

EDUCATION

A Monthly Magazine,

DEVOTED TO

THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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EDUCATION

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Vol. XV.

SEPTEMBER, 1894.

No. 1

THE INADEQUACY OF THE TRANSMISSION OF LEARNING.

HENRY LINCOLN CLAPP, MASTER GEORGE PUTNAM SCHOOL, BOSTON.

Whatever monotony, stagnation and misapplication of energy have obtained in our educational systems, beginning with the primary schools and ending with the universities, may be charged to the almost universal belief in the transmission of learning as the supreme art of education.

Colleges and universities especially, by sending out as heads of elementary and secondary schools young men imbued with the supreme importance of the transmission of learning, began the work of forming public opinion on educational affairs, and finished it for a time when, as members of school committees and representatives of the three learned professions, they prescribe the subjects and methods of study in the schools along the lines they had followed. The narrowness of the "three R's" was a legitimate result of the narrowness of the three learned professions. Instruction, book-learning, traditions and the authority of history in every branch of learning have made such a deep impression upon teachers, and lend themselves so readily to uniform, easy and seductively systematic methods that their transmission may well seem a supreme art. For centuries, instruction has been considered almost synonymous with education. Cramming has been rooted in it. "Take fast hold of instruction" has been handed down from times long ante-dating the year 1, A. D., and a term originally used in the sense of advice in regard to moral and religious conduct is supposed to be equally Generally, teachers see so little potent in secular education.

beyond instruction that they are quite willing to commend to their pupils the context of the proverb: "Let her not go; keep her; for she is thy life." And the school life of the average public-school pupil accords with the statement.

Happily, however, there are not a few educators who think that their supreme art is to develop native germs of talent and genius, while, at the same time, such an amount of learning as pupils can really assimilate and make use of is transmitted.

Tate, in his "Philosophy of Education," pertinently asks, "Why have we so few thinkers among us, and so many great scholars, whose heads are so filled with the ideas of others that they have no room for any thoughts of their own?"

Universities, like books, are repositories of learning, and the educational capital of society may be lodged in them; but something else is necessary to educational progress. The highest art is to lead out freely the good qualities born in the child, and repress or train out objectionable traits only, and not merely to draw out what has been transmitted or poured into him, however valuable that may be.

Up to a period comparatively recent, our universities and colleges have placed the transmission of learning first in the education of youth. That has separated them from the body of the people; and only those who have taken a broader view—"to help the pupil to become a man who takes his place in the world as an active participator in its affairs," as Professor Hanus says—have united with the people. There may be a question even now as to whether there are not a few professors who are more interested in the success of their specialties and in gaining distinction in them than in the proper development of their students' native powers;—that is, as to whether the specialty does not occupy a larger place in their attention than the precisely suitable study for the individual student.

When I took the regular course in Harvard College, there seemed to be not the slightest consideration of what was most suitable for me. A curriculum of learning had been transmitted, and I was run through it, hoping to come out liberally educated at last. Such was not the case. The curriculum hardly touched my best powers, which lay in quite a different direction, and at the end of nearly a decade came out in spite of the curriculum. Such cases of arrested development are still common.

Too frequently, also, what has been transmitted becomes like the old man of the sea in the story of Sinbad, —it is carried but Doubtless Sinbad's leg muscles were disciplined and stengthened, but a more congenial occupation would have developed them just as well, to say the least, and, at the same time. improved his mental condition immeasurably. It takes most college graduates about ten years, on the average, to shake off their traditional training enough to enable them to assert their own individualities and begin their proper work in the world. They are so weighted with other people's thoughts that their own have but little place to work. In a "Protest" against examinations signed by many eminent men, and among them Prof. Max Müller, Mr. E. A. Freeman and Mr. Frederick Harrison, occurs this significant statement: "Again and again brilliant young men, once full of early promise, go down from the universities as the great prize-winners, and do little or nothing afterwards." Such deplorable results are ascribed to examinations. A young man whose individuality, originality and native powers generally have had proper opportunities for development, is not going to be extinguished by examinations, which are trifling obstacles to a liberal education if other conditions are favorable. the lack of a university education itself is not an insuperable obstacle to a liberal education in the case of young men, otherwise favorably conditioned. Professor Wesley Mills says, "We develop in spite of bad methods. The boy develops out of school, if not in it. The great mass are educated by their work and other associations that make up their every-day life. Some of the best educated people have never been inside of a school."

President Gilman says, "It is obvious that a liberal education is not to be limited by the period devoted to a college course or a course in technology. I may go further and say that liberal culture may be acquired without seminaries; scholars may appear in the walks of business, in the solitude of rural life, on the boards of a theatre, in politics, in philanthrophy, in exploration; and they cannot be produced by a narrow, cramping, servile training."

The unadulterated transmission of learning is now found in books, as easily obtainable outside of universities as inside in all large cities. And, provided one has opportunities to use the proper kind of books, and at the same time receive experience in varied provinces and conditions of life, his educational advantages may not be secondary to those furnished by the university.

A better reason for the disappearance of apparently brilliant young men may be found in the transmission of learning, in mere instruction, memory exercises, engorgements of dead languages, ancient history and encyclopædic learning generally, all of which universities transmit perhaps a little too faithfully.

Nearly 1800 years ago Epictetus said, "It is one thing to hoard up provision in a storehouse, and another to eat it."

It is not strange that their graduates find themselves, for a considerable time, out of place in a moving world; and they are bound to disappear from public view till they learn to adjust themselves to living conditions, to make personal investigations, to think their own thoughts and to live their own lives.

It should be the supreme art of the university to further such conditions of learning, to train young men to make the best application of traditional learning as they go along, and to give them the widest opportunities for the development of their individual and original powers.

Such is the distinguishing work of the German universities. "The workshop and the training school of scientific investigation" are the most potent factors in them. "According to the German conception, the university professor is both teacher and investigator; and he is the latter in the higher degree, so that we may say in Germany, the scientific investigators are at the same time the teachers of academic youth." "An account of the advance of science turns out to be mainly an account of university work."

Professor Paulsen of Berlin, says of the universities of Germany, "Their real value is not in perfect learning of their teachers, nor in the ever-growing learning of their students; if we should name this as their distinction, a mirror would often need to be held before us to our shame. It is rather this; in them is given a scheme wherein every important educational talent finds its development, and every lively susceptibility of the student its satisfaction, through which every advance of science finds easy and rapid entrance."

This spirit of investigation and the opportunity for individual development, so characteristic of the German universities, is almost wholly wanting in English universities and French uni-

versities, and, to a less degree perhaps, in our own: Clark, Johns Hopkins, Leland Stanford and Harvard are foremost in the work of investigation, breadth of curriculums and choice of studies, in this country. Professor Perry, in the Educational Review, pertinently exclaims, "How many noted English investigators are inconceivable as professors at Oxford or Cambridge?" Professor Guthrie, in the Journal of the Society of Arts, in speaking of the universities of England says, "It does not admit of a shadow of a doubt but that on the whole these opportunities (for science teaching) have been greatly wasted, these means wrongfully applied, and these duties wantonly neglected. In the matter of chemistry, the record of what we owe to the universities is shamefully short.

"While the intellectual world was ringing with the discoveries of Priestly, Black, and Lavoisier, the universities were concerned with the insignificant squabbles of philologists. While Faraday and Dumas, Liebig and Darwin were at work, what was, say, Oxford doing? Future generations will scarcely credit it. The leading lights in the university had nothing better to do, apparently, than to issue and discuss tracts on the difference between tweedle-dum and tweedle-dee." Possibly he may refer to such matters as have come out in the discussions and pamphlets of our own university professors,—the correct (?) pronunciation of Latin, "Is Greek dead," the second Aorist, the Doric dialect—all of which may be interesting to a literary antiquary and serve to keep students busy; but it is proper enough to consider whether the transmission of such obsolete learning forms any part of the supreme art of the university.

Even as late as February, 1894, Dr. N. M. Butler had occasion to write, "The Oxford and Cambridge dons are beginning to recognize that they ought to take an interest in education. It is not easy for them to overcome the habits built upon centuries of exclusiveness and narrow educational ideals." After all, Englishmen have been the severest and most numerous critics of the English universities.

Herbert Spencer speaks to the point when he says, "The vital knowledge—that by which we have grown as a nation to what we are, and which now underlies our whole existence—is a knowledge that has got itself taught in nooks and corners, while

the ordained agencies for teaching have been mumbling little else than dead formulas."

As a rule, in the world's work the men outside of the universities have been ahead.

Reformers, discoverers and progressionists have never been content with transmitting to others the learning that was transmitted to themselves. They have had a good deal to say that was not transmitted by vocal or written expression to any measurable extent. That is where the element of leadership comes in, in accordance with the law of inheritance and variation. If the university would be a leader in education, rather than a mere conserver and transmitter of learning; if it would have efficient, directive power in developing youth into noble men and women, it must have an innate, inspiring force in its faculty, not derived from transmitted learning, although aided by it.

If "he who should be content with mere learning would be no true German student," so that institution which should be content with mere transmission of learning would be no true university.

In effect, the transmission of learning is much like the transmission of property. A young man who never earned a dollar does not know how to use properly the thousands or millions of dollars that may have fallen into his lap at the age of twenty-one. He has receptivity and passivity, but discriminating benevolence and activity in actually earning money are wanting, and must be learned late, if at all. So the young man who is given every opportunity to appropriate all stores of learning has neither time nor disposition to make any stores by his own thought and work. The power of original research has not been developed. He is all the time getting ready to develop his powers of investigation, but too seldom really gets ready, because he is content with investigating what others have done. That so many young men now should spend from ten to fifteen of the most impressionable years of their lives on the mere symbols of knowledge, or in gaining second-hand knowledge, is reason enough that graduates of high-grade technical schools sooner attain to positions of eminence and influence. At all events, no one would ever think of applying to them the term "educated fools."

A bright young man, nearly prepared to enter Yale College, was walking with me in the woods. Seeing some plants of the

very common "checkerberry" (Gaultheria procumbeus), some in blossom, others in fruit, he said, concerning the latter, "These have n't turned into blossoms yet." He came out strong on Greek roots, but apparently had not observed that exceedingly common process of nature manifested in the fruit following the blossom. Being a city boy, and having been closely limited to the study of Greek, Latin and mathematics for six years, his ideas of country matters, customs, occupations, animal and plant life were infantile, and were likely to continue to be until he became twenty-one years of age, because he intended to continue his classical course in college. He already had marked qualifications for an "educated fool," wholly owing to his artificial, narrow, ascetic life. He and his ambitious parents, like so many others, over valued the transmitted learning that has formed the staple working material of colleges and universities for centuries, and undervalued that experimental knowledge that gives common sense and the power to adapt one's self to the varying conditions of a progressive world. The things that would serve him at every turn were neglected, while the things that were likely to serve no purpose of life except that of a professor, were assiduously followed.

The simple transmission of learning is important, but not all-important; possibly half-important will express my meaning. The other important thing is experience with life and the things that form one's environment. Proper schooling and education should carry on the two important factors pari passu. A collegiate course too narrow, too long pursued and dealing mainly with obsolete matters, incapacitates one for living a modern, individual and useful life. Usefulness, adaptability, keen observation, sound judgement, the faculty of original research and allied faculties are cultivated best in practical life, before the age of twenty-one, before the impressionable years pass to return no more.

Adherence to fore-ordained curriculums and the transmission of learning on the part of universities and colleges, and secondary and elementary schools as well, previous to 1870, and to no slight extent now, have been the causes of much waste of energy and many lamentable misplacements. Universities and colleges especially have been instrumental in converting first-class farmers into third-rate clergymen, first-class mechanics into low-grade

lawyers, and first-class business men into country pillicoddies.

Many of the most eminent university professors have admitted the inadequacy of the systems of education prevailing now; and the university itself is involved. President Eliot has indicated wherein our systems of education have failed, and the general recognition of such failure and the attempt to remedy it has resulted in the rise of technical, industrial and manual training schools, nature study, experimental science as a requisite for admission to college, the elective system, the complete change in the methods of teaching and the incorporation of the kindergarten spirit all along the line. It should be noticed that this exceedingly important movement has been more largely in the direction of experimental science, the work of the German universities, and away from the old subjects and methods that prevailed before 1870.

Moreover, the subjects and methods themselves have undergone a remarkable change. The laboratory method of study formerly applied to only a few subjects, especially those involving tangible, ponderable materials; now we hear of the laboratory method of studying Latin, history, psychology, pedagogy, etc.; and although the term laboratory at present wears a strained look, the destiny of terms is of no great importance inasmuch as there is a tacit but satisfactory confession of the inadequacy of mere learning in all this work.

The universities, excepting the German, have had so much to do in transmitting learning that they have given but little attention to the principles of education. In this country the study and application of those principles have been left to normal schools. If the term normal has a definite meaning and is now applied properly to a certain class of schools, it is fair to infer that our colleges and universities and their immediate feeders have been to a considerable extent ab-normal in their work. Within a very short time a chair of pedagogy has been established at Harvard.

No doubt this has resulted from a recognized need of the study and application of educational principles, not only in elementary schools, but in secondary schools and all our higher institutions of learning as well. The establishment of such a chair in a university shows, as clearly as can be, that the leaven is needed in the university, since the normal schools have fur-

nished the leaven of educational principles for the elementary schools.

The "new education" implies a forgetfulness of the old principles, and "new departures" mean departures from errors to truths.

"We teach and teach until, like drumming pedagogues, we lose the thought that what we teach has higher aims than being taught and learned."

At this late day, we ought not to have had any occasion to use such terms as "new education" and "new departures," and should not, had our colleges and universities heeded the advice and work of the educational reformers.

Three hundred years ago, Montaigne wrote, "Though we should become learned by other men's reading, I am sure a man can never be wise but by his own wisdom." "Nihil est in intellectu quod non prius in sensu" was the foremost educational principle of Comenius. Said Rousseau, "My object is not to furnish his (the pupil's) mind with knowledge, but to teach him the method of acquiring it when he has occasion for it." In Rousseau's opinion, self-teaching was the supreme art. Pestalozzi said, "An interest in study is the first thing which a teacher should endeavor to excite and keep alive." Mr. John F. Reigart has wisely said, recently, "The truly reformatory service of Fræbel consisted in that he allowed children themselves to invent and discover."

Now, all these ancient but fundamental principles are talked and written about as if they were new, or had recently been discovered by the speaker or writer. The inadequacy of the transmission of learning long ago induced the educational reformers to talk over, write about and apply incessantly the principles of true education so very feebly manifested in the transmission of learning down to the present generation.

The future is full of hope and happiness for the coming generations of children and youth.

THE TEACHING OF ENGLISH WORDS BY SOUND.

SUPT. EDWARD P. MOSES, RALEIGH, N. C.

When I was a boy I was much impressed by the old, old story of the Frenchman's difficulty in learning to read our language. He was told that r-o-u-g-h was pronounced ruf. "Then," said he. "c-o-u-g-h is cuf, and p-l-o-u-g-h is pluf, and d-o-u-g-h is duf, and t-h-r-o-u-g-h is thruf." He was told in reply, however, that c-o-u-g-h was not cuf but cof; that p-l-o-u-g-h was neither pluf nor plof, but plow; that d-o-u-g-h was neither duf nor dof nor dow, but doe; and that t-h-r-o-u-g-h was neither thruf nor throf nor throu nor throe, but throo. I thought that these words were fair specimens of English, and jumped to the conclusion that our language was a mighty maze absolutely without a plan - a product of Babel. I did not stop to think (if indeed I knew at the time) that Babel antedated the beginnings of English speech by many centuries. Frequent references by older people to words containing ough, confirmed me year by year in the opinion that the English language was the most arbitrarily unreasonable sort of speech of which man could conceive.

When I became a teacher, I looked with complacency upon the custom of teaching English words after the South Carolina method of cooking rice,—with each grain standing out by itself. I early learned that, in the schools of Continental Europe, children were taught the sounds that each letter or diphthong represented, and were then required to find out the words for themselves, but I inveighed against any attempt to teach English in this manner on account of our absolutely arbitrary spelling, as I thought.

I shall endeavor to show that any such opinion is erroneous, and has been arrived at through hasty generalization from few particulars, and that about ninety per cent of our words can be taught by sound, and that thus a great burden can be lifted from the minds of English speaking children, and much valuable time can be saved. I have gathered into groups every word which is found in a standard series of American school Readers, from the first to the fifth inclusive.

The list comprises 6002 words.

THE DIPHTHONGS.

The English dighthongs should be taught as the diphthongs of other languages. The two vowels of a diphthong represent one sound: e. g., oa in boat. It is, we think, inadvisable to draw a macron over each o and a dagger through each a in order to teach children such words as bout, coat, float, goat, etc.

THE DIPHTHONG AY.

This is found in our list in 44 words. In every instance it represents the long a sound, with the single exception of the word says.

THE DIPHTHONG AW.

This is found in 25 words. In every instance it represents the aw sound heard in saw, with the single exception of the word St. Lawrence.

THE DIPHTHONG AL.

This is found in 132 words. In 124, it represents the long α sound. The eight other words are: said, again, against, aisle, captain, curtain, certain, chieftain.

THE DIPHTHONG AU.

This is found in 45 words. In 37, it represents the aw sound. The remaining eight are: laugh, laughed, launched, Chevaux-de Frise, Esquimau, draughts, aunt, craunching.

THE DIPHTHONG AE.

This is found in but one word,—aerie.

THE DIPHTHONG EE.

This is found in 134 words. In 129, it represents the long e sound. The five remaining words are: been, coffee, cheerful, Beethoven, melec,—the last two being words taken directly from foreign languages.

THE DIPHTHONG EW.

This is found in 29 words. In 15, it represents the long u sound. In 13 words it represents a kindred sound (that of o in move), because of the difficulty of uttering the long u sound after l, τ , or j. In one word, sew, it represents the long o sound.

THE DIPHTHONG EY

This is found in 24 words. Where it falls in an accented syllable it represents the long a sound. Where it falls in an unaccented syllable it represents the short i sound, on account of the general tendency to slight unaccented syllables.

THE DIPHTHONGS EI, EO, EU.

These three diphthongs are found altogether in but 41 words. They represent so many different sounds that they would give considerable trouble but for the fact that they are met with in school very rarely,—only about eight times a year—allowing five years for the five reading books.

THE DIPHTHONG EA.

This is found in 213 words. It represents the long e sound in 131 words,—nearly two-thirds of the whole number. It represents the short e sound in 56 words; in nearly one-half of these before d, as head, steady, ready. In 11 words it represents the er sound, in each case before r. In six words it represents the Italian a sound, in each case before r. In nine words it represents the long a sound, in five cases before r.

THE DIPHTHONG IE.

This is found 113 times. As a rule, where it falls in the accented syllable it represents the long *i* sound. Where it falls in the unaccented syllable it represents the short *i* sound, on account of the tendency, already alluded to, to slight the unaccented syllable. In 27 words it represents the long *e* sound; in two words, friend and chieftain,—it represents the short *e* sound.

THE DIPHTHONG OA.

This is found in 56 words. In 53, it represents the long o sound. The three remaining words are broad, broadside and broadsword.

THE DIPHTHONG OI.

This is found in 41 words. In 39, it represents the sound heard in oil. The two remaining words are reservoirs and tortoise.

THE DIPHTHONG OY.

This is found in 15 words. In every word it represents the sound heard in boy.

THE DIPHTHONG OE.

This is found in 21 words. In 17, it represents the long o sound. The four remaining words are shoes, does, Phoebus, Phoenician.

THE DIPHTHONG OW.

This is found 99 times. In 56, it represents the long o sound; in 42, it represents the sound heard in cow; in one,—know-ledge—it represents the short o sound.

THE DIPHTHONG OO.

This is found 119 times. In 82 words it represents the sound heard in coo; in 31, it represents the sound heard in wood (in 28 words of this class the oo being followed by d or k); in four words,—blood, bloodvessels, flood, flood-tide—it represents the short u sound; in two words,—floor and door—it represents the long o sound.

THE DIPHTHONG OU.

This is found 228 times. Because it represents as many as eight different sounds, even though many of these are rarely met with, not a few teachers have felt justified in spending four years of the precious time of childhood, and four years of salaries, in giving children a working knowledge of a few thousand English words which can easily be taught in two years.

The most common words containing on have the sound heard in out. Seventy-four words of this class are found. In 101 words on represents the short u sound. Most of the words of this class are long adjectives like ponderous, populous, etc. About 80 per cent of all the words containing on belong to these two classes. In 21 words on represents the long o sound. In about two-thirds of these the on is followed by r. In 12 words on represents the sound of on in coo. In nine words on represents the sound of aw in law—invariably before ght. In six words,—could, would, should, cousin, bivouac, silhouette—on represents the sound of on in wood. In four words,—courtesy, journey, journal, scourged—on represents the sound of e in her. In one word,—cough—on represents the short o sound.

THE TRIPHTHONGS.

Triphthongs occur so rarely that they do not merit an extensive notice. They are found altogether but 12 times, and in the following words: beautiful, beauteous, plateau, eye, eyes, eyelid, adieu, lieutenant, Richelieu, interview, viewless, Coeur.

THE SOUNDS REPRESENTED BY THE VOWELS A, E, I, O, U, Y.

I. THE SOUNDS REPRESENTED BY A

These sounds, with few exceptions which will presently be noticed, may be placed in four groups:

1. The sound heard in cap.

- 2. The sound heard in gate.
- 3. The sound heard in farm.
- 4. The sound heard in ball.

1. THE SOUND HEARD IN CAP.

This so-called short sound of a is found 1428 times.

2. THE SOUND HEARD IN GATE.

This so-called long sound of a is found 496 times. In 291 of these words the syllable containing long a is followed by silent c, which has generally the effect of lengthening a preceding vowel. If to such words we add the words containing ing and tion — 99 in number — we find 390 words, out of a total of 476, or 82 per cent, with a sign that makes the determination of this sound of a an easy matter. In the great majority of the remaining words, long a is found at the end of an accented syllable, as in lady and vacant.

3. THE SOUND HEARD IN FARM.

This Italian sound of a is found 207 times. In 165 words, or 80 per cent, it is found before the letter r, as in army, bark, party. The remaining 42 words are troublesome. Some of them are foreign words, and many others are not infrequently mispronounced by intelligent adults.

In 60 words (as beggar, dollar, standard), the regular sound of ar is shortened into er. In all such cases, the ar comes at or near the end of the word, and is thus clipped, so to speak, on account of the unwillingness of the speaker to keep the mouth open long enough to produce the Italian a sound before proceeding to the next word.

4. THE SOUND HEARD IN BALL.

The broad sound of a is found in 60 words. In 42 the a is followed by l; in all the others, except wrath, it is preceded by w.

RARE SOUNDS OF A.

The letter a represents the short sound of o in 24 words, as in wash, wand, what. In every case the a is preceded by a w sound. In three words,—any, many, orange—a represents the short sound of e.

SILENT A.

This is found four times: in miniature, carriage, Pharach, victual.

THE CHARACTER A.

RECAPITULATION.

| The short sound | lof | и (са | p), | | | | 1428 | times. |
|------------------|--------|-------|-------|---|---|---|------|--------|
| The long sound | of a | (gat | e), | | | | 496 | " |
| The Italian sour | ad of | a (f | arm), | | | | 207 | • • • |
| The broad sound | d of | a (ba | ıll), | | | | 60 | 44 |
| ar as er , . | | | | | | | 60 | 66 |
| a as in wash, | | | | | | | 24 | " |
| a as in many, | | | | | | | 3 | " |
| | | | | | | | | " |
| A11 . | | | | | | | 2278 | |
| Silent a , . | | | | • | • | • | 4 | " |

Sixty-two per cent of all are short; 84 per cent of all are short or long. With silent e as a sign for long a, the letter r for the Italian sound of a, the letter l for the broad sound of a, and the letter w for the short o sound, there will be found comparatively little difficulty in teaching children to determine, in almost any case, the proper sound of a.

II. THE SOUNDS REPRESENTED BY E.

These sounds, with a few exceptions, may be placed in three groups:

- 1. The sound heard in bell.
- 2. The sound heard in me.
- 3. The sound heard in her.
- 1. The so-called short sound of e is found 1850 times.
- 2. The so-called long sound of e is found 128 times.
- 3. The sound of e in her is found 559 times, in every case before the letter r.

SPORADIC SOUNDS OF E.

The letter e represents the sound of long a in eight words,—there, where, nowhere, whereas, Senor, melee, maranedis, finale. One-half of these are words taken directly from foreign languages.

The letter e represents the short i sound in eight words,—pretty, English, hideous, gorgeous, bounteous, plenteous, dispiteous, beauteous.

In the word acre, it seems that the letter r represents the sound of er.

SILENT E.

The letter e is found silent 1632 times.

THE CHARACTER E.

RECAPITULATION.

| The short sound of e, | | | | 1850 | times. |
|-------------------------|--|--|--|------|--------|
| The long sound of e , | | | | 128 | " |
| e as in her, | | | | 559 | 44 |
| e miscellaneous, | | | | 16 | " |
| , | | | | | |
| | | | | 2553 | 44 |
| Silent e , | | | | 1632 | " |

The sound of e in her can be determined at a glance, as it is never found except before r. Ninety-two per cent of all the other sounds represented by e are short. The character e represents the short or long sound, or the sound of e before r, in more than 99 per cent of all the words in which it is employed.

III. THE SOUNDS REPRESENTED BY I.

These sounds, with a few exceptions, may be placed in five groups:

- 1. The sound heard in fish.
- 2. The sound heard in kite.
- 3. The sound heard in sir.
- 4. The sound of i like the consonant y.
- 5. The sound of i in combination with consonants.
- 1. The so-called sound of short i is found 1934 times.
- 2. The so-called sound of long i is found 354 times.
- 3. The sound of i in sir is found in 41 words, in every instance before r.
- 4. The letter i represents the sound of the consonant y in 24 words, as in million, onion, Spaniard.
- 5. The letter i is found 212 times in combination with consonants, modifying their sounds. The consonants are t, s, c, x, d. These combinations represent the sound of sh, as in fiction, mission, precious, anxious; of shi, as in expatiated, associates; of zh, as in division; of j, as in soldier.

SPORADIC SOUNDS OF I.

The letter i represents the sound of long e in nine words,—machine, ravines, obliquely, fatigued, unique, Richelieu, Bastile, mosquitoes, Chevaux-de-Frise.

SILENT I.

The letter *i* is silent in 18 words,—fashion, cushion, stanchion, region, religion, legion, suits, pursuit, fruit, juice, muir, bruised, unsuitable, basin, cousin, evil, business, prodigious.

CHARACTER I.

RECAPITULATION.

| The shor | + 000 | 4 | | | | | | | |
|------------------|-------|------|-------|---|---|---|---|------|--------|
| | | | | • | • | • | • | 1934 | times. |
| The long | | nd (| of i, | | • | | | 354 | " |
| i as in \sin | | | | | | | | 41 | u |
| i as the c | onse | nan | at y, | | | | | 24 | " |
| ti as sh, | | | | _ | | • | • | 140 | " |
| ti as shi. | | | | • | • | • | • | | " |
| si as sh. | | • | • | • | • | • | • | 2 | |
| • | | • | • | • | • | • | • | 29 | " |
| si as zh, | | • | • | • | | | | 12 | " |
| ci as sh, | | | | | | | | 20 | " |
| ci as shi, | | | | | _ | | - | 5 | ** |
| xi as ksh | | | _ | | | • | • | 3 | " |
| di as j, | | | • | • | • | • | • | 3 | |
| icalone | | • | • | • | • | • | • | 1 | " |
| i as long i | , | • | • | • | • | | | 9 | " |
| | | | | | | | | | |
| 021 (. | | | | | | | | 2574 | 46 |
| Silent i, . | | • | • | | • | | | 18 | 46 |
| | - | _ | | | | | | | |

It will be seen that in 74 per cent of the whole number, i represents the regular short sound, and in 86 per cent i is either short or long.

