The Educational Weekly.

Editorial.

In a series of observations on the defects of our common school system heretofore offered in these columns, it has been shown that such defects refer specifically, first, to the personnel, and secondly, to the organisation of the system. The defects of the first class refer to the incompetency of teachers, the incompetency of school officers, and the indifference of the people. The remedy for these defects has been shown to be a great extension of the means for the better preparation of teachers, including normal schools, the general diffusion of a sound educational literature, and the proper organization and wise management of teachers' institutes, with the multiplication of educational associations and other agencies for professional improvement. It is highly important that a knowledge, both of the defects and their remedies should become universal. The cause of education seriously suffers from ill-advised and ill-considered legislation, and this style of legislation grows out of popular ignorance of the necessities of a thorough, comprehensive, and effective school system. Hence, leaders of opinion upon educational subjects are indispensable. There is need of a large class of persons of both sexes, highly educated, professionally trained, and entirely competent to inform and guide public sentiment in every thing that relates to education, to schools, and school systems. What class can be more capable of, or better adapted to this leadership than that which is set apart for the work of public instruction? In short, what class is so well fitted to guide and teach as that whose business it is to teach, if properly prepared?

We now come to speak of the defects in the organization of the system as the second branch of the discussion. It is amazing that a subject so vitally important does not receive more attention both from educators and educational journals. Referring especially to the country schools, it is safe to affirm that no very material improvement can be made in their efficiency until a radical change is effected in their organization as a system. It is generally conceded that these schools are by far the weakest and most unsatisfactory in the results produced, of any under the care of the state. They have no well-planned course of study. They are ungraded and unclassified. They are open but a few months in a year. The attendance upon them is irregular. The teachers employed in them are too generally young, inexperienced, untrained, and incompetent. They are too frequently changed. The school houses in many cases are badly located, ill-arranged, ill-furnished, ill-ventilated, and poorly equipped with the material aids to instruction. There are too many petty districts and too many school officers who are poorly fitted for their duties. Bad judgment is exercised in the employment of teachers, the price being deemed of more importance than the quality. Their records are loosely and inaccurately kept, and thus the school statistics which form the basis of our legislation for education are uncertain and to a considerable extent untrustworthy and valueless.

These evils result primarily from the subdivision of the territory into so many small districts each independent and distinct in the management of its local affairs. The districts are constantly changing their boundaries. Disputes are perpetually arising, and harmony of action is greatly disturbed. As an inevitable consequence of so many adverse circumstances, the schools are poorly taught, the children are poorly educated, and slip-shod, slothful, and superficial habits are formed that are fatal to success in after life, and destructive of those tendencies that are so essential to the existence, prosperity, and happiness of a well-ordered, self-governing community. It is the simple truth to affirm that the education of the masses of the people in this country is behind the demands of the age. This is a fact attested by common observation. The progress of discovery and invention has so far complicated our industrial, social, and political relations that large masses of our people are unequal to the discharge of their duties as men and as citizens. In other words, our material and political progress has outrun our educational progress. The schools of the people, especially outside of the larger towns and cities, are unequal to the emergencies of the present situation. They must be reorganized and reformed.

But what is the first step in the process of renovation? Obviously, the abandonment of the petty district system. Obviously, the consolidation and concentration of effort looking to a proper gradation of the schools and a wiser division of skilled labor adapted to the different grades. The township should be assumed as the unit of the school system. The districts should be consolidated. The multitude of district officers should be dispensed with, and the schools of the town should be organized upon principles analogous to those which prevail in cities. A single school board, limited to the smallest practicable number, is all that is needed for a whole town. Such a board, composed of intelligent and capable persons, is far more useful and efficient than the multitudes that now make up the district officials. With such a board it will be possible properly to locate, and in a measure to grade the schools, the lower grades being located in the different neighborhoods with a central higher school for the more advanced pupils. Teachers could and would be selected with more impartiality and with greater reference to their qualifications. Better salaries would be paid. The weaker schools would be strengthened. A definite course of study would be adopted and a better quality of teaching secured. District
quarrels would be known no more, and the instability arising from
a perpetual change of boundaries would cease. Indeed, it is unnec-
essary to enumerate the advantages which would accrue from a
change so salutary and sensible as the township plan has proved
itself to be.

The system here proposed is no longer an experiment. It is
already in operation in several states and the evidence of its su-
periority admits of no doubt. The subject should engage the
earest and persistent attention of educators and of educational
journals. It should be discussed in the newspapers, in the edu-
cational conventions and the school district meetings, until the
people become thoroughly informed as to its importance, and
thoroughly in favor of a change that promises such results in the
direction of a better training and preparation of their children
for the work of life. There are other topics connected with the
organization of the public schools yet to be considered. But the
township movement we believe to be fundamental and hence we
urge as the first step in direction of a reform that is imperatively
demanded.

We observe that several of our exchanges continue to speak
of the National Educational Association as the "National Teach-
ers' Association." The latter title of the organization having
been abandoned several years ago and the former having been
substituted, some confusion and no little embarrassment might
be prevented if the present legal designation could be adhered
to by those who have occasion to speak of the Association. We
say legal designation, because we assume that the committee
appointed for the purpose has secured its incorporation under
the laws of Ohio. While referring to this subject we venture to
express the hope that the next meeting of the Association will be
held at Philadelphia. The reasons for the choice are numerous
and strong, prominent among which is the assurance of respon-
sible men in the Keystone State that at least one thousand will
be added to its membership in case Philadelphia be selected.
Such an increase of members would place the finances of the
Association on a solid foundation and enable it to carry forward
its great work without embarrassment. Again, the Association
was organized in Philadelphia in 1857, and it will attain its ma-
jority next year. Its meetings never having yet been held twice
in one place, there would seem to be a peculiar propriety in go-
ing back to Philadelphia before repeating a session at St Louis
or any other point. We vote for Philadelphia.

We are in receipt of information from Mr. L. Kumlein, of the
Howgate preliminary Arctic expedition, to August 20. The ex-
pedition was at that date off the coast of Labrador north of
Bellevue, and would go into winter quarters within two or
three weeks. Mr. Kumlein is very successful in collecting birds,
fishes, seaweeds, etc. At the time of writing he had secured
several fine specimens of rare birds. He is warmly seconded in
his efforts by the officers of the vessel and particularly by Cap-
tain Tyson, who is an excellent marksman. These advices were
brought by a Scotch vessel on a return voyage which was fallen
in with at the time and place mentioned, the letters coming by
way of Greenock, Scotland. The father of Mr. Kumlein resides
on the lake Koehkonong, Wis., and is himself an enthusiastic natu-
ralist, having recently made a fine collection of the birds of Wis-
consin for each of the four normal schools of that state. The
officers and men of the expedition expect to spend the winter on
the vessel.

THE HIGH SCHOOL PRINCIPLE.—III.

The considerations presented in the former articles of this se-
ries must lead to the conclusion that an efficient high school
in any community cannot but exert a very marked influence in
promoting general intelligence and of higher views of the
relations of man to man and of man to the forces of nature, and
that this influence, either directly or indirectly, must reach every
grade and condition of society.

Mention has been made of the respect accorded to every man
and woman of culture and high purpose, and of the universally
recognized benefits resulting to society from the very presence
of such persons, a recognition that is manifested by the efforts
to secure them as citizens, and the universally expressed regret at
their departure from any community. Such people do not pos-
sess a social value merely, they have even a money value which
can not be expressed by any system of notation. Now an insti-
tution for higher education operates in a two-fold way to multi-
ply the number of such in any community. First, it attracts men
and women of this class from abroad; and second, it raises them
up at home. Within the sphere of its work, no institution is so
efficient in this regard as the high school; and for this reason
among others, being free to all, it gathers in the best minds
from all grades and conditions. Let the opportunities for higher
education be limited to the wealthy, and, as is well known by all
persons at all conversant with the inside workings of high schools,
by far the better half of the material is gone.

There are other considerations bearing upon this question
which ought not to be overlooked. The average age of pupils
entering the high school is fourteen years and nine months. It
is therefore at this age that our children would cease to derive
benefit from the system of public instruction, if the high school were
to be cut off, and, as has already been stated, a majority of the
pupils now in our high schools would cease at that age to attend
school altogether.

It will probably be admitted that no period of a young person's
life is more critical in its bearing upon his future than that be-
tween the ages of fifteen and nineteen, the period covered by the
high school course. It is exceedingly important, not only to the
young people themselves, but to the public, that during this
critical—this formative period of life—they be kept well employ-
ed at some earnest work. It is from the ranks of idle youths that
the dangerous classes of our cities are receiving constant recruits.

There are two potent reasons for this. First, it is the period
during which our present system of industries and social organ-
ization does not afford remunerative employment to many.

