 2, we may add the 8 to the difference between 4 and 10 (6) making 16, and pay back the 10, and have the correct answer, 6. In this example just imagine that above the amount under 'Checks,' which is the one to be sub-

tracted, stands a unit of the next higher order, which would be 1000. You commence at either extreme to add—that is, you may say, 1, 9, 13; or, 4, 12, 13. Commencing with the amount under 'Balances,' 1, and add 8 (the difference between 2 and 10), 9; and 4, and 13, omit the ten to pay back the 10 borrowed in adding 8, and write only the 3. Then 7 (and 7), 14 (and 9), 23; write the 3 and carry only 1, as one of the tens must be omitted in payment of the one borrowed; (1 and 5) 6 (and 9), 15 (and 6), 21; carry the 1; 5, 9, 13, nothing to carry; 3 (and 8), 11 (and 3), 14; write the 4 and omit the 1, as before. Now, the next one, add from right to left: 350.80, subtract 214.75, add 218.95.

0—5—10.....	0
8—11—20.....	0
1—7—15.....	5
5—14—15.....	5
3—11—13.....	3

Answer.....355.00

"It's all right," I said to my friend, "and should it ever fall to my lot to be caught in the whirlwind of rapid calculation, I shall know where to come for assistance," and I bowed myself out with elasticity.—*The Office.*

#### Is Your Heart in Your Work?

We are, to-day, witnessing a struggle for the supremacy of the immortal mentalities. Do you realize that the lessons you taught yesterday and today, are not for yesterday and today, only, but forever? Such a realization is necessary to the conscientious pursuit of the high calling you have chosen. Men die, institutions fail, dynasties perish, but the work of the most unpretending in the rank and file of teachers must endure—like that brook in England, it must go on forever. Think of that, you who have enlisted for the bounty.

Ask what question should be sounding always like a warning bell in the ears of educators, and it will come back to you, swift as an electric flash, "Is my heart in this work?" Experience teaches beyond a reasonable doubt, that unless the heart, the whole emotional nature, nerves and presses you on to the unique and interesting scheme of developing knowledge, then, in this field, your head is empty as a deserted house—your hands as useless as a miser's gold. A knowledge of "what and how," supplemented by a soul-stirring desire to

"do," are indispensable requisites to success in the art of teaching—the grandest, most awe-inspiring work that may fall to the lot of woman. No occupation for men so weighted with moral responsibilities, except, perhaps, those who are called to be the "fishers of men." Are we not fishers among these shrewd little men and women? Each word and act is like a pebble dropped—who may say when the wavelets cease? Let us have a care that the placid surface of these precious souls be not lashed into a turbulency that shall overwhelm and destroy. O, is your heart in your work? if so, you are leading where you wish the timid feet to seek the untried paths. The teacher who loves the art will soon learn lessons of patient forbearance, methods of profitable relief, habits of shining example.

With an ardent desire to do that which is right and best, study to be self-reliant and original. Use text books, not as the things themselves, but as a buoy to show where something lies hidden in the richness of the depths below. Text books are like guide posts to show us which way to go—they are not going there themselves—place them in the hands of uninterested, uninteresting teachers and they become sign posts without a sign.

The new education is but in its infancy, and the young teacher is apt to suppose we are in the "confusion of tongues," so like Babel is the clamor for methods and schemes and plans, and hows and whys and wherefores. Our educational literature is full of "you must not," "do," "do not," "how not," until the grasshopper is a burden, and desire fails—or would fail were one not warned to summon to their aid all the good judgment and individuality at command—qualities that enable us to discern between what is adaptable to the wants of those in our charge, and what is wholly impracticable. The teacher who endeavors to use all the methods, and practice all the plans, and profit by all the experiences, will surely derive good from none. Honest, earnest, effort to make a proved method a success, is by far the most powerful and convincing argument with skepticism and prejudice. Put your whole heart and soul into the work before you, and don't fret about gilt edged positions; the laborer is worthy of his hire, and there is no occupation that establishes an equilibrium quicker than that of teaching.

If you deserve something better, it will hunt you out. The sensation of rising is pleasant; that of falling neither pleasant nor profitable.