IV. THE SOUNDS REPRESENTED BY O.

These sounds, with a few exceptions, may be placed in six groups:

- 1. The sound heard in rock.
- 2. The sound heard in hope.
- 3. The sound heard in son.
- The sound heard in move.
- 5. The sound heard in cord.
- 6. The sound heard in sailor.
- 1. The so-called short sound of o is found 716 times.
- 2. The so-called long sound of o is found 440 times.
- 3. The sound of o in son is found 267 times. In 206 of these the o is followed by n, and in 31 by m.
 - 4. The sound of o in move is found 18 times.
- 5. The sound of o in cord is found in 20 words, in every case followed by r.
- 6. The sound of o in sailor is found 80 times, in every case followed by r. In 68 words the or falls in an accented syllable, as in benefactor, creator, traitor, and in the remaining 12 words the or follows w, as in work, worm, worthy.

SPORADIC SOUNDS OF O.

The letter o represents the sound of oo in good in five words,—

wolf, woman, bosom, unbosom, worsted. In the word colonel the first o seems to represent the sound of e before r.

SILENT O.

The letter o is silent in 21 words,—buttons, pardon, iron, ironsides, poisonous, imprisoned, colonel, season, beacon, weapon, crimson, falcon, reckoning, reckonings, andirons, lesson, lessons, reason, beckoning, cotton, prison. In every case it is followed by n.

CHARACTER O.

RECAPITULATION.

| The short sou | ınd o | fo, | | | | 716 | times. |
|----------------|-------|--------|---|--|---|------|--------|
| The long sour | nd of | o, | | | | 440 | " |
| o as in son, | | | | | | 267 | " |
| | | | | | | 80 | " |
| o as in cord, | | | | | | 20 | " |
| o as in move, | | | | | | 18 | ٤. |
| o as in wolf, | | | | | | 5 | " |
| o unclassified | (cold | onel), | | | | 1 | u |
| | | | | | | 7545 | " |
| Q:1 4 | | | | | | 1547 | |
| Silent o , . | • | • | • | | • | 21 | " |

The short and long sounds of o, and the sound of o in son (generally before n), embrace more than 90 per cent of all the sounds represented by o. If to these we add the sound of or as er, we will find 95 per cent of all the sounds represented by o.

V. THE SOUNDS REPRESENTED BY U.

These sounds, with a few exceptions, may be placed in five groups:

- 1. The sound heard in run.
- 2. The sound heard in use.
- 3. The sound heard in turn.
- 4. The sound heard in truth.
- 5. The sound heard in full.
- 1. The so-called short sound of u is found 472 times.
- 2. The so-called long sound of u is found 259 times.
- 3. The sound of u in turn is found 73 times, in every case before r.
- 4. The sound of u in truth is found 76 times. In 65 of these words, the u is preceded by l or r, and the modified sound is given because of the difficulty of uttering long u in combination with an l or r sound.

5. The sound of u in full is found 49 times, generally in an unaccented syllable.

SPORADIC SOUNDS OF U.

The letter u is used as a consonant in eight words,—anguish, languish, persuaded, assuaging, sanguine, cuirass, language, distinguished.

The digraph qu represents the sound of kue, except in pasqueflower.

The letter u represents the sound of short i in four words,—busy, business, lettuce, minutes.

The letter *u* represents the sound of short *e* in two words,—buried and burial.

SILENT U.

This is found in 23 words,—guide, guidance, guilty, guess, guest, guard, unguarded, safeguards, guineas, beguiling, disguised, vague, fatigued, dialogue, catalogued, Portuguese, build, built, ship-building, circuit, victual, buoys, buy. In 16 of these words, u is preceded by g.

THE CHARACTER U.

RECAPITULATION.

| The short sour | nd o | fu, | | | 472 1 | imes. |
|------------------|------|-----|-----|-----|-------|-------|
| The long soun | u, | | | 259 | ** | |
| u as in turn, | | | | | 73 | 46 |
| u as in truth, | | | | | 76 | (# |
| u as in full, | | | | | 49 | u |
| u as short i , | | | - | | 4 | 44 |
| u as short e , | | • | | | 2 | " |
| | | | | | | " |
| | | | | | 935 | |
| Silent u , . | | • | . • | | 23 | " |

But little difficulty will be found with any of these words, except those in the last three classes, which comprise only about eight per cent of the whole number.

VI. THE SOUNDS REPRESENTED BY Y.

These sounds, with the exception of two words, can be placed in three groups:

- 1. The sound heard in fly.
- 2. The sound heard in silly.
- 3. The sound heard in yet.
- 1. The sound of y as long i is found 37 times. It occurs

either at the end of words of one syllable or at the end of an accented syllable.

- 2. The sound of y as short i is found in 462 words. it is almost always found at the end of the word, and always in an unaccented syllable. More than one-half the words end in ly or ty.
- 3. The sound of y as a consonant is found 20 times. It always occurs at the beginning of a word or syllable.

SPORADIC SOUNDS OF Y.

In two words, zephyr and martyrs, y before r represents the sound of i before r.

THE CHARACTER Y.

RECAPITULATION.

| The short so | und of y , | | | 462 t | imes. |
|----------------|------------------------|--|--|-------|-------|
| The long sou | \mathbf{nd} of y , | | | 37 | " |
| y as a consor | ant, . | | | 20 | " |
| y before r , | | | | 2 | " |
| | | | | 531 | |

It will be observed that 88 per cent of all are short.

SUMMARY OF THE SOUNDS OF A, E, I, O, U, Y.

| | | | | | | | |
|--|------------------------|----|-------|-------|-----|------|---------|
| Whole number of sounds represent | $\mathbf{e}\mathbf{d}$ | bу | these | lette | rs, | | 10,418 |
| Short a, e, i, o, u, y , | | | • | | | 6862 | • |
| Long a , e , i , o , u , y , | | | | | | | |
| a, e, i, o, u, y, modified | bу | r, | | • | | 1060 | |
| | | | | | | 9636 | |
| All other sounds | | | | _ | | 782- | _10.418 |

In other words, in 92 per cent of all syllables, the vowels are either long or short, or have their sound modified by r. In only eight per cent are any other than these sounds heard; and, as I have already endeavored to show, even in a majority of this small fraction of our words, a letter next to the vowel is found which points out as a diacritical mark the modified sound of the vowel, e. g., w for the sound of a as in wash, b for the sound of a as in call, a for the sound of a as in wonder.

It is true that there has been "a departure from the original unitary sounds of our vowels." But there has been a similar change in every known language. While the changes have been more numerous in our language than in many others, we can now easily put the children in the way of finding out for themselves about nine-tenths of the words they meet with. Is it not

the part of wisdom, then, speedily to make an end to "the word method," "the alphabetic method," "the sentence method," and all similar unscientific and unnatural contrivances, and, going back to nature, use our letters for the purpose for which they were invented,— to represent elementary sounds of human speech? Joseph Payne has well said:—"I hold it to be a fundamental canon of teaching never to tell a pupil what he can find out for himself."

SECONDARY SCHOOLS.

J. L. PICKARD, LL.D., IOWA CITY, IOWA.

From the organization of the National Council of Education, one of its twelve standing committees has given special study to the scope of Secondary Education.

Reports have been made by this committee as follows:

1882. Upon High Schools.

1884. Preparation for College.

1885. Academies.

1887. Preparatory Schools; — Relation to Colleges.

1889. The Opportunities of the Rural Population for Secondary Education.

1891. Uniformity in Requirements for Admission to College. The last topic aroused so much interest as to demand continued conference, and a further report one year later. (The custom of the Council had been to call for reports from its several committees upon alternate years.)

1892. The Committee on Secondary Education reported as follows:

"In the opinion of the Conference of Representatives of Colleges and Secondary Schools, called by authority of the Council, certain conferences, by departments of instruction, of teachers in colleges and secondary schools are desirable. We, therefore, recommend to the Council that the following ten persons, namely: President Charles W. Eliot, Dr. William T. Harris, President James B. Angell, Principal John Tetlow, President James M. Taylor, Principal O. D. Robinson, President James H. Baker, President R. H. Jesse, Principal James E. Mackenzie, and Professor Henry C. King, be designated as an Executive Committee, with full power to call and arrange for such conferences during the

academic year 1892-3; that the results of the conferences be reported to said Executive Committee for such action as they may deem appropriate; and that the Executive Committee be requested to report fully concerning their action to the Council."

This Committee of Ten was fairly constituted as to ability. As experts, five are known to the educational world only from their connection with the college side of the conference; three, including President Baker, as thoroughly familiar with practical secondary school work; one as representing academic work; and one as peculiarly fitted by long experience to study the questions that would naturally arise in conference, from a true pedagogic and psychologic standpoint.

A girls' secondary school is represented by one of the opposite sex in a state to the most of whose colleges a girl is not admitted. A girls' college, too, has its representative in a man who could not be admitted to any of its classes, even were he a much younger man. This is the sum of woman's share in the work of organizing conferences, the results of which will affect woman as much as man.

The Normal college, too, probably through the modesty of the chairman of the committee naming the special committee of ten, is without its representative.

Those who have most to do with shaping courses of study as school superintendents, are without a representative, except in Dr. Harris, who can fill acceptably all the vacant places, and who will see that proper provision is made in sub-committees, so that no interest will be neglected.

This executive committee wisely plans for expert testimony, dividing the field of inquiry into nine parts, and placing ten persons of recognized ability upon each division. It is here to be noted that one woman only was found worthy a place upon the nine sub-committees. The Committee of Ten then fixes the limits of discussion for the conferences, the upper limit being the end of preparation for college, the lower limit the beginning of primary work. The wisdom of the committee appears in these limitations, since secondary education is the subject under consideration, and its character is determined by the nature of its underlying elementary education; its unwisdom, if I may be pardoned for the criticism, appears in placing experts in higher education as a dominant influence in each of the sub-committees, and in an

apparent assumption of the fixed character of college curricula to the requirements of which secondary schools are expected to find some way of conforming.

The full reports of the several sub-committees show that they found secondary schools unable to meet college requirements, and they recommend crowding back upon elementary schools some of the work now done in secondary schools. There was hardly a voice raised in defence of the poor elementary teacher who finds her present burden a grievous one. Her cry is answered by the charge of inefficiency, coupled with the request for resignation until such time as she can be fitted to meet these extra requirements. She had no representative on the Committees of Conference to make appeal to colleges for better facilities in pedagogy. Normal school men were heard only upon three sub-committees, or the difficulties in the way of securing trained teachers in specialties might have found expression.

The dominant influence of colleges is seen: (1) in the fact that of the nine sub-committees, six chose college men as chairmen; (2) conferences were held in college halls in seven cases: (3) instruction in Latin, Greek, English, Modern Languages (optional), Mathematics (except Book-keeping substituted for Algebra part of one term for those preparing for a business career), Physics and Chemistry, Natural History, History and related subjects, should be the same whatever the destination of the pupil as he leaves In other words, eight sub-committees declare the high school. that all graduates from high schools must be prepared for college. The sub-committee on Geography, however, taking a wider range, expresses the conviction that colleges should change their requirements for admission by accepting alternatives instead of rigidly prescribed studies; (4) in not a single instance was conference held upon the theatre of secondary school work. The environment as well as the personnel of the sub-committees is seen to be on the side of higher education. To this no objection can be made if the purpose of the conferences were the presentation of the ideal, of what ought to be done rather than of what can be done. It is well to work toward an ideal. While one cannot but admire the spirit which animated each of the conferences, and cannot fail to approve their findings from the standpoint of the ideal, the question will arise: are the results, taken as a whole, possible of attainment? College men have undertaken to recast

primary and secondary courses of study, and to adjust them to a rigid but by no means uniform college curriculum. Were all the modifications of elementary courses made as set forth by the sub-committees, our ordinary school-day must be lengthened to secure time for continued recitation, and children must prepare for their recitations at home. In proof of this assertion, the Committee of Ten presents a tabular statement of the required time for recitation in each of the four years of a secondary school course, as follows:

For First Year, two hours and 56 minutes daily.

For Second Year, five hours daily.

For Third Year, four hours and 40 minutes daily.

For Fourth Year, five hours daily.

If account be taken of changes of classes and of recesses, of general exercises of a miscellaneous character, of penmanship, music and drawing not included in the prepared schedules, another hour at the lowest calculation must be added, making six hours without a moment for study.

The number of different topics which must engage the student daily also appears as follows — reducing all to the standard of five periods per week we find:

For First Year, four and two-fifths topics daily.

For Second year, seven and eight-fifteenths topics daily.

For Third Year, six and one-fifth topics daily.

For Fourth Year, six and seven-tenths topics daily.

The Committee of Ten saw at once the impracticability of securing good results with such a wide range of topics under daily consideration. They present a program for four topics daily through the four years of secondary school work, and retain the variety of studies by reducing the number of weekly recitations Many who have had long experience in secondary school work would prefer to have daily recitations in each of four topics until completed, except in studies so correlated that alternation might not prove distracting. The dominance of the college idea is apparent in the large number of alternating studies. It may be argued that most of these alternating studies are but preparatory to kindred studies of the college course, and breaks in continuity is not desirable. Are weekly breaks in continuity May not a pupil recover more easily the less to be avoided? dropped thread after a year's respite from intensive study, than after one day, or two days' suspension of thought each week, whose entire program is one continual dropping and picking up of threads? The conferences insist upon intensive study in many cases. How can it be secured unless uninterrupted study be possible?

While the opinion of eight of the nine conferences found expression in the recommendation that no modification of the secondary course of study should be made with reference to the needs of pupils who could not complete the course, the Committee of Ten quietly dissents (without doubt under the practical guidance of Dr. Harris and President Baker, and Messrs. Tetlow and Robinson, whose long experience had convinced them that but a small part of secondary school pupils ever reach the college). Four courses of study are therefore presented, -- Classical, with Latin and Greek as distinguishing features; Latin Scientific, with Latin and German or French and Natural Science as distinguishing features; Modern Language, with German and French distinguishing; English, with one choice between Latin, German and French for each of the four terms. The committee says: "Inasmuch as many boys and girls who begin the secondary school course do not stay in school more than two years, the committee thought it important to select the studies of the first two years in such a way that linguistic, historical, mathematical and scientific subjects should all be properly represented."

What the committee considers "proper representation" appears in the following table of percentages (in the two years there are forty recitation periods each week):

| | CLASSICAL. | LATIN SCIENTIFIC. | MODERN LANGUAGE | s. ENGLISH. |
|---------------|-------------------|-------------------|-------------------|-------------|
| Linguistic, | 50 per ct. | 50 per ct. | 50 per ct. | 42½ per ct. |
| Historical, | 17 1 " | 10 " | 10 " | 171 " |
| Mathematical, | 17½ " | 17½ " | 17] " | 171 " |
| Scientific, | 15 " | 22½ " | 221 " | 221 " |

Separating the linguistic studies into foreign languages and English, we find what many at the present time would be inclined to criticize:

| Foreign, English, | 35 per ct. | 35 per ct. | 35 per ct. | 22½ per ct. |
|----------------------|------------|------------|------------|-------------|
| EUKIRU. | 19 . " | 15 " | 15 " | 20 " |

The conference upon Latin would like to see requirements for admission to college increased, and could find only one way of accomplishing their wish,—crowding Latin back into the element-

ary schools, except where the secondary school course covers four years.

The conference upon Greek would begin the study after one year's study of Latin, and insist upon three years' preparatory study. The Committee of Ten recognizes the trend of public sentiment and permits a *two years*' preparatory course.

The conference upon Modern Languages recommends eight years' study preparatory to college; four years in elementary school and the entire high school course.

The English conference wisely provides for continuous study of English for twelve years, and modestly claims but *one-sixth* the requisite amount of all preparatory studies for college.

Assuming thirty-eight weeks as the average length of a school year, according to the several recommendations of committees upon linguistic studies, we shall find:

Latin is given 760 recitations.

Greek is given 494 recitations.

Modern Languages are given 1634 recitations.

English is given, aside from reading exercises, 874 recitations.

Modified by the Committee of Ten and confined to the four years of secondary school work:

| | CLASSICAL. | SCIENTIFIC. | MODERN LANGUAGES. | ENGLISH. |
|-------------------|------------|-------------|-------------------|----------|
| Latin is given, | 684 | 684 | 0 | 646* |
| Greek is given, | 380† | 0 | 0 | 0 |
| Modern Language | es, 266† | 418 | 1102 | 0* |
| English is given, | 418 | 494 | 494 | 646 |

*Latin and Modern Languages are elective studies, but the number of recitations is 646. †Greek may be increased 152, Modern Languages remaining the same; or Modern Languages may be increased 152, Greek remaining 380.

By Committee of Ten, foreign languages are given in courses:

| | CLASSICAL. | SCIENTIFIC. | MODERN LANGUAGES. | ENGLISH. |
|----------------|------------|-------------|-------------------|-------------|
| (Recitations), | 1482 | 1102 | 1102 | 6 46 |
| English, | 418 | 494 | 494 | 646 |

Is proper respect paid to the vernacular when under comparison? What would similar conferences result in, were the dominant influence upon the side of superior school representations?

MISS PEABODY AND THE KINDERGARTEN.

LUCY WHEELOCK, CHAUNCY HALL SCHOOL, BOSTON.

"Let her works praise her in the gates," says the wise man in concluding his description of the virtuous woman.

Any words of praise are needless in honoring the memory of a woman whose life constantly projected itself in deeds. Let the works of Elizabeth Palmer Peabody praise her in the gates. Wherever she recognized need in the world, there was a gateway opened from her generous heart, through which flowed help to meet the need. Nowhere is the song of praise more pleasant to our ears, than when we enter the gate of the child-garden, and find there the happy children whose lives have been blessed by the educational ministry of the woman, whom we count among America's greatest.

"It is a pity," said a man of letters some years ago, in speaking of Miss Peabody's advocacy of the Kindergarten, "that she should have sacrificed her career to this cause. She might write a book of unsurpassed literary value. No woman in America has been privileged to enjoy and to know such a circle of friends as she. Her constant and excessive devotion to this work for children has robbed the world of a literary treasure."

But the man of letters forgot that the living poems are better than all that were ever sung or said, and that the letters on a page of the Book of Life will still shine when the ink is dim on all our printed sheets.

Miss Peabody's interest in the Kindergarten dates from 1859, when she was visiting a family in Jamaica Plain, where she noticed a six-year-old child of Carl Schurz, who had been in a Kindergarten in Germany.

Miss Peabody observed a certain unusual development in the child, which led her to question the mother as to the training that had been given.

"Oh, she has been in a Froebel Kindergarten," was the answer. Later Froebel's *Education of Man* was sent to Miss Peabody, and she recognized at once the deep philosophic insight of the man and the soundness of his educational views.

With great enthusiasm she desired to demonstrate these principles in practice and a school for little children was opened on Pinckney street, which was called a Kindergarten. But Miss Peabody soon recognized her insufficient knowledge of the system and always deplored the influence of this early work which she called "a failure." She determined to learn more of the truth by a visit to Germany where she could discover by visits to the best schools and by intercourse with the disciples of Froebel where her error had been.

A friend writes of this journey: "It has always seemed to me that Miss Peabody's visit to the old world was one of the most memorable experiences of her life. It commenced with her frank confession that her first effort to apply Froebel's system was a failure, and that through her own ignorance; that it was necessary to retrieve her error, and that from being a teacher she should become a pupil and spend a year in Europe. What she needed was the means and, as she never allowed an end she wished to attain to fail on account of any obstacles—the means she got.

"A course of lectures or lessons in History was proposed to her friends, warmly accepted by them and the result was the \$1,100 needed.

"Perhaps no woman of America ever went abroad better prepared to appreciate and understand the old world than Miss Peabody.

"Her meeting with the Baroness Marenbolz Bülow was, from the very nature of her preparation, a predestined one. For the Baroness had for years been awaiting the coming of the woman from the New World, that she might transmit her message and so vitalize the system of which she was the apostle.

"The meeting of these two women might almost be called historic. They joined hands and anointed each other as apostles of the new education in which the Old World and the New World could work unitedly for the education of mankind."

Miss Peabody returned from her educational pilgrimage in 1868, full of the purpose to which all her remaining years were consecrated. She recognized in Froebel's system a means of saving humanity by saving the child.

In one of her "Lectures to Kindergartners," she says: "After the study I have made of Froebel and of the method with little children, which he was fifty years discovering and elaborating into

practical processes, whose rationale and creative influence I perceive; I feel, as it were, Divinely authorized to present him to you as an authority which you can reverently trust."

During Miss Peabody's absence a Kindergarten had been started in Boston by Mme Kriege and her daughter, and in 1870, through her efforts the first public Kindergarten in America was opened in that city.

"The apostle of the Kindergarten," was the name by which the great-hearted woman was now known.

Regardless of fatigue, of discomfort, or of personal expense, she went wherever there was an opportunity to proclaim her gospel.

The Macedonian call for help sounded in her ears, wherever she heard the voice of a child, for she saw "children in the child," and the race in children.

Not only by her eloquent voice, but with untiring pen, did she preach and teach.

The Kindergarten Messenger carried her thought to the educational world for four years from 1873 to 1877.

It strengthened the hearts and hands of the few disciples of the new gospel. The American Froebel Union was formed in 1877, of which Miss Peabody was the president and the soul. An incident, in connection with one of the meetings of this body, is contributed by a friend, which presents "the Apostle of the Kindergarten" in a characteristic light.

Miss Peabody's failing sight and the weight of many years made it desirable that someone should accompany her to New York, where the proposed session of the Froebel Union was to be held.

Her companion on this occasion, says: "It was the stormy month of March; but we braved the rough waters of the Sound and reached New York safely. The meeting was to open the next morning at nine at Dr. Newton's church.

"Miss Peabody felt some apprehension lest the arrangements made by letter should not be carried out, and feared the sexton had not been instructed to open the church.

"In the early dawn she was mysteriously missing, leaving no clue as to her departure. It was a cold and slippery morning; but her anxiety, which would not let her sleep, had driven her to take the street cars and seek the house of Dr. Newton, to make sure of his co-operation in the meeting.

"She reached the house before any of the family were up, rousing the servants to answer her ring.

"Learning that proper arrangements had been made, she returned to her friends in time for breakfast.

"At nine she was ready to hold the meeting, which she took almost entirely on her own shoulders, speaking in an interesting and forcible manner for three hours at least."

Dr. Henry Barnard of Hartford, the prince among America's educators, was the first in this country to hail the light of the new star in the educational world.

Articles on Froebel were published in his journal in 1856 and in 1858.

His volume of Kindergarten and Child-Culture Papers contains much of the standard literature on the subject. Miss Peabody's "Open Letter" in this volume, describing her own early attempt at Kindergartening and deploring its inadequacy, is of interest. She there declares adequate training of Kindergartners is the only possible basis for the success of the system.

America has proved the soil in which Froebel's idea of child-training has taken deepest root. His gospel has been like the "handful of corn in the earth upon the the top of the mountain." The fruit thereof already shakes like Lebanon. The progress of the movement in this country has been steady, and is now dependent in large measure upon the wisdom and insight of its pioneer, who held up always in her lectures, which were first given to training classes and are now published in book-form, the highest ideal for Kindergartners. She exalted the task of the teacher above any blind subjection to method, or device, or material, to the work of an artist, who sees the angel to be set free in that which her hand touches. She insisted, always, that the Kindergartner's chief duty was to see that the primal vision of the little ones, who come beholding the face of the Father, be kept uneclipsed.

"To be a Kindergartner," she declares, "is the perfect development of womanliness, a working with God at the very fountain of artistic and intellectual power and moral character."

On the sixth of January, 1894, a company of Kindergartners and other friends assembled in the Church of the Disciples in

Boston, to honor the memory of the friend and leader who had passed nearer to the fountain from which the springs of her life had been fed.

Simple and lofty words of cheer and of comfort were spoken by friends, who had felt the inspiration of her words and works, and of her tender and generous nature.

A chant, tender and solemn, was sung by the Kindergartners, "Suffer the children to come unto me; for of such is the kingdom of heaven."

But above the strains of that song arose another, the song of the little children who praise her in the gates of the many childgardens planted by her hand.

Amid the fragrance of the lilies, Elizabeth Palmer Peabody rested from her labors; but her works do follow her, and many shall rise up and call her blessed.

BY THE SEA.

HELEN L. CARY, MALDEN, MASS.

The unending blue of ocean meets mine eye All life and sparkle, and the fresh, spiced air Rushes, its gladness with my soul to share. These waves are friends,—together we laugh, sigh, Without the need of words: such ones would I Dwell with, whose silence is a speech most rare. To-day this bright sea hath no room for care, Voicing unchecked the eternal harmony.

God in this scene maketh my soul grow still, Reaching me through creation, telling all That is; and I, most willing pupil, learn By touch of Love, that love is all his will. Assurance sweet! we hear His truth's strong call, And, listening, forget to weep and yearn.

FROM BANTRY TO KILLARNEY.*

PROF. FRANKLIN B. SAWVEL, GREENVILLE, PA.

When the traveler is "set down" at the Cork, Bandon and South-Coast railway station in extreme southwestern Ireland, with the vast sweep of ocean in every direction save that from which he hails, his first impression is likely to be that he has reached the end of a journey with nowhere to go. Once seated in the waiting tourist car, he is soon winding down a steep slope among huge boulders and rock-masses, green swards and neat, lawn-like patches, and then by a picturesque old mill with its moss-covered wheel and fern and shrubbery-fringed dam of darkly clear water, to find himself in the heart of a typical Irish village, all snugly sheltered and shut in by towering hills except the narrow gateway down the bay to the Atlantic. This is Bantry, at the head of Bantry Bay, on whose "white strand" it stands.

Here in this sunny, mountain-sheltered cove, the traveler, perhaps for the first after a dreamy ocean voyage or the first time in life, awakes to some of the poetry and beauty treasured up in the names Erin and Emerald Isle. Here, too, the famous Prince of Wales route begins, the most delightful and picturesque road on the island.

This highway is a masterpiece of engineering, with easy grades and rounded road-bed of limestone laboriously broken into small cubes and beaten, ground and rolled into a gray cement by hoof, wheel, sun and rain. It touches the heads of numerous bays, climbs mountains and tunnels their summits, winds along valleys, hurries over chasms spanned by solid masonry, pieces the arching precipice, and skirts the shores of beautiful lakes, and, distant less than forty-five miles due north, terminates at Killarney. It is flanked with scenery the most fairy-like,—dark ravines, shady nooks and lawny leas, noisy streams and waterfalls, bold cliffs and slopes purple with blooming heather,—hovels and faces the most sightless, cheerless and comfortless,—long sweeps of rugged landscape, zigzag valley, narrow bay and angry, silver crested ocean, and again vine and fern, matted jungle and magnificent forest.

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Southwestern Ireland is in shape a great hand with its outer finger resting on the English Channel and its thumb on Shannon The fingers, fifteen to twenty-five miles long, bay and river. are made of cores of silurian limestone, wrapped with Devonian slabs of Old Red sandstone, edged up against each other in Alpine shapes, sometimes to exceed three thousand feet above tide-The open spaces are occupied by Bantry, Kenmare, Dingle and Tralee bays. The route of travel stretches across the bony knuckles above the bays; around their heads nestle and slumber the beautiful towns of Bantry and Glengarriffe, Kenmare, The scenery is most delightful and en-Killarney and Tralee. chanting, and the contrasts of luxuriant vegetation and barrenness-the widest and wildest around Glengarriffe Harbor, five miles from the start, and the Lakes of Killarney, along whose green, bowery shores the road winds the last five miles of the drive; Killarney wears an air of artificial keeping — the opulence and whims of earls; but Glengarriffe, "The Rough Glen," is arrayed in nature's careless shubbery, — thicket, twining vines, matted mosses and sea-weed, and a wilder native beauty. The Lakes of Killarney are more picture-like, — a painting with calm, clear waters and tufted islets, winding ways, bridle paths, roads and exposed bridges, the Gap of Dunloe, painted stag and moulded deer, shimmering slopes and Macgillycuddy Reeks diademed with feathery clouds; thick forests climb the shores, with fallen trees, hidden rocks, weaving vines, ferns and flowers, well kept lawns spread out into meadows, and a cluster of cottages into a modern tourist town. But to the less orderly landscape of Glengarriffe a simpler charm is added — something of barrenness and loneliness that hints at nature's and man's poverty alike. sides, sleepy showers chased by dreamy sunshine descend only from the Sugar Loaf.