Second, it is the transition period from childhood through
youth to manhood. It is the period during which tastes and
judgments take definite forms. It is the period during which most
persons substantially decide whether they will serve God or the
devil, whether they will be pillars or burdens to society,
whether they will be honorable citizens or prey upon the best in-
terests of their fellow-men.

Who are the youth that excite grave anxiety and even alarm
in the minds of all good citizens? Are they the hundreds who
are gathered from year to year in our high schools, or are they
the young loafers who hang around places of low resort by
day and prowl about the streets at night? Rather than turn out
the few hundred that are now being trained to habits of close
application, and in whose minds we are trying to instill high no-
tions of responsibility and indebtedness to the world in which they
live, ought we not to draw in, if by any means we can, the crowd
of idlers who are being educated now at their own expense, to be sure, but of whom many will have to be educated over again at the expense of the state? (How many, it remains for time and the courts to determine). The logic of the case is this: The state having undertaken to educate its children as a measure for the public welfare, can not safely nor fairly lay down the burden, if burden it should be called, until the period of average unipness is passed.

The pupil should have at home and at the public cost, culture—the best it is possible to give—at least until he can go alone, which is not before the age of eighteen or nineteen.

The fact that all, and not even the majority, can at will avail themselves of the opportunities thus afforded, does not change the obligation of society to those who can do so, since it is not so much an obligation to the individuals as to society itself.

In times of financial depression there is even more than ordinary need for good schools. It is extremely difficult at most times and especially in hard times to find employment for young persons of the age under consideration. Without school privileges this would be a period of enforced idleness. Hard times, as a rule, increase the patronage of secondary schools, while times of commercial activity have the opposite effect, on account of the numerous avenues to prospective wealth that stand seductively open to young men.

The question whether Latin is a legitimate part of the public school course, or whether the higher mathematics ought to be taught, or whether it was “the original idea” that pupils should be educated as scientists or artists at public expense, is altogether irrelevant to this discussion. Let it first be decided at what average age the American youth should be cut adrift and left to paddle his own canoe; let it be determined whether the state will give him schooling for four, eight, twelve, or more years, and then let us form our curriculum upon psycholgical grounds with no other thought in view than that our course of study shall leave the pupil, at whatever time he takes his departure, with the best possible mental development that can be attained within the time.

If we can do for him better, intellectually and morally, by teaching him Latin, let him have Latin by all means. It will cost no more to teach him that it will to teach him anything of less educational value. If we can, on the other hand, benefit him more by leaving out Latin, why, then, leave it out. And so with every other subject. The discussion of courses of study belongs not to politics but to pedagogy.

The question as to what subjects are adapted to produce the best mental development is one which has commanded the attention of the ablest thinkers of the world. While there is some diversity of opinion, by far the greater weight of it favors substantially such a course as is now embraced with great unanimity by our high schools and universities; a course in which there is a somewhat nearly equal distribution of time among the three great departments of human thought, viz: mathematics, language; and science. All schools of eminence except the purely technical embrace all these in their regular courses, allowing more and more scope from year to year to the natural tastes and mental aptitudes of the students.

J. B. ROBERTS.

We have made a change in the order of making up the Weekly so that we can publish later state news and give more room to “Practical Hints and Exercises,” which seems to be a popular department of the paper.

Contributions.

ASTRONOMICAL GEOGRAPHY.—VI.

Prof. EASTERDAY, Carthage College, III.

The most striking phenomenon resulting from the earth’s rotation has not yet been discussed. This is the regular alternation of day and night. The sun, which “throws into the shade” all other lights, either natural or artificial, constantly illuminates one-half the surface of the earth. The ever-spinning earth meets out its surface toward the east from darkness into light, and from light again into darkness, and thus each location upon this surface has its appointment of day and night.

It is easily appreciated how the real rotation of the earth from west to east causes the sun to appear to move majestically around from east to west. The far distant sun, at all times sending its rays perpendicularly upon some point of the earth’s surface, sheds its influence upon all parts of the surface distant from this point not more than 90 degrees. That one, then, who has the sun in his zenith, is located precisely in the center of the illuminated half of the globe. If, now, the sun be directly above a point in the equator, it will shine precisely to the poles. One-half of each parallel of latitude will be in light, and the other half in darkness. The days and nights must, at that time, in all parts of the earth, be equal in length and at all points upon the same meridian the sun will rise or set at the same instant of time.

The lines of vision of all observers of the rising or the setting sun from such meridian, being tangent to their respective parallels of latitude and perpendicular to the meridian, must be parallel. To all, then, the sun rises precisely in the east and sets in the west. To an observer at the equator it will be in the zenith at noon, and 90 degrees below all points of the horizon at midnight. To one located at the north pole, the sun would constantly be 90 degrees from the zenith, ever moving in the horizon from left to right. Should this observer move from the pole toward the sun, the sun to him would be above the horizon in the south. Should be move from the pole and directly from her, it would be below the horizon in the north. Should he move 10 degrees from the pole, the sun to him would rise precisely in the east and set in the west; it would be 10 degrees above the southern point of the horizon at noon, and 10 degrees below the northern point of the horizon at midnight. Should he move 50 degrees from the pole to latitude 40 degrees north, the sun at noon would be 50 degrees above the southern point of the horizon, and 50 degrees below the northern point of the horizon at midnight, rising in the east and setting in the west. The prevailing law is simple.

If the sun be directly above a point in latitude 10 degrees north, having itself therefore, a declination of 10 degrees north, the previous result will be modified. The distance of the sun above the southern point of the horizon will be 10 degrees more, and the distance of the sun below the northern point of the horizon at midnight will be 10 degrees less. Thus, the observer on the equator finds the sun 90 degrees above the southern point of the horizon at noon, and 90 degrees below the northern point at midnight. The observer on latitude 40 degrees north finds the sun 50 degrees above at noon, and 50 degrees below at midnight. The observer on latitude 80 degrees north finds the sun 10 degrees above at noon, and 10 degrees below at midnight. The observer on latitude 80 degrees south finds the sun 10 degrees below at noon, and 10 degrees above at midnight. Should he move 30 degrees from the pole to latitude 60 degrees south, the sun at noon would be 60 degrees above the southern point of the horizon, and 60 degrees below the northern point of the horizon at midnight, rising in the east and setting in the west. The prevailing law is simple if the sun be directly above a point in latitude 10 degrees south, having a declination of 10 degrees south, the declination must be subtracted where before it was added, and added where before it was subtracted.

If the observer be located on the southern hemisphere, the above discussion would hold, provided the words north and south should exchange places, and also the words northern and southern.

The following rules are then deduced:

To find the altitude of the sun at noon. Take the distance in degrees from the observer to the nearest pole; and to this add the sun’s declination, if the latitude and the declination are both north or both south, or from it subtract the declination, if one is north and the other south.

To find the distance of the sun below the nearest point of the horizon at midnight. Take the distance in degrees from the observer to the nearest pole; and from this subtract the sun’s declination, if the latitude and the de-
clination are both north or both south, or to it add the declination, if one is north and the other south.

If the observer is in the northern hemisphere, the first rule will give the distance of the sun from the southern point of the horizon, and conversely; the second rule will give the distance of the sun from the northern point of the horizon, and conversely.

A result of more than 90 degrees from any point of the horizon signifies as well a distance from the opposite point of the horizon equal to 180 degrees diminished by the result.

A negative result signifies the same positive distance in an opposite direction.

It is readily seen that, when the sun has north declination, it rises north of east and sets north of west to all observers; and when it has south declination, it rises south of east and sets south of west to all observers.

It is also apparent that it is only when the sun's declination is zero that each parallel is divided equally into light and shade, and that the days and nights are equal all over the earth. Whatever be the declination of the sun, the days and nights at the equator are always equal. If the declination of the sun be north, more than half of each parallel of latitude in the northern hemisphere is in the light, and the days are longer than the nights; whilst, at the same time, in the southern hemisphere less than half of each parallel of latitude is in the light, and the days are shorter than the nights. If the declination be south, the reverse of this must hold. It is apparent, also, that, when the declination is summer, the tropics reign in the northern hemisphere, and winter in the southern; and that when the declination is south winter follows to the north and summer to the south.

Still further, when the sun's declination is north, there is a zone whose center is the north pole, and whose radius is equal to the declination, all of which is illuminated by the sun, and a corresponding and equal one at the south pole completely in the dark.

