The Normal Review.

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Entered as second-class matter.

Chas. Gumbert is clerking in a store in Elizabeth.

L. M. Axtell, '80, is recorder-elect of Washington county.

Mr. Vincent Rader, '87, enters a medical college in Baltimore this Fall.

Quite a number of students went home to vote. Some came back happy and some sad.

Rev. D. H. McKee, '78, was assigned the Bridgeville charge at the late meeting of Conference.

Mrs. Newton Wolf, known to Normalites as Miss Maggie Jennings, '81, has moved to California.

Mr. A. B. Gnagey traveled all the way from Lock Haven to Meyersdale to vote for Delamater.

Prof. D. C. Murphy, of Ridgway, Pa., will be one of the instructors at the Indiana county institute.

Mr. Chas. Stewart; '88, is employed as phonographer in one of the Allegheny City railroad offices.

Chas. S. Smith, a student of a few years since, has entered the medical department of the University of Pennsylvania.

W. N. Smith, late principal of the Jumonville S. O. school, is now a student at the West Penn Medical school, Pittsburgh.

The leading instructors at the Greene county institute, which met in Waynesburg, Oct. 20–24, were Dr. Noss, Dr. Miller, of Waynesburg college, and Prof. Hogue, of Monongahela college.

Teachers, talk to your older pupils about a Normal school training, and tell them that California is the best place to get it.

Masontown, Fayette county, celebrated her semi-centennial recently. Prof. W. D. McGinnis, principal of the public schools, delivered the address of welcome.

Miss Retta Frankenberry, of Easton, W. Va., was married on Wednesday, October 8, to Mr. T. L. Echart. The congratulations of the REVIEW are cordially tendered.

Miss Effie Flack, a student at the Normal some years ago, was married on Sept. 17th at her home in Pittsburgh to Mr. George P. Baker, now a law student in Washington.

The introduction of gas for lighting into the A room and Model room is an improvement which adds greatly to the convenience of those rooms on dark days, and renders them available for evening exercises.

Jos. H. McKee, '84, is a student at the Western Pennsylvania Medical college, and his brother, Clement L. McKee, a student at the Western Theological Seminary, Allegheny. Clement L. has begun to preach, but Jos. H. has not yet begun to practice.

Mrs. Anna R. Fait, whom many readers of the REVIEW will remember as Miss Anna Pflasterer, is now living in Anadarko, Ind. Ter., where her husband is a missionary. She still thinks of the Normal, and in a recent communication asks to be remembered to her former teachers and friends.

Among the Bridgeport teachers this year are E. F. Porter, principal; Misses Ada V. League, Lizzie A. Clark and Alice Horner.

A. J. Johnson, '90, spent his vacation in reporting for the "Evening Standard," of Uniontown. He has now begun work as principal of the schools of Berlin, Somerset county.

The services of Dr. Noss at institutes are in demand this Fall. He has already attended the Allegheny and Greene county institutes and is booked for those of Pittsburgh, and of Bedford, Fayette, Mercer, Washington and Westmoreland counties.

Prof. McGinnis, principal of the Masontown schools, will hold an institute in that place Nov. 28 and 29. Dr. S. F. Hogue and Prof. Byron King are among the instructors announced. Several members of the Normal faculty have been invited to take part.

In looking over the NORMAL REVIEW for September, an educational paper published in the interests of the California, Pa., Normal School, we notice the name of Frank R. Hall in connection with that of Miss Anna M. Jenkins, of East Bethlehem, Washington county, to whom he was married on the 23d of July. The name of "Frank Hall" is green in the memory of the middle-aged and older citizens of Ligonier and Laughlintown. At that time, perhaps twenty-five years ago, an apprentice in a saddler's shop; now Prof. Frank R. Hall, teacher of writing, drawing and history in the California Normal School.—"Ligonier Echo."

Make it Count.

The time for attending school is so short—the school terms, especially in the country—where most of the children get all the schooling they will ever enjoy—are so short that parents, teachers and pupils too, ought to *make every day count*—every day of our s hort school year to do its full share of the year's work. Neither teacher nor pupil can afford to allow a single lesson to bring no fruit of knowledge and discipline on the too common but weak plea, that one day is not of much account and can easily be made up. A day in school lost by neglect or inattention, or unnecessary absence, is time squandered, opportunity trifled with, and power for all the future diminished. If only all parties—parent, teacher, pupil—knew this to be so serious a matter and could be spurred by this knowledge to begin as if every day were to count, the first week and the last week of the forty—nay, rather of the twenty—would never be allowed to run almost to waste and the school year would bear more fruit in this proportion. The year is too short at the longest, and if the teacher takes out some days at the beginning and some for closing, and the parent takes out a few more to let the child "visit and go to picnics," and the pupil takes out a share by occasional indifference and heedlessness, it is easy to see how *results* are sometimes so disappointing and promotion so uncertain. *I have lost a day in school*, means something detracted from our stock of knowledge for life, something lost from good habits, something less of discipline gained, some element of character wanting or in weaker force, and that is a record sure to bring keen regret to all in after life. 'Well begun is half done.' The drags in our classes are generally those who think it just as well to be thinking of starting when the rest are under full headway.

Practical Pedagogy

SUBTRACTION.

Subtraction is easy when addition is mastered. Subtraction finds what number added to the smaller of two numbers makes the larger. That is, finding the difference between two numbers is finding one part of the sum of two numbers when one is given. The minuend is the sum of two numbers—the subtrahend is one of them and the difference is the other. Find the difference between 8 and 5, written $\frac{8}{5}$. One of the forms of 8 is $\frac{5}{3}$, and as 5 is given the other part is 3. Find the difference between 18 and 5, written $\frac{18}{5}$. One of the forms of 18 is $\frac{13}{5}$, and as 5 is given the other part is 13. Find the difference between 28 and 5. One of the forms of 28 is $\frac{23}{5}$, and as 5 is given the other part is 23. In each case 5 from 8 leaves three. That is the right hand digit in the difference is the same for numbers above ten as for numbers below ten. Find the difference between 13 and 9, written $\frac{13}{9}$. One of the forms of 13 is $\frac{9}{4}$, and as 9 is given 4 is the other number or difference. Find the difference between 23 and 9, written $\frac{23}{9}$. One of the forms of 23 is $\frac{14}{9}$, as 9 is given the other part of the combination is 14. That is, 9 from 13 leaves 4; 9 from 23 leaves 14 (4); 9 from 33 leaves 24 (4). Subtraction is thinking to the smaller of two numbers a number which makes it equal to the larger number. Thus it is seen that subtraction is a form of addition, and that the mastery of the forty-five combinations not only masters addition, but practically masters subtraction also.

When a pupil knows the forty-five combinations he sees the number which added to the smaller makes the larger at a glance. The mind almost unconsciously calls up the wanting part of the combination which makes the larger number. So strange is the law of association, and so intimate the relation between addition and subtraction that to know addition thoroughly is to know subtraction also.

As practice fixes principle and habit, drill in reading differences is necessary to fix the principles of subtraction. Much drill in abstract numbers in the lower grades is necessary to relieve the higher grades of the blundering hesitancy so often seen in the merely mechanical work of solving problems.

Illustration: Write the nine significant figures, irregularly arranged, in a row, and under them write nine 1's. Reqnire pupils to name the differences as rapidly as you can move the pointer from figure to figure. Move the pointer quickly and with purpose. Do not permit pupils to hesitate. Your habits soon become the habits of the class.

1	3	2	5	8	7	6	4	9
1	1	1	1	1	1	1	1	1

The pupil reads 8, 3, 5, 6, 7, 4, 1, 2, 0.

Again,	3	6	7	9	4	5
	3	3	3	3	3	3

and the pupil reads 2, 1, 6, 4, 3, 0.

Again,	9	6	5	7	8,
	5	5	5	5	5.

and the pupil reads 3, 2, 0, 1, 4.