Try to realize the nobility of your calling, the grandeur of the stupendous task, a small portion of which has been intrusted to your faithfulness; come before your class with lips still trembling with a petition to the All-wise for guidance, and you will scarcely fail, however much you may blunder.

Is your heart in the work?

—*Lucas School Journal.*

#### Valuable Suggestions.

BY SUPERINTENDENT R. W. PUTNAM.  
TO TEACHERS

1. Guard against the tendency to assign too long lessons at the beginning of the school year. Ambitious pupils are overworked and soon get discouraged.

2. Let signals be very quiet.

3. Inform the parents through the pupils that they are always welcome in the school-room. Dissatisfaction may often be removed by a visit from a parent.

4. Do not send pupils to the principal or superintendent for small offences. Discipline them yourself.

5. Avoid the spy system in securing discipline. Allow no tattling.

6. Hold your pupils responsible for what *you see*, and not for what others say they saw.

7. Desks and window-sills were not made for teachers and pupils to sit upon.

8. The teacher's chair should not be occupied all the time.

9. The control of a school involves self-control. Remember you can never exhibit vexation before your pupils without losing their respect.

10. Avoid hasty remarks. They are sure to be repeated in such a way as to cause you mortification.

11. If you cannot speak well of your co-laborers, say nothing.

12. Study something outside of your routine work. Do not rest contented unless you are conscious of mental growth.

#### To Parents.

13. An occasional visit to the school will help your child.

14. Remember there are two sides to all questions. Having heard your children's story, it will be well to hear what the teacher has to say.

15. Before you pronounce the school worthless, would it not be well to visit it?

16. Remember, in visiting a school, that the teacher is employed to attend to school duties. Do not expect her to visit with you. Questions, however, that relate to school work, are always in order.

17. In visiting a teacher to settle a misunderstanding, remember that the proper time to do it is not in school hours

#### To Pupils.

18. Attend quietly to your own business at your own desk.

19. Be attentive, and respond cheerfully to every school requirement.

20. Move quietly and quickly through the halls and in the room.

21. Avoid all things which tend to disturb the school.

22. Go to and from school in such a manner as not to disturb any one.

23. Go directly home at the close of school.

24. Obey at once the signals for entering the school-house.

25. Be dutiful, polite and respectful.

26. Give proper excuses for absence and tardiness.

27. Help to carry out all plans for the good of the school.

28. Avoid tale-bearing.

29. Protect the weak and unfortunate.

30. Remember that it does not help you ahead to pull others back.

31. Do not injure school property.

32. Keep your feet and the floor about your desk clean.

33. Cultivate promptness, energy, and patient industry. They are worth more than money or influence in securing success in life.

34. Learn the value of time, and strive to improve every portion of it.

35. Be obedient to parents and teachers.

36. Be generous in spirit in dealing with others.

37. Be earnest in play in the time of play, and equally earnest in work in the time of work.

38. Do the *best* you can in every work, knowing that it is only our *best* that builds good character.

39. Strive to build up a good character, and our reputation will take care of itself.

40. Let no day pass without adding to your store of knowledge.

41. Be truthful, and use the best language on all occasions.

42. Be *clean* in dress, person, habits, thought and speech.

The whole educational question appears to be resolved into this formulation: plain, simple instruction in the elementary principles. No cramming. No fancy studies. Short lessons, well prepared. If any genius be developed, seeking higher methods and wider culture, he will, with the weapons provided, make his way.—*Augusta Constitutional.*

AN IMPORTANT QUESTION.—If it is useless for a stranger to examine the class, and useless for its own teacher to examine it, what is gained by a written examination? Will somebody tell me?

THOROUGHNESS.—The teacher must know in order to teach. Each branch must be critically re-examined, from the standpoint of both the teacher and the learner. The plan of the subject, as well as the plan of the child mind, must be mastered. The laws of instruction must be evolved and applied until as familiar as the multiplication table. In order to lead pupils up to a higher life the teacher must know vastly more than the text books. Thoroughness and breadth of culture are cardinal features.