On the east shore, Priests' Leap mountain rises out of the bay and curves around the head of the Harbour, while "The Mountain of the Wild People" stretches along the western margin and around six miles to the north, till they meet and enclose the estate of the Earl of Bantry. Outside the Harbour on its boulder island stands the ruins of Glengarriffe Castle; on the rocks of the shores are heaps and rows of sea-weed pushed up by the tide; while in the restless waters lay lines and clusters of bright shells, gray,

green, brown and purple, often carelessly encircling patches of sea-moss or half submerged stones.

On the north shore, near a group of some half-dozen houses — all the town there is room for — rises a stone chapel with its steeple shooting above the thick foliage of spreading elms and forest trees.

In the mouth of the narrow valley stands Lord Bantry's cottage, and across, on the west side, is Cromwell's old stone bridge, said to have been erected by him at an hour's notice. Three hotels,—Roche's on the east slope, the Eckles on the north, and a smaller, second-rate one between,—complete the artificial features.

There is luxuriance of plant life wherever there is soil enough for rooting. Forests of oak, elm, pine, yew, holly, magnolias and arbutus, and thorns and shrubs in great variety, cover the base of the mountains and fill the hollows. Every nook, crevice, rock and stream is carpeted with mosses, while ferns the most delicate and others, tree-like, grow everywhere. Many American flowering plants and tropical cryptogamia, carried hither by the infringing Gulf Stream, have taken root among the rocks and spread up the sides of the glen. From a single spot adjacent to the sward below Roche's hotel I noted, besides the variety of native forest trees, two kinds of the holly; the woodbine, with its cream-colored, sweet-scented flowers; roses, white and red, clinging to massive stones; a number of grasses and weeds; and at least seven varieties of wild flowers. On the spreading branches of a tree were growing from the top side two varieties of parasitic ferns. greenish gray moss stood up six inches high on each side like frills, and from the under side of each bough dangled a line of moss-tassles from a few inches in length to as many feet. thrifty ivy stems twined up the trunk and, mingling with the foliage, flowed out over the top and down the sides in a woof, scarce penetrable to sun or rain. Rhododendrons and trailing vines abound; and the omnipresent ivy climbs every rock, shrub and tree in sight. I was standing, or rather sitting, on a mosscushioned, fern-circled boulder in a sub-tropical jungle enlivened by the music of bounding streams and eloquent water-falls.

The forests decrease in stateliness and cease, almost abruptly, less than half way up the mountains. The flats and gentler rises of the middle slopes are dotted with patches of potatoes, rye, oats and grass, and again potatoes. The rougher parts are marked off by rows of stone, rather than fences, into pasture lots for cows, pigs and donkey. The upper full third is covered, where not too bold, with wild grasses, gorse, heather, fragrant thyme and bogmoss, over a springy humus that yields to the tread like a cushion; and between outcropping rocks are green-bottomed lakelets and peat-bogs. Here is the abode and delight of the goat. They browse in small scattered flocks, and are visible on crag, summit and slope, as capricious of presence as freakish by nature. Clusters and piles of turf may be seen drying in the summer sun at all elevations from base to crown. I cannot speak from observation of wild animals and game. Of insects I saw few worth naming, except some obtrusive species whose mission seemed to be to teach humility by disturbing the temper and making life weary.

But the charm of Glengarriffe would be incomplete without the climate. Heated by the Gulf Stream and sheltered by mountains, the climate is even, warm and moist. I was assured that snow in mid-winter seldom remains through the day. In the half-quadrangle of Roche's, open to the south, stand two trees, a "Monkey Puzzle" twenty or more feet tall, and a branching fuchsia, full fifteen feet to the top, from every twig of which hung clusters of velvety, pendulous flowers. A noted traveller says: "The climate is the most favorable for vegetation, moist, and so warm that not only azaleas and rhododendrons, and all sorts of evergreen, stand abroad through the winter, but in a favorable aspect even camelias, dates, pomegranates, magnolias, etc., attain their fullest beauty."

The cloud scenery is equally rich, varied, beautiful. After laboring up the west side of Sugar Loaf, the clouds troop through between the peaks in fleecy flocks and race across to Priests' Leap, or pour out of the depressions, lush and dripping, to burst on the luxuriant valley in baptisms of shower and sunshine. Rain may fall at any hour without herald or regard for human convenience. But neither can man live by beauty alone.

The road carries you up the mountain northward the whole length of the demesne of the Earle of Bantry. This lovely estate is a walled valley open to the south with the bay and ocean in the distance. It is six miles long and one-fourth mile wide. In shape it resembles the interior of a great ship with the stern, to the mizzen mast, carried away. The beak pierces the crest and the broken keel dips into the Harbour. Mountain streams are its ribs of steel, with patches of grain, potatoes and green meadows

between. Peasant hovels dot the sides like so many port-holes, and seams of loose stone fence divide the surface into unequal Here in this remote valley, hemmed in by natural barriers under conditions the least artificial, the best and worst of It is Ireland as it is — its rural western Ireland are epitomized. everyday life, photographed in a single picture; — a negative of niggardly toil wrought out under the tyranny of land-lordism. Nature is the light and wretchedness, the color-shadows, tints and half-tints. I had read descriptions and listened to stories of their peasant life with misgivings, but the senses can be trusted. I therefore transcribe a few notes, pencilled while eye, ear and nose were yet busy. "Hovel of undressed stone laid in coarse mortar, 16 x 8 ft. and 6 ft. to eaves. Flagstone roof (some thatched), no windows. Dwelling part, 10 x 8; stable, 6 x 8; door holes five feet apart; one roof and one yard; several chickens, two pigs of perhaps 60 lb. weight each; a calf two months old; two children, girls, probably 8 and 13 years old;—all inside the doorway trying to look out, except the pigs (the latter were feeding on the earth floor); — donkey outside the door. Within: no stove, several shelves, half-dozen shapes of dishes, small pot, straw nest in corner, a few old clothes on wall. The odor and stench, Oh! "How long, O, how long!"—Enough! Eight or nine such hovels house the peasantry of this valley; -- some better, one worse.

In sharp contrast, down on the fertile meadow-land at the mouth, stands the handsome, palace-like seat of Lord Bantry, separated from the highway by a high stone wall with ornamental cap-stones and ivy-grown. A shady drive leads through an umbrageous forest to the cottage. Adjacent are ornamental groups of trees, pleasure grounds, canopied platforms, cozy rests and arbors, and well-kept vegetable and flower gardens. Clean, tidy, heartsome and outwardly joyous. To the south it looks on the peaceful harbour, receding mountains and far-away sea; to the north, through thick foliage, on lowly hovels and squalor sheltered by nodding rye, whose every ear is secure under penalty. spongy turf pours out its sparkling ale in gurgling rills, and birds warble in forest and grove. Poverty and plenty! Thrift and thraldom! Every passing breeze sounds the whole gamut of weal and woe. The voice of the race in its childhood cries through the centuries for light, love and liberty.

One school-house, 15 x 20, by the roadside adorns — to the mind actually adorns — the scene. As we approached a class filed out, four on one side and five on the other, outside the door to study, as they said, their "spellin' lessen." Was it truth? Does not every approaching stranger see the act repeated? Did they not ogle for pennies? Was there not a twinkle in the eye, a beam of wit peeping through the miry face? Children beg on the way to school and hurry out to beg the way home. From walking age to fifteen all are beggars, and the trade may be resumed any day or year thereafter. Near by is the broad shelf of limestone, in which are pointed out the footprints, knee-deep, made by the sagacious donkey, when, with the robber-chased priest on his back, he cleared the mountain (hence the name,) near two thousand feet high, at a single leap seven miles long! On reflection, it seemed as if the leap might have been measured obliquely, and that the donkey was an athlete in his day.

But adieu! charming, chilling scene,— Glengarriffe,— adieu! We thundered into the majestic tunnel at the crest, from county Cork to Kerry, and out and down the road toward Kenmare, besieged with bands of begging children.

THE CRITIC AT SEA. *

A review of "The Public School System of the United States."

BY THE AUTHOR OF "PRESTON PAPERS." NEW YORK CITY.

III.

CONCERNING PARENTS.

"But still his tongue ran on, the less
Of weight it bore, with greater ease;
And with its everlasting clack,
Set all men's ears upon the rack."

Butler, Hudibras.

I think it's Mark Twain who says it isn't half so bad not to know a lot of things that are so, as it is to really know a lot of things that are not so, which latter *scems* to be Dr. Rice's position about our public schools, their work, patrons, pupils, teachers and supervisors.

If there is one criticism more prevalent than another concerning the American parents of to-day, it is that of the apparent reversal of the position of parent and child portrayed in the

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"commandment of promise;" and this is not without at least some show of reason, for the parents of to-day do care for their children, and are anxious for their well being to such an extent that no sacrifice is considered too great, no effort too difficult to make things easier, better, or in some way different from that which has come into their own lives.

And this is particularly true with regard to education and its manifold advantages, as any teacher or school officer can testify. Many a father drudges until he is stoop-shouldered, hollow chested, dim-eyed and grizzly, that Tom may go to college, or Jane to the seminary or normal school; and the land is full of patient, plodding mothers who toil until far in the night to keep their little ones in decent order for the public schools whose benefits they recognize — as it's a pity their censor does not — or to help the older ones through the high school or academy. All honor to their loving hearts and hard hands.

In the face of this, which can be verified in any town, village or city in all this broad land—read page 10: "If but one parent in a hundred would but be interested to this extent ("to follow closely the actions of the board of education, the superintendent and the teachers, and to seek some knowledge of the scientific development of children"), I believe that most of our flagrant educational evils would disappear."

This is a simple truth to formulate in words, particularly as the parents are really "interested" and the "flagrant educational evils," are actually disappearing, though evidently without the distinguished doctor's knowledge or consent.

One of two things is evident: either the candid critic has lost his thinking cap somewhere on his memorable tour, and forgotten to advertise for its restoration, or he should have petitioned for a much earlier birth, as some of his suggestions carry a pungent flavor of antiquity with them which detracts somewhat from their market value. It is never well to advertise an ancient calendar as current literature. "Tempus fugit," educational reform did not lie around loose waiting for Dr. Rice to discover it.

Following closely on the heels of the above quotation is a still redder one, in which the mothers of America are denounced as follows:

"It is indeed incomprehensible that so many loving mothers

whose greatest care appears to be the welfare of their children are willing, without hesitation, to resign the fate of their little ones to the tender mercies of ward politicians, who in many instances have no scruples in placing the children in class-rooms the atmosphere of which is not fit for human beings to breathe, and in charge of teachers who treat them with a degree of severity that borders on barbarism."

Verily, the verbal architecture of the above leads one to contemplate (with tears in the eyes and fists doubled up!) the inevitable wreck which must follow when such a number of "stories" are built upon so slender a foundation! Surely, it would be "incomprehensible" if true—but is easily understood by reversing the telescope.

Indifference in some mothers, like other qualities in most people, is "sandwiched" with at least a spice of interest, and all boards of education are not unscrupulous "ward politicians," some members actually having themselves risen to the dignity and responsibility of parenthood, thus having additional reasons for being glad to serve (as many do) on the board of education, without pay — except in some such tid bit as the above, offered by some outside theorist, who perhaps has done less than the least of these workers to promote the cause so strangely antagonized.

Again we read, on page 19:

"If parents would but take sufficient interest in the welfare of their children to insist upon securing conscientious boards and able superintendents, the leading educational abuses would soon cease to exist. Until they take an active part in securing such, they must be considered guilty of criminal negligence."

"Criminal negligence" has a serious sound, and I would gently and dispassionately refer the pedagogical expert to Bouvier's Law Dictionary for a definition of the term which he has so remorselessly hurled at the inoffending heads of American families, and beg that he remit the sentence to the lesser form of "contributory negligence." Possibly, too, he will then learn that he "must" not pose as judge and jury at the same time, and that questions of negligence are ever left to the jury to determine ever as to degree. The judge may only interpret the law—the jury will convict.

But not only are American parents in general, and mothers especially, under fire from this gunner — who must not return

empty-handed, as he went out—but the parents of New York City get a special shot on page 49:

"As for the parents in particular, the fact that they send their children to unsanitary schools—indeed, so unsanitary as to be unfit for the habitation of human beings—is of itself sufficient to prove that they are in no way concerned with what the schools do with their children. This does not apply alone to the more ignorant classes, some of the most unhealthful schools in the city being attended by children from the best of homes."

"In no way concerned" carries a delicate perfume of inconsistency in his phraseology, when this absolute proof (?) is compared with the language on page 47, where the New York principals are being scored for their ignorance, idleness and general inefficiency. There we read:

"What the average principal does beyond keeping an accurate account of the attendance of pupils and teachers, and listening to complaints from parents and teachers, is also a matter that has puzzled more than one."

Now the author forgets (?) that parents are concerned—else why should they "complain"?—and proves that "they are in no way concerned." What's the matter, Dr.? Do you "see double" at times?

Well, I wish the great, tender-hearted man had seen some of the New York parents whom I know — but it's the old story of the sign board and the travellers. Association makes so much difference with our views of any subject; and heredity and environment give belief — or its opposite — very largely. He may not be entirely to blame for what he does n't know about New York parents; but really, some one ought to introduce the doctor to some of the many thousands of loving, tender, judicious men and women who send their children to the public schools, and who have not found the loathsome dens he has so graphically described. How does it happen that so many of the business men of to-day survived to lives of extended usefulness and honor after graduating from these "unsanitary schools" which he stigmatizes as "unfit for human habitation?" Will the men of New York kindly rise and explain — or apologize for — their abundant energy, health, success, mental activity and business acumen?

But why enlarge upon this point, and cite more instances of

feeble minded attacks on parents for being the one thing which they surely are not—indifferent to the welfare of their children? Foolishly indulgent in extreme cases, perhaps, until they have become marked among other nations, but indifferent, never!

Young America is not suffering from parental neglect and indifference, is not unhappy, is not in the least automatic; and Young America's parents are worthy all honor for the devotion to their children which they not only feel but show. And although Young America sometimes apparently fails in the old-time formal courtesy and deference once deemed due to parents, his heart is all right, and the names of "father" and "mother" symbolize some of his tenderest feelings all through his young manhood as well as his riper years; and this could not be if his parents were habitually and "criminally" negligent.

Young America, of both sexes, is progressive, keen and wide awake, in spite of "ignorant" teachers and "unconcerned" parents; and it is to be doubted if Young America, as a unit, will ever engross a card of thanks to the educational iconoclast who turns a full stream of sarcasm and caricature on two of the dearest images known to the heart of man or woman, — parent and teacher.

AS TO SUPERINTENDENTS.

A peasant woman had been often and severely beaten by her-husband, and was finally asked why she didn't complain of him. "I have," she replied. "In what way?" "Oh, I went to a magistrate and said, 'Sir, I wish't ee'd ask Willum to spread his licks!"

Some one must have suggested the same thing to our author, for after "licking" the fraternity, with all the boards of education, the teachers and parents, he next assaults the superintendents in the following select rhetoric:

[See p. 26.] "The real causes for the existence of the mechanical schools at the present stage of civilization are no other than corruption and selfishness on the part of school officials, and unjustifiable ignorance, as well as criminal negligence, on the part of parents. It is in the cities where school-boards appoint such superintendents as will make able tools * * * that the science of education does not enter the schools.

"In a few instances the antiquated system of education appears to be entirely the result of misdirected and incompetent super-

vision. When the superintendents fail to instruct and inspire their teachers, or are unable to recognize the difference between scientific and unscientific instruction, the schools are, as a rule, mechanical in spite of honest government.

[Page 27.] "A feature common to all of the purely mechanical schools is the fact that far too little, if anything, is done by their superintendents to inspire and instruct the teachers."

"Fortunately, the schools of many of our cities are now marching along the line of progress; some of these, however, are moving only with the pace of a snail."

[Page 13.] "Superintendents of small cities not uncommonly go from one locality to another for a consideration of one or two hundred dollars per annum."

[Page 17.] "Supervision is ideal when the superintendent and his assistants are able educators, who devote their time primarily to educating the teachers in their charge, both by pursuing with them, in teachers' meetings, the study of educational methods and principles, and by aiding them in the class-room in the practical application of the theories discussed at the meetings."

[Page 45.] "What he does, beyond meeting the assistant superintendents once a month and the principals three or four times annually, and keeping certain sets of books, is a question that no one as yet appears to have answered."

"The method of supervision—if, indeed, there be a method—is so unsystematic as apparently to render their (the assistant superintendents) services of least value."

[Page 46.] "Under the circumstances, it were better for all concerned if there were no supervision at all."

[Page 51.] "The city superintendent should take an active part in improving the minds of the teachers. All his time should be devoted to visiting classes and teaching teachers."

[Page 77.] "Buffalo has, for the purpose of supervising and raising the standard of seven hundred teachers, not even one, but only one-third of one, superintendent."

All this and much more can be found in the book under consideration, and an inquiry forces itself upon the attention of the casual reader, as to why the superintendents have allowed such suggestions and statements to go unchallenged—but the reply is not far to seek—they are absolutely too busy in conscientiously attending to the work for which they are paid and in which their

interests center (contrary assumptions and presumptions notwithstanding) to be diverted even under such exasperating journalism as the above.

It is unnecessary to review the charges against the superintendents by items, for intelligent people—even the "unjustifiably ignorant" and "criminally negligent" parents mentioned on page 26-know somewhat of the multitudinous duties of a supervisor or superintendent of anything, anywhere, and that in the case of a school superintendent these must be greatly increased; but to one or two points I do wish to direct public attention: I. The function of a superintendent is to superintend; it is not to teach teachers, nor even to stop their work and teach or argue with critics, although I will admit that some of them might do this without straining their mental capacity or their educational "fitness"; and when anybody suggests the propriety of metamorphosing the office of superintendent into that of a peripatetic pedagogical university, it betrays a lack of the "purely mechanical grind" which will sometimes develop a keen perception of "fitness" at least.

As for the superintendent of New York (p. 45) or any of our large cities, being overcome with inertia, is scarcely conceivable—even though they may scorn to reply to impertinent questions from outsiders as to the precise number, nature, or manner of performance of their duties. It is possible that some Paul Pry has been snubbed, if no one has yet been found "to answer the question."

That "it were better for all concerned if there were no supervision at all" is too absurd to admit of argument, and reminds me that somewhere in our railroad literature I have read of a distinguished foreigner who intended to visit Niagara. Reading of its immensity, its grandeur, its power and magnificence, he longed intensely to see this great American wonder, to live by it, to study it, to investigate it. At last he was to cross the Continent, and believed that his ardent desire was about to be realized, his darling wish fulfilled, and in order to do the subject complete justice, he took a sleeping car on a through express train, that passes Niagara at midnight. Before retiring he gave the porter a quarter, saying: "Don't forget to call me when we get to the Falls; and hang out a lantern so I can study them thoroughly."

Verbum sap.

GERMAN METHODS OF USING THE MOTHER TONGUE.

DR. RICHARD DAVIES JONES, SWARTHMORE COLLEGE, PA.

One of the striking facts of these closing years of the 19th century is the extraordinary pre-eminence of Germany in the world of learning. In nearly every branch of knowledge the world's acknowledged authority is some German scholar. To a remarkable extent, the reason of which is not difficult to apprehend when one understands the conditions of success in German scholastic life, German scholars write the world's books,—the books which are regarded as authorities throughout the civilized world, or upon which other books are based. Professor Bryce of Oxford has written of Germany as "the central country of Europe; the State which dominates continental politics; the nation which does the largest part of the intellectual work of the world." This is the nation of whose philosophy Gladstone of late said that it "has in recent times largely dominated the thought of the world."

Have German scholars attacked this problem of the proper use and function of the mother tongue, the language and the literature, as an instrument in education? Yes, there has been and there is now great activity along this line of thought. The interest in the subject was heightened by the famous school conference at Berlin in December, 1890, when the Emperor gave expression to the following sentiments: "The foundation of our Gymnasien must be German. It is our duty to educate young men to become young Germans and not young Greeks and Romans. We must relinquish the basis which has been the rule for centuries, the old monastic education of the middle ages. These are no longer our standard; we must make German the basis, and German composition must be made the center around which everything else revolves."

The agencies for carrying on the discussion,(*) with which I

^{*}Note. For assistance in finding the best literature on the subject I was greatly indebted to Herr Karl Rudert of the Royal Library at Dresden. His friendly assistance and kindly interest was more than the performance of his official duty, it was rather a graceful courtesy to a foreigner.

have become to some extent familiar are: (1) Books, (2) magazines or periodicals, which are the recognized "organs" of the teachers of German literature, (3) the Programms of the Gymnasien, which are our annual school reports or college catalogues, with the addition of more or less scholarly contributions to some phase of educational thought by a member of the faculty of each Gymnasium.

The books are, as a rule, written by men who have the German love for thoroughness, and who have been trained to know what thorough work is. Educational buncombe is usually appreciated at its real value by German schoolmen.

The standard of the German periodicals devoted to the subject of instruction in German is creditably high. One of the best of these is the magazine "Zum Deutschen Unterricht," published in Leipsic and edited by Dr. Otto Lyon of Dresden, whom I had the pleasure of hearing on this subject of instruction in German before an association of the schoolmen of Saxony. The breadth of thought and grasp of his subject manifested by the speaker gave me the highest respect for a body of schoolmen which could provide from its membership a speaker able to so dignify and exalt his theme. I had the courage to ask this specialist — to whom I was first referred by the well-known Prussian School Commissioner, Dr. Münch, and of whose general recognition in Germany as one of the great authorities on this subject I was assured by the Minister of Education of the kingdom of Saxony-I had the courage to ask Dr. Lyon to prepare for some American magazine an article embodying his views as to the function of literature in education, which article I offered to translate into English, and I am happy to say that he kindly consented to do so. This article will doubtless embody his ripened thought as to character building through literature; patriotism as cultivated by literature; the imagination and the mental faculties in general as developed by literature; and, for the upper classes, the proper limits of discussion in the classroom and the proper methods of presentation of such themes as the poet's view of God and of his relation to his creatures; the poet's view of nature and of our relation to her; the poet's view of freedom and of fate, whether indeed "Man is man, and master of his fate," or "It is the stars, the stars above that govern our conditions;" in short, what sort of literature shall we choose for the various periods in education, and

how shall we treat the literature chosen and what mental discipline may be derived therefrom.

Another publication is especially worthy of mention here, though not devoted exclusively to instruction in German, the Annual Report on Higher Education, edited by Professor Conrad Rethwisch of the Königl, Wilhelm Gymnasium of Berlin. This report gives a summary, written by a specialist, of the latest trend of thought in each subject of education, as Latin, Greek, mathemathics, history, German, etc., with a list of the books and other publications which have appeared during the year. This annual report is a large volume of some eight-hundred pages, and is in itself an eloquent testimonial to German interest in educational matters.

The third agency of discussion mentioned is the Programm, or annual catalogue. I have said that, included with the statistics of the Gymnasium there is included a more or less scholarly discussion of some educational theme. It is not to be presumed that each one of the hundreds of Programms which appear yearly contains a valuable contribution to the literature of education. And yet the existence of this opportunity for making known the results of scholarly work, together with the security of the tenure of office and the determining influence of a reputation for exact scholarship in securing promotion, are a unique stimulus to investigation. The scholarly German must investigate and must publish his results, or he must perish. Did time allow me to enlarge upon this theme, I could illustrate the necessity under which the worthily ambitious German scholar lives for discovering new truth, for leading the new thought of the world, whereas the success of English and American teachers depends to a larger extent upon personal qualities and social gifts, upon power in expounding and making attractive time-tried truths, the accumulated wisdom of the past.

Hence the activity of the printing press in Germany. Every man of influence is an author. When I had been in Germany but a short time and had not yet grasped the situation, I asked a young German professor whether he had as yet published any books. His reply was, "Natürlich," i. e. To be sure. He would not have been made professor otherwise. In a country where so many of the ablest men are, like the Athenians, continually

prospecting for new truth there is likely to be occasional discoveries of real ore.

Klussmann's Systematisches Verzeichnis der Abhandlungen, etc., is a volume giving the titles of the publications of the schoolmen during the five years from 1886 to 1890 inclusive, — several thousand programs on all sorts of subjects connected with education,— on pedagogy and method, on philology, literature, history, mathematics, the sciences, philosophy, ethics, theology, art, etc. Under literature and language are mentioned dissertations on English, French, German, Greek, Latin, Hindoo, Celtic, Hebrew, Italian, Provenzal, Rätoromanisch, Lettoslavische, the various dialects of each, their history, and the like diversions of the German teacher's leisure hours. Yet, notwithstanding this mass of pedagogic material, one writer expresses the hope that his book on methods "will prove a life-preserver to the many young teachers who are thrown into the educational stream with the friendly advice: 'Now swim!'"

A similar catalogue is issued of the publications of the University men. Eye hath not seen, nor ear heard, nor hath it entered into the heart of man to conceive of the subject not therein set down, and thus made more difficult than ever to master because some German University professor has been extending the known field of man's conquest into what Carlyle called the circumambient realm of Nothingness and Night.

Of the programs of the schoolmen there is one to which attaches a romantic sort of interest inasmuch as it comes from Bingen on the Rhine.

"A soldier of the Legion lay dying in Algiers,
There was lack of woman's nursing, there was dearth of woman's tears;
But a comrade stood beside him, while his life-blood ebb'd away,
And bent, with pitying glances, to hear what he might say.
Take a message and a token to some distant friends of mine,
For I was born at Bingen,—at Bingen on the Rhine."
"I dream'd I stood with her and saw the yellow sunlight shine
On the vine-clad hills of Bingen,—fair Bingen on the Rhine."

At Bingen in the Rhine, just beneath the magnificent national monument erected by the nation to celebrate the realization in 1871 of that dream of ages, so long but a beautiful dream, national unity, stands the stone tower where, according to tradition, the Deeds of the wicked Bishop Hatto returned upon the Doer, as described in Southey's poem: "God's Judgment on a

Wicked Bishop." After an unfruitful summer Bishop Hatto invited the poor to his barn filled with a last year's store and "burnt them all," women and children, old and young. But the rats in thousands attack him in his tower.

"They have whetted their teeth against the stones, And now they pick the Bishop's bones; They gnawed the flesh from every limb; For they were sent to do judgement on him!"

In this program we have this legend discussed in its historical, literary-historical, and mythical aspects, with quotations from old Latin tomes (including what *Tacitus* has to say of Bingen on the Rhine) and a mass of footnotes substantiating the positions taken, and an attempt made to give a local habitation and a name to that which some may have looked upon as a mere play of the poet's fancy.

A clearer idea of what is accomplished in a German Gymnasium will be given by confining ourselves largely to the curriculum of a single typical school whose course of study in German is given in detail rather than by "turning over many books together." I have before me the program for 1887 of the Königl-Friedrichs Gymnasium of Cassel. The instruction in German extends throughout the nine years of the course of study. The average age of the lowest class, Feb. 1st, 1887, was 10 1-6 years, of the highest class 19 1-6 years. In the Königl-Wilhelms Gymnasium of the same city the average age of the lowest class Feb. 1st, 1892, was $10\frac{1}{2}$, of the highest class 19 7-12. In the Königl-Kath-Gymnasium of Cologne, Feb. 1st, 1890, the same classes were $11\frac{1}{2}$ and $20\frac{1}{2}$ respectively.

The students in the lowest class of the Königl-Friedrichs Gymnasium of Cassel recite in German three times per week; in all the grades between the lowest and the highest they recite in German twice a week, and in the highest class three times per week. The lowest class, average age 10 1-6 (they spent four years in the Volkschule), have altogether 30 recitations per week, including drawing and gymnastics. Of these 30 recitations 9 are in Latin, 4 mathematics, 3 religious instruction, 3 history and geography.