Treat each digit in a similar manner, dropping the figure or figures in the minuend to keep the figure treated always less than the one directly above it. Practice reading differences until great proficiency is acquired.

When the figure in the subtrahend is greater than the one directly over it in the minuend, add 10 to the figure in the minuend and read the difference as before, then add one to the next figure in the subtrahend and name the difference without hesitancy.

Thus:	5	4	6	7	5	3
	2	5	7	5	6	2

The pupil reads 1, 9, 1, 9, 8, 2.

Again,	9	3	7	6	0	5
	4	8	3	7	3	2

The pupil reads 3, 7, 8, 3, 5, 4.

A little spirited drill in reading differences where some figures in the subtrahend are greater than those in the minuend will enable pupils to read the results as quickly and correctly as when the subtrahend is uniformly smaller.

Why 10 is added to the minuend and only 1 to the figure in the subtrahend is easily explained. Business men always use this method. There is no reason why business methods should not have the preference over mere pedagogical wisdom. "The greater contains the less"—a fact many teachers seem slow to recognize.

These suggestions are not offered as strictly original. Success depends more upon the ability to add to what others have done than upon the power to discover new methods. What is often called genius is more the product of genius and concentrated effort than of original gifts. "All originality is relative." "Only one or two in a generation are really original," says Emerson.

While this is true, no mere machine can succeed in the schoolroom. Nature never compliments one out of his place. Apologies hardly compensate for incompetency and favoritism. Children deserve a better start in school work than comes from immature convictions of duty and indifferent methods. Teaching, divorced from ample knowledge of the subject taught and correct methods, is barren of satisfactory results.

Teaching school is something more than asking questions and drawing salaries. To teach is to inspire—to unfold—to direct the pupil to help himself—to make him feel that opportunity is his best help. Education can unfold only. It cannot create. It cannot make good the inherited deficiencies of generations.

In primary schools the pupil forms his first impressions of the world outside of home, hence the teacher should be tender, trusty and true. Her manner should express presence, feeling and conviction.—*J. N. Patrick, A. M.*

School Regulation.

Dr. J. Baldwin, the distinguished author of "Baldwin's School Management," [a book by the way, which ought to be on the table of every teacher in the United States for frequent and constant consultation] says: "The old school master, with all his rules and all his rods, belongs to the past. Though a blundering despot, he did what he could. Peace to his ashes. The *goodish* modern teacher with no rules and no rods is the opposite extreme. The efficient teacher will equally avoid these mistakes. The inspiring teacher with necessary regulations judiciously enforced, is the true mean.

Great principles underlie all educational processes. These, not whim or caprice, determine plans and methods. School regulations should accord with the following principles:

I. PRINCIPLES.

1. *Few.* The regulations should be few but exhaustive. Simplicity is of primary importance in school management. Many rules occasion much friction and cause a vast amount of waste labor in education.

2. *General.* The regulations should be general rather than special. They should be equally adapted to the primary school and the college. Special regulations with specific penalties are usually educational mistakes.

3. *Popular.* The regulations should merit the approval of all; they should be so evidently just and proper that they will command the approval and support of all teachers, patrons and pupils. The influence of public sentiment is immense.

4. *Practicable.* The regulations should be such as the teacher can and will enforce. Rules or laws not enforced tend to bring all rules and laws into contempt.

5. *Educational.* All regulations should tend to form desirable habits. The school trains the pupil for citizenship and achievement. The object of school life is to prepare for real life.

II. GENERAL REGULATIONS.

The following regulations are the outgrowth of educational

thought and experience. They accord with the above principles, and though few, cover all the ground. They are now in general use and tend to become universal.

1. *Regularity.* Teachers and pupils must be regular in their attendance. When at all possible, each one must be present each day.

2. *Promptitude.* Teachers and pupils must be prompt in the discharge of every duty. Regularity and promptitude are the foundation of good management.

3. *Decorum.* Teachers and pupils must observe strict decorum. Decorum means proper conduct, good manners, and becoming behavior. It means to do the right thing at the right time, in the right way.

4. *Morality.* Teachers and pupils must sustain good moral characters. School government should be positive. It is not enough that pupils *avoid* all immorality. The positive virtues must be developed into *habits.* Truthfulness, honesty, benevolence, fidelity, etc., etc., must be systematically cultivated.

Talks to Boys and Girls.

"THE NINES."

"The nines are so hard!" said Fred running in from school the other day. "I missed on them. Is supper 'most ready? I'm so hungry. Say, mamma, do you think you could help me learn them?"

"Yes, my dear, after the supper things are cleared away, I will help you; and supper is almost ready. Wash yourself, and set the chairs around the table. Are the girls close by?"

"Yes, there they are at the gate." And in came Daisy and Nellie and Ralph, too.

Bright young faces soon surrounded the well-spread board; and unspoiled appetites enjoyed the wholesome meal. "Mamma's bread's the best in the world!" attests one eager voice, while others chat of the day's doings in school.

Soon, the meal over, the boys hasten to milk the cow, and bring in wood for the fireplace, while the girls with deft hands wash and wipe the dishes.

As I get out my mending basket, I say, "Daisy, we are going to have a blackboard lesson tonight. Please get the chalk and write "The Nines" neatly on the blackboard." (We have a blackboard, one of the cloth kind that rolls up like a map, and it is very useful.)

"Oh, good, good!" cried Ralph and Nellie, "Mamma's blockboard lessons are always so interesting."

"But I don't know what she can find to tell us about 'the nines'," said Fred.

"I mean to let you tell me some very interesting things," said I; "so put on your thinking caps, and be quiet."

By this time the blackboard looked thus:

1x9= 9
2x9=18
3x9=27
4x9=36
5x9=45
6x9=54
7x9=63
8x9=72
9x9=81
10x9=90

"Now, all of you look at the board thoughtfully, and don't speak. Perhaps some of you will discover something curious. I will give you five minutes."

Before they were up I saw Fred had discovered something, and was aching to tell it, so when I gave the signal, he burst out with: "They count right straight down. Don't you see they do?" And he rose and showed Ralph, pointing to the tens column. "See, 1, 2, 3, 4, 5, 6, 7, 8, 9!"

"And," said Daisy, "the units column counts backward." "So it does," exclaimed Fred. "See, 9, 8, 7, 6, 5, 4, 3, 2, 1," running his pointer down the line of figures. "I never noticed that before. I believe I shan't miss now. I always know 2x9=18, and 3x9 are 27, and 5x9=45, and 10x9=90, and some of the rest. Now, if a fellow doesn't know 4x9 all he has to do is to take 3x9 is 27, add 1 to the 2, and take 1 from the 7. There you have it, 36! Why is it, mother? What makes it count up and down so?"

"Well, you see, Fred, every time you add nine, you add 10–1, which is the same thing. You add one ten and subtract one unit."

"Oh, yes! So we do!" they chorused.

And there is another curious fact that will help Fred more still. I wish I had known it when I was a girl. Don't you see the tens figure each time is one less than the number of times 9?" "So it is! So it is! Hurrah!" said the boys. "And also (here is more help still) don't you see the units figure plus the tens figure makes 9 every time?"

"Who can't say the 9's now?" cried Fred. "1 and 8 equals 9, 2 and 7 equals 9, 3 and 6 equals 9, 4 and 5 equals 9, 6 and 3 equals 9, 7 and 2 equals 9."

"Why didn't we see it all before? I'm going to tell all the boys at school in the morning."

MRS. CHAS. PELTON.

—*Mid-Continent.*

What and Why?

We hope our teachers will not only read carefully, but republish widely the following very fundamental statement, made some time since by the present United States Commissioner of Education. Let us state and restate clearly and definitely what we teach and why we teach it.

We are sure if—not only the people who pay the taxes, but the school officers also, were kept *fully informed* of the work done in the schools by our teachers we should have thousands of enthusiastic supporters of the school where, now for lack of this information, we have not only lack of interest but causeless fault-finding and active opposition.