A fact easily recognized is that the sun constantly and gradually changes in declination, ever swinging back and forth between the points 23½ degrees north and 23½ degrees south. From what has been previously stated, then, it is seen that our great luminary is liable to send his rays perpendicularly upon any point of the surface of the earth whose latitude does not exceed 23½ degrees. This surface is called the Tropic Zone, and is bounded on the north by the Tropic of Cancer and on south by the Tropic of Capricorn. When the sun has its greatest northern declination, and is shining perpendicularly upon the Tropic of Cancer, it is shining beyond the north pole completely illuminating a zone whose boundary is 23½ degrees from the north pole. This surface is called the North Frigid Zone, and its bounding line is called the Arctic Circle. The zone at the south pole, all of which is, at the same time, in darkness, is known as the South Frigid Zone, and its bounding line is called the Antarctic Circle. When the North Frigid Zone is completely in the darkness, the South Frigid Zone is completely in the light. The surface of the earth between the North Frigid and the Tropic Zones is known as the North Temperate Zone, and that between the South Frigid and the Tropic Zones is known as the South Temperate Zone.

The earth's motion around the sun. It now remains to be noticed by what simple natural process the change in declination is effected. This brings us clearly to a consideration of the second special motion of the earth. The arguments by which to prove that the earth does not of necessity each year revolve around the sun at a distance of 93 millions of miles are most conclusive. A presentation of these evidences in this connection is not deemed desirable. To suppose the earth to have such motion, and to suppose the axis of the earth to be inclined 23½ degrees from a perpendicular to the plane of the earth's orbit, and ever to remain parallel to any and every position held by it, is fully to account for all the varied changes in the declination of the sun, and all the accompanying phenomena of the seasons.

When the earth occupies a position in its orbit in which the north pole, compared with the south pole, is nearest possible to the sun, the sun is in the summer solstice and has a declination of 23½ degrees north, and it is summer in the north. As the earth moves onward in its course during the following quarter of a year, the axis remaining parallel to itself, the poles become and more nearly equally distant from the sun, until the plane of the equator is carried into the sun. The sun now appears to cross the equinoctial, the point of intersection being called the autumnal equinox.

In the next quarter of the year the sun's declination increases toward the south, the poles again becoming most unequally distant from the sun, the north pole now being the more remote. The sun is now in the winter solstice, winter reigning in the northern hemisphere. The next quarter of the year brings the plane of the equator back to the sun, and the sun appears in the vernal equinox. The last quarter of the year brings us to the place of starting, with the sun again in the summer solstice. Without the least delay the earth again begins her ample round, moving bodily with a velocity of about 1000 miles a minute, and the seasons come and go.

It is easily seen that the inclination of the earth's axis to a perpendicular to the plane of the equator determines and fixes the distance of the Tropics from the equator, and the Arctic Circles from the poles. Were this inclination greater, the Torrid and Frigid Zones would be greater, and the Temperate Zones correspondingly less.

A RECENT UTTERANCE ON PUBLIC SCHOOLS.

At the Annual session of the Rock River Conference of the M. E. church, recently held at Princeton, Ill., Dr. C. H. Fowler, editor of the New York Christian Advocate, spoke, according to previous announcement, upon the subject of Education. Considering the time, the place, and the official position of the speaker, who is designated by the authority of the denomination to fill the most influential place in the church, his words ought to be carefully noted, and to be generally read by all who are interested in our public schools.

The ex-president of the Northwestern University stated emphatically that the state has no right to educate beyond the primary branches. "High schools tax the poor man to educate the children of the rich!" "The state universities are supported by lands stolen from the working-men of the country."

"The state cannot teach and has no right to teach morality."

The remedy is, of course, all higher education should be given in denominational schools. With equal emphasis the speaker affirmed that Methodists should send their children to Methodist schools, Baptists to Baptist schools, and so on through the whole range of sects.

In view of such statements made before a body of 175 clergymen, some of whom applauded his most emphatic utterances given above, it seems probable that the ultra Roman Catholics in their attacks upon the public schools are about to receive powerful reinforcements from an unexpected source. If this doctrine is the doctrine of the Methodist church to-day, the sooner it is openly avowed the better. But if Dr. Fowler has spoken unadvisedly, and is not endorsed by his brethren, let them speak to him a few words that he will lay to heart.

H. L. B.

SELECTED.

THE NATIONAL EDUCATIONAL ASSOCIATION.

The committee of the National Educational Association has waited on the President and presented, according to instructions, certain resolutions of the Association. The committee consisted of Prof. Newell, of Maryland, and Regent Bowman, of the University of Kentucky. They were accompanied by the Commissioner of Education (Gen. Eaton), Col. Smith, formerly superintendent of education in Washington, Judge Tibbetts, and Superintendent Wilson, of Washington city. In presenting the resolutions, Prof. Newell remarked that one of the main objects was to enlist the sympathies of the President in behalf of the Bureau of Education. The Bureau had been established at the suggestion of the educators of the country, and had fully met their views, except so far as it was crippled by the want of suitable office-rooms, and by an appropriation altogether inadequate for the requirements of the service.

No opposition to the Bureau existed anywhere, unless it might be on the part of those who suspected that the Bureau of Education was the entering wedge for the introduction of Federal influence into the management of state educational institutions. Of such intention the committee had no knowledge, and with such a scheme they had no sympathy. The promise of the Bureau was simply to collect, arrange, and diffuse useful educational information; and if this necessary work were not performed by the Bureau there was no other agency by which the work could be done. The President in reply expressed his sympathy with the views and desires of the Association, and the committee retired to pay their respects to Secretary Schurz, by whom also they were cordially received.—National Republican.

A JOLLY BOY IN THE COUNTRY.

Bangs sends us the following copy of a letter written by a Cambridge boy who is up in the country: "Billy, why do you write me a letter? I am having a bully time but I have to go round on crotchets, for a hoss rae fell off a hay mow on to me and spraint my legs. A boy from Charleston named Hookey boards where I do, an me an him go round together and have a good time. We catch frogs down in the brook and throw 'em through the winders on to the table and scare the boarders when they eat; there ain't no
policeman here and you bet 'tis fun to tie papers on to a hog and set em a fire and here em squeal. Mr. Smith was awful mad. I was awful sick last week, and I have wore out four pairs of pants since I have been here. When I left home I forgot to let my rabbits out, and I wish you would go into my back yard and let em out but I guess they are dead now and if they are you may have em rabbits can't live three weeks without nothin' to eat if they can they are tuff.

I have got three turtles and a crow and a lot of things I shall bring home in my trunk if my mother don't find it out. My mother says I fret her to death, and says she never 'lil me go into the country with her again. I can't write any more for me and some more fellers is goin down in the pasture and throw stones at some calves. Hookey broke out a lot of glass in the school house and his mother paid $10."—Boston Globe.

**THE DECAY OF LANGUAGES.**

As time goes on the languages spoken in the world will steadily grow fewer. Three hundred years ago Cornish was beginning to disappear as a spoken language, and a similar fate is now being experienced by the Breton, in many respects a kindred dialect. A Breton sailer told a traveler that three generations of his family were alive—his father, who spoke only Breton; himself, who spoke French and Breton, and his son, who spoke only French. So in Ireland every year the number of those speaking Irish decreases. Twelve years ago a tourist in Kerry met a well-dressed young man of the farmer class on a country road, of whom he asked some questions, which were answered very politely, but very little to the point. At length he said; "Truth is, sir, I can speak very little English." Asking some well-to-do peasant women in Clare for some milk, they made signs for him to wait, and called a man who interpreted. The rising generation, however, nearly all speak English except some on the wild Atlantic washed islands. In the Isle of Man it is as described in Breton. The Welsh, however, stick to their vernacular, and when you get into a rural district in a country not contiguous to the English border, you might almost as well be in Russia. A famous English Judge, who on one occasion observed, "There is a degree of cunning and duplicity revealed in the conduct of this case such as is, I regret to say, not uncommon in the principality," used to aver that the Welsh stuck to their vernacular in great measure to defeat the ends of justice.—N. Y. Sun.

**A NEW MAIL CAR.**

A new and improved mail car has just been completed by the Chicago, Milwaukee, and St. Paul Railroad Company for use on their road. It is fifty feet in length, and has twelve wheels, carried under two patented trucks. It is fitted with Miller platforms and the improved Westinghouse automatic air-brake. The principal improvements are, first, the increased space given; second, the new arrangement of the mail bags whereby the distribution is facilitated, and third, the increased light and superior accommodation for the distributing clerks. In the old cars the papers were distributed into a semi-circular case, which occupied a full half of the car and admitted light from one side only. Now the bags are carried on iron racks and rest on the floor, while the letters are sorted into pigeon-holes at one end of the car. It is estimated that fully 95 percent more mail matter can be handled under the new arrangement within a given time than was possible in the old cars, and that the clerks can attend to this extra business with less trouble than they formerly could. A second car will be completed within the next two weeks the cost of the two being less than $10,000.—Chicago Inter-Ocean.