THE primary object of teaching in school is to cultivate in the child the power to direct the attention to the best purpose for the longest time. The first aim is to teach how to do it; the next, to exercise him in doing it until he has the skill and facility himself.

### Sudden Changes of Climate.

If a blizzard of unusual severity were coming from the northwest that would send the thermometer down 60 or 70 degrees in three hours, we should expect a great increase of pneumonia and other respiratory diseases, resulting in many deaths. Now, instead of three hours, suppose the mercury were to drop three-score degrees in three *minutes*,—or take another step in fancy, and suppose this great change to take place in three *seconds*,—what would likely be the effect on health? And yet we bring about, artificially, changes to ourselves quite as sudden and as severe as this.

We make an artificial climate in our houses. We live in doors in an atmosphere heated by stoves, furnaces, or steam pipes, to 70 or 80 degrees; and we pass from our parlor or hall so heated into the open air. At a step, literally in a breath, the temperature of the air has, for us, dropped 60 or 70 degrees. We may put on an extra coat or shawl, and shield the *outside* of the body and chest, but we cannot shield the delicate linings and membranes of the air passages, the bronchial tubes, the lung cells. *Naked*, they receive the full force of change,—the last breath at 70 degrees, the next at freezing or zero,—and all *unprepared*. We have been sitting, perhaps for hours, in a tropical atmosphere deprived by hot iron surfaces of its ozone and natural refreshing and bracing qualities; our lungs are all relaxed, debilitated, unstrung; and in this condition the cold air strikes them, perhaps 60 degrees below what they are graduated to and prepared for. Is it strange if pneumonia and bronchitis are at hand?

If we are in the West Indies, or even in Florida, and wish to come north in winter, we try to make the change gradual. But in our houses we keep a tropical climate, or worse, for we have not the freshness of air that prevails in an open tropical atmosphere, and we step at once into an atmosphere as much colder as 40 degrees difference of latitude will make it. It is in effect going from Cuba to Iceland—or at least to New York—at a step, and we make the journey perhaps a dozen times a day. And often, while we are still shut up in our domiciliary Cuban climate, Iceland comes down upon us from an open window. Especially is this likely to occur in school houses, where children will instinctively seek to get a breath of fresh air that has not had

all its natural refreshing qualities, quite cooked out of it by hot stoves, furnaces, or steam pipes. And all these sudden changes and shocks of cold come upon us while the whole system has its vitality and powers of resistance gauged down to the low necessities of a tropical climate.—*Popular Science Monthly*.

### How to Breathe.

Breathing through the open mouth is practiced for the most part only by civilized men. The aborigines of our country, and savage tribes elsewhere, always keep the mouth tightly closed and breathe through the nostrils.

Nature is a wiser teacher than fashion; for the primitive method of breathing is the best one on every principle of hygiene. There is danger of severe injury to the bronchial tubes and to the delicate vessels of the lungs, in passing from the warm air of a house to an atmosphere in the neighborhood of zero, if the air is taken directly into the lungs. By passing it through the nostrils, the chill is removed, and the shock from the sudden change escaped. Yet our readers will remember that Lieut. Schwatka, in an article which we recently published, said that in the most intense cold of the arctic regions one *must* usually breathe through the mouth.

If the modern germ theory of the origin of infectious diseases be true, breathing through the nostrils is one of nature's safeguards. The hairs which line the entrance to the nostrils may arrest the germs floating in the air and prevent their passage to the lungs, and consequent absorption by the blood. Parents ought to teach their children early to breathe only through the nostrils.—*Farm and Fireside*.

SCHOOL work and responsibility do not end with the development of ability to do good intellectual work. There is further demanded a well-matured desire to know the best things, and a desire to learn them in the best way. It is this latter part of the work that must be insisted upon, especially in these days when methods of intellectual effort have attained such momentum. The old-time country schools furnished the scholastic desire without training in any methods; and the modern school, with all its methods, will come into disrespect if it neglects to supply as keen a desire as was imparted to our fathers upon the hillside.

The devil gave a hermit the choice of three great vices, one of which was drunkenness. The hermit chose this as being the least sinful; he became drunk and committed the other two.