A good school trains not only to habits of cheerful and prompt obedience, but to industry and economy, to truthfulness and friendly co-operation.

Our teachers in addition to all this put the pupils in possession of the keys which unlock all the hidden resources of the universe.

Dr. Wm. T. Harris says: "The pupil who is taught how to *master* the five elementary branches is at the same time taught to master *all* branches of human learning" —and this is just the work in which every one of the four hundred thousand teachers in the United States are to-day engaged.

This mastery of the mind gives us the mastery over the realms of nature as well, and makes possible all culture as well as communication between man and man.

The tools of thought by which this mastery is gained are:

I. Reading and Writing.
II. Arithmetic.
III. Geography.
IV. Grammar.
V. History.

By the first of these,

BY READING,

the pupil issues forth from the circumscribed life of the senses in which he is confined, and finds himself in the community of the world at large, so far as his language extends. He is not limited by space; for the printed page of the text book and the newspaper gives him a survey of the life of the globe to-day. He is not limited by time, for the libraries open their doors and he reads and associates with Socrates and Plato, Confucius and Zoroaster, and no empty gossip escapes from these lips! Faint echoes come down to him from the Chaldean oracles, and the Phœnician or Cushite civilization—most ancient of all. Not merely this: he can WRITE HIS OWN THOUGHT and thus be present to others far separated in time and space. This branch is the alphabet of all others, and leads to them.

By the second of these studies,

ARITHMETIC,

he becomes measurer of numerical quantity, and masters the practical side of life in the way of exchange. The exchange of thoughts and ideas through reading and writing, is extended by arithmetic to a practical ability to exchange food, clothing and shelter.

By the study of the third subject,

GEOGRAPHY,

he comes to a realization of his relation to the world. He contributes of what he earns or produces to the world and receives from it, through commerce. The world through this relation is all a part of the patrimony of each individual. His farm, trade or profession furnishes him certain things through the mediation of certain activities; so likewise does the whole world. Every civilized man is interested in the cotton crop of Georgia and Texas, and in the corn and wheat crop of Illinois, or the iron crop of Missouri, Michigan and Alabama, and in the manufactures of England and Massachusetts, just as *really*, though not so vitally, as the farmer of Texas, the miner of Missouri, the manufacturer of Manchester or Lowell. Thus Geography becomes not only one of the *most important* but an indispensable branch of education. Not one State alone—not the United States—but all the grand divisions of the globe—the civilized world—contributes food and clothing for all.

GRAMMAR.

Grammar gives to the pupil a knowledge of the formation of language and exhibits the stages by which pure intellect becomes master of itself. The profound analysis and superior grasp of thonght which grammar gives, as compared with mathematics and physical sciences for example, has long been noticed by educators. It is emphatically a *culture* study. It marks the educated man from the illiterate; the former uses language with conscious skill, the latter without it.

HISTORY.

History initiates the learner into his *past existence*, as well as the past existence of the race, in the same sense as geography initiates him into his outside (and out of sight) existence. For the *precedent* conditions of the individual belong to, and are a part of his actual *present* existence."

This is the real philosophy of education—the real, *substantial*, permanent work our teachers are doing, and we want the people to understand it, and we want the teachers to be able to explain it, and state it and restate it definitely and clearly, so as to overcome this opposition to our common schools and their fundamental and important work.—*Am. Journal of Education*.

An Interesting Exercise.

Let your pupils have an exercise similar to the following, occasionally, to show them how easy it is to *do a thing*, if they know how.

B makes the road broad, turns the ear to bear and Tom into tomb.

C makes limb climb, hanged changed, a lever clever, and transports a lover to clover.

D turns a bear to beard, a crow to crowd and makes anger danger.

F turns lower regions to flower regions.

G changes a son to song, and makes one gone.

H changes eight to height.

K makes now know and eyed keyed.

L transforms a pear into a pearl.

N turns a line into linen, a crow into crown and makes one none.

P, metamorphoses lumber into plumber.

Q of itself has no significance.

S turns even to seven, makes have shave, and word a sword, a

pear a spear, makes slaughter of laughter, and curiously changes having a hoe to shaving a shoe.

T makes bough bought, turns here to there, alters one to tone, changes ether to tether, and transforms the phruse "allow his own" to "tallow this town."

W does well, e. g., hose are whose, are becomes wars, on won, omen women, so sow, vie view; it makes an arm warm, and turns a hat into what?

Y turns fur into fury, a man into many, to to toy, a rub to a ruby, ours to yours, a lad to a lady!

More Than A Theory.

The World of New York indulges in something more than mere theory in its educational work. Its ringing editorial leaders in behalf of the thousands of children who are denied admittance for want of room in the public schools are backed up and sustained by large and direct contributions by Mr. Joseph Pulitzer, the owner and editor of that paper.

Mr. Pulitzer has inaugurated a plan of supporting *sixty* poor boys permanently in a full college course. In his letter inaugurating the experiment, Mr. Pulitzer wrote:

My special object is to help the poor. The rich can help themselves. I believe in self-made men. But it is the aim of this plan to help people for ordinary money-making purposes. College education is not needed for that. There are nobler purposes in life, and my hope is not that these scholarships will make better butchers, bakers, brokers and bank cashiers, but that they will help to make teachers, scholars, physicians, authors, journalists, judges, lawyers and statesmen. They certainly ought to increase, not to diminish, the number of those who, under our free institutions, rise from the humblest to the highest positions. I have not entered upon this scheme without careful thought. It was a dream of my youth. It is the conviction of experience. I shall be happy indeed, if it should even in the smallest degree relieve poverty, aid the cause of education and lift to a higher plane of citizenship and usefulness to the State children of the poor, who, in spite of talent, without such education and great hardship cannot compete for the nobler prizes of an intellectual career."

The conditions of the gift were: 1. The boys gaining the scholarships are to be absolutely free to select any college of the first class. 2. The scholarships shall be awarded after impartial examination, the only favoritism being a controlling preference for poor boys, who would not be able to take a college course without help.

Spelling.

Everywhere, throughout our schools, there is a large proportion of poor spellers. I frequently give tests on verycommon words and find that a class of pupils in every other way intelligent, fail almost entirely in trying to put the letters together according to customary usage. It is also a frequent experience to hear in regard to the failure, this most discouraging statement from the teacher: "They've *had* all those words; they know how to spell them." That they have had them I believe, but that they know how to spell them I must question, since so large a number have made perfect failures of them, and I look about for the cause of failure.

Why, since they have *had* the words over and over, do they not spell them? First in answer, children remember that only which makes an impression on them. Second, spelling is a mechanical process, a habit, and can become accurate only through utmost drill. Teachers in primary grades are at liberty to choose the words used as spelling lessons, and the skill of the children depends entirely upon the wisdom of the teachers.

Three things, then, are necessary in this very important exercise; great care that the words given shall indeed be "signs of ideas" to the child; such development of their meaning and use as shall make an impression on the child's mind, and force the words into his vocabulary; drill in written and oral spellling, and in using the words in their settings in sentences, until the child's habit of spelling correctly becomes fixed.

I examined a list of words recently, that had been used in a room noted for poor spelling. I found it to consist largely of words unusual in the conversation of an adult even, and wholly meaningless to a child. It contained many words used as adverbs and adjectives, and few names and words expressing action. It must have been drudgery indeed to teach such words, and I no longer marvelled at the poor results obtained in that room.

In another room I discovered that a frequent and popular way of assigning a lesson, was to say: "Take the same words next time." Now, children do not like to study a lesson the second time, and a teacher who makes such a mistake as the above, will be sure of a *poor lesson next time*."

I have known the interest in

words to be enhanced and continued, by selecting from each recitation the words missed, and at the end of the week, having a lesson on those words, which shall be ranked. If pupils are old enough they may keep the missed words in little note books. As soon as a word is learned by every pupil it should be dropped from the list.