**Kindergarten Department.**

**To the Editor of the Weekly:**

Yours admirable editorial of September 27 encourages me to address you on the subject of the great and radical reform of education, initiated by Froebel's Kindergarten, kept strictly according to his idea, and in his way; which allows the teachers such a wise freedom in the application of the idea as can only be ensured by study of this last great master in the art of arts.

Froebel's reform is, in a certain subtle sense, revolutionary, but still it is a conservative reform, inasmuch as it does not propose to alter any school which may come after it in the form of its methods and discipline; but to underlie them with three or four years' culture of the child's powers of sense, manifestation, and observation, by means of a discipline of love, trust, hope, and generous confidence, as shall really "keep the heart to the issues of life," and educate the will to self-direction, self-government, and the production of forms transient and permanent; and so foreclose mischief's idle caprice in an ever-increasing measure.

Froebel's first principle is that human will is irrefragable, and must be preserved self-respecting, by being employed and addressed reasonably and generously, instead of repressed or coaxed arbitrarily. But he recognizes none the less that it can be perverted and exasperated to the creation of evil from earliest years; and often is so perverted and exasperated, by the ignorance of mothers and the carelessness of early teachers; and therefore here must be the pressure of reform; and special culture for kindergartners and mothers is the most important thing for all educators to secure.

An American Froebel Union has been formed, during the last summer, which has had three meetings in Boston; and guaranteed Lee and Shephard of that city in the publication of "Reminiscences of Froebel, by the Baroness Marenholtz-Billow," author of Education by Work according to Froebel's principle (which was translated by Mrs. Horace Mann, and privately printed and to be had of its patron Rudolphus Bingham, of Camden, N. J., post-paid for $1.00).

"The Reminiscences" is mailed to any address for $1.50, and contains conversations of Froebel with Diesterweg, Varnhagen, von Euse, and other great thinkers of his time, reported by the Baroness, who may almost be said to have discovered Froebel, and who first brought him in contact with those who could appreciate him, and who uniformly decided, after hearing him talk or seeing him work, that he made an advance on all his greatest predecessors, by taking up the child in the irresponsible era of its instinctive activities, and sympathetically directing them into formation and production, without interrupting the childish freedom of play, but merely perfecting it.

The publication of this book is timely; for it suggests the momentous consequences of superficial people's getting hold of the mere form of the kindergarten occupations, with no profound knowledge of infant psychology, or the ground principles of morality, religion, and art. Every attempt at a so-called kindergarten that does not succeed in preparing children for school, is a serious injury to the cause of this reform. "The corruption of the best is the worst."

The American Froebel Union is an earnest attempt by those who have studied Froebel's system most profoundly, to discredit ignorant attempts and pretended improvements, of which there are many, especially—though not exclusively—in America. The members feel sure that if the American people can have a fair chance to know the system of Froebel in the purity of its idea and form, as it came from the master, who did not proclaim it till after thirty years of earnest experiment, they would adopt it. The only striking proof we can at present point to is at St. Louis, where a faithful experimenter, and expounder Miss S. E. Blow, by four years of concentrated effort, one for her own preparation, and three of practical kindergartening,—so plainly demonstrated its excellence, that the city authorities have proposed it to their school system, by establishing thirty kindergartens to be kept by Miss Blow's trained scholars, under her superintendence.

But few persons have the material means and her peculiar advantages, to repeat Miss Blow's experiment. In general, the public school authorities must depend on private kindergartners to create a general demand; and the American Froebel Union takes upon itself the duty of discriminating and pointing out these, and especially the reliable training schools; and it makes the Kindergarten Messenger, published at 19 Folien street, Cambridge, Mass., its organ. The number just published, for September and October, contains the report of the organization of the Union. While the kindergarten is no more the school than the home is a school, it is, like the home, of essential importance to all school education.

The late Dr. Bushnell most happily set forth, in a great oration of his delivered at Cambridge, Mass., on an anniversary of the Phi Beta Kappa Society, the play-principle was the principle of genius; and Coleridge defined genius as childhood's instincts carried forward into the years of maturity. Froebel has verified these dicta by his invention of the kindergarten to educate the play-principle before school begins; and of the school-garden and youth-garden to keep the play-principle healthy, and a civilizing recreation from the severe exercises of the school.

In the number of the Kindergarten Messenger for Sept. and Oct. is copied a letter upon School-gardens, by Dr. Erasmus Schwab, of Vienna, Austria, who for several years so successfully conducted one in that city, that its municipality has doubled the number of acres devoted to it, that all the school children of the city may have the advantage of its refining and healthy influences.
Notes.

GENERAL.—Mr. S. F. Cole, of the Sauk Center Graded School, now has charge of the public school at Blue Earth City, Minnesota. He has had some interesting experience in discipline recently. It appears that several children in the Intermediate department broke open the teacher's desk and secured a promise from a few others that happened to be in the room, not to expose the transaction. But one of the latter, however, whose conscience was troubled, turned *state's evidence* in the case and revealed the names of the incipient burglars. A teacher's meeting was called at which it was decided that the offenders should be punished, including all of the witnesses but the informant. Against this decision there were signs of parental revolt, and threats were made against the Principal. But the punishment was inflicted, and much excitement was raised among the parents of the offenders. The school board firmly sustained the course of the teachers. The Blue Earth City Post, commenting upon the affair, justly remarks: *This is right. The teacher should rule the school and the scholars be made to understand that neither they nor their parents can dictate the mode of discipline.*

SCIENTIFIC.—General Macaulay announces that the Woodruff Expedition was a fixed fact and will sail within a very few days of October 25. There is yet incipient burglars. A teacher's meeting was called at which it was decided that the teachers' telegraph wires in Germany have proved highly satisfactory. The zoological gazette announces that in the caves of Pappenheim, near the long a subject of study for naturalists, is half-reptile, half bird. From traces are anxious to trace their origin to a monkey have, however, reason to hope that the discovery. The art was first discovered by a Bavarian, in 1795. The first specimens of this extraordinary bird of the antediluvian period, and has already been found; and the archreologist Fiorelli expresses his belief that a proper handling of the old docks and quay; will bring to light some curious maritime implements once used against the fleets of Carthage.

LITERARY.—The first number of *The Primary Teacher,* the much-hoped new monthly from Boston, has made its appearance according to announcement—and yet perhaps not exactly according to announcement, for something had given us an idea which is hardly realized in the magazine before us. It contains 22 pages of reading, or about half as much as the Weekly. It sticks well to its text, and furnishes the primary teacher with valuable help in her work. In view of the vast number of primary teachers throughout the country who never read such a magazine, and in view of the consequent barrenness of their minds in respect to the best methods of instruction, such a publication should be hailed with thanksgiving by every lover of children and every laborer for their proper education. It may find its way to every corner of the land, and do its part—which will be no inferior one—in revolutionizing and elevating the character of primary instruction in public schools.—Among the early holiday books issued by D. Lathrop & Co., are *Vacation Stories for Girls,* and *Vacation Stories for Boys,* both by popular American authors. Mr. T. S. Denison, of DeKalb, Ill., has met a want of in schools by composing new plays for school exhibitions and dramatic festivals: *The Lavoisier medal is a rare distinction.* The much-hailed *The New Education,* devoted to the earnest and intelligent advocacy of the kindergarten. He is putting all his energies into the noble work of promoting the interests of this new departure in American education. He has our entire sympathy, and we give him the pledge of our hearty cooperation.—We are greatly indebted to the Hon. J. H. Smart, of Indiana, for a copy of his latest biennial report of the public schools of that state. It is an exceedingly interesting and suggestive document, containing several unique features to which we shall hereafter take occasion to refer. We are glad to learn that Mr. Smart's health is greatly improved so that he is able to resume his official labors.—Mr. Phelps Teacher's Hand Book has been translated into the Spanish language and officially adopted as a textbook in the government normal schools of the Argentine Republic.—Another new music book for schools is *The Grammar School Chair,* by W. S. Tilden, published by Ditson & Co., Boston. It contains 182 pages covered by 220 songs of varying utility. The grouping into fourteen sets of the songs best adapted to various voices is in some respects an advantage. A large part of the book is taken up by short strains or airs from pieces of greater length, which, though pretty, are not complete enough in themselves, or long enough, to be sung very generally by schools. Many of these airs are from classic writings, and some are standard songs; the music generally is simple and easily sung, provided the school has a good leader.—James T, the celebrated poet of Rochester, N. Y., will issue the first number of his Illuminated
The Wittenberger, a journal devoted to the interests of Wittenberg College, Springfield, Ohio, appears in a new form, about the size of Sr. Nicholas. It is also under new editorial management, but its excellence is well sustained.—One of the neatest and in many respects the best of our literary exchanges is The Literary Messenger, published by E. H. Hutchinson, Buffalo, N. Y. It is a monthly, and can be obtained at the very low price of fifty cents a year.—The Appeal, the organ of the Reformed Episcopal Church, edited by Bishop Samuel Fullaw, of this city, has been changed from a monthly to a bi-weekly journal. Subscription price, $1.50 a year, in advance. It is a good paper.—E. L. Kellogg & Co., of the N. Y. School Journal, have brought out the first number of The Scholar's Companion, designed to furnish good and instructive reading for boys and girls who are attending school; it also contains a few good pieces for reading. It shows the increasing attention given to education in the Southern States. It has a kind of missionary work to accomplish, but is doing it well, and should have the decided support of every Southern teacher.—Messrs. D. Lothrop & Co. bring out a humorous book this month which is likely to make a sensation among the juveniles, it being "The Twelve Adventures of Milladies Petrikin Paul," with over thirty illustrations by Hopkins.