As society is constituted, with so much commercial license, so much laxity in gossip, so many temptations on the street, it is of prime importance that the teacher early and persistently make a distinction between right and wrong. She should emphasize the responsibility in determining what to think, say, and do because it is right, and what should be avoided because it is wrong. Children need both definite rules and the fundamental principles.

Who were the two children of Israel that reached the land of Canaan? Joshua, the son of Nun; Caleb, the son of Jephunneh; Were the only two Who ever got through To the land of milk and honey.

What was the first commercial transaction?

Abraham's purchase of the cave of Machpelah for four hundred shekels.

### DOLLARS AND CENTS.

What will this country be noted for hence? Dollars and cents. Dollars and cents. What are men striving for hot and intense? Dollars and cents. Dollars and cents. What makes our politics reek with offense? Dollars and cents. Dollars and cents. What makes Mr. Gould, though a small man, immense? Dollars and cents. Dollars and cents. What makes our cashiers jump o'er the back fence? Dollars and cents. Dollars and cents. What causes crime on the slightest pretence? Dollars and cents. Dollars and cents. Why is it stern justice so often re-lents? Dollars and cents. Dollars and cents. What more than all shadows tell coming events? Dollars and cents. Dollars and cents. What makes you polite to a man of no sense? His dollars and cents. Dollars and cents. Why don't editors' vacations ever commense? No dollars, no cents, not even cents.

## Geographical Contrasts and Resemblances.

### THE OLD AND NEW WORLD.—CONTRASTS.

#### THE OLD WORLD.

##### *History, Ancient.*

The principal mass of the Old World, Asia and Europe, extends from East to West, over one-half of the circumference of the globe.

The mountain ranges run from East to West.

Asia.—Europe,—lies within the torrid, north temperate, and north frigid zones.

Mountain ranges somewhat central.

Rivers of Europe small

Traversed by different mountain chains.

Vast table-lands or plateaus. The mountains and plateaus of Asia cover five-sevenths of its surface.

Volcanoes on the Continent.

Coast line of Europe very much indented.

Inhabitants white, dark, black, etc.

Animals: Lion, Tiger, Leopard, Elephant, Giraffe, Cow, Crocodile, Nightingale, etc.

### RESEMBLANCES.

Land in two great masses, Europe and Africa in the west, and Asia in the east.

Isthmus of Suez connects Africa and Europe and Asia.

The coast-line of Europe is more broken or indented than that of Asia, and still more than that of Africa.

Europe better adapted for human societies than Asia or Africa.

Europe 1 mile of coast to 150 of surface; Africa 1 mile of coast to 620 of surface; Asia 1 mile of coast to 460 of surface.

The direction of the land corresponds with the general direction of the mountain masses.

The southern extremity terminates in a point directed toward the southern ocean, while they go widening toward the north.

The peninsulas have nearly all the same direction.

The highest mountain in the Himalaya is a little more than 5 miles above the level of the sea.

#### THE NEW WORLD.

##### *History, Modern.*

The New World extends from north to south, over two-fifths of the circumference of the globe.

The mountain ranges run from north to south.

America comprehends all climatic zones, and hence presents a greater variety of phenomena.

The mountain range extends like a band along the western border.

Great water basins. Rivers and lakes very large.

One mountain chain, the Andes and Rocky Mountains.

Vast plains which form two-thirds of its surface.

Great volcanoes on the islands.

Coast-line not so much indented as Europe, but more indented than Asia or Africa.

Native inhabitants chiefly red men.

Animals: American Lion, Jaguar, Panther, Grizzly Bear, Buffalo, Alligator, Mocking Bird, etc.

Land in two great masses, North and South America.

Isthmus of Panama connects North and South America.

The coast-line of North America is more broken or indented than that of South America.

North America better adapted for human society than South America.

North America 1 mile of coast to 230 of surface; South America 1 mile of coast to 380 of surface.

The same as in the Old World.

The same as in the Old World.

The highest mountain in the Andes is nearly five miles above the level of the sea.