There are many words in every lesson that all the children can spell. It is a waste of time, and it is tiresome to children, to urge study upon those words. Only words that they mis-spell require study, and the tactful teacher will rearrange the order of these words, so that they may appear in guise of a *new lesson*. Spelling seems so common-place, and may assume so much of a humdrum character, to both teacher and pupils, that it is necessary for a teacher to be alert in inventing new methods in teaching it.

I think an occasional self-examination like the following may aid one in securing variety and accuracy: Are my list of words chosen with reference to the needs of the children? Do they mean anything to me? In what way do they help the child in his daily work? Does he use them in conversation and recitation? Are they giving him a helping vocabulary? Should I expect him to make use of them when he recites to me? How will they help him in a succeeding grade? Should I insist upon his studying words that he cannot make immediately useful? Are my pupils ready spellers? Why not? Am I giving the best drill that can be given? Can I recommend my plan to others?—*School Education.*

Common Sense Arithmetic Work.

Such problems as cause pupils to think should be given. The teacher can make any number from the affairs and transactions of daily life. Here are some suggestions. They can be multiplied indefinitely, with any variety of objects.

With Coins.—Take 3 pennies, 1 three cent piece, a nickel, a dime, and a two cent piece. How many cents have you? Some one buys a book for 8 cents, and pays with a quarter dollar coin. How many ways can change be made? With the dime, the three cent piece, the two cent piece, and two pennies. In what other way can it be done? Can it be done without using the dime?

Name all the coins with which change can be made from 1 to 13 cents.

With coins mentioned above, how many two-cent stamps could you buy?

How many five-cent pencils could you buy, and how much money would you have left?

At 7 cents a quart, how many pints of chestnuts could you buy?

If you spend half of your money for pencils, and buy two sponges at 2 cents apiece, how many cents will you have left?

Measurements.—What is the measurement around a table which is 4 ft. wide and 2 yards long? How many panes of glass will a window 2 feet by 3 feet require, if the panes are 8 by 12? I have a box 1 foot square, how many times as large will one 3 feet square be? How can the contents of a stone, which is 6 in. long on one side, 5 in. on the other, 4 in. on the other, and the other entirely irregular, be ascertained? Which will be the more expensive to get a picture framed that is 8 by 10, or one that is 5 by 16? What is the difference of the cost, if the frame costs 2 cents an inch? Which will cost more to plow, a 10-acre field having its sides 40 by 40 rods, or one measuring 80 by 20 rods?

Geography.

One day a poorly dressed boy handed his teacher a unique advertisement of the Rock Island Route, in the form of a first-class passenger ticket around the world, supposed to be issued by the Chicago, Rock Island & Pacific railroad, containing nineteen coupons, showing in large letters the important places on the route, and their distances from one another. The teacher, holding this in his hand, stepped to the board, unrolled it, and held it up before the class, telling them what a fine present Master O'Brien had just made him. He then asked the boys to open their geographies, and take, in imagination, a trip round the world as advertised on this supposed ticket.

New York was the starting point. The class named the next important place—Liverpool. The teacher drew on the large blackboard outline map of the world, a wide, heavy red line from New York to Liverpool, and put down the distance on the line, and the average time it would take to make the trip. These figures were also placed on one side at the head of columns. Then the next section in the trip was taken, laid out, and figured, the class becoming wonderfully interested. In ten minutes the distance round the earth, "*via* the most popular route," was sketched and figured in miles and days. Afterward the class drew the rout on the commercial map in the back of their geographies. That class during the year never forgot how the world is circumnavigated for business or pleasure.—*King's Methods in Geography.*

When there comes a reform in the human heart by virtue of what is done in our common schools, then there will come a great reform in human thought and human work also.

Clionian Review.

MOTTO—Pedentim et Gradatim Oriamur. W. D. BRIGHTWELL, Editor.

J. C. Long, class of '89, and a Clionian, is finishing the course of civil engineering at Ada, Ohio.

Our society was honored by the presence of Miss Ruff, our most estimable English teacher, Friday evening, Oct. 24th.

The spirited talk of Prof. Hall, Friday evening, Oct. 24th, was appreciated by the entire society. Call again, professor.

B. W. Craft, who graduated in '79, is teaching his eleventh consecutive term at the Redstone school, Redstone township, Fayette county.

L. W. Lewellen, of Masontown, who graduated in '85, and who was a little giant in Clio, visited our society, Oct. 3d, and gave us one of his characteristic speeches.

The ladies who have taken part in the debating class have acquitted themselves well. The young gentlemen of the society must keep a sharp look out, or the "girls" will capture the laurels.

One of the most entertaining parts of our programmes is the music, by the Clionian chorus, under the charge of Mr. Dickey. The selections are good and rendered in an artistic manner.

Miss Ada Jenkins, the young lady whose recitation "The Octoroon," was so heartily received during the contest of '88, is one of the successful teachers in the public schools at Salem, Ohio.

It is gratifying to know that H. W. Camp, who, at the present time, is so ably filling the pulpit of the M. E. church, is a graduate of the class of '79, and was one of the enthusiastic members of the Clionian Literary society.

Mr. C. L. Smith, the present presiding officer of our society, fills the position with dignity and impartiality. Mr. Smith is a strong member of the present Senior class, having taught successfully in the schools of Fayette county for the last seven years.

The Clionian society will give a literary and musical entertainment the latter part of December. With the talent we now have in the society there is no reason to doubt that this will be what we propose to make it, the most successful entertainment ever given by the society.

Mr. Jas. A. Wakefield, now a member of the Pittsburg bar, whose contest oration, in 1883, has probably never been surpassed by any member of the school, was married to Miss Anna Regis Lowry, of Pittsburg, Monday evening, Oct. 13th. We extend to Mr. and Mrs. Wakefield our heartiest congratulations.

As in the past, the debating class is one of the most interesting as well as instructive features of the society. Good, live questions are discussed with a "vim" that calls forth rounds of applause from the appreciative audience. So enthusiastic are the speakers in these discussions that "time" is called on almost all of them.

J. M. Layhue, '89, who is now principal of the 2d ward school, Connellsville, visited our society Friday evening, Oct. 24th. When "Mack" Layhue, W. E. Crow, W. S. Kreger and "Jesse" Arnold occupied the floor, as debaters, the society never went away hungry. Keep an eye on these young men, you will hear from them in the future.

Our society expects a treat, in the near future, in the way of a select oration by Mr. Will J. Johnson, an old member of Clio, who is now practicing law in Uniontown. Will Johnson, George Jeffries, Allen Cooper and Elmer Scott are four bright young men who graduated back in the early eighties, and whose names are an honor to the alumni of this school. The first three are now members of the Fayette county bar and are rising very rapidly in their profession, while the last gentleman, Mr. Scott, is practicing medicine in Ohio.

Never has there been a period in the history of the Clionian Literary society when it was in a more flourishing condition than it is at the present time. This was well demonstrated to those who attended our society Friday evening, Oct. 24th. Although most of the performers belonged to the intermediate classes of the school, yet their work was of such an artistic nature as to demand, and receive, the hearty commendation of the large audience that considered themselves fortunate in being present. Nor was this an exceptional evening. It goes without saying these days, that every evening's programme is a good one, and that Clio's present "boom" is the greatest she has ever had, which is probably due, more than anything else, to the harmonious feeling that pervades the society at the present time. This spirit of cheerfulness and helpfulness—a desire of the strong to encourage and assist the weak, and a general movement of the forces, along the whole line, in the direction of literary culture—are the factors whose influence are felt in the Clionian society to-day.

Philomathean Galaxy.

MOTTO—Non Palma Sine Pulvere. HATTIE WESTBAY, Editor.

Mrs. Jennings visited her daughter, Miss Lou, Oct. 24.

Miss Hattie Fergus is expected to visit the Normal soon.

Miss Annie Kinder paid the Normal a flying visit Oct. 18.

The Seniors began to deliver their chapel recitations Oct. 20.