REVIEWS.

Tangled. By Rachel Cares.—(Chicago: S. C. Griggs & Co.)—This is a pleasant story for an idle hour, especially if one wants merely to be amused, without being obliged to exercise his thinking powers. A pretty young lady is told by her "friend" about an "interesting lunatic," a Polish Count, who has for years been at the watering place where they have just arrived. She is greatly interested in the account given her of him, and at her first appearance at the table chances to be placed opposite him, as she supposes. It is really, however, another handsome young man in the full possession of all his faculties. Remembering the directions given by her friend for the treatment of the maniac, she applies them to this young man, and the consequence is—all sorts of absurdities. He very naturally supposes her demented. They each making each other's misfortune. He

44. Assign a whole page in the spelling book for a lesson. Select twenty-five words and pronounce at the time for recitation. Pupils may write the words as they are pronounced, upon the slate or slip of paper, or in a writing-book. In order that all may hear, have some pupil in a remote part of the room from the teacher pronounce the word just after the teacher pronounces it. After the twenty-five words are written, let there be just a moment given for explanations; then the work may be exchanged, when the teacher will spell the list of words otherwise that he has been in good company. He can cite quotations like this:

A little learning is a dangerous thing; Drink deep or taste not the Pierian spring.

Yours truly,
BELLEFLOWER, ILL., Sept. 24, 1877.
J. W. WRIGHT.

ANSWERS.

[The answers are numbered to correspond with the queries which have preceded.]

44. "A little learning is a dangerous thing; Drink deep or taste not the Pierian spring."

Ask his pupils such questions as these: "Who wrote the piece from which the first two lines are an extract?" "What other pieces did he write?" "Write a biographical sketch of the author and give another extract." In the second extract nearly all would recognize that it was taken from Longfellow's Song of Hiawatha. Many questions could be asked about this one piece, and most of the pupils will be surprised to see how little they know about the writings of such men, especially if properly presented by the teacher. The old rule holds good here as elsewhere: "As is the teacher, so is the school." A. H. PORTER.

45. The teacher should read good works and tell his pupils about what he has read. If he has not the faculty of telling it, his pupils will know in other ways that he has been in good company. He can cite quotations like the following:

"A little learning is a dangerous thing; Drink deep or taste not the Pierian spring."

A. H. PORTER.

44. Write on blackboard each day for the first four school days of the week a lesson of twenty or more words selected according to the best judgment of the teacher, have the classtime the same on slips or in writing spellers. On the fifth day have a selected pupil gather the slips or blank books up, after which let all who have words to their pass the list of all the words missed, placing by the side of each word the number of each pupil who missed it. A different person should be appointed each week to examine the written exercise and render a written report of the same to the teacher. The country teachers are, as a class, poverty-stricken, are inexperienced writers—too frequently incompetent writers; as individuals they are unknown outside of the district—they frequently work for money, and in the school-house in which they teach, therefore fail instead must be the echoes which come back, as after-cadences of the voices sent in from the country school, from the editorial and publishing rooms of the various noble papers that really have at heart the good of all the schools.

Can a physician prescribe intelligently for a patient whom he has not seen, and from whom he has heard only through some day-laborers? Can a naturalist describe the habits and characteristics of the ant, having studied the same only while a bulb is bulb the earth? Can't you raise a price that will reach us away down here? I've accepted your kind invitation to write; please pardon, but publish my long letter.

50. I believe the best method of stating examples in compound proportion to be that of compound fractions. As in the problem:

If 12 men in 8 days, working 10 hours a day, build a wall 20 rods long, 5 feet high, and 3 feet thick, in how many days can 9 men, working 8 hours a day, build a wall 22 1/2 rods long, 3 feet high, and 2 feet thick?

Showing that the answer must be some number of times 8 days, integral or fractional, first consider the number of men employed, as our comparison of the causes. As 12 men build the first wall, and 9 men are to build the second, it is necessary to divide 8 days by 12, and 8 days by 9, and then multiply the results by 22 1/2 rods and 24 rods, and 3 feet by 3 feet and 3 1/2 feet. When comparing the work done in the same time and the work done in different times, the work done in different times, which, by cancellation, gives the result.

36. "Omelet" makes a slight mistake in attempting to answer question 36 when he states that the frigid zones would be each 25° wide, as this would be but 2° of their width, for they would extend 25° each side of the poles, making their whole width 50° instead of 25°.

We have several questions and answers which are crowded out this week; they will appear next week.—Ed.]
Arkansas

GEOECE W. Hill writes as follows in the educational department of the Spirit of Arkansas: Letters to us, to the Superintendent of Public Instruction, to every body in the state, of whom information in regard to Arkansas is required, ask about our schools. "In answering this question, we are obliged to convey the idea that they are not equal to those of Ohio and other states that have had superior systems in operation for years. But to immigrants especially, we write this explanation, and it is just as we understand the question.

We have as good a school law based upon as good a system, with as good, earnest, and hard-working a State Superintendent as any state in the Union. Our system and all belongings, and State Superintendent, are heartily supported by the Governor, and leading men and women of the state. The people of Arkansas are both sufficient, and who, for the most part, look upon the system which rests the safety and prosperity, and as fast as they understand the merits of the system, give it hearty support. In answer to the question why the system as established under Radical rule was not supported, we answer, that whatever good there was in the system, under them, was, too headache with rascality and thi vling that honest people would have nothing to do with it, is a short answer as well as a blunt one, and too true. Our public schools at Little Rock, Fort Smith, and Helena, the largest cities in the state, are not surpassed. Here are true devotees of learning who have been pioneers, and honest men and women, who have popularized as well as secured untold benefits to this great state. The past year, the State Superintendent succeeded J. N. Fish, Esq., a most zealous gentleman of Little Rock, as the educational editor of the Teachers' Association. His writings with his hard work has told favorably and largely in the good work. The Arkansas Industrial University, the Academy, and numerous private schools of the state have been more largely attended the past year than heretofore, and the present summer the proceeds of people and have agitated and advocated the public school question so largely that we apprehend that there will be more schools supported by public tax during the next eighteen months, and more zeal and a greater desire manifested for their success than ever was had in the state in twice the length of time before. We cite the case of the county as one instance. It has been hard work heretofore to keep any tax from coming to Arkansas next month, and see us as we are.

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Ohio.