These ten-year-old boys study under the subject of the mother tongue: (1) Spelling, including syllabication, the use of capitals, letters, etc. (2) Grammar, the parts of speech, declensions and conjugations in connection with Latin, and the simplest rules of

syntax in connection with Latin. (3) Punctuation. (4) Reading. Here are given the names of 12 poems to be committed to memory during the year. Five of these are by Uhland, one by Schiller. Also, 22 other poems to be read and thoroughly understood during this first year. There is here a recommendation that some of these also be committed to memory. There are also selections in prose to be read in connection with the other studies pursued: 2 selections in connection with history, — the Worship of the Gods by the Early Greeks and Orestes and Pylades; 5 selections in connection with science lessons; 5 selections in connection with geography; and 11 selections to be read in connection with botany.

We see at once the great advantage of a well arranged plan for the reading. The course of study is thoroughly articulated. The reading is not haphazard and unconnected. With the history lessons are to be read selections from literature which elucidate the history and are elucidated by the history. And the exact title of these selections and the page in the Reader where they are to be found is given in the course of study. This reading is for ten year old boys.

The German method of reading literature according to a well-digested plan and in articulation with other subjects may well serve as a model to us. I remember a severe arraignment of the colleges of New England for their requirements in English by a writer who said in substance: "It may seem an extreme statement, but I believe that if English literature is well taught in any preparatory school it is likely to be in spite of rather than because of the college requirements—these requirements encourage the total neglect of the historical development of literature—they foster disconnected reading—the selections have no necessary connection with each other—the lists prepared by the committee of the Commission of New England colleges have no sequence or congruity." This charge is certainly important, if true.

At the annual meeting of the Realschule men of Saxony last October, I heard the report of a committee appointed to prepare a course of reading in English literature for the English courses in the Realschule. After the report was read the Chairman asked for the plan on which the selections were made, remarking that he was unable to see on what principle these particular

selections were chosen. To German schoolmen accustomed to a plan in the reading matter and an articulation of studies, it was not a satisfactory answer to say that all the selections suggested were masterpieces of English literature. There is a choice even between masterpieces, — for their value in elucidating other subjects of the curriculum,— and there is a choice in the order in which masterpieces may be read. The report was not adopted.

But returning to the course in German in the Cassel School, we find in Quinta, the second year of the course, average age of pupils, 11 5-12 years; 11 poems to be committed to memory; 20 others to be thoroughly studied; 5 prose selections illustrating Greek mythology and 2 illustrating Roman mythology, to be read in connection with history; and 21 other selections to be read in connection with other subjects of the curriculum. In Obersekunda, fifth year of the course, average age, 15 1-2 years; 8 of the 10 selections to be committed to memory are by Schiller, one by Uhland, and one by Goethe. The Goethe selection is the Erl König.

At the close of Obertertia, or in five years from the time the pupil entered, he has committed to memory 59 poems, has read thoroughly 83 other poems and 115 prose selections. Of these prose selections some are by the great historians, Mommsen, Ranke, Curtius. Others are by Freytag, Schiller, Goethe, and other writers of established reputation. And the reading has not been fragmentary and disconnected, but arranged according to a well-digested plan. For example, a portion of the prose reading in history in Quarta, third year students, average age 12 3-4, is the Battle of Marathon, the Athenian Assembly, the Building of the Acropolis at Athens, an Athenian Gymnasium, etc.

In Obersekunda, the third year before graduation, average age 17 1-2, several of Goethe's poems are committed to memory, as well as some portions of his dramas which are read. The reading for this year is: Goethe's Hermann and Dorothea, Götz von Berlichen and Egmont, Herder's Der Cid, and Schiller's Maid of Orleans.

There still remain two years of the course. In the first of these two years portions of the early German literature are read; selections from the Niebelungenlied, Gudrun, Parzival; some songs of Walter von der Vogelweide; selections from Luther, Hans, Sach, Fischart, Opitz, Fleming, Haller, Klopstock (odes

and a portion of the Messias), Lessing's Minna von Barnhelm and a portion of the Laokoon and the Hamburg Dramaturgie, Shiller's Bride of Messina and Wallenstein. The portions of the above to be committed to memory are indicated.

During the last year Goethe and Schiller are read, and the history of German literature is studied, especial emphasis being placed upon the great names.

EDITORIAL.

THE National Educational Association meeting at Asbury Park, N. J., July 10-13, was a great success. The members in attendance were considerably above six thousand. A large number of the most eminent men and women in the profession were there. Notwithstanding the great strike, the West was well represented, Chicago notably so. Asbury Park is almost an ideal place for such a gathering, with its miles of hotels and accommodations for more than The weather was about perfect; the ocean views 50,000 people. Hon. A. G. Lane, Superintendent of the Chigrand and inspiring. cago schools, made an excellent presiding officer, his voice being easily heard throughout the great auditorium. The indefatigable secretary, Principal Irwin Shepard, of the State Normal School, Winona, Minn., ably seconded by Prof. J. M. Ralston and the local authorities, had everything in readiness and kept all things moving without break or disturbance. The Arion Quartette (four young ladies from Chicago) won the hearty applause of the audience again and again, by their artistic singing and charming personal appearance. Probably the most popular man present was Dr. Wm. T. Harris; his good, gray head seeming like thought solidified. Another man who has become very popular was Nicholas Murray Butler, who was elected president of the Association for the coming year.

The papers and addresses were, with scarcely an exception, admirable in form and content, and full of suggestion, often of inspiration. All were disappointed that pressing public duties prevented the attendance of Hon. Hoke Smith, Secretary of the Interior, and that illness kept Mrs. Alice Freeman Palmer,— a brilliant star in the educational firmament—from being present and delivering an address. Probably no speaker so completely won and held the hearts

of his auditors as President Stanley Hall of Clark University. The progressive educators of the land look to him in an especial degree for "light and leading." We doubt if any educator in America is conversant in so many tongues, or is so carefully experimenting in the laboratory, on all matters touching "Child Study." His observations on the danger to children's health from the excessive exercise of the minute muscles in their kindergarten exercises, deserves the serious attention of teachers, parents and physicians. In this line we would also call attention to the very surprising statistics presented by Dr. Hartwell of Boston, on the death rate of children between the age limits five to fifteen years, in Boston, Berlin and London. It does not speak well for the sanitary conditions of Boston—and we suppose that, generally speaking, the same thing is true of all our cities—that the death rate of these children is nearly twice as high here as in London, a city nearly ten times its size.

One of the notable papers of the meeting was that on "The Ethical Aim in Teaching Literature," by Dr. J. A. McLellan, Toronto, Canada. It contained much vigorous thought, although too long and not delivered in the best possible manner. A most acceptable paper, and given in his masterly way, was that on the "Professional Training of Teachers in Summer Schools," by Dr. Emerson E. White. It was packed with good and sensible advice. Dr. R. G. Boone of Ypsilanti, Mich., discussed this subject as it regards teachers in normal schools, in a bright but very strong and incisive speech. Hon. Henry Sabin of Iowa, read a vigorous, sensible paper on "Horace Mann's Country School," paying a glowing tribute to the great educational pioneer. Dr. Wm. T. Harris held, as he always does, the undivided attention of a great audience on Wednesday evening, while he discussed, in his clear, trenchant way, "The Influence of the Higher Education of a Country upon its Elementary Schools." These are but a few of a great number of papers, addresses and discussions, most of which were of a high order. These meetings are in every way uplifting. We wish that every teacher in the land could be privileged to attend them.

PRESIDENT Brainerd, of Middlebury College, Vermont, contributes to the Middlebury Register a most interesting Review of the life and work of Mrs. Emma Willard, whose work in that place made her the pioneer of the movement for the higher education of woman. Mrs. Willard went to Middlebury as Miss Hart, in 1807, to take charge of a female academy. Only the most superficial work was done in the school, although it was located under the very shadow of the college and society was quite cultured in the vicinity. She

at once gave a new impulse to everything; but her work was brought, apparently, to an abrupt end by her marriage to Dr. John Willard in 1809. A divine providence, however, was only preparing her for still larger things. In her husband's library, during his absence on his medical visits, she found abundant means of self culture and with the true instincts of the student, she mastered the principles of physiology and mathematics hitherto almost forbidden to girls; and then she took up in succession Natural Philosophy, Paley's Moral Philosophy and Locke's Essay on the Human Understanding. She completely demonstrated to her own and her husband's satisfaction that the female mind could grasp and comprehend philosophical subjects as well as men. She also showed how much any one who has the taste and the will for it can do in the way of self-education, with only books In 1812 reverses came. The Middlebury bank, of for teachers. which Dr. Willard was a director, was robbed, and the directors were held responsible by the legislature. With the sole object of retrieving her husband's financial fortunes, Mrs. Willard opened a boarding school for girls in 1814. She taught, at first, only the superficial studies prescribed to women by the spirit of the times. her school being close to Middlebury College, the contrast between the courses for girls and young men of about the same age was continually suggested to her thoughts, and she could see no good reasons She formed a class in moral philosophy and for the difference. another in the philosophy of mind, taking Locke's work as her text-The professors of the college looked askance at the experi-They were interested spectators at her examinations but would not grant her the privilege of attending theirs. She named her school a "female academy," not daring to aspire to the name She finally achieved a brilliant success at Troy, N. Y., and gave an impetus to the movement for the higher education of women which is likely never to die out. Her life is a fine illustration of the possibilities of the teacher's profession, and cannot fail of bringing inspiration to everyone who studies it.

THE one hundredth birth-day of an American college is an event of more than ordinary significance. It is the occasion of reminiscences and congratulations which are more than mere sentiment. They bring out and popularize some of the best features of academic life, and, through the reports of the press, call attention to methods and results in a way that is promotive of the best objects for which the college is established. Such an anniversary was held in June at Brunswick, Maine, where for a hundred years Bowdoin College has been doing its noble and world-extensive work. The exercises were

all most interesting and impressive. More than anything else, perhaps, the thought was brought out that the college is the producer of men, - clergymen, teachers, statesmen, lawyers, industrious and intelligent private citizens in time of peace and in time of war, wise leaders and patriotic defenders. Bowdoin has as brilliant a galaxy of distinguished graduates as any college in the land; and her friends have good cause to be proud of such names as Hamlin, Packard. Smyth, Cleveland, Longfellow, Hawthorne, the Abbotts and scores of others who attained fame after, and partly, at least, in consequence of the training which they received within her walls. But when the distinguished names have been told and retold, the best and widest work of such an institution has not been disclosed. It is in the thousands of lives which, in the ordinary routine of daily experience. have been broadened, deepened, enriched and rendered fruitful of good words and works, that any college is most honored. There is a certain advantage along this line in the smaller colleges like Bowdoin. where the contact, between teacher and student is close and personal. The influence of the commanding intellects in the professorships flows out through the lesser channels of the graduate life and irrigates society. Bowdoin has been fortunate in her professors as well as in her students, and her hundred years are the country's felicitous heritage. May she see many more significant anniversaries.

IN the death of Professor William D. Whitney, at New Haven, on June 2nd, the world of letters lost one of its brightest lights, and the educational world one of its most learned scholars. Professor Whitney showed the superiority of his mental endowment plainly in his early college life, fifty years ago, where he stood easily at the head of his unusually brilliant class, at the same time giving attention to several branches not included in the regular curriculum, and being popular in social life as well. It was frequently prophesied in those early days that he would be first in whatever department of life he might enter. But so great was the diversity of his talent that no one could forsee what department that would be. He was born in Northampton, Mass., in 1827, and received his early education at the high school of that town. He was graduated at Williams College, in the class of 1845. For the next three years he was a clerk in a Northampton bank. During this time, his attention was called to Sanscrit literature by Professor George Day, then pastor of the church in Northampton, and the next chapter of his life was taken up as a student of that language, under Professor Salisbury, at Yale College. This was the beginning of his distinguished career. Mr. Whitney took an exhaustive course of study in Germany, under the ablest instructors, and after his return became professor of Sanscrit in Yale College, in 1854, teaching also classes in German and French. He organized the department of Modern Languages in the Sheffield Scientific School, in 1862, and has been connected with that department ever since.

Professor Whitney has been a voluminous author, both of books and of magazine articles that have commanded universal attention among scholars the world over. His work has been recognized by many prominent institutions, from which he received numerous degrees. His career illustrates the possibilities of a scholarly life which offers opportunities for usefulness and wide influence second to none. We know that such a life as Professor Whitney's sets the world forward and makes humanity richer and stronger. The man is gone but his example and influence remain, and will not soon, if ever, lose their vitality.

THE Conference on the Relation of Education to Ethics, which I was held in connection with the Summer School of applied Ethics at Plymouth during the second week in August, was thoroughly successful. As to numbers it is estimated that it increased the school by at least one-fourth on that week. The lectures were earnest and stimulating, and those held in the evening were followed by well sustained discussions. President MacAlister of the Drexel Institute gave three addresses on the "Relation of the School to the Labor Problem," dealing successively with the industrial, the political and the ethical aspects of education. Professor Ashley of Harvard spoke on Economic History as an element of Historical Study. Professor Clark of Amherst, also, sent a paper advocating the teaching of Economics in school. Dr. Anderson of Yale explained the "Ethical Element in Physical Training." Professor Adler, in a lecture which he called "Organic Education." showed how the school can fit the child for the highest service to society. Dr. Burnham of Clark University had for his subject, "The Educational Movement in Europe in relation to Social and Political Movements." Professor Palmer of Harvard gave a charming address on "The School as an Ethical Instrument." And the closing lecture was by Mr. James L. Hughes of Toronto on "The Ethical Element in the Kindergarten." The conference was organized by a committee consisting of Messrs. Dutton of Brookline, Huling and Hanus of Cambridge, Page of Boston and Miss Lucy Wheelock of Boston. It is quite possible that another year the Conference may be expanded into a full department of the School of Ethics.

THE COMPLEXION OF SOME COLLEGE FACUL-TIES.

Statements of varying degrees of authority, emphasis and even eloquence are frequently made on the influence of the professional teacher in bringing about the present state of affairs in matters educational.

In order to put the statements to some kind of practical test, some weeks ago the writer submitted a circular letter to fifteen representative denominational colleges of nearly as many different denominations and different sections of the country. I chose this class of institutions because they seem on the whole more conservative; and also because of the traditional practice of employing clergymen as teachers, thus relying largely on another profession and bringing to these schools the maximum of non-professional service both in amount and efficiency.

The circular read as follows:

Jan. 9th, 1894.

DEAR SIR, Will you kindly aid me in gathering some facts concerning college education by filling out and returning this blank? The name of your institution will not be used in connection with the facts you give.

| | Whole number of regular Professors employed in How many of above numbers are professional teachers (e. g. who never entered the ministry, law, or medicine)? | 1873. | 1883. | 1893. |
|----|--|-------|-------|-------|
| 3 | How many of above who do service at the same | | | |
| Ο. | | | | |
| | time in (a) Ministry | 1 1 | | |
| |)7 (v | | | |
| | | | | |
| | (c) Medicine | | | |

Remarks. -

I did not make the purpose known and have taken the figures just as given. The reports show the following facts:

| | | 1873. | 1883. | 1893. |
|----|---|--------|-------|---------|
| 1. | Whole number of regular Professors in the ten | | | |
| | colleges | 96 | 100 | 125 |
| 2. | Whole number of professional teachers | 58 | 66 | 93 |
| | Number from other professions | 88 | 34 | 32 |
| | (a) Hence the ratio of professional teachers is | 3:5 | 3:4-6 | 3:4- |
| | (b) Ratios of non-professional teachers | 1in2+8 | 1in3+ | 1 in 4- |
| | (c) Ratios of professional to non-professional | | | |
| | teachers are nearly as | 3:2 | 2:1 | 3:1 |
| | • | | | |

A further inspection of the reports shows that most of the non-professional teachers belong to the profession of theology in about the following ratios: 30 to 23 to 21 for the three respective periods.

The ratio is a decreasing one and rapidly so, when we take into account the fact that for the same periods the whole numbers engaged were increasing and very rapidly between 1883 and 1893, as 96 to 100 to 125. Also those who belong to the medical profession show an increasing ratio as 3 to 4 to 7 for the same periods, thus indicating a large relative increase of the number for the last decade, as one would suspect.

The number who came into teaching from the legal profession remained too nearly constant to be tabulated. This is probably owing to several facts as this class of institutions does not work toward the legal profession as an end, and there is therefore a certain lack of affinity; also, the profession of law is much more remunerative and entices its votaries to remain in the profession.

It will further be observed that the increase in professorships is much greater during the last decade than during the first as might have been guessed; and that in the changed complexion of college faculties is a manifest tendency toward the scientific basis of this phase of professional life. Another institution not included in the above list shows by her catalogues a sudden change from 4 ministers and one professional teacher in 1891-2 to 5 educators and 1 minister in 1892-3.

The tendency toward professional service is more marked in eastern and western colleges than in central and southern states. Further it is most evident in the west, as west of the Mississipi River, and least of all in the south. It is no part of the purpose of this note to interpret the facts herein given, but simply to state them for what they are worth. Is the efficiency of educational effort increasing? Is the product of that effort improving? If so, or if not, why?

s.

The Department of Professional Study is necessarily omitted from this number, but will appear as usual in the October issue. We are sorry to disappoint the many readers of this valuable department, but trust it will not be necessary to do so again. This department is of great value to all and especially to those who become Correspondence Members.

FOREIGN NOTES.

RELIGIOUS INSTRUCTION VS. THE LONDON BOARD

The educational matter of chief interest in England is the excitement respecting religious instruction in the London School Board. The controversy, it may be remembered, was started originally by a member of the Board, Mr. Athelstan Riley, who complained of the religious instruction as then given. After months of heated discussion which caused more or less excitement throughout the country, the whole matter was referred (July 7, 1893) to a committee of the Board.

It was rumored soon after that the committee had approved a "Test Circular" to be sent to teachers, which rumor was subsequently confirmed. The circular was approved by the Board in its meeting of March 15, after a prolonged and hot debate. This measure has substantially the obnoxious feature of a denominational qualification for teachers. In defining the sense in which the Board rules as to religious instruction are to be interpreted, the circular says: "In the course of the lessons, as opportunity occurs, you will impress upon the children the relation in which they stand to God the Father as their Creator, to God the Son as their Redeemer, and to God the Holy Ghost as their Sanctifier."

"The Board cannot approve of any teaching which denies either the divine or the human nature of the Lord Jesus Christ, or which leaves on the minds of the children any other impression than that they are bound to trust and serve Him as their God and Lord."

All this is against the convictions of Unitarians and several other sects, and excites apprehension also in many orthodox circles, in which the question arises: What next? The fact that the circular closes with the assurance that means will be taken "to release teachers from giving the Bible lessons without prejudice to their position" is not comforting, especially in view of the fact that the originator of the whole controversy stated in a committee meeting that "he knew that many teachers could not give religious instruction in the spirit of the circular, and that unless its issue were followed by withdrawal from the religious instruction of a sufficient number of teachers he would ask for more stringent measures."

While the majority of the London Board have taken this position, it is by no means certain that they represent the wishes of a majority of the rate-payers. Not only non-religious bodies, but all non-conformist denominations have made open and vigorous protests

against the measure. It appears, now, that some compromise may be agreed upon, especially in view of the fact that 3,150 teachers employed by the Board have asked to be relieved from giving religious instruction. At a meeting of the "Metropolitan Board Teachers Association," attended by 1,500 members, a manifesto was unanimously adopted calling upon all the teachers who had requested this relief, not "to reply individually to the Board's individual request." The signers assert that as "experts they are convinced that the introduction into the schools of the definite dogmatic teaching desired by the leaders in this movement is both unsuitable and unwarranted. They feel strongly that the religious instruction should aim at the formation of character and the inculcation of the principles of morality rather than at supplying doctrinal teaching, which is best left for a more mature age. Instruction of the former character they have given in the past from the open Bible, and as they are denied the relief promised on application, they will continue to give such instruction in the future without reference to the circular."

"They are still of opinion that the operation of the circular will amount to the application of a test, and they agree with the Rev. Dr. Abbott (late of the 'City of London School,') that a teacher who will conform will be more useful than one who will not, and, in the end, the former will have his reward in better pay and quicker promotion, and that a new kind of dissent will thus be started, and School Board Non-conformists will find themselves gradually drifting out of the swim of professional advancement." It is noticeable that the Press, as a rule, sustains the teachers.

UNIVERSITY NOTES.

FRANCE.

The summer has witnessed several brilliant ceremonies in University circles of France. The new buildings for the Facultes of Caen, were opened with imposing ceremonies, on the third of June. All the French facultes and the leading Universities of Europe, Germany alone excepted, were represented in the concourse. Visitors were reminded of the antiquity of this seat of learning by the following inscription on the interior wall. "University of Caen, 1432." This gave the text for the address of welcome by the Mayor of Caen who reviewed the early glories and later decline of this University of Normandy. M. Liard, the Director General of Superior Instruction in the Ministry of Public instruction was the recipient of special honors as he was formerly the rector of the académie of Caen. An interesting feature of the ceremonies was a grand banquet tendered the guests of honor by the neighboring maritime city of Havre. The

mayor of the latter city in welcoming the illustrious professors and gifted students who composed his audience recalled that Francis I, the founder of the city, also revived the French University, created the first chairs in the Collège de France, and courses of law, of medicine and of the classics. The rector of the Facultés of Caen in his response styled Havre, a "Normand Chicago with the added characteristics of an Athens."

For the new buildings thus auspiciously dedicated the city of Caen has contributed \$260,000, the department of Calvados \$50,000, and the State \$100,000.

The Facultes of Poitiers are also rejoicing in the possession of new buildings which were inaugurated May 13. The Minister of Public instruction who took part in the ceremonies paid a well merited tribute to M. Compayré, the rector of the Academie of Poitiers and one of the most brilliant members of the department of Superior Education in France.

The annual banquet of the Students' Association, Paris, under the presidency of M. Jules Lemaitre, brought together a distinguished company of authors and savants. At the table of honor were seated among others MM. Zola, Lavisse. Michel Bréal, Liard, Colmet de Santerre, and Frederic Passy. All names well known in the literary or educational world. The speech of M. Lemaitre, the principal one of the occasion, was an enthusiastic eulogy of tolerance, which he characterized as "the grace" and "the charity of intelligence."

SPAIN.

From the latest official report relative to public instruction in Spain, it appears that the ten Universities enrolled 9,700 regular students in 1891–92 distributed as follows: Philosophy 917, Science 962, Pharmacy 882, Medicine 2,154, Law 4,785. The number of free hearers, or attendants upon selected courses, is not given; in 1890–91 it was 7,354 on a total of 17,911. Madrid draws more than one-fourth of the students, i. e., 2,882 in 1891–92, Barcelona followed with 1,860. Saragossa has the smallest attendance (609). This University which dates from the 16th century celebrated its third centennial in 1893, following this ceremonial, the first of its kind in Spain, with the inauguration of the new building erected for the faculties of medicine and science. This is said to afford the finest equipment for instruction in experimental science to be found in Spain.

AUSTRIA-HUNGARY.

Official statistics for 1892-93 show a total attendance of 13,573 students in the universities of the empire and of 1,974 in the technical schools.

GERMANY.

The twelve higher technical schools of Germany, (viz. Aix-la-Chapelle, Berlin-Charlottenburg, Brunswick, Darmstadt, Dresden, Hanover, Carlsruhe, Munich, and Stuttgard) in the winter semester of 1893–94 had a total of 774 professors and teachers and 7,342 students. Berlin-Charlottenburg led with 2,405 followed by Munich with 1,323.

AMONG THE BOOKS.

To accommodate readers who may wish it, the publishers of Education will send, post paid on the receipt of price, any book reviewed in these columns.

THE PRINCE OF INDIA is a powerfully written story of the fall of Constantinople, by Gen. Lew Wallace. The author of "Ben Hur" has won an honorable and lasting place among writers of fiction. His characters live before us. They seem like real flesh and blood. The Prince of India is really the Wandering Jew, who having despoiled the tomb, Hiram of king of Tyre, is able to dazzle Constantinople with the splendor of his dress and state. Life on both sides of the Bosphorus is graphically and minutely depicted. The love story centers round the Princess Irene, a kinswoman of the Greek emperor, Constantine, whom Mahommed, the young Sultan, falls in love with and eventually, after he has captured Constantinople, makes his sultana. One of the most important characters is Mirza, Emir of the Hajj, the chosen warrior and friend of Mahommed, who, in his master's interests, comes to live in the doomed city, keeping watch of Irene, but falls in love with her, learns that he is an Italian Count, Corti, and, freed by Mahommed, fights bravely on the Greek side. Another fine character is Sergius, the young priest. Much good historical work is done in presenting the customs, manners and life of the Greeks and Turks of that time. The dissensions in the church between the Greek and Latin monks is powerfully set forth. One also learns much and accurately of the typography and architecture of Constantinople and its environs. This lengthened tale,-1080 pages-may not fascinate the reader as much as "Ben Hur," but it is certainly a strong, entertaining and instructive work of fiction. New York: Harper & Brothers. Price, in a box, \$2.50.

ETHICS OF SUCCESS, by Wm. M. Thayer, with an introduction by Samuel B. Capen, is a Reader for the middle grades of schools, illustrated by anecdotes from the lives of successful men and women. The author's book, with the same title, for higher grades of schools, has proved so acceptable to teachers all over the land, that he has been induced to prepare this one for younger readers. His books are founded on the idea that character-building is the great end of teaching, as it is of life itself, and that nothing helps the formation of character in young people like the actual achievements and victories of real men and women, who have risen to distinction and left their mark upon the world. So, with admirable diligence and discrimination, he has collected illustrative inci-

dents from the lives of the great and good, and arranged them under such heads as: "Who Wins?" "Keep Your Eyes Open;" "How Places Seek Occupants;" "Aim High;" "The Devil's Workshop," etc. The stories are so real and illustrative that the attention is at once held, and the principle involved is seen and felt almost without effort. These are excellent books for clergymen and other public speakers, as they abound in "feathers for arrows." We do not hesitate to commend them as among the best of the Readers now before the public. They are sure of obtaining a wide popularity on their merits. Boston: A. M. Thayer & Co., publishers.

Specimens of Work in an Elementary School is a volume reproducing the original work in writing, composition and drawing, by the young pupils of a South Hackney (England) school. The work is excellent in its originality of conception and neatness of execution, and reflects great credit alike upon teachers and pupils. Longmans & Company, 39 Paternoster Row, London, E. O.

Steps Into Journalism, by Edwin Llewellyn Shuman. Any young man or woman contemplating seriously a sortie into newspaper work will find "Steps Into Journalism," by Edwin L. Shuman of Evanston, Ill., a light unto the path; for in this volume, frankly and impartially, the author has set forth the grave obstacles of disillusion, disappointment and destruction of pet theories which every votary of modern journalism must encounter. In perfect fairness to the craft, its brighter side is told in equally truthful and forcible language. The book pulses with the truthful delineation of a life of feverish excitement and rarest attraction. It sustains the interest to the final syllable of the last page. Neither the woes nor the joys of newspaper life are exaggerated. It is a normal picture. Any one interested in the volume can obtain a copy of the Correspondence School of Journalism, Evanston, Ill.

AN IDEAL COURSE IN ELEMENTARY ART EDUCATION, by Langdon S. Thompson, A. M., Ph. D., Supervisor of drawing in the public schools of Jersey City, N. J., and lecturer in the School of Pedagogy of the University of the City of New York, is an elaborate series of drawing-books presenting a complete course of art instruction according to a logically developed plan. The series begins with primary work and proceeds by careful gradations to advanced aesthetic and industrial drawing. Every essential principle of art education seems to be set forth, each in its scientific relation to every other, and we feel sure that the work of the schools that adopt these books will be thorough and satisfactory in this important branch of modern education. Boston: D. C. Heath & Company, Publishers.

LIFE STUDIES FROM MOTHER GOOSE, by the author of Preston Papers, is made up of judicious directions for the preparation of wax works, pantomimes and illustrated lectures from Mother Goose Melodies. It will afford fun for winter evenings.

MAIZE, A BOTANICAL AND ECONOMIC STUDY, is an exhaustive monograph by John W. Harshberger, Ph. D., Instructor in Botany in the University of Pennsylvania. We acknowledge the receipt of the REPORT OF THE UNITED STATES COMMISSIONER OF EDUCATION for the year 1890-'91, just published at Washilgton. We have also received the Secretary's Report and the Regent's Bulletin, REPORT OF EXTENSION Department, of the University of New York. These documents abound in matters of interest to all educators.