Miss Eisaman went home on the 16th to attend the wedding of her brother.

One of Philo's earnest workers, Mr. S. N. Dague, expects to be with us in the Winter term.

Mr. Fowles had the pleasure of having a visit from some of his friends recently.

Miss Jennie Thomas, class of '90, who is teaching in Webster, paid the Normal a visit a few weeks ago.

Prof. Bryan thoroughly arouses the interest of the Senior class by performing experiments before them each day.

We are pleased to hear that two of Philo's workers will be with us in the Winter term, Miss Jennie Boyd and Miss Ina McKinney.

Philos were delighted Friday evening, Oct. 17, with the solo sung by Miss Laura Ward, and the instrumental solos by Miss Ewing.

Misses Birdie Orr and Mary Hixson, Philos of last Spring, are both at their homes this year. Miss Orr is paying special attention to mnsic.

Miss Ida Gumbert, class of '90, went to Cleveland, Ohio, during the second week of October to attend the wedding of Miss Nettie Evans, her friend and schoolmate while at Painesville, Ohio.

C. E. Carter, a student at the Normal last Spring, is teaching school in the Fallowfield district, Washington county. We wish him success.

Miss Cora B. Davis, one of our earnest workers of last year, is, we are glad to know, getting along admirably in her school at her home in Colorado.

Miss Maggie Dickey, a former Philo, expects to visit us before long. We will be glad to welcome her, as we are always glad to have former members back with us.

Mr. Steepee, the artist of last year's Junior class, and a staunch Philo, will go to Ohio in a few weeks to take charge of a store. Philo's best wishes go with him.

Prof. W. D. Cunningham, an old Philo, is principal for the third term of the West Newton schools. Among his assistants are Miss Lillian Brown and Miss Ada Stephens.

The earnestness which is manifested by the members of Philo will surely keep it in an improving condition, and greater work than has ever been done before will be accomplished.

Misses Anna Reed, Bird Foster, class of '90, and Minnie Coursin, class of '89, visited the Normal a few weeks ago. All of the young ladies are teaching schools in McKeesport, and enjoy the work very much.

Miss Mattie Morgan received an invitation to the wedding of Miss Allie Greenawalt, of West Newton, and Mr. S. Harman, of Pittsburg, which took place at the residence of Mrs. Greenawalt, on Thursday evening, Oct. 23.

Miss Gertrude McVay, formerly a student at the Normal, and a sister of W. F. McVay, class of '90, was married Oct. 6, at her home, near Prosperity, Washington Co., to Mr. Milo Andrew, of the same place.

The following officers have been elected: President, C. L. Dils; vice-president, Miss Mary Bentley; secretary, Miss Bell; attorney, Mr. Day; critic, Hattie Westbay; treasurer, Mr. Fowles; marshal, Mr. Husk.

Philo has many friends in the field who are not only working for Philo, but for the school. We have heard from several sections lately, and all reports show that there are many new students coming to join our ranks.

How many, many persons do we see, as we journey through life's pathway, who, when called upon to assume some responsibility in public, are wholly at a loss to know just how to perform the duty resting upon them. Undoubtedly one of the greatest hindrances is timidity. Never having been so situated as to rid themselves of this draw-back, they go on through the world, unable to stand before their fellowmen, and by the aid of their self-possession exert a powerful influence. But, always dependent upon some one else to take the lead, they remain silent, and thus, instead of gaining, they must lose that which fits them for useful life. Philos, you have a valuable opportunity to overcome that timid feeling which will prevent you from being what you were intended to be.

How To Do It

Look first after the minute formalities in your discipline. Arrange these and you will conquer all the rest—and here comes in the principal of the division of labor. A good supervisor relieves the subordinate teacher of the feeling of responsibility to such an extent that she is able to devote her time more fully to *details*, and by well-directed assistance and advice, to strengthen a weak teacher, in a short time, so as to secure good work. They have exhibited great skill in the application of their strength. They had wasted formerly, what power they possessed in trying to accomplish results by wrong methods. They may have, for example, stood before their pupils and ordered silence, addressing their command to the whole school, and thus paralyzing their own effort. They had undertaken to check gross disorder by wholesale punishment or by scolding the entire school. Their strength not being equal to the task of forcing all the pupils in a mass, they had lost confidence in themselves and settled into a kind of apathy, broken only by spasmodic attempts to secure discipline. The supervisor's first lesson to them was the requirement that they should notice *little things*, and small beginnings; become attentive to minute formalities. Discipline is made up of these minute formalities, and when the teacher has learned how to repress her inclination to scold or punish indiscriminately, and has acquired the habit of noting the manner of performing the smallest formalities, she is on the way toward success.

Remember that no teacher is strong enough to force a whole school at once—to control it at arm's length. But no teacher is so weak that she cannot have good discipline by insisting upon the performance of tne minute formalities. A wise teacher will conquer the chaos of arbitrariness and caprice by introducing order in little things, continually formlating what is accidental and irrational into the universal and reasonable.

The teacher who is strong enough to secure the performance of one of these small formalities, can secure everything by persistence.

Study of the English Language.

We have, indeed, entered upon a new era of literary investigation. The departure of the old and the entrance of the new has been marked by the interest awakened in the study of English. In former years the great mass of our pupils have been too ignorant of and unable to appreciate the grand simplicity and the classical richness of their mother tongue, on account of the lack of acquaintance with the works of our best writers. Our "vigorous English" has never been anything but dull to them. Its "varying music" has been to them but discordant sounds. Unfortunate, indeed, has been their lot! Yet I intend by no means to blame unjustly our faithful educators, who, by years of toil and experiment, have endeavored to bring about the change that was so much needed. Nor have their efforts been fruitless. The bread that they have cast upon the waters has returned after many days.

The tendency of education to-day is toward the practical. In the study of language as well as of science, the motto of the educated world to-day is—"Little Theory and Much Practice." We hail the day with rejoicing! Yet how slow has been the revolution in the study of English!

Almost a thousand years have passed since Alfred declared that English should be taught to the people of his country. Yet a thousand years have been insufficient to impress upon the English people the claims of their mother tongue. The blame of this neglect must largely be laid to the methods of thought and work in tho college, as well as in preparatory schools. We have for all these centuries been laboring under the mistaken idea that English could be used and appreciated without any attention to its study. As a result we find our English of to-day polluted with solecisms and slang phrases.

Another great impediment that has long been in the way of a more extended knowledge of our great writers has been that until recently their works have not been accessible on account of high prices and inconvenient form. Now these difficulties have been overcome, and no one can bring forward as a plea, why he does not read, that he can obtain no suitable and pleasing edition not beyond his means.

It is only recently that English has been considered the essential element in the successful pursuit of all study. We are but just opening our eyes to the fact that a thorough knowledge of one's own language is of inestimable value to him in *any* and *every* department of life. Important and undeniable are the claims of the English language for the first rank in our educational system. For we are told that "English is the sole literature of ninety-nine hundredths of our people, and the best literature of the other hundredth." Even with no other consideration, this, together with the fact that the study of language is necessary for mental training, ought to be a sufficient reason why English should occupy the most important place in our system of education. That the study of the English language is necessary for mental development can not be denied, when we recall the fact that a knowledge of English serves as a foundation for all other study. For the great mass of English speaking people the English offers the only practicable linguistic training.

While recognizing the great importance of this training in our

own language, we are led to ask ourselves the question, "Why, then, should it be neglected?" "Why do so many of our most able teachers shrink from the task?" Doubtless the great reason is the absence of some efficient method in the teaching of English. Our schools have long been burdened with a great deal of useless grammatical drill and parrot-like recitals of inflections and rules, that of necessity weary both teacher and pupil. But, fortunately for all, there are methods being brought before us to-day which will, if properly presented, enable the pupil to use his language with grammatical correctness and some degree of ease.