The annual school meeting was held at Northfield, pursuant to notice, in the large hall of the brick school house; at 7:30 o'clock. The attendance was not large, for the reason, probably, that the people think the management is in good hands. In addition to the resources provided by the law for the support of the schools, the Board of Education recommended the raising of $4,500 by a tax upon the property of the district. At this point Hon. H. Sricver arose to make a motion that in view of the great change in values, expense of living, etc., that the board be instructed to make a deduction of ten per cent on all salaries of teachers who are paid over $4,000. This motion Mr. Sricver supported by a sensible speech from his stand-point, although it failed to bring a majority of the meeting to his views. The resolution was opposed by Prof. Goodhue and Payne, G. M. Phillips, A. F. Kingman, and President Strong. The last named motion was lost; first by a vote of vote, and secondly, on request by a rising vote. On motion the board's recommendation to raise $4,500 was adopted without opposition. The meeting then adjourned. Programme for Teachers Association to be held at Litchfield, Oct. 27.-Discussion of methods of teaching oral spelling, opened by Mrs. S. M. Adams; lesson in Physiology, Geo. A. Kline; the Geography of Italy, Mrs. Learned; Straight line analysis of compound proportion, Prof. Haines; Music; Paper, "School Discipline," J. M. Russell; Lesson in elocution, Prof. Haines;Lesson in writing, L. S. Cathcart. Discussion on the relative value of mathematical, linguistic, or scientific studies. Reports of schools then in session by their teachers. The conclusion of the speech was published in the schools due the different counties of the state under the law apportioning the current school fund. The total sum is $146,500.44. The teachers' drill held at Grand Meadow recently was in every way a success. Sup't. Holbrook, assisted by Miss E. A. Wheeler, Mr. Dudley, and Mr. Goodall, did an amount of work for four days, which, judging from the complimentary resolutions passed by those who participated in the meetings, was highly appreciated. The Catholic society of Victoria, Ky., have decided to erect a new school-house, and we are informed that the priest collected among his parishioners the sum of $1,000 to be devoted to that purpose. The attendance of students at the University is larger than for a number of years. The Regents at their late meeting voted full authority to their attorney, Senator Christian and Hon. Wm. L. Webber, to settle the laboratory matter as they deemed best. The libel case of Dr. Rose vs. Dr. Douglas is on the trial, we understand, at the term of court soon to begin. The boys at the University are busy electing their different class officers and "rushing" each other. A splendid course of lectures is provided by the Students' Lecture Association for the season. Mr. Storrs, of Chicago, opens the series Oct. 24. The Catholic society of Victoria, Ky., have decided to erect a new school-house, and we are informed that the priest collected among his parishioners the sum of $1,000 to be devoted to that purpose. The attendance of students at the University is larger than for a number of years. The Regents at their late meeting voted full authority to their attorney, Senator Christian and Hon. Wm. L. Webber, to settle the laboratory matter as they deemed best. The libel case of Dr. Rose vs. Dr. Douglas is on the trial, we understand, at the term of court soon to begin. The boys at the University are busy electing their different class officers and "rushing" each other. A splendid course of lectures is provided by the Students' Lecture Association for the season. Mr. Storrs, of Chicago, opens the series Oct. 24. The Catholic society of Victoria, Ky., have decided to erect a new school-house, and we are informed that the priest collected among his parishioners the sum of $1,000 to be devoted to that purpose. The attendance of students at the University is larger than for a number of years. The Regents at their late meeting voted full authority to their attorney, Senator Christian and Hon. Wm. L. Webber, to settle the laboratory matter as they deemed best. The libel case of Dr. Rose vs. Dr. Douglas is on the trial, we understand, at the term of court soon to begin. The boys at the University are busy electing their different class officers and "rushing" each other. A splendid course of lectures is provided by the Students' Lecture Association for the season. Mr. Storrs, of Chicago, opens the series Oct. 24.


THE ILLINOIS STATE HISTORICAL LIBRARY AND NATUREL HISTORY MUSEUM, CIRCULAR NO. 1.

To the Students of Illinois:

It gives us profound pleasure to announce the successful inception of measures designed to establish upon a permanent basis, and to maintain with becoming liberality, the following scientific institutions in this state.

An act of the last General Assembly, approved May 25, 1877, provides for the establishment of the State Historical Library and Natural History Museum in the new State House in Springfield, and the conversion of the Museum at Normal, formerly the property of the State Natural History Society, into a State Laboratory of Natural History. In the former, all the geological and biological collections made during the progress of geological survey will be arranged, together with a full exhibit of the botany and zoology of the state, prepared and arranged for popular instruction and attractive display, and provision will also be made for the preservation and arrangement of all books, articles, and other documentations belonging to the state, and all specimens of ethnology relating to early historic and prehistoric times.

For this Museum the third floor of the entire west wing of the new State House has been devoted and is now being furnished as far as necessary to accommodate the collections now on hand; a board of trustees has been created consisting of the Governor, Secretary of State, and Superintendent of Public Instruction; and a curator has been appointed to take charge of and arrange the large amount of material already available.

At the State Laboratory at Normal all botanical and zoological work for the Museum will be done and material furnished for the biological work of the state educational institutions. It will also provide for the use of scientists and other students a full series of the botanical and zoological species of Illinois, (including anatomical and histological material) prepared and arranged for reference and study, together with such extra-limital species for comparison as are necessary to give correct ideas of the general relations of our fauna and flora to those of other regions. At this institution all books, instruments, ladders, furniture, and appliances will be placed upon each label, and every sort necessary for the work in each department of biology, will be provided, and an especial feature of the State Laboratory will be the thorough organization of every part of the material, in a way to make it readily and completely available for the use of specialists and other students of science.

This institution remains under the control of the State Board of Education, by whom liberal appropriations have been made for the furtherance of its work during the next two years. Provision has also been made for the publication of all acceptable oral and written matter relating to the natural history of the state in the Bulletins of the Laboratory, one of which has already been issued, while the second is now in course of preparation.

The support afforded these institutions by the state is not sufficient to relieve them from the responsibility of the officers of the friends of science throughout the state for their highest success, and the opportunity is now afforded the scientific men and women of Illinois to establish the future of science in this state on a sure foundation. The spontaneous interest which all such must feel in this matter will doubtless render any urgent appeal to our patrons a matter of course, and we, therefore, confine ourselves to simply indicating the direction in which their co-operation is most needed.

There are no doubt many persons in this state who have store and flint implement for hunting or other purposes, or rare minerals and fossils, which they would gladly donate to the State Museum, where they would be preserved for all time, and be accessible for study to those interested in these departments of science; and in all such cases where the specimens are deemed worthy of being placed on exhibition in the Museum, the donor shall place upon the specimen or the label attached thereto, and also entered upon the catalogues of the Museum, and where private collections of sufficient size and value to fill an entire case are presented, they will be kept intact and designated by notes by which they are presented. All specimens in the departments above named may be sent to the State Museum at Springfield in care of the curator, and also all historical books, papers, or other historical documents.

The following specimens are also wanted for the use of the State Laboratory at Normal, to be sent to the care of the director thereof, by whom due credit will be given for all valuable material: Reptiles, amphibians, insects (especially hymenoptera), insect larvae, cryptogamic plants (especially fungi). Fuller details of the condition and future needs of both institutions will be given in subsequent circulars, and it is our earnest wish that, as soon as practicable, a State Society of Natural History may be formed in connection with these institutions.

A. H. WORTHEN,
Curator of The Illinois State Historical Library and Natural History Museum, Springfield.
S. A. FORBES,
Director of The Illinois State Laboratory of Natural History, Normal.
By order of the Board of Trustees.

R. P. JOHNSTON, Secy.
SPRINGFIELD, ILL., Sept. 1, 1877.

The following rules of the Board of Trustees of the Illinois State Historical Library and Natural History Museum are published for the information of the public:

The Curator shall have the general charge of the Museum, and as soon as the cases for the reception of the geological specimens are prepared, he shall proceed without delay to place therein a series of all the minerals, fossils, and lithographs belonging to the state, and shall, in such a manner that they may be readily seen by all visitors to the Museum. He shall also make and preserve a complete catalogue of all specimens placed in the Museum for exhibition, the specimens to be numbered on the catalogue and a corresponding number placed upon each label, and also upon the specimen or the card upon which they are mounted. No specimen after being catalogued and placed on exhibition shall be taken from the Museum under any pretense except to give place to a better one of the same kind to which a corresponding number shall be attached.

As soon as the specimens now on hand are placed in the cases the Museum will be open to the public and shall be kept open each week day from 9 o'clock A.M. until 4 o'clock P.M.

Donations of all specimens in Natural History may be received, and those deemed worthy of being placed on exhibition shall have the donor's name placed thereon, and a record of all such contributions shall be kept by the curator.

Iowa.

THE Davenport High School reports an enrollment of 239 pupils.---TH. Marshalltown schools are in a crowded condition.---Supt. Rogers says: "Last year the enrollment exceeded the total number of sittings by one-third, and the recent school census shows an increase of more than 100 over that of last year."---The study of Latin has been begun in the Grinnell public schools.---Supt. von Collin reports that the whole number of persons in Iowa between the ages of five and twenty-one in 1877, was 535,910. Of these 398,825 were enrolled in the public schools.---MR. H. M. Hoop, the energetic and affable principal of the Vinton schools, paid us a flying visit a few weeks ago. Mr. H. was our predecessor of nineteen years ago. He found Davenport had grown wonderfully. To Mr. Hoo, we believe, belongs the honor of organizing the first county normal institute ever held in the state. If we are in error let the pioneer organizer stand by his report to his successors. Their schools are said to be in a flourishing condition.---Prof. F. P. Brewer, the new Iowa College professor, is rendering perfect satisfaction in his new field of labor. He is spoken of as a very fine teacher of Greek.

IOWA SCHOOL REPORT FOR SEPT. 1877.

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CHICAGO NOTES.

The Board of Education has under consideration the question of teaching phonography in the public schools.---The principals of the King, Ogden, and Kinzie Schools have had their salaries increased $200 each.

Dr. John Lord proposes to deliver in Chicago a course of twelve historical lectures, on the greatest characters who have given a marked impulse to civilization, or who have effected important changes in society, being selected from his long course of seventy lectures which he has been delivering the past nine years in Boston, New York, and Philadelphia.

These lectures will be given in Hershey Music Hall, No. 83 Madison street, at 3 o'clock on Monday and Thursday afternoons, commencing October 22, 1877.