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THE EARLY REFORMATION PERIOD IN ENGLAND, edited by Edward P. Chevney, A. M., is Number 1 of a series of translations and reprints from the Original Sources of European History, published by the Department of History of the University of Pennsylvania. This number and the entire series is an attempt to open to the student some of the original sources of historical knowledge. Those interested in university extension, as well as general students of history, will find the efficiency of their class work increased by the use of these texts. Published by the University of Pennsylvania. Price 15 cents.

BETWEEN Two Forces, a record of a theory and a passion, is one of those powerful and engaging tales for which The Arena Publishing Company is celebrated. It is safe to say that everyone will not accept the teachings and implications of this story, but it is equally sure that no one can read it without becoming more thoughtful of the possibilities of human life.

It is enough to say of THE SIR ROGER DE COVERLY PAPERS, Parts I and II, and of THE WAR OF INDEPENDENCE, by John Fiske, that they are Nos. 60, 61 and 62 in the well-known Riverside Literature Series, published by Houghton, Mifflin & Company, Boston.

The Appleton's issue a new edition of Bayard Taylor's History of Ger-MANY, from the earliest times to the present day. with an additional chapter by his widow, Marie Hansen-Taylor. In his introduction to the original edition the author says,-"The History of Germany is not the history of a nation but of a race." It is impossible to understand the history of our modern civilization without going over the ground covered in this work; and the student would have to look long before he would find another volume in which the story is recorded in such pure English and, at the same time, in so clear and comprehensive a way. The book is eminently fitted for use in the higher grades of schools, and also supplies the need of the general reader. New York: D. Appleton & Company. Price \$1.50.

THE PRIVATE LIFE OF THE ROMANS, by Harriet Waters Preston and Louise Dodge, is a capital adjunct to the classical dictionaries as an aid to students of Latin. It helps one to get at the daily life of the people about whom he is studying and so makes study interesting. Boston: Leach, Shewell & Sanborn. Price \$1.25.

GREAT TEACHERS OF FOUR CENTURIES, by Ossian H. Lang, is an outline history of the great movements and masters of the past four hundred years that have shaped the theory and practice of the education of the present. New York: E.L. Kellogg & Company. Price 25 cents.

ADDRESS TO THE CLERGY AND SKEPTICISM AND DIVINE REVELATION, by John Ellis, M. D., is a thoughtful and devout little book written from the Swedenborgian standpoint. New York: Published by the author.

AN UNOFFICIAL PATRIOT, by Helen Gardener, is the story of a conscientious Southener who was born and bred in the midst of slave ownership, but who became convinced that the system of which he found himself a part was wrong. His efforts to extricate himself and to care for his slaves and his own family, make up the story of the volume. Mrs. Gardener could not write a dull book, and we have found every page of this one full of a thrilling interest. Some excellent stories of Abraham Lincoln are related; and a clear idea is given of the way in which the war of the rebellion was looked at from the Southern Standpoint. To our taste the book is marred by the author's evident materialism and her inability to appreciate the deeper spiritual experiences of the human heart, as well as by the frequent profanity introduced. Boston: The Arena Publishing Co.

THE JUNGLE BOOK, by Rudyard Kipling, is one of the most thrilling and delightful books we ever read. It would be hard to find a more enjoyable book for the young. The author has a marvellous knowledge of the Indian jungle. Who that has read can forget these stories of Kala Nag, the elephant; Shere Khan, the tiger; and old Baloo, the sleepy brown bear, who teaches the wolf cubs the Law of the Jungle; of Bagheera, the black panther; and of Kaa, the python, whose blow is like the blow of a steam-hammer. Readers of St. Nicholas will remember the stories of "Rikki-Tikki-Tavi," "Toomai of the Elephants," "Mowgli's Brothers," and "Tiger, Tiger." These stories, delightful in spirit, are published in the present volume with additional illustrations, and to them are added "Kaa's Hunting," "The White Seal," and "Her Majesty's 'Servants." Older people, too, will delight in these tales. They are clean and wholesome, and fit for the Sunday school, the school-room or the home. New York: The Century Co.

ELEMENTARY ALGEBRA, for the use of preparatory schools, by Charles Smith, M. A., is an excellent revision, adapted to American schools, of a work that has achieved a wide reputation on the other side of the Atlantic. It constitutes a well rounded course in the newer elementary algebra, and includes the subject-matter specified by nearly all colleges in their requirements for admission. New York: Mcmillan & Company. \$1.10.

The August number of the Review of Reviews contains articles by Mr. William B. Wallace on the Hon. Wilfrid Laurier, by Attorney-General Longley on "Canada's Political Conditions," and by Dr. Albert Shaw on "Toronto as a Municipal Object Lesson." --- Robert Louis Stevenson tells in McClure's Magazine for September how he came to write "Treasure Island," and under what conditions and how the work was done .- The Primary School, a magazine for the primary teacher, makes its first appearance in a bright June issue. It is to be issued monthly, at one dollar per year. E. L. Kellogg & Co., publishers, New York.—A new plan for reaching the north pole will be offered in the September Popular Science Monthly, by Stuart Jenkins; in "'Arctic Temperatures and Exploration" he gives his experience in enduring extreme cold as a Canadian surveyor .-- We are indebted to Public Opinion, Washington, D. C., for a copy of Group No. V, of their series of Albertype reproductions of the photographs of fifty prominent contributors to the magazine literature of the day .---- A fine sketch of "Madame Sevigne as a Woman and Mother," by Miss Agnes Stuart Bailey, appears as one of a number of the illustrated articles in The Catholic World for August .-- Secretary of the Interior, Hoke Smith, contributes to the August number of the North American Review an able article upon "The Resources and Development of the South."—The American Book Company of New York have sold to the Prang Educational Company of Boston, New York and Chicago, their interest in the White System of Art Instruction, heretofore published by them .- The Monist for July contains, among other things, two brilliant and scholarly articles by the well-known editor, Dr. Paul Carus; one a review of a contribution by Prof. Adolf Harnack on "The Religion of Science," and the other a timely paper called "The Message of Monism to the World."-Fiske had conferred upon him, at Harvard's last Commencement, the degree of LL.D. This is a worthy tribute to the historian by America's greatest university. Also, at the Commencement dinner, the Harvard Alumni presented to President Eliot a beautiful gold medal, as a mark of their appreciation of his faithful services to the university for the term of twenty-five years just closed.—Western Reserve University has just laid the foundations for a new Physical Laboratory for the use of its Adelbert College and the College for Women. Mr. Samuel Mather of Cleveland is the donor of the building .- The Forum for August, contains among other able articles one on "The Increase of Crime, and Positivist Criminology," by Henry Charles Lea, and another, which will specially interest teachers, on "The New Psychology as a Basis of Education," by President G. Stanley Hall.

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CONFERENCE REPORT ON MATHEMATICS.

SUPT. J. M. GREENWOOD, KANSAS CITY, MO.

The parts of this report that I do not concur in may be arranged under two tolerably distinct sub-divisions:—

(1) abridging, enriching, overlapping, and transferring; (2) the low conception of arithmetic as a science.

The report as a whole is divided as follows:—

- 1. General Statement of Conclusions.
- 2. Special report on the Teaching of Arithmetic.
- 3. Special report on the Teaching of Concrete Geometry.
- 4. Special report on the Teaching of Algebra.
- 5. Special report on the Teaching of Formal Geometry.

1. Abridging, Enriching, Overlapping, and Transferring.

The limited time at my disposal will be devoted almost exclusively to that part of the report pertaining to the subject of arithmetic. The language of the report must be its own interpretation as to the views the conference entertained on the subjects under discussion. Judged as a production and of the actual state of the schools in which arithmetic is now taught, it is evident that the gentlemen who made the report are not engaged in teaching arithmetic, or if they are they are not familiar with the best methods in vogue in many schools of our country.

As a whole the report is suggestive, but is decidedly weak. By this is meant that in the opinion of the conference, the children are less able to work in the elementary branches of mathematics than in any other department of elementary or secondary education. This fact is brought more prominently into view by comparing the magnificent course in geography, for instance, with the lean course in arithmetic. The geography conference treats the children as great philosophers, while in arithmetic they are regarded almost as weaklings. The mathematical report is turned around so that the conclusion comes first, and it virtually starts in with the assertion that the course in arithmetic should be abridged and enriched,—"abridged by omitting entirely those subjects which perplex and exhaust the pupil without affording any really valuable mental discipline; and enriched by a greater number of exercises in simple calculation and in the solution of concrete problems."

"Among the subjects which should be curtailed, or entirely omitted, are compound proportion, cube-root, abstract mensuration, obsolete denominate quantities, and the greater part of commercial arithmetic. Percentage should be rigidly reduced to the needs of actual life. In such subjects as profit and loss, bank discount and simple and compound interest, examples not easily made intelligible to the pupil should be ommitted. Such complications as result from fractional periods of time in compound interest are useless and undesirable. The metric system should be taught in applications to actual measurements to be executed by the pupil himself; the measures and weights being actually shown to, and handed by, the pupil. This system finds its proper application in the course which the conference recommends in concrete geometry."

This extract may be received in two ways,—(1) abridgment; (2) enrichment. Under the first are the subjects of compound proportion, cube-root, duodecimals, abstract mensuration, obsolete denominate quantities and the greater part of commercial arithmetic.

Duodecimals expired by the statute of limitation long ago, except in college and university examination questions. As to compound proportion and cube-root, ten recitations are ample time for teaching both subjects. Compound proportion when treated analytically, or as "cause and effect," has a very high educational value as well as a wide application beyond arithmetical computation.

Hundreds of thousands of pupils never go to high school and have no opportunity to study algebra, but from the recommendation of the conference, they should not have anything to do with cube-root.

The kindergarten children handle globes, cubes, cylinders and cones, not to mention other simpler material forms, and yet, notwithstanding the necessity for such knowledge, a pupil must not learn how to find the edge of a cube till he studies algebra, lest the labor should exhaust his mental powers. Should algebra never be studied, what then? Starve the mind!

As a means of definite information and strengthening the mental faculties, unless it be the critical analysis of sentences in English Grammar, there is no other kind of work more interesting and satisfactory to pupils than the extraction of square and cube root, illustrated by means of geometrical forms made by the pupils themselves. These processes embrace the most elaborate and connected chain of reasoning that the school boy or girl meets with in the grammar school course. The discipline is greater and equally as valuable, or more valuable, than the extraction of these roots by the "algebraic method." No one who has ever taught these subjects properly and intelligently will contend that they are difficult for boys and girls to understand or to apply.

What meaning the conference attaches to the term "abstract mensuration" is not clear. If by it is meant that volumes, areas and lines are always to be measured first by the pupils before computation should be made, then the hypothesis becomes impossible if not contradictory. But if, at the beginning of a subject, the pupil shall make his own measurements, the position is not only tenable but educationally correct. However, when the pupil has once obtained a definite idea of an inch, foot, yard, rod, mile, etc., future measurements need not be performed but assumed. The gathering of "field notes" is well enough at first, but a surveyor or an astronomer does not measure, in a physical sense, all the lines and angles used in making a calculation.

"Obsolete denominate quantities" must refer to old tables common in English Arithmetics prior to, and immediately after, the Revolutionary war. The recommendation that all business or commercial arithmetic should be handed over to the tender mercies of the commercial colleges, under the plea that the children in common schools are two young and immature to understand these subjects, is "a dream theorem of words-words."

Children hear very much more of banks, stocks, insurance, assessments, taxes and such things, around the fireside than they do of scientific instruments, or of such problems as "computing the quantity of coal which would have to be burned in order to heat the air of a room from the freezing point to 70°." How this can be very much simpler to a child of twelve years than the idea of shares in a corporation, is a "sphinx riddle."

No doubt, it is because the conference has said so! That the child can have no idea of business till brought face to face with it may be true from the standpoint of learned professors, but certainly not with the average American boy "who catches on without the second telling."

The conference recommends also that practice in quick and accurate reckoning in the fundamental rules, including operations with vulgar fractions and decimals, should be made an essential feature. I agree most heartily with this except that the adjective "vulgar" has a flavor of Thomas T. Smiley's "Federal Calculator," published in 1825, and which volume certainly made a much deeper impression on the conference than any arithmetic of recent date.

Children in first, second and third grades are doing these things now. Come west and see!

The time devoted to algebra is an instance of extreme lengthening out beyond anything I have ever known in mathematical instruction. The pupil is to study algebra a year, then he is to spread it out two years longer, giving as much time to it for two years as he did the first year, that is to say, five hours in recitation each week for the first year and then two and a half hours a week for the second and third years. Two solid years on algebra is tough on the books, but tougher still on the boys and girls.

There is not a college algebra published in the United States, except Stoddard and Henkle's University Algebra, that pupils will not study through and review in a year and a half. When a pupil begins algebra why should he not work at it in earnest?

For the average American Algebra fifteen months, at the farthest, is ample time.

It is an educational mistake for children to lay aside common school arithmetic to dip a little bit into algebra. A boy or girl will be far stronger in mathematics after a good drill in mental arithmetic than if mental arithmetic be omitted, and elementary algebra, in a half hearted way, be substituted. Until a pupil can handle quadratic equations well, algebra is little help in the solution of arithmetical problems. Many equations of the first degree are more easily and clegantly handled by arithmetic than by algebra. A boy with a smattering of arithmetic and of algebra is not half so well equipped, either for life or for progress in mathematics, as he is if thoroughly grounded in arithmetic, both practical and mental.

I have yet to see the man, woman, or child that was good in algebra that was not also good in arithmetic. Jumping around never counts for much in either of these branches. The better the learner is in arithmetic, the easier algebra is. The outlook that elementary algebra can give is quite limited.

While the report is full of suggestions about what should be taught, the nearest approach as to how any particular subject should be taught, is a statement that the children should see and handle some measures. Had the gentleman been entirely familiar with the methods of presentation employed in nearly all the schools of the country and the appliances provided by boards of education or by the teachers for teaching concrete arithmetic, a considerable part of the report would never have been written. It, in this respect, is a verbal contest with a straw man that certainly has no existence in the progressive schools of the country. Portions of the report, in my judgment, should have been leveled at the methods of teaching certain subjects rather than at the subjects themselves.

Nearly all the subjects recommended to be dropped occupy but a few pages in our modern school arithmetics. I have before me Dr. Milne's Standard Arithmetic, published in 1892. Compound Proportion covers three pages; Cube-Root, including pictures, explanations and applications, seven pages. Duodecimals not in the book; True-Discount, Banking and Bank Discount, six pages; Insurance,—property and personal—three pages; Partial-Payments, three pages; Equations of Payments and Accounts, four pages. These subjects cover twenty-six pages in a book of 428 pages, and can be easily mastered in twenty-six recitations, yet this is what is called "abridging and enriching" the course in arithmetic.

I will venture to suggest certain subjects that may very profit-

ably and properly be omitted from our common school arithmetics, namely,—circulating decimals, all but the simplest exercises in compound interest, foreign exchange, all foreign money (except reference tables of values), annuities and progressions. Percentage and Interest, with all their applications, should not fill more than twenty pages. This means a cut of at least two-thirds or three-fourths of all the matter crowded into Percentage and Interest. With a good drill in Mental Arithmetic, the necessary matter pertaining to Percentage and Interest can be compressed into ten or a dozen pages.

As to the concrete instruction in arithmetic, algebra and geometry, as exercises in getting the subject matter clearly before the pupils, there can be no two opinions; but in the study of all branches of mathematics as such, neither the teacher nor the learner should be compelled to eat, drink and sleep with concrete mathematical illustrations. Just as soon as the illustrations have served their purpose, they should be put aside. Mathematics deals with symbols and mental conceptions of time, space and motion, and not with material things that must be felt, handled and weighed only incidentally. The science is one thing and its concrete application another. Mathematics is essentially a science created by the human mind — a product of the understanding and of the reason.

2. An Inadequate Conception of Arithmetic.

Arithmetic is looked upon in many ways and from different points of view. The true reason for these differences must be sought for in the unintelligible manner in which it is taught in some schools, and the low use to which it is put in doing menial service for other branches. It is used as a sort of wheelbarrow for carrying other things in all the inorganic phases of the material world. It is the most general key possible to nature by dealing with quantitive relations.

(1) In solving a problem the learner must register in his own mind what is given; (2) what is required, or to be proved; (3) the steps in the argument necessary to establish the proof. The main points for the learner to keep in mind are these: (1) is my interpretation of the problem correct? (2) is my plan of work legitimate? If he is able to decide these two questions affirmatively, his progress will take care of itself.

A rational course of study must satisfy two demands, one for stimulating and training all the human faculties and furnishing such kinds of knowledge and to such an extent as to render it efficient throughout life. Or this may be put in another form, to know that you know how you know yourself, and to know how you know the material world. Thus good observation and sound reasoning should go hand in hand. This means that one must know inductively and deductively. Induction asks what is true? Deduction pushes one step further and asks why it is true? Thoughts need to be arranged consistently. Mathematics is the one science that is completely logical. It is the one field in which the beginner perceives that he must be an accurate reasoner or he is nothing. Here is the field of absolute cer-Mathematical conclusions, compared with all other scientific conclusions which are true conditionally,—the conditions being those of experimental data — are absolutely and universally true so long as our minds are constituted as they are. Here is a measure of certainty freed from doubt. This inner self-contained certainty, arising from and springing out of the very nature of arithmetic, has an educational value and marks it at once as an instrument for the training of the mind in precise and exact habits of thought that can not be found in any other branch of the common school course.

Mathematics deals not in treacherous reasoning. not jumped at. In its dry, clear atmosphere of certainty and unemotional thought, the pupil learns to think precisely and impartially, and he carries this strength with him into after life. The habit acquired of getting to the roots of things, and of not being put off with insufficient reasons, is a mental condition that cannot be so fully developed in any other department of human thought as in mathematical subjects. How is this or that proved? is the foremost question. Knowledge of the Laws of Number and Form has the widest application in other departments of science. Indeed, natural science cannot be understood without a knowledge of number. Botany makes' heavy demands upon it. Physics and chemistry require a great deal more. Quantitative modes of measurement are continually called for in all the experimental sciences. Political and social sciences are dependent upon arithmetic for all their facts. The higher forms of electricity, heat, light, motion and

sound are only extensions of the science of mathematical ideas of addition and subtraction; and all the machinery of this age depends upon mathematical investigations. Thinking, then, is largely quantitative, and arithmetic is only the first preparation for this kind of thought. The mind needs to be made strong and sure by clear methods of thought freed from distracting Truth is oftentimes covered over with rubbish or incidental circumstances and it has to be picked out and arranged systematically, and the process of entanglement is better laid in mathematical studies than in either the languages or natural Mathematics, by virtue of its peculiar nature, holds an intermediate place between what may be called the external sciences and the internal sciences, and it is through the science of number and form that these two great departments are connected. And while arithmetic, the very foundation of the mathematical structure, should begin by getting its starting point from the senses, yet it is not a sense study except sparingly. rob any branch of mathematics of its abstract character is to belittle it, and to deprive the mind of the greatest mental discipline that can come to it. Man is the symbol using animal, and mathematics is the symbolic department of absolute knowledge.

The too prevalent notion that the elementary branches of arithmetic, algebra and geometry are to be learned, and should be learned, incidentally, is to misconceive the character and the scope of all sound mathematical knowledge. It has been well said: "The mathematician is independent of all things but his own mind; his work is to think out his own thoughts to the end." As far, then, as the conference on mathematics indicates an opinion, it is on the side of "bread and butter knowledge." There is not that uplifting influence running through the report which places even elementary mathematics in its proper light Each branch of before the great teaching force of America. mathematics holds in solution a great body of truths of its own, which are susceptible of wide application to many other questions that lie apparently outside of the domain of pure mathematical investigation. The report makes "mathematical fadding" the essential element in each branch, instead of putting the subject in its essence forward as the basic idea.

Should the studies of our schools wear the sordid air of a mercenary selfishness? The idea that a bounty or a bribe to stimu-

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late is necessary to secure the highest results in mental or moral progress is repulsive to every ennobling instinct of humanity, and the low "bread-and-butter motive" so persistently lauded in some quarters can have but one tendency,—the lowering of educational ideals.

To cultivate the constructive and imaginative faculties is an important gain in all mathematical teaching, but that species of arithmetic and geometry which essays to deal continually with real things, degenerates into a kind of mechanical measurement well enough for the "square-and-scratch-all" philosophy, but entirely too restrictive for the learner who works after an idealized form in his own mind. To become proficient in mathematics is an individual affair. Each must do his own thinking, follow his own clews, and reach his own conclusions. Every branch of the sciences demands earnest, voluntary and persistent effort, and he who is not willing to subject himself to this kind of mental discipline which demands self-denial, patience, perseverance, need not enter this field with the expectation of accomplishing a great deal. Unless it be in metaphysics, there is no other department which can compete with mathematics for furnishing matter for severe and exact thought.

The one who first makes an original experiment is a discoverer, but others coming after him and repeating it cannot be said to perform an experiment in a very striking sense. It is simply doing what others have done, — a mere copying under directions. The interest aroused is nothing compared to that which belonged to the first trial. As has been truthfully said by one of England's greatest men: "In fact, almost always he who first plucks an experimental flower thus appropriates and destroys its fragrance and its beauty." The experimental side of instruction is largely devoted to familiar processes already hammered out exceedingly They are necessary and have a place in instruction, but when pushed beyond a certain boundary, they negate themselves. Besides, it too often happens that what the pupil cannot draw cannot be imagined, and the mind long accustomed to act through the fingers and the eye, cannot act independently. Mental processes stand infinitely higher than eye, ear, and finger processes.

The idea that a science of any kind is to be learned incidently in the prosecution of another science or other sciences, is an unsound position, and especially is this obvious in the many futile attempts that have been made in this country during the last score of years. Arithmetic, grammar, spelling, geography, United States history, were all to be thus acquired. But the cold fact, naked and truthful as it is, is that not one of these attempts has succeeded.

A science is not a parasite, because it may aid in unfolding another science. It is what it is by virtue of its own inherent principles, and as such it must be learned and correlated.

THE RESPONSIBILITIES OF PREPARATORY SCHOOLS.

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Every student of social progress has learned that the distinguishing feature of this age is the specialization of work or function. Commonplace as this observation seems, it is nevertheless always interesting to note the application to particulars of any general law. It is interesting to notice how all trades and professions are now specialized into departments; departments into sections; sections into details, down to the minutest division This is true of mechanical labor and it is equally of labor. true of intellectual or brain work. All the learned professions are divided into special departments. Law has its corporation lawyer, its criminal lawyer, patent lawyer, collection lawyer, etc., and each attends to his own specialty. has its numerous specialties and specialists. So has theology. So has every department of human activity. The result of all this specializing is vastly better and more comprehensive work performed with less expenditure of vitality and with far greater aggregate results than would be possible under a less thorough and systematic division of labor and responsibility.

That the great work of education must progress in accordance with this law is apparent to every one who has given the subject serious thought. Good scholars were doubtless made in the little country schools of fifty years ago, where one teacher taught everything from the a b c's to logarithms and Greek roots. But those scholars were made in spite of and not on account of their surroundings. Generally, too, such as made great attain-

ments did so because on account of their mental aptitude they succeeded in securing more than a fair share of the teacher's attention and efforts.

No question of the present day presses more keenly upon the hearts of earnest and faithful parents than the question of the right education of their children. For nothing do they pay out money so cheerfully and so lavishly. Generally speaking, no subject more instantly secures their attention.

For it is not merely a question of having our children instructed in the sciences and languages and technical knowledge of the schools. It is a question of how the child shall be led and helped and developed physically, mentally and spiritually, until it shall realize its own individual relation to the Universe; shall be brought into harmony with the laws of that universe, physical, intellectual and spiritual, and, learning to live in harmony with those laws, shall realize how infinitely grand is the gift of life, how infinite its possibilities for good or evil.

A very great change in theories of education has taken place within the last ten or fifteen years, in that the great importance of the earlier years of a child's life has been recognized.

Thanks to the wide-spread teachings of the Kindergarten, wise parents are almost everywhere beginning to realize that the first great aid in the development and growth of the child is to be found in these beautiful child gardens. Without, for one moment, attempting to enter upon a discussion of the deep philosophical and spiritual principles that underlie the whole system of the kindergarten teaching, the most cursory observer who visits a well conducted kindergarten can see where the help to the parent comes in; where indeed the opportunities for child culture and training are found in the kindergarten, that cannot be found even in the homes. There is first the association of number whereby each little one learns that he is not the only object of the special care of the teacher; learns, under the good kindergartner's instruction, that he is expected to be kind, courteous, unselfish, generous toward his little fellows. Here is activity which is the essential factor of his physical growth and development, is guided unconsciously to himself into directions of constructiveness instead of destructiveness; he is taught to observe the principles of beauty in color and form and sound until, as a result, he learns to choose beauty instead of ugliness, order

instead of disorder, harmony instead of discord and is started in the right direction toward a generous, order-loving and harmonious life. It is in the kindergarten that the observant parent first begins to realize the incalculable power of the teacher's example and character over the child. Many a mother whose children are under the care for a part of the day of a competent kindergartner has felt herself held to a higher standard of good temper and politeness by the innocent comparisons made between herself and the kindergartner.

"Miss Mary never speaks that way to us" was the innocent reproof administered by a little four-year-old to an impatient mother. On the other hand, the mother may happily find in the person and example of the kindergartner one of her strongest allies in forming a high ideal of behavior and propriety in the mind of the child. To a little one who had formed the habit of biting its nails, the mother said, "Miss Mary's nails, I am sure, never look like that." The next day the child, on returning home, exclaimed, "Miss Mary's nails are just beautiful, and I mean to have mine just like hers," and that was the end of the annoying habit which no amount of reproof had been able to overcome.

A good kindergarten training is, undoubtedly, the best possible start for the child on the long road which it must travel before the goal of a broadly educated and developed manhood or womanhood is reached. But, leaving this department the invaluable aid of the good teacher is next realized in the preliminary and intermediate departments of study. In the primary should be acquired the principles of good penmanship, of drawing and spelling and reading aloud which includes a clear and distinct enunciation. If a child leaves this department without having acquired these, he will be forever after hampered by the In this department, too, first, object lessons in natural history and science should be given, developing and cultivating the power of observation which, in after life, shall prove such a factor in the effective handling of his mental tools. Here I would especially wish to emphasize what I believe to be an important fact, namely,—that it is in this period of a child's mental development that the foundation for a love of good reading must be laid.

Children are often what we call great readers from a very

early age, but their reading is too frequently of a kind that not only does them no good but is positively harmful. It is with mental food just as it is with food for the body. Good, substantial bread and meat and healthful fruits make good blood and bone and muscle. Highly seasoned, artificial or stimulating foods not only do not nourish, but they are causes of disease. Children need to have good mental food selected for them by those older and wiser than they, just as they need to have food for the body selected, and they need to be kept on this food till they learn to prefer it to the sensational and deleterious mental food that is served up in such profusion in much of the current literature of the day. Of course it is the duty of the parents to know what their children are reading, but it is also the duty of the teacher to select and cause to be read by the pupil in school the best literature, and the reading of the best literature can be begun at a very early age.

All this in the primary and intermediate departments requires the painstaking and conscientious effort of the teacher, who not only loves her work but who has some high conception of the importance of the foundation she is laying. Both in this department and in the intermediate, it is impressive to reflect how dependent the parent is upon the teacher. When we remember that in these impressionable and formative years of life the child is for a greater number of hours every day under the direct care and instruction of the teacher than under the care and instruction of the mother, how does the teacher function rise in importance. It is in these earlier years that so much precious time is idled away, or squandered through lack of ability or skill on the part of the teacher, to train the young mind to habits of attention and cultivate the power of study. Notwithstanding all that has been written and preached against forcing the youthful mind, or confining it too long to the labor of study, I venture to affirm that, in thousands and tens of thousands of instances, the time between eight and fourteen of a child's life is largely wasted for lack of knowledge on the part of the teacher as to what should be expected and required of a child in the way of intellectual work, and for lack of the proper systematizing of that work.