*Tate's Philosophy of Education.*

### The Tea-Kettle's Party.

The Tea-kettle danced and sang, and sang and danced, until Mary, the cook, thought it would dance itself off the range; but she didn't know that it felt awfully jolly, and was telling its neighbor, the Saucepan (who was boiling potatoes for the dinner), that it intended to give a party.

"Why shouldn't we have a party?" sang the kettle. "What with Thanksgiving, Christmas, and New Year's day, we're nearly worn out. Let's rest a day or two, and then have a party ourselves."

The Saucepan rattled its lid in hearty applause, and held out its handle in token of ready acquiescence.

The Poker and Shovel, who had been listening, cried, "That's an excellent idea!" and so the matter was settled.

That evening, after the servants had gone to bed, the Tongs, who was the best walker, on account of the length of his legs, went round with the invitations. Of course none of the China family were invited, because they lived in the dining-room, and very rarely associated with the inhabitants of the kitchen. The tins glowed with delight when they heard of the party, and the young Pans and small Pipkins raised such a clatter that the Rolling-pin gave them several round raps to silence them.

At last the long-looked for evening arrived. All the family had retired, and the kitchen was put in perfect order. The Broom had swept the floor until not a grain of dust could be found on it, and the Tins had polished themselves until they shone again.

The Kettle was so excited that, although it was a winter evening, she was in a state of profuse perspiration, and the Saucepan had her round hat placed on one side of her head in the most knowing manner.

The first arrivals were the Tins. They lived up town, and were obliged to slide down the walls, but this did not dim their lustre in the least.

"You all look as though you were brand-new out of the store," said the good-natured Kettle to them.

Then came the guests who resided in the closets. First the Frying-pan and the Griddle stepped out, their broad faces shining with good humor, and looking as though they fed on the fat of the land.

Next came the Coffee-pot, with the Quart-measure leaning gracefully on

his arm, accompanied by her daughter, Miss Pint. Then came the Grid-iron and the Dish-pan, the latter wearing an elegant waterfall made out of the dish-cloth. The next couple were the Hash-chopper (oh! such a sharp fellow,) and the Fluting-iron, who wore her hair in the fashionable style, waving down her back; and they were followed by the two large wooden Spoons. Some Earthen Dishes and a number of Pipkins arrived soon after, and the party commenced.

The Kettle proposed a waltz, and although, on several occasions, the Dinner-pot had called her black, she kindly forgave him, and, taking his arm, prepared to lead off the dance. An old Guitar in the corner struck up a merry tune, and a small Waiter behind the stove played upon the tambourine.

The Poker grasped the Shovel round the waist and hopped into the middle of the room, the Broom slid with the Window-brush, the Coffee-pot danced with the Quart-measure, and the Griddle pulled the Dish-pan about so rudely that her waterfall fell off, and was found by the cook on the hearth in the morning. The Tins jingled and tinkled, and even the Nutmeg-grater, a rough old fellow, could not resist the music, but seized the Apple-corer, and danced away as merrily as the rest.

After the waltz they had a polka, then a quadrille; then the Tongs danced the Sailor's Hornpipe in a manner wonderful to behold. When he ceased every one applauded; even the Covers on the range rattled as loudly as possible to show how pleased they were.

After the hornpipe the Kettle made a steaming bowl of punch, and the Broom proposed the health of the hostess. The hostess said she was strictly temperate, never drank anything but water, but never refused to assist in making punch for those who liked it. In water, therefore, she returned the toast, and hoped they might all meet again soon and spend another pleasant evening; she loved and esteemed her friends, and would like to see them often.

"I'm most steamed," whispered the Iron-stand, "for I hang from the mantel right over the range."

"Joke!" cried one of the little Pipkins, and laughed until he cracked his sides.

The company then dispersed; and the girls, coming in next morning,

never dreamed that the Tea-kettle had been having a party.—*Our Young Folks.*

### Geography.

BY WM. M. GIFFIN, A. M., NEWARK,  
N. J.