The main purpose of these lectures is educational, to assist ladies and students in their historical studies, and direct their attention to the great events and great men; two thousand persons are the average number in attendance on these lectures, which have been given in most of the large cities in both England and the United States. Forty different lectures were given in Philadelphia last winter, and to audiences of fifteen hundred people, one-third of whom were gentlemen. Tickets for the course, with reserved seat, $5.00; single admission, 50c; reserved seat, extra, 25c. To be had at the bookstores of Jansen, McClurg & Co., 117 State street, and W. G. Holmes, No. 77 Madison street.

Dr. W. W. Everts, the well-known pastor of the First Baptist Church, has been elected Chancellor of the Chicago University, vice Dr. Burroughs, who resigned the position last summer, expressing the purpose to be absent a year or two in Europe. As Chancellor, Dr. Everts fills the position of financial agent for the West. The plan adopted last summer provided for the gradual paying off of the debt, and, as a part of that plan, two financial agents were to be appointed—one at the East and the other at the West—to work among the churches and secure contributions to go toward paying the finances of the institution on a new and favorable footing.

The only sure way to get the first number of THE PRACTICAL TEACHER is to send us a postal card asking for it. We want all who are interested to do this, as the extra numbers will be sent to those who are not subscribers to the WEEKLY, unless we receive your invitation.
After this the notes are thus placed, the school may proceed to sing, using the syllables, do, do, re, re, etc., as the teacher points to each note; then repeat, giving the proper accents; and, finally, accenting and beating time, as it is sung. An entire stanza may be introduced at once, if thought best, by the teacher, instead of one line at a time, as we have suggested. For the introduction of simple three-part or triple measure, dactylic verse may be used, taking similar steps to those used in introducing double measure. The following line may serve as an example of the kind of verse required:

"Bird of the wilderness, blithesome and cumbrous."

Of course, one kind of measure should be thoroughly learned before another is attempted, and not only should the theoretical points be well understood, but many various and pleasing exercises should be introduced in order that the practical part may be as nearly perfect as possible. By making good use of this feature of accentuation, as we have suggested, in the introduction of all the various kinds of measures, teachers will find it one of the greatest aids in their work of instruction.

Practical Hints and Exercises.

CHAPTERS IN SCHOOL ECONOMY.

II. ORGANIZATION.

President Wm. F. Phelps, Whitewater, Wisconsin.

Preliminary duties of school officers. The mistakes of school officers in the preliminary arrangements for opening the school are often fatal to success. Sufficient care is not exercised in the selection of teachers. The question of special fitness and adaptation is too frequently subordinated to that of cheapness. A low salary is practically the chief consideration. Experience, ability, and skill rarely compete successfully with inexperience at a meager price. By such a short-sighted policy, failure is bargained for in advance, and the school board is responsible for it, although the poor teacher is made the scapegoat in the case. He suffers while the real authors of the mischief are perhaps allowed to go on blundering and to blunder, in accordance with the law that "history repeats itself!" In nothing connected with school administration is so much careful discrimination required as in the exercise of this function of employing teachers. There is such a thing as a special adaptation of particular persons to places. The secret of success lies in the wise application of this principle. In employing teachers, therefore, school officers should take into careful consideration the peculiar conditions and circumstances of the school, as to the grade of studies, the difficulties of discipline, the tastes and wishes of the inhabitants, and on the other hand, the special qualifications necessary to meet these conditions and circumstances. We do not hesitate to express the conviction, that were proper attention bestowed upon these matters relating to the organization of schools by those whose duty it is to provide for their wants, failure and dissatisfaction would be of rare occurrence.

3. Engaging a school. The contract. No teacher should engage a school until his chances of success in the position have been carefully weighed. No school officers should engage a teacher until the same question has been duly considered from their own standpoint. General looseness is the wrong generalism to win success in any encounter. Success in public affairs demands the same compliance with the essential conditions as does success in private affairs. When, therefore, a teacher has determined to secure a particular position, and when the other "high contracting parties" have decided that he or she will be "the right person in the right place," there should be a free exchange of views as to the plans and methods of teaching and government to be pursued by the former. A teacher who has not clearly defined views of his duties is prima facie unfit to be employed anywhere. If these views are unsound and tend to injurious results, he should not be employed. If, on the other hand, they are wise and practical, he should be sustained by the school board in the effort to carry them into execution. This should be understood from the beginning. The consistent and steady support of the school officers is essential to the success of the teacher's efforts. Without such support his best measures may be baffled, if not utterly defeated. Hence, let these plans be unfolded during the negotiations, and let the support of the school authorities be made a condition in the contract. A full understanding upon this point should be arrived at in the beginning whether it be embodied in the formal contract or not. No less care should be exercised in making school engagements than in other
business engagements. Teachers above all others should cultivate correct business habits.

9. The first day of school. To the young teacher the first day is an eventful and important one. Much depends upon the impressions he shall make when he appears for the first time before his charge. Every reception should therefore be carefully considered and deliberately executed. Nothing should be left to the impulse of the moment. In calling the school to order, let a quiet and self-possessed demeanor be practiced. If possible, the presence of one or more of the school officers should be secured, through whom an introduction to the children would be eminently proper, accompanied such by remarks as are invitations of this kind seem to sanction. Let these proceedings be followed by a few simple and fitting words by the teacher explanatory of the mutual duties and relations of instructor and pupils. This may be followed by some appropriate general exercise, as singing led by the teacher. By this means embarrassment may be dispelled and a bond of sympathy established between the parties who are to be so intimately associated in the future. If the first effort be not entirely successful, try again, and again, until sufficient confidence is gained to render further intercourse pleasant and free. If singing be not practicable, select some other exercise, in which the teacher is himself proficient. Nothing should be undertaken in which the instructor is not competent to lead and inspire confidence. A hesitating and uncertain manner will be quickly detected by the children and will be fatal to that entire confidence which a teacher should ever be able to command.

SCHOOL MOTTOES.

MOTTOES of some kind should be displayed on the walls of every schoolroom. They can be purchased at very low rates, or the teacher can prepare them himself. As a sample of such as should be seen in the halls and corridors of large public institutions of learning, we print below those observed recently at the State Normal School at Whitewater, Wisconsin; they may not be considered mottoes, but they serve the same purpose:

"Clean your feet."
"No spitting on floors!"
"Visitors are requested not to converse in class rooms or interrupt the teachers."

A true gentleman will be a gentleman everywhere!"

REGULATIONS.—All persons visiting these closets will please observe the subjoined regulations: 1. Refrain from spitting, cutting, or in any way defacing or injuring the walls or wood work of this building. 2. Leave no paper, dust jackets, or other litter of any kind on the floors or seats or in the passage ways. 3. In all things let decency, propriety and scrupulous neatness be your constant care. Remember that manners and habits make the man. To command respect show that you are worthy of it by first respecting yourself in all places. 4. For the comfort and convenience of all concerned, you will please promptly report all violations of these regulations, and all evidences of disorderly and improper conduct observable on these premises."

"NOTICE TO STUDENTS.—I. The pupils of this school will hereafter be held to their full share of responsibility for the neatness and good order of these premises in all their parts. 2. To this end, they are expected to observe scrupulous neatness that their desks and the floors surrounding the same are kept free from loose papers and litter of every kind, and that their books, slates, and other materials for work are preserved in good order. 3. All students are required to be neat, quiet and orderly in the cloak rooms, corridors, class rooms, and all passageways leading thereto. They will refrain from spitting on the floors, scattering scraps of paper, or in any way defacing or injuring the walls, furniture or fixtures of the building. 4. Students should remember that whatever tends to disorder or lack of neatness in the person or surroundings, is a positive injury to the character, and a discredit to the school itself. No person is fit to become a teacher who does not make self-discipline and personal culture the foundation of all other attainments."

HOW TO LEARN GERMAN.—NO. III.

By Zur Brücke.

I give this week a lesson on the hand, taken from my little work for learning German by speaking on objects in nature, and of things in real life.* This same lesson was, I think, given last winter at the State Teachers' Association at Champaign, in this state, substantially as it stands in my book, and was received with much favor by those present. Presuming that many others, who were not present at Champaign, would like to see the lesson in print, I give it here in short a form as possible.

In the first place, then, the learner has already a large fund of words to start with, for the words Hands, Finger, Daumen, Arm, Faust, etc., are so like their English equivalents, that they are easily recognized by their sound at the very first hearing.

The teacher raises his arm and looks at his hand, saying, "Dies ist eine Hand," this is a hand; "Dies ist ein Finger, Dies ist ein Daumen, Dies ist eine Faust, Dies ist ein Arm," (this is a finger, a thumb, a fist, an arm).