The best teaching is, no doubt, that which well combines precept and example. At this the educational world of to-day is aiming. The pupil is to have laid down before him but few principles. Specimens of classic English are brought before him, the excellence of which he tests by applying the principles which he has learned. Along with the mental grasp of principles comes the unconscious development of a critical literary taste. With comparatively little effort he acquires ease of expression and breadth of thought as well as a taste for the best reading.

This work in the study of our language should be progressive from the primaries up. The work in our high schools is often very much crippled by lack of care in lower grades. We are obliged to content ourselves in the study of literature with merely an "introduction to the best authors," instead of spending our time in careful thought and appreciation of them. The child in the primary has the concrete and known object before him and calls it *chair* and *dog*. . Soon with his varied acquisition of words and things and with a power to think on their relations he comes to the more advanced form of work. He has become master of a working vocabulary, and has begun in the natural way the study of language as a medium of thought. He is now ready for further attainment, if it be in harmony with his previous study.

In the intermediate and grammar grades his intelligence is called into play. Memory is now secondary and *reason* is of prime importance. He must now *think*. The pupil is no longer studying words as words, but as the expression of thought. At this point we find very strong proof of the mental training from the study of English,—by logical analysis employed in the solution of constructions. In inflectional languages constructions are largely determined by distinctive endings, but in English this must be told by the logical relation of a word to the context. Few principles are necessary in the explanation of the method of analysis. The less the better. Far better than having the pupil apply the principles to selected sentences as exercises in analysis, let him base his language work upon some selection taken perhaps from his supplementary reader. The sense of a difficult passage becomes clear when its parts are seen in their true relation to one another. Far different is the result after *parsing* a boy through Pilgrim's Progress,—it awakens no interest, is far from being understood. But by logical analysis he sees the sentence development,—through the phrase, clause, sentence, paragraph, and chapter, and he enjoys and appreciates a standard selection of English prose and poetry. Of course, great care must be exercised in making the work not a drudgery. Its purpose is for it to be beneficial and not detrimental to the pupil.

A word about the study of poetry and particularly of metre. Metre has been thought to be too difficult for young pupils. It is, rather, especially adapted to this period of school life. The child ı atural ear for metre and rhythm. He will read a couplet from Mother Goose far better than after having lost the music of the verse, he attempts to read from Shakspeare. Attention not given to metre and rhythm in early life is often the cause of its not being mastered and appreciated in later life.

It would be unnecessary in this now too long paper to speak of the much needed revolution brought about in the teaching of English composition. We have learned by sad experience not to try to get out of a boy's mind what is not in his mind. We have ceased being guilty of the absurdity of requiring the pupil to write upon such an abstract subject as *Heroism*, when it would have been far more heroic for him to have written a narration based upon his own observation and experience. We have come to realize that the secret of composition writing is the pupil's interest in his subject. He deems it a delight to tell of Rip Van Winkle's domestic infelicity, and of his mysterious absence of twenty years, and to follow Evangeline as she journeys from her home to a strange land. This exercise, besides aiding his power of expression, leads him to become acquainted with our best authors.

All language study should aim at a thorough acquaintance with the English, so that it may be used correctly and easily. The contact with the works of our best authors, especially the American, should be such that the pupil may have a desire awakened within him to read more and more extensively. In these days of our National Library Series, Riverside Literary Series, and Modern Classics, we cannot plead poverty as the reason why our pupils cannot be supplied with the best literature. In an age when so much trashy literature is in circulation, and when newspaper English is almost the only class of literature the average citizen reads, there is great need that we direct our pu-

pils to a purer and more effective style.

"Our first and highest aim in the study of English," says Supt. Hall, "should be to induce our pupils to read good books and to guide them into interesting and profitable courses of reading." It is largely our fault if the pupil of the grammar grade has entered the high school without a love for the author of "Mosses from an Old Manse," Legend of Sleepy Hollow, Snow Bound, and Miles Standish. After having enabled the pupils to read and enjoy the works of our best authors, then it is ours to help them examine more closely the style of composition and expression of the author. This will lead them not only to better appreciation and understanding of the author, but also to the improvement of his own mode of expression. Nor does our task end here. We must cultivate in the pupils the habit of the investigation of topics hinted or suggested in the text. This opens up to them History, Biography and Geography, and is the means of great interest and profit.

Thus the task of the teacher of English in our American schools is by all means of vital importance. It embraces at once—language, composition, rhetoric and literature. Yet if we perform our work faithfully and well, good results *must* follow. In our endeavor to make English hold the foremost place in our courses of study let us take for our encouragement the words of Emerson: "Cause and effect, means and ends, *seed* and *fruit*, cannot be severed.—*Flora L. Lawson, in Wis. Journal of Education.*

School Room Hints.

Keep your school room air tight. If your pupils get into the vicious habit of breathing fresh air, their parents can hardly keep them in the house at all.

Let the children breathe carbonic acid gas; they should learn to live under unfavorable circumstances. Some will die, of course, race will evolve toward physical perfection.

You may succumb to your disease yourself, but that will be all the better for those who are left to struggle in an over-crowded profession.

When the heat becomes too intense, you may let down a window from the top—always but the fittest will survive, and the from the top. In this way both the room and the children can be chilled without allowing the escape of any carbonic acid gas, which is heavier than air and settles to the floor.

If any dust accumulates on the floor, stir it up before you dismiss, and let the children carry it home in their lungs. Then you will be rid of it.

In the evening, when breathing and re-breathing has consumed all the oxygen of the air, the doors and windows should be closed carefully so as to pen in the nitrogen and carbonic gas to be used again next day. If this is not done the room will become filled with a deadly poison; namely, night air, and we all know what a dangerous thing that is.

Curtain the windows. Let the children grow in the shade; then they will get beautiful complexions and beautiful white tombstones.

But these rewards are useless, perhaps; for what I advise is being done already, and, as far as originality is concerned, I deserve no credit; for the things that I suggest I have seen done quite often. —*Educotional News.*

History.

By all means have the class study and recite topically. Encourage them to consult other histories than the one used as a text book, and to broaden their recitations by the use of information gleaned from other authorities. It is a good plan often to assign a special topic to some one pupil, and have him discuss it somewhat at length; for example, if the class is studying early discoveries and explorations in America, let some one study quite fully the life of Columbus, another how much was known of the science of navigation at that time, and something of naval architecture. —*Ex.*

The thought just now seems to be gaining among our educators that our pupils in school should do more reading in connection with their study of geography, history, and in short, all school work. A number of schools have decided to place from 50 to 100 suitable books in each grade, and require the teachers to be conversant enough with their contents to act as intelligent monitors in their reading, and more especially as guides to their reading. We heartily endorse this sentiment. It will train better readers. It will cultivate a taste for reading, which of itself is one of the prime motives of a school course, and it will aid materially in teaching many studies in a way not now known in many of our schools.—*Moderator.*

It was Dr. Thomas Arnold's opinion that a man is only fit to teach so long as he is himself learning daily. A teacher is doing what he ought to do only when he is learning more than his pupils. We might as well stop living when we get to the point where we can stop studying, for studying always means improving. The expression, "I know enough to teach the common branches," was more common a few years ago than to-day. The impression is growing that we shall never know enough to teach the common branches, or any other branches, as well as they might be taught. The teacher who settles down for life on a State certificate, a normal school or college diploma, ought to be settled in some place where there are no schools.—*Exchange.*

The Idea of the Teacher.