During the period between six and fourteen, a child should acquire a good elementary knowledge of one or two languages,

of two or three of the natural sciences, and of elementary arithmetic and algebra. I say elementary arithmetic advisedly, because, as the result of years of observation as a teacher, I am convinced that schools generally press the study of arithmetic at too early an age and before the reasoning powers are sufficiently developed. In these earlier years children love, and may be successfully taught, to observe and to classify, their powers of memory may be also cultivated, both by its exercise in learning the languages and by committing to memory beautiful selections from the poets and literature of all ages, by which means the love of literature and poetry may be implanted.

This is the brief outline of what may and should be accomplished for the child up to his fourteenth year, and its reasonableness and desirability any intelligent parent can appreciate. But without the cooperation and intelligent effort of the teacher, the parent is almost helpless to secure this result for the child. because this harmonious, correlated, systematic work must all be done in the school room, and under the direct guidance and direction of the good teacher. For lack of such systematic and thorough work, thousands of children enter the higher classes in our schools, both public and private, handicapped by difficulties from which they can scarcely hope to recover. A poor and awkward and difficult penmanship hinders them from expressing their thoughts or preparing their exercises easily with the pen. Inability to fix the attention and observe carefully handicaps them in one direction; an inability to read aloud with ease and propriety handicaps them in another direction; an uncultivated memory and lack of readiness in expressing thought clearly, orally, handicaps them in still another, and yet the power to perform every one of the exercises should have been thoroughly acquired in the primary and intermediate departments, or before the child is fifteen years old. That this work has not been done is the fault of the teacher and the school, if the parent has done his part in requiring punctual and regular attendance and the observance of necessary hours of study.

But it is when the child enters upon the wider and higher departments of collegiate preparatory study, that the parent most needs the coöperation and aid of the true teacher. For now character begins to crystallize, aims in life are now to be defined, if ever; companionships are to be formed that will, in all prob-

ability, color the whole future life. Now indeed are the influence and coöperation of the true teacher most needed and appreciated. For my own part, there is nothing that continually impresses me more and more as my days are spent in the work of teaching or rather, more largely now, in the superintending of teaching than the responsibility laid upon schools and teachers, not only in the work of imparting instruction in a systematic and thorough manner, but in the formation of character. A notable article by President Andrews of Brown University, entitled "The Next Step Forward in Education," has attracted very wide attention among thoughtful educators throughout the country. In it he says: "Speaking succinctly, the constituents of sound education are: First, character; second, culture; third, critical power; fourth, power to work hard under rule and under pressure." This is a short outline, but how strong! First, character. This is something that is so largely influenced by association and by example, that it constitutes one of the vital elements in every good school. Teachers should be exemplars in manner, in speech, in self control, in all generous behavior, as Emerson would say. The ideal teacher is one of whom the parents, on thorough acquaintance, should be able to say: "I would wish to have my child resemble that teacher in character and manner;" and of whom the child also should say: "I should like to be such a woman or such a man."

It has been my privilege, within a short time, to attend two reunions of the alumnæ of two celebrated schools, or seminaries, that have sent forth from their walls more young women of noble and strong character than any other two similar institutions in the world,—Mt. Holyoke and Monticello. At one of these reunions, Mrs. Alice Freeman Palmer, the former President of Wellesley College, made a short address in which she said: "A college professor lately asked me: 'Why is it that in all the modern appliances of culture, all the facilities for doing educational work with which our modern schools and colleges for girls are supplied, we do not seem to turn out girls of such fibre and character as these old seminaries did forty or fifty years ago?'" The answer, I think, is not far to seek. It may all be explained by a study of the character of the women who officered those institutions of fifty years ago. They were women who had obtained their own education at a cost in struggle and privation

that made them appreciate its value. Their earnestness had made them thorough students; and what they had studied they knew thoroughly. They came before their pupils filled with a sense of the importance of the work they were to do for them, of the great value of an education, and with an enthusiasm for imparting instruction. They knew the value of good foundations. It is an interesting incident in the life of Mrs. Bannister, who was associated with Mary Lyon in the founding of Mt. Holyoke Seminary, but who afterward went to Ipswich and founded that celebrated school, the Ipswich Female Seminary, that in its first year, after she had organized the classes for scientific and other studies, she found the whole school so deficient in penmanship, grammar, spelling and the elementary principles of arithmetic that all the class work of the school was laid aside and the entire attention of the pupils for nearly one term was required for the study of these neglected elementary branches. Every girl in the school was required to thoroughly review grammar and arithmetic, and to give much time every day to penmanship and spelling. What a lesson in character building was the enforced review! The pupils saw at once that there was to be no sham work; that solidity and thoroughness were to be the essentials of a true education. And speaking of this thoroughness in the elementary branches, who of us have not had opportunity to compare the elegant letters written by educated women of forty years ago with the harum-scarum, scrappy, scrawly notes — they cannot be dignified by the name of letters — written by so many girls and women educated in our latter day schools.

Penmanship, composition and forms of expression were regarded as beautiful arts in those days, and practiced with a respect due to their importance. Then, too, the pupils of those schools in their study of literature, studied the classics. They were not submerged and confused and bewildered by the flood of literature that sweeps over the world today, the greater part of it mere padding — mere thin rehash of the thoughts of the past. Our women of forty years ago read Milton and Shakespeare and Bacon's Essays and Locke on the Human Understanding and Burke on the Sublime and Beautiful and Dr. Johnson's Rasselas and Addison's Spectator and Pope and Thompson and Gray and Scott and Wordsworth. Every one of these writers gave the mind food for earnest thought, and while there was, perhaps, not

enough of diversion and entertainment pure and simple in the books of those days, and while, also, a rather sombre cast was given to the mind by the lack of these elements, yet we must concede that this training developed a genuine love for good literature, such as it is often very hard to develop now. It developed a love for good reading that made books the beloved friends of quiet, happy homes; that made the quiet hearthstone, far removed from the gay crowds rushing after exciting and ephemeral pleasures, the dearest place on earth, where the companionship of the choicest and noblest spirits of the past was shared by husband, father, mother, brothers and sisters.

Now it is to help develop all these beautiful possibilities of the intellectual life and the noble character that the preparatory school should devote its energies. To do this takes time, patience, energy, ability and an innate enthusiasm for the work. To the private preparatory school especially, is delegated the duty of giving more attention to the finer and more delicate departments of culture than is possible in our public schools in fact, this is the principal argument for their existence. public schools have a work of transcendent importance to do. They must take the children of all who send and give them the education that will more particularly fit them to fight the battle of life for themselves. They too often, unfortunately, are not allowed the necessary time to lead the pupils away from the stern practicalities of figures and scientific statements into the beautiful and alluring fields of literature, and art and music and all those higher domains of thought and feeling which, if they do not help one to earn a living, at least make life worth living after it is earned. To fill this lack is, in an especial manner, the function of the good private preparatory school.

And now the thought comes to me, how shall I close this paper, containing but a few of the considerations that crowd upon the mind when that delightful subject, the education of the young, is considered. I must call to my aid one of our greatest, our most beloved American poets, who, when addressing the children who formed a little preparatory school in his own house, wrote:

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What would the world be to us
If the children were no more;
We should dread the desert behind us

What the leaves are to the branches, With light and air for food, Ere their green and tender branches Have been hardened into wood,

Worse than the dark before.

Such to the world are the children;
Through them it feels the glow
Of a brighter, happier climate
Than reaches the trunk below.

THE PSYCHOLOGY OF OBJECT DRAWING.

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The simple request "Draw what you see" is frequently made to pupils in our public schools when a picture of any object placed before them is desired. This very innocent expression, however, is capable of two interpretations: The drawing of the form presented as it appears to the eye, and the drawing of it as it is known to the mind in its facts of geometric form. In the case of the young child who essays for the first time to make the picture drawing of an object, the pertinent inquiry may be made: Does the child know what he sees, or does he simply see what he knows? It will not require much studied reflection to arrive at the conclusion that the latter inquiry reveals the true condition of the child's mind; for it is unreasonable to expect him, as it is entirely outside of his experience, to do other than to express the object only as his mind knows it in its geometric facts.

To explain this statement we must look up the antecedents of the ideas which are active in directing the hand to record the sensations of sight when the brain is stimulated by the vision of the object. We know that when the baby eyes are first unsealed, visual sensations are conveyed to the brain and, like all other subjective sensations, are immediately projected out of the self towards, or to, the external object, the inferred source of the stimulus. When, therefore, emanations of sunlight in undulations of ether of varying wave lengths are reflected from the surface of any body, the lens of the eye concentrates a part of these undulations upon the retina, or expansion of the optic nerve.

This irritation, or stimulus of the nerve ends when communicated to the brain, is recorded there as a complex sensation of color in various gradations and tones. These color ideas, although registered in the brain, are accompanied by an instantaneous, concomitant idea whereby they are projected back to the object from which they originated.

This instinctive projection of the sensation of sight towards the object is unaccompanied at first by any associated idea of distance or of solidity; the "color points" of the retinal picture, if we may so call them, consisting of all the rays of light stimulating the nerve ends over an area identical in outline with the perceived object, are alike projected indefinitely into space. The object therefore is cognized by the undeveloped brain as a flat picture; and this impression obtains until the hand in its explorations rounds out the cycle of the acquisition of knowledge and grasps the object. Directly this act is accomplished, by the effort of reaching a greater or less distance, the opening and closing of the fingers to grasp the object, and the passage of them over its surface, sensations of touch are experienced which, being communicated to the brain, are there recorded as ideas of distance, extension, form, texture, etc.

These sensations of touch are recorded in the brain conjointly and simultaneously with the visual sensation of the object, so that after several such associated experiences the paths of nerve conduction become so efficiently trained that any subsequent sensation of the visual nerves alone will recall all the associated impressions of touch.

Thus when the child has handled the ball or the sphere a sufficent number of times to have properly co-ordinated in the brain the visual perception of it with the tactual perception, thereafter that particular visual impression of graduated tones of color, passing from light and tones of light to shade and tones of shade in all directions, is recognized as a ball, a sphere with its round contour and surface. In like manner, when the cylinder is again seen by the eye in any occasional position after one or more experiences of seeing and handling it have firmly associated the tactual and visual sensations, the visual impressions of graduation of tone around the circular periphery and the more or less even tone on the plane ends recall the tactual concept of rounding surface and circular plane ends, and the object is recog-

nized as the cylinder. The important point to be borne in mind is that the object is conceived to be what it actually is, in its facts of geometric form, irrespective of the position of the object, or of the "view" which the eye takes of it.

The above briefly stated is the operation of the brain in the mental recognition of the several geometric forms, or of the forms of nature and of art. The knowledge of the actual geometric shape of the object is indissolubly associated in the brain with the visual idea of it; so that in describing it by spoken or written speech, or by graphic delineation, its real shape is conceived and not its apparent shape, which is really what the retina always receives.

We have now precipitated in the last few words the entire argument of this special inquiry.

The eye is simply a species of camera, through the crystalline lens of which images of external objects are thrown inverted* upon the sensitive "plate" of the retina. The images are actual pictures in perspective the same as photographs, and are subject to the same laws of optics observed in such pictures,—the true geometric forms are rarely recorded, but lines which are actually parallel converge as they are seen to recede, and nearly all surfaces are foreshortened, so that squares become trapezoids or trapeziums and circles become ellipses. These retinal images or pictures, however, have from the earliest childhood been interpreted to the brain by the associated tactual memory ideas,

*The precise similarity between the function of the eye and that of a lens convinces us that not only is the image of the external object pictured on the

convinces us that not only is the image of the external object pictured on the retina at the proper focal distance of the crystalline lens, but that the image, as in the camera, is also inverted on the retina.

No former theory of physiological optics, or of the mental "point of view" of this retinal picture has even satisfactorily explained the manner in which the mind reverses this picture and recognizes objects in the position which we designate as upright. But the psychological theory of the projection of sensations, by which we instinctively invest the object with our sense impression of its properties, accounts for this inversion in a manner that leaves nothing to be desired in the way of further explanation. If we can conceive of the mental projection back to the object of a single ray of light which may have entered the eye through the exact centre of the crystalline lens, or approximately thereto, and subject consequently to no inversion, we can as easily conceive of the external projection of every "color point" on the retina back through the crystalline lens to its original source in the object. In other words, the brain can know nothing of the arrangement, inverted or otherwise, of the color points of the picture on the retina as each individual color point is independently projected back to the object. By this mental process a perfect agreement is effected between the visual and tactual sensations, and extension in any or all directions is similarly recognized by both visual and tactual ideas. visual and tactual ideas.

which act as a kind of intermediary and translate the ever changing impressions of sight into the simple language of geometric facts. In view of these facts it is not at all surprising that in the graphic expression of form the drawing of beginners is invariably flat and geometric. In this respect their efforts are perfectly paralleled by the drawing of all early races of mankind.

The Egyptians, Assyrians and the early Greeks all represented form in two dimensions with no conception of perspective. In their pictures we see little more than knowledge drawings, with only an occasional suggestion of foreshortening. With the later Greeks the grandeur of their art attests to the success with which they emancipated themselves from the error of geometric representation, and founded their inimitable art on the critical study of the object by the eye in its purely visual function.

The child's first drawing of the cylinder is simply a knowledge drawing of it, not a reproduction of the visual image. He expresses in the drawing his knowledge of the geometric facts of form—the circular top and the flat bottom—learned through long association of the visual and tactual ideas of it. With the cube his attempt to draw what he "sees" is no more successful. He represents the facts known to his mind, that the cube possesses a square front face and a square top face.

In order that the beginner may draw objects as the eye actually sees them, or, to state it with no ambiguity of meaning in regard to the psychological functions of the brain, as the image is received on the retina, he must be brought to dissociate as far as is possible by studied effort the intimately associated ideas of visual impressions and the ideas of true geometric form. These latter ideas while correct for the thing in itself are wholly wrong as an interpretation of the retinal picture of the thing. In pictorial representation the real facts should be suppressed and the visual sense impression should be expressed exactly as it is received without any modification, just as the eye of the babe receives it, in the innocence of the eye,* without knowing its significance.

^{*&}quot;The whole technical power of painting depends on our recovery of what may be called the *innocence of the eye*; that is to say, a sort of childish perception of these flat stains of color, merely as such, without conscioueness of what they signify, as a blind man would see them if suddenly gifted with sight."—Ruskin.

To develop this faculty in the child,—the ability to reflect upon the integrity of his visual perceptions - and to promote facility in expressing by drawing the apparent shapes of objects as seen by his eye in contradistinction to their true shapes, is a most valuable exercise in the training of the faculty of observation. It trains his eye to perceive the subtleties of proportion in three magnitudes, to study the details of the surfaces of fruits, vegetables and other natural or artificial objects, and to observe and render by shading the delicacy of the light, shade and shadow on these objects. The fact that this method is the method of the artist and if carried out in the higher schools may lead ultimately to painting, the highest order of pictorial representation. gives a romantic interest to the work. But this desirable result, much as it may be hoped for as the goal of undoubted talent, should by no means be considered to be more than an incident of the instruction. Object drawing should be a constant auxiliary of all branches of study in our public schools. In the first year in school, pupils might be taught to draw simple leaves directly from nature, thereby familiarizing them with their specific shapes as well as gaining power in graphic expression. In the second year, they are none too young to begin the representation of simple fruits and vegetables, as the apple, potato, etc. It is truly surprising to those who have not observed the drawing of very young children to see how soon they learn to observe for themselves and to express intelligently as well as intelligibly such facts as the impossibility of seeing the top end of the stem of an apple when it is turned away from the eye, or of being able to see both the stem and blossom ends in the same drawing of the apple.

These are to them actual facts of knowledge which they are at first prone to believe are visual facts, and they so record them both. Another simple fact is learned, and the child's capacity for the reception of knowledge gained through his perceptive faculties is correspondingly increased when he discovers in drawing the potato that the curved edges which partly surround the buds on their inferior margins always bulge toward the root end. Once they perceive this, or any other scientific fact acquired through their own self-activity, they are not soon likely to forget it; and they will look with great eager-

ness to find the root end of their potatoes that they may draw the curved axils in the proper direction.

In object drawing, as suggested above and followed out in the higher grades with more thorough drawing of all the forms of nature studied in the schools, the child is stimulated to observe after a critical, scientific method, marking down with his pencil the simple discoveries which he makes. With some few of the pupils who enjoy the endowment of native talent, this work will lay the foundation for future art work, making the production of a single clever artist worth all the cost.

But the direct gain which this kind of drawing gives in general perceptive acumen will make for the education of the practical, scientific scholar. There is constant need throughout the study of all the natural sciences of close, critical observation of the organic and inorganic forces of nature and of their varied phenomena. These manifestations of the activities of nature are best studied and observed when the eye and the hand are mutually employed.

Nor will the time of the future artisan in any way suffer loss from these school exercises in object drawing. Any exercise which improves the discriminating power of the eye, and requires, and hence cultivates, the skill of the hand, cannot be other than a gain to the manual worker.

Indeed, the study of object drawing when correlated with other branches of study, or when made an exercise in pure representation, carries out fully the spirit of those objective methods of study which are the underlying principles of our Kindergartens, and which should form the basis of the methods of instruction in all the studies of the higher grades. Not only do they make all branches of study more interesting to every pupil, but they render them more intelligible to the average mind.

CORRECTING AN IMPORTANT DATE.

PRIN. WILMOT H. THOMPSON, ORANGE, N. J.

With great pleasure I read in the December number of Education Mr. Chas. R. Ballard's very interesting paper on "The Dominical Letter," etc. I was the more pleased to see this matter so well presented there because of my firm belief in what the author says in the concluding paragraph of his article,—that "a very large majority of teachers know nothing about it," and further that knowledge on this subject is well worth acquiring as "a part of every live teacher's outfit for daily use."

The question of time, — the science of computing dates,— has not received the attention that should be given to it in our schools. I do not say that to school courses already overburdened, perhaps, another study should be added, but a better understanding of some things pertaining to chronology would enable many teachers to do more intelligent work in teaching history and biography. Surely every teacher should have accurate knowledge of all time-recording schemes that have a bearing upon, or that are likely to come to the surface in the study of modern history. Have teachers, as a rule, such knowledge now? Assuredly they have not. In one of our public grammar schools, the following questions were asked by different pupils at different times within a few years. In each case the teacher to whom the question was put was unable to answer satisfactorily and the writer was called on to explain.

What is the meaning of old style and new style dates?

What is the Dominical letter, and for what is it used?

If December 21 is the anniversary of the landing of the Pilgrims, December 11, O. S., why is not February 21, the anniversary of Washington's birthday, February 11, O. S.?

Why is Forefather's Day observed sometimes on the 21st and sometimes on the 22nd of December?

Why will the year 1900 not be leap year?

Just such questions as these are likely to arise in any bright pupil's mind, and the answer to any of them would be apt to call forth from a wide awake class many more kindred inquiries. How many teachers are prepared to give, off-hand, clear and satisfactory answers to a train of queries thus started?

The problem of a difference in time, between the old style and the new, has given rise to more perplexing questions and to more mistakes in historical, biographical and encyclopedic works than most people imagine. The carelessness of some writers and the manifest ignorance of others have caused the greatest confusion and uncertainty in regard to dates occurring between the latter part of the sixteenth and the middle of the eighteenth centuries. When the Julian Calendar was corrected and the new style or Gregorian reform was adopted, due care was not exercised by historians and other writers to follow a uniform style in entering dates, and few took the pains to indicate whether recorded dates were given according to the old or the new style.

The events of the past year or so show how widespread is the misunderstanding of the time question. As a nation we came ridiculously near to celebrating an important anniversary nine days ahead of time. The year 1892 was to be a grand jubilee year; but that would not satisfy sentimental regard for an anniversary day, and October 12, 1892, was looked forward to as the day to be especially marked. By act of Congress, nearly two years before the time, that date was fixed as the time for dedicating "with appropriate ceremonies" the grounds for the proposed World's Fair in Chicago. It was to be the great day in our season of rejoicing. The American people were reminded again and again of the fact that at two o'clock in the morning of October 12, 1492, a gun fired on board the Pinta made known to Columbus and his fellow voyagers that land had been sighted at last. October 12, 1892, mistakingly regarded as the 400th anniversary of this discovery of a new world, was to be duly observed as such and active preparations for the celebration were begun throughout the country. In the spring of '92 the New York Legislature enacted that the day should be a legal holiday in the State, and in New York City plans were formed for a celebration covering several days and culminating on the twelfth.

But the correctness of the time fixed upon as the anniversary was called in question, and efforts were being made to have the old style date, October 12, changed to the corresponding date in our calendar, October 21. Much was written to show why this change should be made, but little attention was paid to it until

the summer, after preparations for observing the twelfth were far advanced. The Hon. John B. Thacher and Richard Delafield. World's Fair Commissioners, had become interested in the matter and were working earnestly to secure action by Congress. length, in the month of July, Senator Hill of New York introduced in the United States Senate a resolution changing the time of the national ceremonies in Chicago from the 12th to the 21st of October. The reasons the distinguished Senator gave for proposing the change show that he did not clearly understand, or that he paid little heed to the real principle involved. The change had been asked for on the ground of historical accuracy. Senator Hill argued that inasmuch as New York was to have a celebration on the twelfth it might interfere to have one in Chicago on the same day. But the resolution was adopted and received the approval of the President, who issued a proclamation declaring "October 21, 1892, the 400th anniversary of the Discovery of America" a legal holiday.

The advocates of the reform were glad enough to have the change made without stopping then to question the motive of the legislators who voted for it. It was too late to change the New York program as the legislature had adjourned after making the old style date a legal holiday. It is to be regretted that not half the people in the country understand the nature or the significance of this change of date, or can give any better reason for celebrating different days in Chicago and New York; but it is not to be wondered at that misunderstanding prevails when law makers and writers for the press get so far astray and so many misleading and conflicting statements appear in print.

When, as a nation, we had fixed upon and were preparing to celebrate October 21, the new style date of discovery, Spain had a grand celebration on the third of August as the 400th anniversary of the sailing from Palos, and strange to say no one in that country or in this seemed to think but that it was all right, notwithstanding the fact that Spain was nine days ahead of time. And now we find writers who, having adopted the new style date of Columbus's landing, make use of the old style in giving the time of his leaving Palos. The immediate effect of this is to allow eleven weeks and two days for a voyage that covered only ten weeks (including the time spent on the Canary Islands). If in this connection the historic facts that the sailing and the land-

ing both took place on Friday, be considered it might be difficult to explain how August 3 and October 21, of the same year, could come on the same day of the week.

If newspaper and other writers play fast and loose with dates in this manner surely historians should do something to set the people right, but a number of school histories, revised and written up to date, claiming to give the events of Harrison's administration, make no mention whatever of the act of Congress changing an important date. In all these works the old story of Columbus's voyage is repeated, giving the dates August 3 and October 12, without so much as a foot note to explain that these are old style dates corresponding to August 12 and October 21 in our calendar. Only one of the revised works that I have seen makes any allusion to October 21, and that only to say that "the anniversary of the Discovery of America occurred in 1892 and the 21st of October was set apart as the anniversary," etc., without a word to explain why that day was chosen or to reconcile it with the earlier mention of October 12.

These histories should be taken in for repairs. They need to be revised again. If a date is to be recorded at all it is worth while to be accurate. If given in the old style it should be indicated as an old style date, but it is better recorded in the new style or, better still, in both. If the old style be given we know and should teach how to change from the old style to the new, whether by adding twelve days to the old style, as in the present century, eleven days as in the eighteenth century, ten days as in the fifteenth century, etc.

The lessons which it was thought the Columbian celebrations would teach were but imperfectly learned, for the reason that the subject has never been clearly presented. Teachers should have something to do in this work of correcting a popular error, and should be familiar with the prevailing system of recording time, its origin and its history, but the details of that history cannot be given here, the purpose of this article being to review briefly the facts connected with the Columbian celebration and the change in the anniversary date, and to call attention to the misunderstanding that prevails regarding it.

Let it suffice to say further that the so-called Gregorian calendar now used throughout the civilized world, is nothing more than the Julian calendar, slightly amended to correct its only error. By the Julian scheme devised by Julius Cesar about half a century before Christ, the civil year exceeded the true solar year in length by eleven minutes and some seconds, consequently there was a falling back or loss of that much time each year, or about three days in every four centuries. In 1582, it was found that the accumulated losses amounted to ten days and they were that To correct this difference much behind in their reckonings. Pope Gregory XIII. decreed that ten days should be eliminated from that year. This was done by calling October 5 of that year October 15. Then, to guard against such losses in future, it was provided that three days should be omitted from every four centuries, by reckoning as common years of 365 days each. three year's that in the Julian calendar pass as leap years. For convenience the centurial years were chosen to be so changed; thus 1700, 1800, and 1900, all leap years in the Julian scale, were made common years, but every fourth century year, as 1600, . 2000, etc., is to be regarded as leap year still.

Every year that passes as a common year in the Gregorian reckoning, and as leap year in the Julian calendar puts the latter one day farther behind. In the sixteenth century the difference between the two calendars was ten days; in the year 1700 it was increased to eleven days; the year 1800 made it twelve and very soon the year 1900 will make it thirteen days. This growing difference between the "Old Style" and the "New Style" cannot be disregarded entirely as the former is still in use in Russia whose dates are now twelve days behind ours. When it is May 30 here, it is May 18 there; Wednesday, July 4, 1894, with us will be Wednesday, June 22, with them; and Sunday, December 25, 1894, to the Russians will be Sunday, January 6, 1895, to us.

These are simple facts that every teacher should be able to explain. Our scheme for recording time should be more generally known and understood, as to its origin, the nature and the significance of the changes it has undergone, the exact difference between the "old style" and the "new," etc. The promulgation of the Julian calendar by Julius Cesar in the year 46, B. C.; its amendment by Gregory in 1582; the ratification and adoption of the amendment by different nations at different times, as by England and her colonies in 1752; the changing of important dates to conform to the "new style" as the date of "Columbus

Day" was changed in 1892; are all matters of historic interest and importance, and suitable mention of these events should be made in histories covering the times during which any of them took place. This, however, is not done, and it remains for the teacher to do the more to supply the deficiency.

THE CRITIC AT SEA. *

A review of "The Public School System of the United States."

BY THE AUTHOR OF "PRESTON PAPERS," NEW YORK CITY.

IV.

THE BOOK AS A WHOLE.

1.

ITS VERBAL OBLIQUITIES.

"One chooses words, like servants, for their usefulness, and not for their pedigree."—Bucknill: Preface to "The Mad Folks of Shakespeare."

But even good servants, and those who boast of pedigree, sometimes fall into the hands of heartless masters, who do not scruple to overwork them, compelling not only the performance of their own duties, but those of various others.

Very like this is the manner in which the author seems to have used some of his most telling (?) words and phrases, even those whose original construction never fitted them for anything but ornamental appendages to pedantic conversation. By the time they have done "domestic duty" they have used up whatever attractive air for embellishment they may have at first possessed, and one is led to regret the evident paucity of the English language to express somewhat commonplace ideas, when such a word as mechanical is made to bear "the burden and the heat" (particularly the latter) of the argument as many times as it seems to have been used - at haphazard? - throughout every description of every "system" and of the individual schools and teachers described. (See pp. 126-7, 153, for fair samples.) To be sure, the word gets a new setting occasionally, by having "purely" or "ludicrously," or some other equally psychological product of the Queen's English; but like the boy's jack-knife, with a new blade one day and a new handle the next, "it's the same old jackknife!"

^{*} Copyright, 1894, by Kasson & Palmer.

"Purely" is another hard-ridden but seemingly favorite word, which, to my benighted mind, looks better as a fringe than as part of the whole cloth; and when it is made to do duty with "political" (pp. 2 and 62 et al.) it seems like a marriage without mating, if his idea of the political corruption of school boards and superintendents is O. K. Politics and purity are so far apart in fact according to his own statements, that he ought not to force their amalgamation in literature at a-dollar-and-a-half a volume!

After having seen "purely mechanical" in cold type so many times, its re-appearance after a while begins to partake of its own nature, and I heartily wish the "critic" hadn't criticized the "poor English" (p. 172) of the subjects of his "scientific" "observations" until he had sifted his own vocabulary. The use of purely with other irrelevant words is kept up throughout the book, with a variety of attachments that indicates a strong predilection in its favor, to be sure, but which smacks somewhat of verbosity rather than of masterly diction.