The writer has often noticed that children obtain but a vague idea of the different states and countries from their lessons in geography. One reason for this is because, when taking the first lessons on a map the children are told to begin at lesson one and learn the first ten map questions. The result is that the attention of the children is first called to the *questions* which they read, and after reading them they look for the answer only. There is no doubt but that they will be able to recite the answer to the ten questions perfectly; but any question outside of the ten will be a perfect blank. Proceed from the known to the unknown; from the whole to the part; from the general to the particular; never do for a child what he can do for himself; are well-known principles in teaching, that have been handed down from the time since the memory of man runneth not to the contrary. Yet, a teacher who begins her lesson as above ignores every one of these grand old principles. Many times before beginning the study of a map the writer has said to a class: "We are about to begin the study of a new map. Our first lesson will be a hunting exercise. To show you what I mean, and to prove to you how much you can do for yourselves, I will draw a map on the blackboard of an imaginary country. Then I will know that none of you have ever seen it, and hence cannot have had any previous knowledge of it. Look at me while I draw the map.

"Now look at the map for three minutes and see how much you can find on it. The time is up. I will now erase or hide the map, and ask you some questions, though none were given to you to learn. In what direction was this country the longest,—north and south, or east and west? Which boundary line was the most irregular? Where were there any mountains? What river did you see? How many cities were on it? Which was a capital city? In what direction was the river flowing? How do you know? Where was the city of B? What part of the country was most early shaped like the letter V? How did the northern boundary extend?"

Every one of my questions is answered. Remember no one had seen or heard of the map before. If such good results can be had from this map, I conclude as good can be had from another; hence I say, "Now open your books to the map of N. A. Once more you may go hunting, this time for five minutes." At the end of the five minutes, I ask my questions, and the teacher is surprised to find that they actually have as good a knowledge of the country as of the one she has been drilling them on for a week. That is, it is genuine knowledge; for it is of their own discovering. They may now be given a lesson from the book.

I never ask a pupil in Newark to learn "For what is Boston noted?" till I have them first learn "For what is Newark noted?" This I do not have them learn from a book, but tell each to get the business-card of some business house in the city and then let each read his card. In this way we learn about commerce, manufacturing, factories, foundries, machine shops, etc. The next day I ask them to bring in some of the manufactures, and the result is, I have a chart some ten feet long and four feet wide, hanging full of all kinds of manufactures, from a clothespin up to a trunk. I was once asked if I made mud-pies in my school. "Yes, indeed," I answered. "Do you think the children get a just and true idea of islands and mountains, etc., etc., when learning of them from a sand table?" was asked. "I hope so," I said, "I am sure they are as good and true as they get of this vast world from a ball of pastboard the size of their head, painted with all the colors known to man; besides, you know, the children enjoy the *sand* hugely." No more questions were asked, and hence I was not called upon to give any more answers.

INTELLECTUAL near-sightedness is the thing to be avoided by the teacher who is long habituated to school routine.

THE character of the child in his earliest years should be formed for him. If teacher and parents do not by wise direction form it, others by unwise processes will. The permanent character is, or should be, formed *by* the child; but, before that can be, circumstances, good or bad, by judicious selection or vicious purpose, will form it for him. The responsibility of the teacher and school under these conditions is great.

*Clonian Review—Continued:*

A certain Senior is addicted to the use of highfalutin language. He recently drove into California in a great hurry and accosted a hostler at the livery in the following language: "My most obedient minister, accommodate yourself with great dexterity to the operation of detaching this fatigued, but unrepining quadruped from the demoralized vehicle. Stabulate him; present to him a sufficient quantity of the nutritive element and when the nocturnal shades shall have been dissipated by the oriental luminary, I will appear upon the scene of action again and remunerate your faithful devotion to the requirements of your position."

A failure, if rightly used, is more beneficial to one than success.—*Dr. Noss.*

I wist, all their sport in the park is but a shadow of the pleasure that I find in Plato. Alas! good folk, they never felt what true pleasure meant.—*Roger Aschcom.*

Far more seemly were it for thee to have thy study full of books than thy purse full of money.—*John Lilly.*

At this day, as much company as I have kept, and as much as I love it, I love reading better.—*Pope*

No entertainment is so cheap as reading, nor any pleasure so lasting.—*Montaigne.*

We are as liable to be corrupted by books as by companions.—*Fielding.*

For every man of real learning,  
Is anxious to increase his lore,  
And feels, in fact, a greater yearning  
The more he knows, to know the more.