The true teacher abhors stagnation as much as "nature abhors a vacuum." She avoids rut–running, and never deceives herself with the belief that treadmill processes are evidences of professional activity; nor does she delude herself with the thought that every will-o'-the-wisp will lead to the discovery of a great educational principle. She is progressively conservative, and conservatively progressive. She is conscious of the difference between solid earth and quick-sand; between genuine effort which produces results and mere physical energy which effervesces with simply a "phiz." She strives to get a just renumeration for her labors, but seldom or never dwells upon its inadequacy or the injustice of school boards, and the general inequalities maintained by an unsympathetic humanity. In the school room, before her pupils, she never estimates the expenditure of labor by her salary; she makes no provision for personal ease when sacrifices are demanded; she loves self least, and God's highest token of the world's future good, childhood, supremest. She recognizes the fact that she lives in an age of vital activities, wherein the law of the survival of the fittest has been fully established. She knows she is too intimately associated with the complex forces forming the future weal or woe of lives to stand still or drift aimlessly with the tide. See has brought herself to believe there is a scientific side of teaching, based on laws as clearly established as the law of gravity; that to harmonise her efforts with these laws requires that she should be a student of theory and of practice. And to this end, she aims to develop the powers of the philosophical scientist,—a power to detect causes, trace results, weigh principles, and a power to note agreement or disagreement of stated laws, with facts gathered from closest observation and experiment. She studies the history of education, notes the characteristics of the several great systems introduced and their relative values, the evolution of present systems and operating agencies tending to improve or destroy them, sources of deep-rooted errors and means of eradicating them. But with all this study and investigation, one thought is uppermost, and is the propelling motive for continued effort,—and that is, *the highest good of those taught.—Supt. J. W. Holloway.*

Discipline.

In a certarn school each pupil keeps his own record of both conduct and study, in a little blank book prepared for the purpose, and makes daily entries. This is not the "self-reporting system," because the pupil's standing is not made up from this record. The pupil does not report to anybody; he simply keeps the record for himself. The principal frequently looks at these little books to see how they are kept, but never criticises the marking. The pupil is not required to show his book to his parents, and yet he is encouraged tc keep a book that he will not be ashamed to show. The pupil is given to understand that the record is for his own benefit exclusively, and that it is for his own inspection exclusively, unless he chooses to let others see it.

Teaching New Words.

I find that constant repetition is needed to keep the words fixed in the minds of the little children. To this end, I write or print sentences, containing each new word, combined with words already learned, on slips of paper. These sliys I pass to the children, going back and forth in the class, giving each child a new slip when he has read the old one. This affords a quick, easy review, and saves time and labor spent at the blackboard. It is a sure test as there is nothing to suggest the idea of the sentence to the pupil. These slips are always ready and the entire work of a year can thus be kept in small compass. These same slips can be given out to the children to copy for b"sy work.

Sentence Writing.

A pleasant exercise in sentence writing for little pupils is the following: Place on the blackboard a number of works that the children have met in their reading lessons. Then dictate sentences, each containing one or more of these words. If any child cannot spell these words, he can search for them on the blackboard, in that wap becoming familiar with them. The exercise has a threefold benefit, helping the child in reading, writing and spelling; and as it may sometimes require an effort to find a word, it may have a little of the nature of a game of hide-and-go-seek. For instance, fancy this figure a section of the blackboard: Shines, squirrel, arightly, to-day, yesterday, now, to-hight, runs, gray, afraid, sun, the, very, fast, rabbit, was, moon, rains.—*Pop. Ed.*

Some of the teachers who taught us, by their joy, light, affection and intelligence, made our home radiant by their presence. We can never forget them. We never want to forget such teachers.

Every common school in the land is a luminous object shining afar if only we had the wit, wisdom and patience to trace out the divine light.

President Elliott is reported as saying in a recent address: "I firmly believe ten minutes a day given to one book of the highest class, such as the Bible, Shakespeare, or to a book of the second class, like Virgil, or Homer, or Milton, will make a man cultured in a very few years." This is true. It is in this way that many of our best men and women, though largely deprived of school and college privileges, have yet attained a high degree of genuine culture. What a blessed means of culture was the good old-fashioned custom of reading the Bible, morning and evening, at the "family altar."

"To elevate above the spirit of the age must be regarded as the end of education, and this must stand clearly developed before us ere we mark out the appointed road. The child is not to be educated for the present—for this is done without our aid, unceasingly and powerfully—but for the remote future and often in opposition to the immediate future." —*Richter.*

A Word To Teachers.

Because various artificial arrangements become necessary in the management of school-work, and well defined courses of study are demanded to render graded schools possible, accompanied as they must be with examinations to condition transitions from one grade to another, teachers need great caution against the danger of making the aim and uses of instruction bend to these arrangements and examination in such way as to injure both themselves and their pupils Children must be taught to read, for example: but the aim here, upon the part of the teacher, must be something higher than the successful passage of the pupil from one Reader to another through the monotonous text-book march from grade to grade. The end in view is to enable the child clearly to grasp the world of reason that confronts him in the visible forms of his mother-tongue. At some stage of the process, therefore, the mere act of learning to read must pass over into reading for the sake of gathering wisdom from the word-embodied experience and thought of mankind, awakening in such transition a greater thirst for knowledge than the narrowing ambition to pass an oxamination on pauses, inflections, emphasis, tones, etc., which are but the scaffoldings of expression. These are good in their place, and may require some attention in the process. But the process in no sense is toward them, but toward the substance and grandeur of literature. Schools need well selected libraries, to which teachers and pupils may have free and frequent access, that the prescribed course of the school, going through six Readers it may be, shall not fetter both alike in the great work begun.

In every elementary study, in fact, the teacher should have a clear vision of the end toward which it moves, and direct the awakening mind of the child thitherward with no uncertain or vacilliating step. There must be teleology in teaching. The end must be seen in the beginning, and serve as a directive and inspiring motive throughout the whole advance. To plant a walnut simply as a seed, without reference to what is legitimately involved in its growth and development, is but to stick it at random in the ground, near the building it may be, to thrust its branches against the windows which are to admit light, or at the very edge of the walk, to impede exit and entrance, and endanger its own preservation. To start upon any given course of study without knowing the end toward which it logically directs itself, is to start at random and with unsteady gait. Children demand a proper guidance in this regard. They are not things,—they are living souls. Already in rudimentary form the various sciences are enveloped in them, from the very fact that the have an understanding which may be interfused with an inner rational light, ond come under the sway of truth.

The teacher must be able to make full account of this, and in his most primary instruction be sure that he is turning the glance of the pupil toward *knowledge*—toward *truth* a recipient form for which the intellect is—and not toward arranged limitations of grade; that his orienting is not false, and the whole process not cramped and fettered, either by his own too narrow vision or by the necessary machinery of his school. The most advanced and noblest scholar will find that he can take the soft hand of his youngest pupil, and soon realize how eagerly his own slightest onward leading will be followed by the child; for mind delights to marry mind, and science is but the truth of the world in forms of reason, which reason seeks, and without which it cannot be satisfied, At times—no one can fix these in way of prescription, for mental regeneration is a mystery only less profound than that of the spirit—at times he will challenge the child's tender eyes, already filled with wonder-mist, to a still higher vision seen as yet in but dim, shadowy outline, as by no legerdemain but with a master's power he removes one fold of the curtain and shows him the glory of the worlds beyond.

The power of the teacher is in his own far-seeing, not directed to examinations and transitions from prescribed grade to grade, but to the vast expanse which is involved in the infinite possibilities of the souls with which he has to do. His office in this light is truly great, and its responsibility most solemn. It involves deep reverence for the most advanced scholarship, and an awe-inspiring sense of the destiny of man as transcending all knowledge, and capable at present of being seen but dimly and in enigma.

Tropically, or in way of allegory,

we can best express what we mean, allowing each one to interpret from his own standpoint of vision. Across the stream whose rapid waters bar his direct and timid progress, the child must be lifted from stepping-stone to stepping-stone,—then led on through the thick shade of mossy woods, among ferns and cardinal flowers, still moving upward through the tangled and blossomy pathway where thorns threaten and eglantines sweeten the toil,—then still onward with more reliant step across the wide-spread table-land of meadows made green by the mountain springs where he can find refreshing rest,—then still upward with a greater strength of self-possession to the very summit of the thunder-smitten rock, where before him in vision far outreaching his most ardent expectation he sees with wistful eyes the silvery winding rivers,—the scattered villages along their margins—the mist hovering over the distant valleys that sweep onward until they vanish in storm-haunted hills over-arched with glowing amethyst. Anon Hesperus comes leading on his host of stars, Arcturus and his sons, belted Orion, the clustered glory of the Pleiades, and the Swan with outstretched wings sweeping up the Milky Way: and all this, with infinitely more, when thus seen, comes to be for him but this Universe bending in adoration and joining with Cherubim and Seraphim and veiled angels in crying Holy! holy! holy! Lord God Almighty! Heaven and earth are full of the majesty of Thy glory!