Tautology may pay, as an occupation to the highly scientific; but its office in argument is worthless (I nearly said "purely" worthless, so accustomed have I become to these rich combinations); and even when taking a verbal chastisement, one may tire of "ludicrous teaching," "ridiculous," "absurd," "pure, unadulterated, old fashioned grind," "purely mechanical drudgery," "drudgery schools," "highly unscientific," "professional weakness" in seemingly endless repetition, and wish for sledge-hammer Saxon. However fascinating the other may be to the "expert" it is a little wearisome to the culprits, who meekly follow the brilliant example of the old time Athenians and wail for "Something new! Something new!"

Can not the pedagogical philosophers of culture supply the apparently needy with a brand-new vocabulary at reasonable rates? Surely the New Education can do this for its disciples.

Somebody will please pass around the hat for synonyms — and for new ideas (Small contributions thankfully received, and large ones in proportion!) as down to date this author has not discovered to the readers of his volume any new ideas nor new principles nor new language that can be made of practical service to the "average American teacher."

On the contrary, we are convinced when we read — as on page

106—that, "Some of the little ones even committed the crime of laying their hands on the teacher, and she so far forgot herself as to fondle them in return," that he has had no experience as a teacher,—and we are almost tempted to add, nor as a child. True, there are repellent teachers; there are also parents who are undemonstrative, even severe, to their offspring; but this admission does not change the rule of kindly association that is positively at variance with his idea of the strained relations between teacher and child.

The sight of children caressing their teachers and being petted in return is not rare, Utopian, nor new — but is an every day occurrence, in the every day schools which dot this land from ocean to ocean; and it is neither looked upon as wonderful, exceptional, nor criminal.

Surely Dr. Rice's teachers can not have been cast in the common mould of the American pedagogue, and they owe him a huge debt of apology for the "barbarous treatment" which his experience justifies him in condemning. Will they please come forward with the proper genuflexions and use the prayer-book cry "Mea culpa"—and then add: "But I'm the Exception that proves the Rule."

2.

ITS SARCASM.

On page 171, describing a visit to a "lowest grade" the author says: "The proceedings were such as to remind me of a room used for playing school"—(how's that for average American harshness?)—and in the same paragraph, of the same grade he says: "Some of the children were copying words from their reading books on their slates, and the writing in some instances might have been mistaken for the footmarks of flies with chalk legs."

I am glad that he did not make this brilliant comparison with reference to all the writing of all the pupils in all the grades of all the schools all over the land, because then some one might have suggested that it had a flavor of obscurity and of extravagance; that it lacked common sense; that the ordinary writing of the ordinary five-year old, is ordinarily expected (by the ordinary unscientific teacher) to be absolutely without a flaw, perfect in every detail and a copy for their elders, "Foot-prints on the

sands of time," rather than on slates. As it is no one will of course question its value to the New Education.

The exhibition of "flies with chalk legs" has been so exceedingly rare in my own experience as a teacher that I do not now remember to have seen just exactly such a specimen of dipterous insectivora, although they are doubtless easily propagated in the atmosphere of the "highly scientific teaching" with which he proposes to endow the children of this densely ignorant and educationally criminal and unenlightened country. I will call at the Smithsonian on my next visit to Washington, and see if some learned naturalist will not assist me to analyze and classify the object until I have become sufficiently familiar with its form and looks to make instant recognition possible. It would be such a pity to meet "a fly with chalk legs" in my daily haunts, yet be so intellectually deficient and weak as to pass it by without even a bow, when I might be "studying" it and "observing" it to present in all its grandeur to my next "class" of "ignorant and incompetent" teachers! Until then I will devour humble pie by the plateful, that my early education was so neglected!

And "the foot prints of the fly"! Was it not Abraham Lincoln who said: "You can fool all the people some of the time, and some of the people all the time; but you cannot fool all the people all the time"? Now I'm just that kind of a "person." All my life I've been fooled into ignorance of the existence of the graceful, chalk-legged fly—but his "foot prints" never! Never, that is, unless his "foot prints" are of a different color and pattern than those against which I daily strive with scrubbrush and sapolio. Of the size I can 't be positive, but of the existence very; and while I can not commend the imitation of the same to the "lowest grade" children of a city school, I have no doubt that those children were actually proceeding a la Fræbel, "from the known to the unknown" in drawing such "foot prints." Selah!

On page 129 he asked the teacher's permission to glance over some examination papers lying upon her desk which request she answered by "clutching the papers for dear life." As this offensive conduct was a part of his unhappy experience in Boston, one of the beacon lights of our American educational world, its effect on me was (to use a pet phrase of the Dr.'s) "most depressing;" and it was not until I had bearded the lion in his den,

and met the Boston teachers in their schools, that I fully realized the size of the caricature; and I am bound to report that I was not only politely received by the Boston teachers, but very kindly; and that "clutching" seemed to be no part of their program, so far as my "professional weakness" could determine. "Clutching the papers for dear life" was evidently an unusual pastime for them, indulged in only on stated occasions and at high rates, for the special edification of distinguished visitors, among whom I was not enrolled. Will the lady who did this dramatic "clutching" please repeat the performance for public amusement? Such talent should not be left to "blush unseen" and I'll willingly excuse the "for dear life" appendix, if she will agree that the "clutching" shall be done according to the best and most modern of "highly scientific" rules for such educational exhibitions!

On page 88 he describes a child's reading, done for him by request, as follows: "Lucy then came forward courageously and read this thrilling tale—'The cows feed on the grass. At night they come to the barn.'" As a matter of phonetic reading "tale" may be the very best word he had at his command just then to describe the simple lesson—evidently adapted to the mental ability of the little Lucy though not to his—but there does n't seem to be any great demand for the use of "thrilling" in this connection, unless, indeed the phonetics would change the orthography of the word and picture to the over-sensitive "critic" some bovine experience in which the "tail" had contended with the horns to give "scientific" expression of disapproval of something or somebody, which he "observed," in which case the thrilling sensation of his medulla ablongata at the time had been easily re-awakened.

On page 32 he says: "Things appear as if the two children occupying adjoining seats were sitting upon the opposite poles of an invisible see-saw, so that the descending child necessarily raises the pupil next to him to his feet." For a clear-headed simile commend me to one like this! "The opposite poles of an invisible see-saw," of course are easily disposed of as the most natural places in the world upon which the children of the New York schools should rest, where "everything is prohibited that is of no measurable advantage to the child," and learned doctors agreeing that a perpetual see-saw is excellent exercise—though

why "invisible?"—but the "his" is not so easily gotten away with and cared for. If "the descending child" raises the pupil to his feet, the reasons may be as various and cogent as those for the appearance of the book under review; but if to the pupil's own feet, why not go further and kindly elevate the pupil to the level of his head? Or wasn't his head level? Or didn't he have a head? Raising him "to his feet" is too obscure for yours truly. Above his feet, or off his feet, or simply "raising" him, I might after profound study understand in its "ridiculous" fulness. As it is, I sadly give it up, and write my "Waterloo" over the door, in hopeless, helpless despair, and partly that an "invisible see-saw" should have an "appearance." What's the matter with the clairvöyants of the New Education?

On page 37 another class "presented the appearance "of a "traveling pump handle." Now I like that! That's down to the dead-level of my comprehension, for I've been acquainted with "traveling pump handles" all my life—and I know the species, even when they "travel" under other names. Some of them are not satisfied with simply "pumping" vigorously, but wildly rant, rave and gesticulate because their efforts produce little effect upon mankind in general save that of wholesome somnolence!

On page 58 we read: "They religiously raised their voices two tones." A "religious" raising of the voice is not to be despised in these days when the voice of the people is sometimes heard in more objectionable melody, and in which military language is prominent, together with verbal pepper and salt. But this was in Baltimore, and by the time I get to Baltimore the "religious" effect may be forever departed. Woe is me!

While reading on page 69 we find: "The whole subject of California appeared to be involved in as deep a mystery as the language of the Hindoos." Not having sounded the depths of that "mystery" I dare not undertake its elucidation, but turn to page 84, where he says that the "most striking peculiarity (note the combination, please, and weep at the waste of raw material) exists in the fact (sic) that so much time is devoted to concert recitations," referring to the Cincinnati schools, adding that these recitations are given "in tones so loud that the uninitiated might readily mistake them for signals of distress," which is afterwards seemingly contradicted by the statement that the spelling was done "in melodious tones."

Without going further into monotonous and pointless details, it is to be regretted that a book from the pen of one who criticises unsparingly the numerous lapses of the teachers he so loudly denounces should not have brought a better element than that of sarcasm to give edge to his tart remarks. Posing as the "advocate" of children (p. 4) his "cuts" go deeper than if aimed only at their ignorant parents and incompetent teachers.

3.

ITS PADDING.

"His phrase is always a short cut to his sense; for his estate is too spacious for him to need that of winding the path of his thought about, and planting it with epithets, by which the landscape gardeners of literature give to a paltry half acre the air of a park."

LOWELL: Among My Books (speaking of Dryden).

It is a pity that our educational "landscape gardener" hadn't had at least a "paltry half acre" in which to pile up his verbiage; but when it takes fifty pages of "preface," "introduction" and "summary" to explain and float the text of a 300 page book (one sixth its volume — by the page!) we feel as if we may have been paying dearly for definitions at page rates! (See pp. 1-28; 216-238.

For padding of the text itself, I only ask your patient perusal of pages 29,-30, and compare them with the mighty intellectual efforts on pages 62-65; 75-80; 89-94; 100,-101; 142, beginning at "From the descriptions given," to 148; 159-165; 182, beginning at "The principal cause," to 183, etcetera, ad libitum, ad infinitum, ad nauseam!

To be sure, he is writing to elevate ignorant teachers, idle principals, stultified superintendents and vicious Boards of Education; but such doubled and quadrupled repetition seems like an extravagance of printer's ink, and a profusion of pedantic phrases — which may give out before the end of his journey is reached, and that would be a pity.

4.

ITS MISSION.

Undoubtedly the book is destined to a large market — but as a chapter of cheer or encouragement, or practical uplifting of the workers, or propelling power in the work, well — I'd as soon suggest a wet blanket to warm and comfort a shivering child — the

"child" for whom he pleads on one page and whose childish efforts he ridicules on another.

Real teaching and real teachers exist — and I simply suggest, in the language of the Orient:

"Diving and finding no pearls in the sea, Blame not the ocean; the fault is in thee."

GERMAN METHODS OF USING THE MOTHER TONGUE.

DR. RICHARD DAVIES JONES, SWARTHMORE COLLEGE, PA.

I cannot now enter upon that large field of discussion among German schoolmen as to how Goethe and Schiller and literature in general should be read, and to what extent the teacher of literature should be also a teacher of philosophy. I have heard in German classrooms elaborate expositions of philosophical systems given by professors of literature on the ground that certain philosophical conceptions are fundamental to a proper understanding of great literature. If these expositions of philosophical themes are fairly understood by the pupils, there can be no doubt that literature is richer in content to them in consequence thereof. And even if not fully comprehended by young men from nineteen to twenty years of age, these outlines of philosophical thought, these glimpses into the realm of great ideas, must prove suggestive and stimulating.

I was especially interested in a recitation conducted by Dr. H. Unbescheid of the Annenrealschule of Dresden, whose book "Beitrag zur Behandlung der dramatischen Lektüre" (A Contribution to the Treatment of dramatic Literature) obtained for him the degree of doctor of philosophy from the University of Leipsic without an examination, an honor as well deserved as it is rare. The recitation in question, an excellent one in every respect, was particularly valuable because, in addition to the admirable presentation of new subject matter by the instructor, there was enough of recitation by the pupils to enable the visitor to judge to what extent they had assimilated the previous instruction given them as to the structure of the drama, its laws and its nature.

There is thus given in many schools in connection with the literature in the latter part of the course an introduction to philosophy to give the student some idea of the philosophical conceptions necessary for the understanding of great poetry. Other schools begin in Untersekunda, or four years before graduation, a course of: (1st) a general view of the history of German literature, (2nd) chronological readings of great poems in translation beginning with the Iliad and the Odyssey and closing with the masterpieces of modern literature. But the course I have given from the Cassel curriculum may be regarded as a fair average course.

Surely the course here outlined ought to give a boy a fair introduction to German literature. The course is well planned to include portions of all the great writers of Germany and a fair amount is read. And the work is not optional. This is the course in German of a school which devotes 77 periods to Latin for every 21 to German. It gives 40 periods to Greek, 34 to mathematics, 28 to history and geography combined, and 21 to French, Latin, Greek, mathematics, history, and geography, each fill more periods during the nine year's course than does German. If the work done in every department is in proportion to the periods given to it, recalling the great amount of work accomplished in the 21 periods given to German we may well believe the cry of overpressure abundantly justified. But however that may be, the important fact is that these masterpieces are read, and read according to a plan, the fundamental principle of which is concentration and articulation, and furthermore that in Germany it is an educational axiom that every recitation in every subject is a recitation in German.

The directions in connection with the course of study suggest that in spelling ten new words each day is sufficient, and that five to ten minutes will suffice for the recitation. The purpose of instruction in grammar is to quicken the language sense of the pupil so that he will unconsciously choose the right form of expression, and yet he must not be satisfied with a mere mechanical distinction of true from false, but must know the reason why. This instruction in German grammar begins in the lowest class, but less stress is laid upon rules in Sexta and Quinta, the two lowest classes. In Quarta and Tertia, average age from 12½ to 15½, syntax in its essentials is systematically taught, but though instruction in grammar proper closes with Tertia, average age 15½, yet as opportunity offers in the reading references are made to peculiarities of grammatical construction.

An important part of the instruction in the use of the mother tongue is composition work and essay writing. The purpose of the essay is to educate the pupils in a well-ordered, correct, clear, appropriate exposition of worthy thoughts lying within the field of their intellectual vision and the circle of their experience. The principle governs, then, in every grade that the subject matter of the essay shall be drawn from the subject matter of instruction given in that grade. This principle determines for every grade the choice of theme. Just as articulation of studies and concentration, the keynote of the German curriculum, determine the choice of reading matter for every grade, so they determine also the subject of the composition work for that grade.

In the lower grades there is much writing from dictation to give the pupil practice in punctuation, the use of capital letters, and in spelling. Or the pupil writes from memory matter that he has read. In the lower grades accuracy of expression is the chief end in view; in the higher grades logical arrangement and rhetorical excellencies are emphasized. It is recognized that there cannot be clear writing without clear thinking, and that just as every instructor in every subject is an instructor in German, so every instructor deserves his share of praise or blame for excellency or deficiency in the composition class. An essay is required of every pupil, the period varying in different schools from once a week to once a month.

Subjects for essays are often suggested in the course of study. Themes connected with literature seem to be favorites. Among the subjects proposed for the upper class in a '92 Program we find: Max Piccolomini's relations to Octavio, the national importance of Lessing's Minna von Barnhelm, what are the Acts in the Philoklet of Sophocles and to what extent do they correspond to the laws of the drama. Of twenty subjects suggested for Sekunda in this Program fourteen are literary themes. Here is a Program published in 1892 containing seven essays intended as models for the students of the upper class. One of these discusses Hamlet, and all treat of literary themes. In speaking of the correction of essays, one writer in the spirit of Portia's thought that the quality of mercy is not strained suggests that the pupil's essay when returned to him ought not, if it can be avoided, be so marked over with corrections in red ink that it resembles nothing so much as a blood-stained battle field!

As to the importance in education of the composition work, President Eliot of Harvard University, in expressing to the students of Smith College his own conviction that "the great object of all education is to learn how to speak and write well the mother tongue," is in harmony with the latest educational thought of Germany,—a thought expressed at the Berlin School Conference of 1890 by Emperor William in the statement that "German composition must be made the centre around which everything else revolves."

One of the admirable methods of using the mother tongue in the public schools of Germany is to put it into the mouth of a strong vigorous teacher, who is a man. I believe there is a distinct gain all along the line, in character and in behavior, when the discipline is of that firm and masculine sort which gives so wholesome a tone to some of the schools of Germany.

In one of the admirable reports of our Commissioner of Education he refers to the fortunate lack of necessity in the German schools for frittering away the strength of the teacher in discipline, and he attributes this, rightly I have no doubt, to the difference between the character of the German and the American boy. But this difference in character is partly due to the fact that in Germany the word of command is given by men, - by strong, vigorous, masculine men. More men of the right sort in our public schools would render easier the work of the highminded women, who are now endeavoring by pure strength of will and expenditure of nerve force to maintain a respectable standard of discipline in communities which do not really desire real discipline, where noble women literally wear their lives out on this vexed matter of discipline. Whereas in German schools, there is, apparently, no discipline. Discipline is not needed, i. e., especial cases of discipline. The tone of the school room is a continual discipline. One feels there that it would be impossible for the purpose of the school to be antagonized and the thoughts of teacher and pupils diverted from the proper work of the school, because a single restless boy, with abounding vitality, has not been taught self-control. It would be the salvation of many an American boy to put him under wholesome influences of this kind. There is a moral training in moving about among boys accustomed to military discipline, accustomed to a formal and visible, to an, in our eyes, exaggerated courtesy to the teacher in

charge, accustomed to obey at once and without question every requirement of the school life. Not that every male teacher in Germany meets this high ideal, but many of them do. Many Americans whose children have attended the schools of Germany sigh on their return for the same rigorous and bracing and wholesome school atmosphere, for the equivalent of this German use of the mother tongue as a word of command in the mouths of forceful men.

But to return to the German use of the mother tongue as exemplified in the reading book, by means of which we are told a knowledge of the language and a readiness in its use is developed. At the same time this serves to enlarge the culture of the pupils, to develop their understanding, imagination and emotions, and to fill their hearts with love, admiration and appreciation for the great heroes of German literature, and to awaken in them a sound national feeling.

In England there is, as is well known, a strong sentiment that literature cannot be taught. Indeed, a young don of Christ Church College, Oxford, is credited with making recently the unanswerable argument: Literature cannot be taught. I know because I have tried it! In a conversation with the distinguished historian, Edward A. Freeman, shortly before his death, he said to me: Appreciation of literature is a matter of taste and taste cannot be taught. He was therefore strongly opposed to the establishment of a chair of English literature at Oxford, an opposition which at the time was successful, though within a few months a proposition to establish a school of literature in the University of Oxford has been carried through one of the stages necessary. But in Germany other views prevail.

The view of Goethe as to the necessity of interpreting the thought of modern masters is accepted in Germany, and we find in German universities lectures on the poetry of Tennyson and the prose of Carlyle, and a different conception in general of the function of literature. There is in Germany a heartier acceptance of literature as a teacher of righteousness, a guide to conduct. Hence we find patriotism taught by means of poetry, and love for Fatherland expressly stated as the goal of instruction in the mother tongue. In a course of study for the kingdom of Saxony we find these high words:

In making choice of these selections for youth the guiding principle has been that the literature read serves not alone for enriching the understanding, but even more for awakening the imagination, for developing a love for nature and a sense of the beautiful, for strengthening religious feelings, the moral character and a love for Fatherland, in short, to make the soul of youth susceptible to all that is good and beautiful, and to fill it with enduring enthusiasm for the ideal view of life.

Such views of the function of literature, entertained by a people distinguished for love of order and system, have produced a well-planned, thoroughly digested method of teaching their own language and literature, the teaching of the mother tongue being so coördinated and articulated with the remaining branches of the school curriculum that the literature receives help from each and gives help to all. Such a method we have not yet elaborated for our English literature. Such a method for the teaching of English we ought to have. And such a method we will have.

FROEBEL FROM A PSYCHOLOGICAL STAND-POINT.*

EDWARD F. BUCHNER, YALE UNIVERSITY, NEW HAVEN, CONN.

One of the unique features of human nature is its idealizing tendency. Man is always fond of constructing an idea of what may be. With the expansion of his intelligence and on the basis of his experience, he finds increasing satisfaction only as he is able clearly to define the possibilities awaiting that experience. Indeed, the possession of ideals is the sign of one's manhood. The sort of an individual one is, is always revealed by an examination of the ideals which are treasured by that individual, moreover, the wisest and best of our race have ever dreamed and idealized. Jacob dreamed, — and the world still has its "chosen people." Plato soared to the realm of the ideal and the invisible, — and men continue to philosophize. Jesus of Nazareth pierced the gloom of sinful life, saw the divinity within us, — and we, to-day cherish the Christian church.

But antiquity is not the only era of the world the echo of whose few voices we continue to catch up and re-echo. Modern

^{*}An address before the Elm City Kindergarten Association, New Haven, March 28, 1894.

men have dreamed, and dreamed not only of man as a citizen or a member of an insoluble earthly community, of man as a rational intelligence, of man as a religious being, but they have dreamed of man as the educable being. It was Immanuel Kant, as famous as Plato for his services to human reason, who saw that "the great secret of the perfection of human nature lies concealed in education." It was his delight to imagine that "human nature will always be developed to something higher and better by education, and that the latter may be brought into a form "A Theory of Education," he says suited to mankind." (§ 8 Ueber Pädogogik), "is a lordly ideal, and no harm is done even if we are not in a position to realize it immediately. must not hold an idea as chimerical and cry it down as a beautiful dream simply because its execution meets with a hindrance." In one sense, Kant was a head without hands, and this ideal side of education remained only half-expressed, becoming little else than a seed-thought given over to the nourishment peculiarly provided in the German intellectual awakening and ferment of which Kant himself was the forerunner.

In certain phases of its life humanity is satisfied with the mere expression of ideals; but, to others, those which go to the core of its being, it will not give audience unless they are given a practical setting and are put into actuality. All ideals concerning the education of the race belong to the latter class. The perfection of the race through education dare not remain a thought, but must be put into schools and institutions. Those who do this become philanthropists and educational reformers, of whom the world already has not a few. Thus it is that the Kantian hope in education slumbered less than a generation, when it burst forth in a perfected theoretic expression in Froebel's Education of Man (1826), the forerunner of the now great institution called the Kindergarten.

But Froebel stands in another more definite and well-assured historical connection, which gives a supreme interest to the psychological aspect of Froebelian ideas. It has long since been recognized by those who retrace the intellectual footprints of respective civilizations, that each age is dominated by one idea, which places a distinctive stamp upon the politics, the literature and the philosophy of that age. When once clear insight is gained into that idea, the key to the whole situation is mastered

and detailed interpretations become comparatively easy. Froebel was educated at a time when this one-idea domination was probably the most complete of any historic instance. He gathered his pedagogic insight while breathing an atmosphere that was laden with a speculative and not a scientific determination of man and nature, German speculation had almost run riot with human reason in its efforts to secure the best formula which would express the truth of pantheistic monism. That famous rational trilogy of Fichte, Schelling and Hegel, with their host of attendants, put to dramatic grief all attempts to view man and nature as other than the being of God. Froebel himself could not resist the quickening brought by this conception. Although there is wanting more or less evidence that he was a devoted student of these rife pantheistic theories, nevertheless, it is just such a recital of facts which will account for that so-called vague, dreamy mysticism on which he has based his whole educational theory. and from which he gathered renewing inspiration for continuing his arduous and almost crushing task as an educational reformer. Whether this speculative pantheism detracts from the efficiency of his pedagogic ideas, as many have thought, is not a question for immediate discussion. It is well, however, for students of Froebel's educational theory to note that in the first twenty-three sections of the Education of Man the author is not departing from what was the common possession of his co-temporaries; and, also, that he is there laying the foundations, as broad as all existence and as deep as truth, for a theory of the education of man as such, and not bothering himself merely with the training of separate individuals nor of special classes.

Froebel hastens to fashion his conception of God, incorporating his reflections on nature, from which he deduces, or rather to which he relates several primary elements in the process called education, and finally throws around it all the flesh and blood of anthropological facts. The result is his educational theory and such practices as he had already devised at the Institute at Keilhan. Seventeen years later—an interim of constant pedagogic activity and of reflective observation and experiment—he published the Songs for Mother and Nursery. This was the literary fruit of those early experiments which have developed into the Kindergarten. The two works stand together as brain and hand, as science and practice.

Reflection was never distasteful to Froebel, at the early age of seventeen years we hear him complaining that philosophy was not represented in the University of Jena. With maturity this trait of his mind launched out boldly. The "groundwork of the whole" is the nature of God who is the "eternal law" that "lives and reigns in all things," — a law which "is necessarily based on an all-pervading, energetic, living, self-conscious Unity." "All things live and have their being in and through this Divine Unity, in and through God." " As the spirit of man is related to the work produced by him, so is the spirit of God, so is God, related to nature, and to all created things. The spirit of God rests in nature, lives and reigns in nature, is expressed in nature, is communicated by nature, is developed and cultivated in nature — yet nature is not the body of God" (§ § 1. 63, Education of Man, Hailman's tr.) Such were the conclusions ripened by Froebel's peculiar love for nature. But it was not nature in the bald, objective sense which modern science forces us to fashion and accept. Nature to him was a mere symbol, a legible manifestation which he had read and interpreted as in the above passages. He was "one who only cared for nature," says his latest expounder, Susan E. Blow (Symbolic Education, p. 32), "because he had penetrated her disguise and beheld in all her varying forms the shining lineaments of mind." He became satisfied only as he had succeeded in reducing the gorgeous variety of animate and inanimate experience to a totality whose fuller interpretation was the conscious being of God.

With this truth in his possession, that the essence of all things forms a unity, he at once passes to the practical aspect and asserts: "It is the destiny and life-work of all things to unfold their essence. to reveal God in their external and transient being" (§ 2, Ed. of man). This implies that whatever comes into being possesses an inner law which must be fused with an activity in order that all potentialities may The individual must be made to wear the become external. aspect of the universal, the partial must be transformed into the total. But this is exactly what the process of education is and The law that lives in men must be caught up into a self-conscious life. The child must be looked upon "as a struggling expression of an inner divine law"; then does it appear that "education consists in leading man, as a thinking,

intelligent being, growing into self-consciousness, to a pure and unsullied, conscious and free representation of the inner law of Divine Unity, and in teaching him ways and means thereto" (ibed § 2).

Such, with exceeding brevity, are the two fundamental ideas with which Froebel sets to work to realize the ideal which had been fancied by Immanuel Kant. Keeping in mind, also, that Froebel was working under the speculative inspiration drawn from a half-articulated pantheism, under which education ceased to be a profane, perfunctory procedure for increasing intelligence, and became a truly divine arrangement working in the lives of men to the end that they should consciously enter into and reflect their divinity, let us turn to a few of the principles around which cluster everything that is Froebelian, and, afterwards bring them to the bar of psychology and hear the verdict of science.

If I am not greatly mistaken, these principles are these three: Education, if it is to be effective, must recognize the development of the human mind during the educable period; this development involves, and, indeed, is conditioned by one thing, viz., that it shall orientate about the activity of him who is being educated; and thirdly, that education if it is to be true and not factitious, must set the individual into harmony with his immediate environment in such a manner that he will know how to feel and to do in reacting on that environment, so as to give constant realization to the ideals which are actuating his education. It must be admitted that more thorough students of Froebel may find other principles than these three; and, also, that the first and second are glaringly obvious to the most casual reader, while the third is not mentioned by Froebel and may be only a restatement of the first and second.

The factor of development is probably the one most widely diffused in Froebel's thinking and practice. It entered into his consciousness very early. When later he became a serious student of the sciences, he was constantly struck by the fact that "in every part of organic nature life and growth appeared to be a progressive development from lower to higher grades of being." This new idea that there is a marked continuity in the generation of things and individuals, triumphed over the conception of stolid individualism of the preceding century. Over Froebel, always susceptible, this new idea held such supreme control that it has

been said of him, almost facetiously, "he would rather win from a tiny sand grain the history of its development than learn from God himself the structure of the universe" (Blow, Sym. Ed., p. 22).

Not only does he admit this principle into his anthropological studies, explaining by it the respective ages of man, but he even carries it into his philosophizing, and his Divine Being becomes one who fuses this orderliness of development into His own acts. "God creates and works productively in uninterrupted continuity. Each thought of God is a work, a deed, a product; and each thought of God continues to work with creative power in endless productive activity" (§ 23, Ed. of Man); and in its concluding section he reassures us that "God neither ingrafts nor inoculates. He develops the most trivial and imperfect things in continuously ascending series and in accordance with eternal self-grounded and self-developing laws."