A little peaceful home  
Bounds all my wants and wishes;  
add to this,  
My book and friend, and this is  
happiness.—*Rioja.*

A few books well studied, and thoroughly digested, nourish the understanding more than hundreds but gargled in the mouth.—*Osborne.*

Mr. Hugh I. Keys, of the Senior class, has received, but declined the appointment as cadet for West Point.

Some weeks ago Mr. Keys took the examination for West Point in a class of twenty-three candidates.

Mr. O. S. Johnston, '83, writes from Dakota, "Please send my paper to Menoken, Dakota. I have taken the place of Henry Meier, who got lost in a blizzard, and froze to death, November 22, 1886."

The teaching of Mr. E. E. McGill, class of '86, at Racoon, Washington County, has given great satisfaction, and he has been urged to return next year. This is what we expected to hear of Mr. McGill.

Mr. S. B. Holland, of Beallsville, Pa., father of Miss Rena Holland, '84, died suddenly of heart disease, Feb. 14.

Miss Carrie M. Holland, '82, now of Canonsburg, writer; "I like the REVIEW because it is instructive and helpful to teachers, and also because it tells us of many of our old school friends."

A member of the last graduating class writes to Dr. Noss, that he has quit the use of tobacco; that he weighed 129 pounds before and now weighs 156. "The way to quit," he says, "is to keep the vile stuff out of your mind."

A perfect recitation is called a "tear" at Princeton, "squirt" at Harvard, "sail" at Bowdoin, "rake" at Williams and "cold rush" at Amherst. A failure in recitation receives the title of "slump" at Harvard, a "stump" at Princeton, a "smash" at Wesleyan and a "flunk" at Amherst and the University of Pennsylvania.

Senior orations and recitations, in chapel, are now in season. Each of the class is to have a turn before the close of the term.

Next term, it is said, the Seniors are to deliver one original oration, each, in chapel. At the reading of this the Juniors will sigh.

Miss Lenore H. Philips, '78, has been obliged, on account of poor health, to discontinue her studies at Mt. Holyoke Seminary, Mass. She is now visiting a sister at Auburn, N. Y.

Messrs. A. M. Claybaugh and W. S. Bryan, both of '81, are said to be candidates for the county superintendency in Fayette County.

Rev. D. H. McKee, '78 is meeting with much success in his new charge at Glenwood, Pa. A handsome donation was given him by his people recently.

Rev. Harry W. Camp, '79, is serving his first year in the ministry, and is proving "a workman that needeth not to be ashamed." His charge is in Indiana County, Pa.

Prof. A. W. Newlin, '77, is reported as one of the most popular and efficient instructors in Allegheny College. His work was somewhat changed at the beginning of the present year, so as to include the department of Greek.

Mr. John S. Eberman, '78, still deals out drugs, stationery, and textbooks in California. His new home on First street is one of the neatest and coziest in town.

Prof. W. S. Jackman, '77, of the Pittsburgh High School has published a syllabus of Botany that has received and deserved high praise.

Mr. Geo. E. Hemphill, '75, contributed an interesting article on business training in the public schools for a recent number of the *National Journal of Education*.

**How to Read this Paper.**

- (1) Read with pencil in hand.
- (2) Read first the articles which most attract you.
- (3) Mark with one X in the margin the points that interest you; with two XX those which seem more important; and reserve the XXX for those parts which are most valuable to you.
- (4) Make notes on the margin or in a scrap-book when you differ from the author, or have some thoughts to add to his.
- (5) When your interest is most deeply awakened turn to some books or article which treat on the same subjects, and compare the views of other authors with those of the writer.
- (6) Make the thoughts you have gained subjects of conversation with other teachers, as opportunity may present.
- (7) Write your own ideas briefly and fully after you have thus compared notes with others. By this method a single number, or a single article, may be made of great practical value in your teaching, and you will learn the true value of a teacher's paper.

HAPPY the teacher who acquires the art of teaching so as to make discipline easy, instruction a luxury. The intellectual and moral gain to herself and pupils is inestimable.