This is not the prescribed course of study which confronts the teacher, but it should in his inner sense be made to interfuse it, and give to it its meaning and significance, so that the child while moving under his guidance may feel, however faintly, the worth and dignity of his own soul.

THE cure of all doubt, grief, misery and mystery, is action.—*H.M. Stanley.*

Growth of Our System.

The building up of our comprehensive public school system has been a prolonged development, sometimes fluctuating, sometimes apparently stationary, but fortunately never going backward. Its first period of gradual extension over the Commonwealth from small beginnings, and the patient efforts of school officers and teachers and friends of education to bring about this steadfast result, reminds us sometimes of the little existences we read of far down in the coral depths of the sea, which, by their own unwitnessed toil and slow accretions from the element around them, in the lapse of years, perhaps of centuries, gradually build up their own colossal monument. Steadily they build, and with unwearied patience, until at length reefs and islands and ultimately a continent appear upon the bosom of the waves, anchored in their depths for eternity, and proof against all influences, however subtle, that might seek to undermine or the wildest storms that might beat against to overthrow them. And the rapidity of its development at a subsequent stage of its existence, when new and more ample powers were conferred, and new resources and agencies created to energize its operations and expand its capabilities, reminds us again of the clouds of midsummer, that lift themselves so luminous and large into the heavens, visibly growing before the eye of the spectator—not built *up* by mechanical agencies of artificial material, but drawing their varied and vast resources from the atmosphere beneath, on which they rest, and thus expanding upward and outward, evolving fold after fold with boundless prodigality, until the snow masses seem to pillar the skies—a school system as pure in its purposes as those same Alpine crests, and as beneficent in its results as the refreshing showers which they send down to bless and fertilize the thirsting earth; but unlike those fleecy, fleeting clouds, as deep-seated and enduring as the everlasting hills. —*Ex.*

Resistance to tyranny is not only legitimate, it is glorious.

Intelligence and liberty never produce disorder and anarchy. These come from ignorance and selfishness.

Our teachers train for intelligence, obedience, law, order and progress all the time.

Ah, how many new ideas yet remain to be agitated, thoughts to be expressed, great deeds to be recorded as a result of this teaching in our common schools.

This ignorance and illiteracy, growing all the time, is an ever-widening shadow in the sunshine of our prosperity, depriving the people of power and keeping the ignorant in poverty and helplessness.

This common school system which is modelled upon the wants and demands of the time, adapting itself to the present condition of society, becomes the means of opening up to the common people a smooth and easy road to power and prosperity.

No matter how humble our position or how onerous our labors, we ought to learn to think, and to know what is going on about us for our weal or woe, and try to have wrong abolished and truth established. No one loses by this, but all alike gain.

The people need to nourish their interest and affection as well as their body; need teachers, writers, poets and artists as well as people to plow and to *reap*. The teachers are always and everywhere our benefactors. Do the most and best we can for them, we shall still be in their debt.

CLASS OF '90.

We give below the location of each member of the last class, as reported to us. If any mistakes occur, we shall be glad, if informed of them, to correct in our next issue:

PRINCIPALS OF GRADED SCHOOLS.

N. B. Countryman, Duquesne.
Chas. Graves, Beallsville,
A. J. Johnson, Berlin.
W. S. Kreger, Stonerville.
J. M. Layhue, Connellsville, 2nd ward.
B. F. Meredith, Glenfield.
Wm. McCullough, Fayette City.
J. E. Masters, Woods Run.
W. F. McVay, Prosperity.
Chas. Phillips, New England.

ASSISTANTS IN GRADED SCHOOLS.

Janet Campbell, Powhatan Point, Ohio.
Bird Foster, Christy Park.
Emma Gass, Allegheny.
Ida Gallagher, West Newton.
Olive Hank, Monongahela City.
Nannie Hornbake, Courtney.
Anna Hurst, Scottdale.
Lucie Kinney, Pittsburgh.
Maude McCrickart, Pittsburgh, 20th ward.
Georgie McKown, Allegheny.
Anna Reed, McKeesport.
Gertrude Richard, Derry.
Clara Smith, Johnstown.
Ella Sibbit, Granville.
Belle Sterling, Masontown.
Jennie Thomas, Webster.
Stella Yarnall, Lucyville.
Fannie Greathead, Stauffers.

IN UNGRADED SCHOOLS.

Anna Duncan, S. Union township, Fayette county.
Fannie Goodman, Suterville, Westmoreland county.
Ida Gumbert, Lincoln twp., Allegheny county.
Lizzie Higbee, Venetia, Washington county.
Ella Luce, Perry twp., Fayette county.
Linnie Leech, Mt. Pleasant twp., Washington county.
Mamie McWhirter, Virsoix, Allegheny county.
Chat. Sterling, German twp., Fayette county.
Sadie Thomas, Sunnyside, Allegheny county.
Laura Westbay, Elizabeth twp., Allegheny county.
Jesse O. Arnold, Franklin twp., Fayette county.
F. P. Cottom, E. Huntingdon twp., Westmoreland county.
W. H. Farquhar, E. Bethlehem twp., Washington county.
A. M. Ross, Monongahela twp., Greene county.
W. R. Scott, E. Huntingdon twp., Westmoreland county.
H. F. Parsons, Charleroi, Washington county.

NOT TEACHING.

W. E. Crow, editor "California Messenger."
W. N. Butler, at college in Beaver.
Mary J. Murray, substitute in Allegheny.
Lyda Taylor, deceased.

The Institute held in the Normal chapel on Saturday, October 25th, was in every respect a complete success. The attendance, especially at the evening session, was large. The interest was sustained throughout the day without flagging, and every one went home feeling that the day had been profitably and pleasantly spent.

Among the visitors from abroad were Principals Dalbey, of Monongahela City; Fenneman, of Greensburg; Cunningham, of West Newton; Lowstuter, of Coal Center; McCullough, of Fayette City, and Layhue, of Connellsville.

The position of secretary was filled by Miss Ella Neemes, '89, vice-principal of the Monongahela City schools.

Prof. Bryan's address on Natural Science in the Common Schools, elicited quite a lively discussion and was frequently referred to during the day in terms of approval.

The closing address, in the evening by Miss Ruff, on the Teaching of Language, was heartily applauded.

Miss Suter, of Monongahela City, read a paper on the Teaching of History, and an interesting discussion on that subject followed.

No more interesting discussion occurred during the Institute than that on "Music in the Public Schools," called out by Prof. Fenneman's able address on that subject at the afternoon session.

A noticeable feature of the Institute was the prominent part taken by students of the school, who spoke with an ability that argues well for their success when they leave their Alma Mater.

An instrumental duet by Misses Burke and Gabler was especially meritorious, and called forth a hearty encore.

Vocal music was furnished by the combined choirs of the two societies, under the direction of Prof. Hertzog and Miss Ewing.

Interesting and instructive papers were read by Miss Ella Neemes, on Literature in the Common Schools; by Principal Cunningham on the subject, How May Reforms be Introduced, and by Miss Sadie Lilley on The Experience of a Young Teacher.

Recitations by several members of each society, delivered in a style which reflected great credit both on them and their societies, added to the pleasure of the audience.

Wooda Lang, of Belle Vernon, a student for several terms a few years since, is now attending the School of Pharmacy in Pittsburgh.

The principals of the graded schools in Westmoreland county have formed an association for their mutual improvement in educational work and to promote the interests of the schools under their charge.