Now the teacher may venture to ask, "Ist dies eine Hand?" Reply: "Ja, das ist eine Hand." Again, raising the index finger, the teacher points at various objects near at hand, saying, "Ich kann mit dem Finger zeigen," (I can point with the finger). "Ich kann die Uhr zeigen," (I can point at the clock). "Ich kann auf den Hut zeigen," (I can point at the hat), etc., etc., (watch, Taschenuhr). Let the teacher, now holding up the other fingers, ask: "Ist dies ein Zeigefinger?" Reply: "Ja, das ist der Zeigefinger" (that is the index finger). Again: "Ist dies ein Mittelfinger?" Reply: "Ja, das ist der Mittelfinger." "Ist dies ein Ringfinger?" "Ja, das ist der Ringfinger." Lastly, "Ist dies ein Kleiner Finger?" "Ja, das ist der Kleine Finger." Résunmé.—We have learned so far not only several words, but in fact several sentences, without necessarily translating a single word, as nearly all the explanation can be given by signs and motions.

Much can be accomplished by this object teaching through the sound of the words themselves, as is seen in Hand, Finger, Faust, Arm, etc., and even in the names of the fingers, as Mittelfinger, Ringfinger, etc., for here we see that Ringfinger is the same in both English and German, and that Mittelfinger closely resembles in sound the word middle-finger.

In some subsequent lesson we shall take up the comparison of objects as to size, color, etc.

MORE BLUNDERS.

An English pedagogue has given your readers an amusing page of blunders, duly vouched for. Having enjoyed the same, and having often found the dreary monotony of correcting examination papers relieved by a positively good and original blunder, I willingly contribute a few specimens from my blunder-book, all of which I will vouch for as genuine and occurring in my own experience.

Without attempting to classify blunders, I take the following from a single page where I have written down some of the gems of my collection.

"Hall, conjugal horrors!" for "Hall, congenial horrors."
"Sauerbrat,—A kind of fish.
"Eli Whitney invented a process of making wine out of cotton-seed.
"Quiada,—A ferocious animal, found in South America.
"Eucharist,—Hedgehog." (Echinus intended.)
"Dragoon,—A kind of boat used in building bridges.
"The rhetorical figure of Schenectady."

"I... antimony."
"Ich bin der letzte meines Stammes."
"I am the last of my ancestors."
"The angle of insolvency等于 the angle of reflection."
"Revolvent viret victuri. They call the men to their food."
"The blood passes from the right-ventricle through the sublumbar valves.
"His conduct gave much embargo (humour) to his subjects."

English Literature classes often give rich harvests of queer mistakes, e.g.,
"The examples of the hopelessly stupid and wildly absurd may be multiplied indefinitely. A few may suffice.

"Champion was a Frenchman who accompanied Alexander into Egypt.
"Anthony escaped from the battle of Actium on one of Cleopatra's gunboats.
"An atoll is water surrounded by cliffs and coconuts."
"Solon was a Roman consul, lived about the fifth century, B. C., noted for his toleration of the Christian religion.

Object of Burgoynes expedition? "To acquire new territory and to become governor."

What battles ruined him? "The battles of Lexington and of New Orleans."
Who commanded against him? "General Howe."
"The reason why the polar circles are 23½ degrees from the poles is because it is so cold there."
"The Rosetta Stone was discovered by Herodotus in the xix century."
"Longfellow's principal work was the Waverly Novels."

I doubt not that other teachers can furnish equally amusing examples ad libitum.

H. L. B.
REQUISITES FOR A SUCCESSFUL TEACHER.

II. ACQUIRED QUALIFICATIONS.

Supt. H. S. Baker, Pierce County, Wisconsin.

WITHOUT natural aptitude for teaching, developed by practice, proved by success, all acquired qualifications are of little value. To endeavor, by elaborate preparation, to become a teacher, without ascertaining by actual practice in a limited sphere that there is some natural taste and tact in that line, is folly.

Supt. Agnes Hosford, of Eau Claire county, had a clear view of what a teacher should first do for himself, when she told the district officers as follows: "High school scholarship is not always an evidence that teaching will be well done, but poor scholarship is an evidence that proper teaching is impossible." The most pernicious fallacy in school policy is the belief that pupils can receive good instruction from a teacher who is barely in advance of them. A mind of no cultivation is not one that can stimulate pupils. It has no stock of power to meet emergencies.

Of scarcely less importance is an active, studious mind. If a teacher is satisfied with his own acquirement, and lacks the desire or energy to constantly study, he soon becomes, from contact with those of less mental power, decidedly dull. Then woe to the pupils under such a nightmare.

When an engineer would build a bridge he considers the properties of the iron and wood, their behavior under strain, shock, and jar; the pressure and tension they will bear per inch. He who would work successfully with the human mind must know its laws, its powers, its order of development, and how it is affected by different bodily states. The laws of mental activity may be learned in three ways, by the faithful teacher. He may study pure metaphysics, and apply the laws himself as needed. He may study applied mental science, as taught in the works of eminent teachers. He may look backward through his own mental growth and observe what were his difficulties, and how he overcame them. But of all the ways the three may be combined.

All sound teaching must be based upon a knowledge of the mind's action. Moral claims urge a teacher to know something of physiology. When we see such monstrosities as geography without map drawing, botany without flowers, spelling without writing, elaborate mathematical demonstrations without flowers, spelling without writing, elaborate mathematical demonstrations

SUGGESTIONS TO TEACHERS OF ARITHMETIC.

BEGINNERS need much practice in both reading and writing numbers. Give, therefore, a great number of examples for exercise.

Combination problems—that is, problems which combine the operations of several rules in their solution—will do much to evolve thought on the part of the pupil. Since the pupil cannot solve these problems by any one rule, it is necessary that he "think out" his own method of solution. It also shows him the practical application of arithmetic.

Thorough and frequent drill should be given in addition, particularly in the addition of ledger columns. Give a thorough drill in all the fundamental rules; all others are based on these.

Some teachers think that in arithmetic, whether on the slate or on the blackboard, is neat and in proper order. See also that pupils give all their solutions, analyses, and explanations in grammatical language.

Give the class frequently problems selected from actual business operations and from other books. Encourage them to think for themselves and give original solutions. Have your pupils originate problems to illustrate the principles and rules, and thus make an application of the science as they learn it.

Be sure that the pupils understand each part of their work before they pass to the next. Be thorough!

*From Raup's Complete Arithmetic.

Publishers' Notes.

PRICE OF THE WEEKLY to all subscribers till Jan. 1, 1878, 30 cents.

—We are glad to announce that Miss Isabel Lawrence, superintendent of critical teacher in the Whitewater Normal School, has been engaged to prepare a series of practical sketches on subjects connected with primary school work, for the WEEKLY and THE PRACTICAL TEACHER, the first of which will probably appear next week. The first series will be on Reading. Two sketches will appear in each number of THE PRACTICAL TEACHER. The experience and ability of Miss Lawrence are a guarantee that her contributions will be of great value to teachers.

—Thanks to Mr. Henry A. Ford, of Michie, for a list of sixty-five teachers in one county who want to receive THE PRACTICAL TEACHER.

—Ten subscribers for THE PRACTICAL TEACHER, with $10, will procure THE EDUCATIONAL WEEKLY one year.

We have copies only of the Arithmetic and Spelling and Penmanship, of the Regents' Questions, now left. We will send them postpaid for twenty-five cents each.

—We still need more copies of No. 31 of THE WEEKLY. Any who have extra copies of 21, 31, 32, or 40, will confer a favor on us by returning them.

—We will extend their subscriptions one week for any of the copies for their graduating classes. We wish to make a generous distribution of the first number.

—Teachers of experience are particularly requested to send us short articles on practical subjects, especially methods of teaching the different branches found in the common school. We want jottings,—brief notes, single thoughts, actual results of school work, and actual processes. Teachers can help each other better than other can to them.

—John Wiley & Sons have our thanks for their catalogues and lists of publications. Their catalogue of scientific works consists of two parts, the first of 90 pages, and the second of 32 pages. They are large importers of foreign books and periodicals and give prompt attention to the smallest orders. Public libraries, schools, and colleges can import them. Send two copies of any book free of duty.

—The Musical Department of the WEEKLY has received much praise from our readers, and, judging, for we think it one of the best features of the paper. Prof. Smith's articles on the teaching of music in primary schools, now being published, are of great value to all teachers.

—Our subscription list increased so much more during the week ending Oct. 18 than we had provided for or anticipated, that at the last moment we found ourselves unable to mail the WEEKLY to the following subscribers, besides a few exchanges. We regret this very much, and can only extend their subscriptions for the present.

—Extra copies of the first number of THE PRACTICAL TEACHER will be sent to principals and superintendents who will place them in the hands of the teachers. Principals of normal schools are invited to send to us for any number of copies for their graduating classes.

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