If nature is in a process of evolution, and God must be viewed as undergoing a progressive self-realization, man - the subject of education - cannot hope to escape the characteristic changes which come and go with growth. We find, accordingly, that Froebel views man in childhood, in boyhood and as a pupil, insisting all the while that in each age there abides a unity expressive of the whole life; "the unity of humanity and of man appears in childhood; the whole future activity of man has its germs in the child" (§ 23 ibid). That is, the individuality found in the child is the individuality present in the boy and in the man, excepting that the latter are such as have gained in complexity through diversity, but not in mere accretions. He forbids us to look upon education as increasing the number of qualities with which we are endowed in the germinal stages of our conscious life, but rather insists that the educative process merely elaborates in the course of experience the tendencies which were fused into the unity constituting our primal being.

The foregoing may be regarded as the one great objective condition on which everything educational depends and to which every pedagogic artifice must be reconciled and adjusted. Froebel makes of it the one index whose pointing he incessantly follows. Both in describing the successive periods of the individual's development and in the selection and arrangement of the material with which mothers and teachers are to aid the growth of their

child and pupil, he never departs from its unerring indications. How significantly does he say, "The boy has not become a boy, nor has the youth become a youth, by reaching a certain age, but only by having lived through childhood, and, further on, through boyhood, true to the requirements of his mind, his feelings, and his body; similarly, adult man has not become an adult man by reaching a certain age, but only by faithfully satisfying the requirements of his childhood, boyhood and youth" (ibid. § 22). As may be seen later on, this is a strictly psychological affirmation, and yet, Froebel was led to it by steadfastly holding to and constantly interpreting by means of the idea of development. It is nothing more than the principle of "connectedness," which runs through all his teaching, but here seen in its anthropological bearings.

Besides this outward "connectedness," as it were, which maintains itself between the respective ages in our growth, Froebel also maintains another kind, or an internal connectedness, that, namely, which unites the different psychological elements in every anthropological stage, and thus secures unity at every moment in life—a unity which is comparable with the Great Unity in which all things essentially exist. It is the connectedness which constantly attracts the different kinds of mental activity—knowing, feeling and conation—and fuses them into a whole; as, e. g., in a letter written in 1851, he maintains that by his plan "intellect, feeling and will would unite to build up and rightly constitute our life" (Bowen, Froebel, etc., p. 97 f).

Now all this is merely the scaffolding by which the teacher mounts to his true place. If it be true that any stage or period of our mental life has meaning only in the light of its preceding stages — a view which Froebel is asserting over and over again — then only are we first in a position to do truly pedagogical work. It bases itself on a principle which is a corollary of the above tenets, and is this, namely, true education begins only when the teacher has provided for the logical succession and inter-relation of the subjects of knowledge. The pabulum on which the young mind is to feed must be selected in the light of this principle of connectedness. The order in which facts are to be presented must be aware of the truth that the very nature of knowledge itself calls for, and even demands this necessity. Isolated facts, unrelated perceptions never lead up to the totality we call knowledge.

The elements of knowledge must be presented in such a series as will most readily secure their fabrication into what we call knowledge. The child must not be precipitatingly led from one group of facts to another group, between which there is no relation, no connection. Conducted in such a manner, the young mind is constantly groping in darkness, and never comes to the assured issue which education is pledged to provide.

While Froebel was gradually led to this insight, he was not content with mere generalizations. They must be put into simple. That knowledge is a growth and consists in the concrete forms. comprehension of relations between apprehended things or facts. is the theoretical truth which underlies the curious arrangements known as the "gifts" and "occupations." These have often been looked upon with mystic reverence as containing an inscrutable symbolism. But this is unwarrantable. In the light of the foregoing truths, we see at once that Froebel was seriously in earnest with the principle of connectedness. Fifteen years of his mature life were spent in perfecting these simple mathematical devices of balls, spheres, cubes, cylinders, triangles, parallelograms, surfaces, etc., in order to secure a graduated series of objects which should answer the demands of his speculative insight. In each successive gift and occupation there appears nothing isolated, or that can long remain so. Their adjustment is secured to such a nicety that every fact and every relation can be simplified and united, even so far backwards as the first impressions received from the earliest plaything which the child has, namely, the first woolen ball.

As we advance in our description of this first and objective principle which threads its way through the Education of Man, links the Mutter-und Kose Lieder into a truly pedagogic means, and fuses the occupations of the Kindergarten into the ripest arrangement for starting the young mind on the highway to a true educational goal, we are insensibly led to regard the second of the three educational principles which are uniquely Froebelian, viz., that the development of the young mind, and the gradation of objects shall orientate themselves about the activity of him who is being educated. The deepest, most fruitful and important thought of Froebel is just this, that man, and also the child, is not only an observing and intuitive being, but also a being of activity. The previous principle of development in the being

taught and connectedness in the subject-matter of the teaching had already been proposed, but remained fruitless, not because of its falsity, but because it had been left objective, as it were, and not followed up with its complement. When we speak about the activity of the child, then our whole attitude becomes changed. It is an activity that is subject to growth. It changes by slow development from the earliest expression of force by the babe to the sublimest deed of will in the mature man. Nevertheless, it is an activity whose characteristic changes determine the order of the connectedness in the knowledges to be taught. Development, if it is to be true, depends on exercise being given just when it is needed and in proportion to the strength of the thing exercised.

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[CONCLUDED NEXT MONTH.]

THE GRAND CANON OF THE YELLOWSTONE.

ELIZABETH PORTER GOULD, BOSTON.

Earth teems with glories

The works of nature and of man
Tell old, old stories.

But in these latter days there comes to view
A wonder never seen before;
A wonder more and more

To make America known the whole world through.

It is the priceless gem of her great park,
The Cañon of the Yellowstone!

Its coloring, John of Patmos might leave Heaven to see;
Its wondrous outline, Michael Angelo.

No finer setting ever crowned a river's flow.

If human or historic life give added glow,
Then Hudson or the Rhine.

But knowing Merced's grandeur, Columbia's beauteous sides, The Royal Gorge of Arkansas, And those Alaska hides, The Cañon of the Yellowstone, Bright with its rainbow hue, Stands out sublimest of them all, For earth and heaven to view.

It is a national glory,
Born not of song or story,
But out of nature's large and generous heart.
Like grand Niagara, it is the people's own,
Unique, alone,
Their badge of beauty and of constancy.

E. Then

EDITORIAL.

NE of the most interesting occasions in connection with the development of public education in the South was the laying the corner stone of Winthrop College for young women at Rock Hill. South Carolina, May 12th, 1894. This projected institution is of the same type as the Normal and Industrial College for Women, established in Mississippi several years ago. It combines the advantages and outfit of an academical, industrial and normal training, either with free tuition or at small expense, under the auspices of the State government; thus supplying the growing demand for the training of young women, which is largely offered in the North by the co-educational State Universities, Normal Schools and Agricultural and Mechanical Colleges. At present, the Mississippi plan, if faithfully carried out and kept clear of partisan politics, is certainly good in many ways; especially in the opportunity for the concentration of funds and operations. The State of Georgia has already established a college for white young women of similar grade, and now South Carolina "follows suit." In the case of this State, there seems a probability of an earlier and more complete success than in the previous experiments; inasmuch as the college is the development of one of the best Training Schools in the South; under the direction of perhaps the most accomplished manager of any Southern Normal School. The Columbia, South Carolina, graded school system was organized in 1883, under the superintendency of Mr. D. B. Johnson, and immediately took high rank among the graded Public Schools of the South. Three years later, 1886, Superintendent Johnson, through the agency of Honorable Robert C. Winthrop and Dr. J. L. M. Curry, President and General Agent of the Peabody fund, secured an appropriation to aid in the establishment of a City Training School for teachers, which took the name of Winthrop, and immediately rose to distinction; one of its most prominent instructors being Miss Mary Leonard, a former pupil and teacher from the Bridgewater (Mass.) In 1887 the Legislature established an annual Normal School. scholarship of one hundred and fifty dollars for one student from each of the thirty-four counties of the State. In 1891 another act established "The Winthrop Normal and Industrial College of South Carolina." The new, flourishing little city of Rock Hill, in the extreme northwestern portion of the State, secured the location of the institution by gifts in money, land and material to the extent of \$75,-000. It is expected that the buildings will be completed and the college in operation at an early date. And if Professor Johnson, to whose great ability, broad educational views and a fidelity that amounts to consecration, the state is so largely indebted, be made its President, the State of South Carolina need not fear comparison with any of her neighbors in her arrangements for the academical, industrial and normal training of her young women. With the College of South Carolina, the Clemson Agricultural and Mechanical College and the great Claflin University for negroes, all under State patronage and control, and the steady growth of her public school system, South Carolina can survive a good many years more of her political contentions; especially if, as Governor Tillman said at Rock Hill, "The one thing on which the people of South Carolina are united is the education of their children."

FTER all our eloquence over the magnificent results of popular education we doubt if any humane and thoughtful person can contemplate the fact that now some 12,000,000 of American children have begun their year's work inside the school house without a twinge of compassion over the confinement, sense of constraint and often real hardship of the life inside what are too often little better than prison Of course, the kindest hearted father or mother knows well enough the absolute necessity that the foundations of character must be laid, while the baby is yet "in arms," in a habit of cheerful obedience. And we are finding out, through the mirage of an indiscriminate and sentimental booming of the kindergarten, the truth of the old saw,—"All play and no work makes Jack a mere toy." Any system of education which does not hold at its core the idea that every child. from the first, should be trained to something which stands to it for genuine work, to be done as a duty-often against its inclination, and any school however suffused or clothed upon with the glory of imagination and the warmth of sentiment, that does not have a grip on this solid centre of life, is a delusion from the beginning and can have no outcome in character save what Mr. Chas. Dudley Warner fitly characterizes, "a fatty degeneration of the heart," and everybody who is anybody sees to-day in the growing insubordination, selfishness and intolerable disorder among multitudes of American children, especially of "the better class." Still, there is another venerable saw which declares: "All work and no play makes Jack a dull boy." Many of our eminent experts of the new education in their enthusiasm over the superiority of the natural methods of instruction seem to forget that, however disguised and made easy in this way, every new study or exercise put into a school is a solid addition to the work of every faithful pupil and a temptation to superficiality to thought-

It really sends a shiver through the less multitudes of children. bodily and spiritual frame of a thoughtful parent to contemplate the amount of actual mental labor, physical restraint and moral self-control required even in little children to "keep up" with the tremendous school life of the cities and larger villages of our country. Of course, the average child has each his own way of shirking what is distasteful or oppressive and comes out from his ten years of schooling with a superficiality of information, a dishevelled mind and damaged moral sense, to the disgust of the great educators. But the most perilous feature of our school life is its result on the superior class of children to whom, after all, the country must look for leadership in the future, as in the past. It is becoming a serious matter; this putting out the fire of youthful joy, adventure and spirit in so many of the finest youth in the land, who come forth at the end of their prodigious effort either physically scotched, morally benumbed or mentally so ensnared and imprisoned by the too early revelation of the infinitude of knowledge that they become the "dull boys" of pedantry or the infuriated disciples of an intense and narrow culture. The most valuable result of our investigations into the "contents of children's minds," whose headquarters now seems the good city of Boston, would be some reliable knowledge of what the 70,000 school children of this city really think, feel and propose to do about this vast machine of which they are to be a part during the nine months to come.

T the September meeting of the Congregational Club of Boston,— A a powerful organization including in its numerous membership a large number of cultured men, and some whose names are known the country over,-the subject for discussion was "Our Children and Young People." One of the speakers was that sylph-like flame of educational enthusiasm and Christian zeal, Miss Lucy Wheelock, who took as her theme: "The Church and the Children." It was a sweet, glowing, clean cut, convincing appeal for Kindergarten work in Sunday schools, and by the churches in their week-day efforts to Christianize the lower strata of society. Her address and the speaker herself are index fingers pointing out the bright and shining way of future progress for the little children of the land; yea, and for their mothers also. We rejoice in the rapid growth of this Kindergarten movement which aims to uplift all society by setting little children's feet in right paths, and helping them by the inspiring presence of sweet and gracious young womanhood, to long after the noblest ideals and to attain the highest and best results in morals, in education and in religion.

If figures do not lie, the careful investigations of Dr. Edward Mussey Hartwell, director of physical training in the Boston public schools, establish the startling fact that there is a needless loss of the lives of 149 Boston school children every year.

In his recent report Dr. Hartwell shows that the mortality per 1000 inhabitants of all ages, for 1881-'90, is 23 in Boston, compared to 24 in Berlin and 19 in London, disregarding decimal fractions. In children under five years the rate in Boston is 88, to 110 in Berlin, to 61 in London. But in the case of children from five to 15, the school age, the rate is six in Boston, to four in Berlin, and three in London. These death rates are the annual average mortality per 1000 living at each age period. They show that Boston school children die in greater numbers than the same class in either of the other cities, and the facts obtained should be compared with statistics gathered in other American cities, and should certainly stimulate the gathering of such statistics where they have not yet been obtained. If any subject is literally and emphatically of vital interest to parents and educators, this is. If there is this needless waste of human lives under certain definite conditions the causes can and should be found and the awful leak stopped.

So high an authority as Dr. S. H. Durgin, chairman of the Boston Board of Health, suggests as a partial remedy for the above alarming state of affairs a direct medical supervision of the schools. lieves that every school should be visited every day by a trained physician, and he thinks that fifty such doctors could be secured to make these calls in the Boston schools at a total expense of \$10,000 a year. Such visiting physicians would carefully inspect the seventy thousand children in the schools, and, detecting the presence of contagious diseases and unhealthful conditions, secure their speedy removal. "In other words," he says, "a well-directed medical surveillance over school children would, in my judgment, save a great many lives. I know that our school hygiene can be improved immensely." It is also the opinion of Dr. McCullom, the city physician, that the schools are largely responsible for the spread of contagious diseases. He has made an exhaustive study of the matter and finds that irrespective of weather conditions the greatest prevalence of scarlet fever and diphtheria is just after the beginning of a school term. These diseases reach their height in October, and then falling off a little in December at the mid-winter vacation, they spring up again in February. Then in June, when the windows are opened and the children are much in the fresh air, they grow less prevalent and disappear almost wholly in the long summer vacation. These facts are certainly significant, and it would seem that there

could be no field of investigation more attractive to the specialists of the day than this one. We like Dr. Durgin's suggestion of daily medical inspection of the public school pupils. But if this is not the right, or only a partial solution of the grave question at issue, let us spare no pains nor expense till we find the full and true one.

UNCLE SAM'S PRINTING OFFICE.

BESSIE L. PUTNAM, HARMONSBURG, PA.

No publisher in the United States issues more reliable works than the United States government. The material is furnished by men of the highest scientific knowledge and ability, experts in the subjects on which they treat; those whom the leading scientific periodicals are glad to number among their contributors. The range of topics is so vast as to cater to the taste of each individual. It comprises the problems of prime importance to the welfare of the nation. History, anthropology, ethnology, geology, botany, zoölogy, meteorology, chemistry and microscopy are a portion of the subjects which, though wholly distinct from the government educational department, are treated in so complete a way as to render them most potent factors in educational work.

Yet, despite these facts, the one who acknowledges a taste for such literature in most cases exposes himself to the ridicule of his companions. Why is it that these reports are not more popular among the masses? The shrewd advertising agent will at once answer that it is because other people's "printer's ink" is not more liberally employed as a means of increasing their circulation. Another answer may be that they are distributed gratuitously; that we are prone to estimate the real value of a product by its market value. A third one may say that they are not written in a fascinating style.

While the last answer may in some instances be partially true, it cannot be denied that to the thoughtful person most interesting facts are presented. If a portion of this matter seems dry to us, it may be of great value to some one else. To the South Sea Islander the husk of the cocoa nut is as useful as the kernel; we find no trouble in divesting the latter of its to us useless covering; our mental food should be prepared with equal facility.

The number of these publications issued each year is steadily increasing; their value to the general reader is increasing by a still greater ratio. And they are destined soon to become generally

recognized as a great educational medium.

Secretary Rusk says, in submitting his final report to President Harrison; "To enumerate even a small proportion of the valuable publications issued during the past three years would be impossible within the limits of this report. They have been many, varied and most useful to the agricultural interests, and, while the information to the practical farmer has been, as I believe it ought to be, my chiet care, the interests of scientists have been by no means forgotten. Congress itself has shown a high appreciation of the value of some of these publications by ordering their reproduction in very large

editions for distribution among Senators and Representatives, and I am gratified to be able to state that educational establishments and agricultural associations throughout the entire country have shown a steadily growing and keen appreciation of the publications of the Department, and of their educational value."

A glimpse at the work covered by the Department of Agriculture, a branch seemingly of little interest or charm to the general reader or student, may not be amiss here. The report for 1892 shows that nearly eleven thousand printed pages were issued from this department alone during the year, the number of copies of the various

reports or bulletins ranging from 500 to 400,000 each.

The chief of the division on illustrations reports that with the assistance of eight draftsmen he has made about 1400 illustrations, a large part of which appear in the above mentioned publications. "The work," he says, "embraces nearly every variety of illustration, such as drawing on wood, with pencil or ink wash for the wood engravers, pencil or crayon drawings for the lithographers, pen and ink drawings for the reproduction by the process engravers and India ink wash for the delicate photo-tone or half-tone engravings. A large number of water-color paintings which are almost unexcelled in

fidelity and artistic effect have also been prepared."

One of the most important additions to botanical literature is a report on the grasses of the Pacific slope, including Alaska and adjacent islands. It includes fifty plates, $7\frac{1}{2}$ by $11\frac{1}{2}$ inches, accompanied by a complete descriptive text. A Manual of the Gamopetalæ of Western Texas, by John M. Coulter, will prove of invaluable assistance to the student of that locality, a welcome accession to the library of any one interested in the study. Contributions from the United States National Herbarium also include a Monograph of the Grasses of the United States and British America, and lists of plants collected at various places, including Carmen Island, the Western Coast of America, Indian Territory and Oklahoma; the latter are interesting as showing the distribution of the different genera and species if for no other reason. Skilled botanists need not be told of the value of these publications. Amateurs will find them of great assistance. This is especially the case in studying grasses as the accompanying plates are far superior to those of the standard text books.

Among the many excellent papers in the chemistry department is an exhaustive treatise on foods and their adulteration. The report on fiber investigation gives much information in regard to flax, hemp, ramie and jute, their cultivation and relative commercial importance. Insect Life, edited by the well known entomologist, C. V. Riley, forms excellent supplementary reading for the student of this branch of science. The report of the Ornithologist and Mammalogist for 1892 was brief, yet by no means devoid of interest. Those desiring to learn something about the real character of the famous Death Valley will find in the biological report of the government exploration of that region, issued but a few months ago by this division, and its companion report of the botanist of the same expedition, an excellent description of the general character of the country, its flora and fauna. The list of reports above mentioned is by no means an

exhaustive one of those issued from a single department, which are or should be of direct interest to teachers.

The largest history, in fact perhaps the largest literary work of any kind ever issued, is now nearly completed. It is prepared under the auspices of the War Department, and has required twenty years of hard work in its preparation. It will consist, when completed, of 120 huge royal octavo volumes, each containing 1,000 pages, and a gigantic atlas. The estimated weight of the entire set is 520 pounds, and it will require thirty feet of shelving space. As the most complete and reliable record of a most important period in our history, it will prove an invaluable work of reference.

The Interior Department is one of the most prolific in works bearing directly on educational interests. In addition to those issued by the Commissioner of Education, the full history of progress in geological work is presented, together with most interesting and exhaustive papers on subjects pertaining to the science, by N. S. Shaler, T. C. Chamberlain and others of equally great renown.

The Commissioner of Indian Affairs gives much interesting information in regard to the condition of the race. The census reports form a vast cyclopedia of American affairs. While the Smithsonian Institution and its offspring, the National Museum, faithfully follow the wishes of their founder, who desired "an establishment for the increase and diffusion of knowledge among men."

While these publications are issued for the enlightenment of all American citizens, some of them are so expensive that but a limited number of copies can be furnished; these are placed in the leading public and college libraries, as thereby reaching the greatest number of people. Others may be obtained through a member of Congress, or directly from the department in charge.

The desire is to place them where their value will be appreciated. And to teachers who wish to make a special study of any particular branch, I would say, "Consult Uncle Sam's library." But if you simply want a large book with a good substantial binding to use as a "scrap-book" do not impose upon his munificence by applying to him. And if you chance to be presented with any of his publications which you do not care for, do not sell them for "paper rags," but place them where they will at least in a measure accomplish the work designed for them.

DEPARTMENT OF PROFESSIONAL STUDY.

THE TEACHERS' INTERNATIONAL READING CIRCLE. FIRST MONTHLY SYLLABUS FOR THE THIRD YEAR.

PREPARED BY DR. CHAS. J. MAJORY, NEWTON, N. J., SECRETARY. FOR THE USE OF CORRESPONDENCE MEMBERS.

With this number of Education the work of the International Circle for the third year is taken up in a regular monthly syllabus. Members are asked to bear in mind that the questions or topics presented are not intended to indicate any agreement with or dissent from the views presented in the several books, but only to call attention especially to points of seeming prominence or to ask for the expression of the member's own judgment.

Three classes of members are recognized in the International Circle and the Secretary desires to make due provision for the interest of each class and to extend to each member due recognition for work performed. One class of members, and this the far largest class, are readers only of books belonging to the prescribed courses for the several years. So far as the Secretary is definitely informed of the reading done by these members he desires to make due record and acknowledgement of the same. A letter received while this month's syllabus was in preparation says, "we have in this county more than one hundred teachers who are reading the books of the International Series." A membership certificate will be forwarded to all such teachers upon receipt of their names.

A second class of members pursue the reading and submit written work to local leaders of school or district circles. Upon the favorable report of such local leaders special certificates will be issued to these members.

The third class, Correspondence Members, send their written work from month to month directly to the Secretary of the Circle. To these annual certificates for the Brief Course of three books per year, the advanced course of five books, or the complete course of seven books per year will be issued. Upon the completion of three years of such correspondence work a Diploma of the Circle will be issued.

Registration of membership is free to all teachers in the first two classes. Applications should be addressed to The Teachers' International Reading Circle, 72 Fifth Avenue, New York City. Correspondence members should enclose a fee of two dollars, which fee will also constitute them subscribers to Education, in which journal the monthly syllabi of the current year will regularly appear.

I. ROUSSEAU'S EMILE. PAGES 1-40.

- 1. From what three sources is education derived?
- 2. In what sense does nature consist in habits?
- 3. What constitutes the "training for manhood" that Rousseau deems the sole education?
 - 4. What general principle underlies the right care of the infant?
- 5. Has the young man as teacher, more sympathy with childhood and youth than the older teacher?
- 6. Can Rousseau's treatment of his ideal child directly guide one in the care and training of children in real life?
- 7. What is meant by the assertion that the child should be allowed to contract no habit?

8. To what extent is it wise to permit liberty of action to the impulses of the child's mind and body?

II. HERBART'S PSYCHOLOGY, PAGES 1-25.

- 1. What relation does psychology bear to natural philosophy and to metaphysics?
- 2. How does psychology compare with natural history, with physics, and with physiology as to material and means of study?
- 3. How is a concept affected by the encounter with an opposed concept?
- 4. What relation of concepts permits one to come into consciousness in preference to another?
- 5. How many concepts that are in consciousness combine with one another?
- 6. In what order do blended concepts act upon one another in reproduction or memory?

III. ADLER'S MORAL INSTRUCTION, PAGES 1-26.

- 1. Is there any basis for moral instruction outside the authority of a religious belief?
 - 2. Can there be a religious belief entirely unsectarian?
- 3. Why will it not suffice in public schools to base moral instruction on certain religious doctrines that are accepted by all sects?
- 4. Why not open the religious and moral instruction to the various denominations at certain separate periods?
- 5. Why not permit sectarian schools to draw proportionately on public school funds.
- 6. How may distinctively moral instruction be separated from all religious teaching.

LECTURE II.

- 7. What dangers of excess arise in the consideration of moral instruction?
 - 8. With what relations is the science of ethics concerned?
- 9. How are the natural tendencies of man restricted by the laws of ethics?
- 10. How are the senses, the intellect and the feelings to be regarded as related to the moral faculties?

IV. FROEBEL'S THE EDUCATION OF MAN, PAGES 1-39.

- 1. Education defined by the Law of divine unity.
- 2. The knowledge to which education should lead man.
- 3. Free self-activity the essential method in education.
- 4. The relations existing between teacher and pupil conditioned upon the law of right, not upon despotic authority.

- 5. Unity, individuality and diversity the phases of human development.
- 6. Self-control to be fostered from infancy, and willfulness to be guarded against.
- 7. The earliest religious influence in the development of child nature.
- 8. The several stages of childhood, boyhood and manhood to be duly respected in their order.
- 9. The various powers of the human being to be developed by means of suitable external work.

V. PICKARD'S SCHOOL SUPERVISION, PAGES 1-19.

- 1. Importance of the special work of supervision in school organization and administration.
 - 2. Need for the successful teacher in the office of superintendent.
- 3. The first supervision provided over school funds, not over school work.
 - 4. Various provisions for supervision in the several states.
- 5. The incidental supervision of school trustees or boards of education.
- 6. The partial supervision of the principal in the affairs of his graded school.
- 7. Professional supervision only possible where the system is extensive enough to warrant the devotion of an officer's entire time to supervisory work.

VI. LAURIE'S RISE OF UNIVERSITIES. PAGES 1-38.

LECTURE I.

- 1. Literary culture and philosophical learning emanating from Athens.
 - 2. The first formal organization of a university at Alexandria.
- 3. The trivium and quadrivium of the early university course of study.
- 4. Fostering of educational institutions on the part of the Emperors.
- 5. The early establishment of libraries, and of special schools of Oratory, Medicine and Law.

LECTURE II.

- 6. Tendency of Christianity to discourage university studies.
- 7. Educational influence of the ideas of human brotherhood, individual freedom and relationship to God.
- 8. Purpose and character of the catechetical schools and of the Western monastic system.

- 9. Admission of the laity to opportunities for learning through the work of the Order of St. Benedict.
- 10. Limited scope of the episcopal seminaries and monastic schools.

VII. PREYER'S DEVELOPMENT OF INTELLECT, PAGES 1-33.

- 1. Argument that thought occurs before ideas can be expressed in words, in the case of the child.
- 2. Memory-images evidently necessary in order that comparison, the lowest mental activity, may take place.
- 3. Order in which the several senses are capable of furnishing material for personal memory.
- 4. Evident drawing of general conclusions from particular cases even before the first attempts at speaking.
- 5. Apparent recognition of the relation of means to ends in certain child acts.
- 6. Relation of the idea-signs of deaf-mutes to the language of normal children.

FOREIGN NOTES.

ANTHROPOLOGY AT THE BRITISH UNIVERSITIES.

The British Association is almost as much an educational as a scientific society, hence its annual meeting should not be overlooked in these pages. The meeting of August last was the 64th, and Oxford did the honors of the occasion. This circumstance naturally prompted many speakers to touch upon the provisions for teaching the various branches of science, so that a careful perusal of the papers affords in this respect much valuable information. From the address of Sir W. H. Flower, before the section of Anthropology, we learn that a "professorship of anthropology does not exist at present in the British Isles." Since 1883 the subject has indeed been taught at Oxford, but the teacher bears only the modest title of "Reader." Many lectures are, however, maintained at Oxford which pertain distinctively to anthropology. Such are those of Dr. Tylor, whose researches into the customs of primitive races are well known, and of Henry Balfour, an authority upon the arts of mankind and their evolution; both of these scientists are attached to the University Museum, which comprises among other collections the famous Pitt-Rivers, illustrating the arts and customs of primitive people. The Ashmolean Musuem of archæology and Ethnology, and the Indian Institute increase the facilities in this study. Their curators, of the former, Mr. Arthur Evans, of the latter, Sir Monier Monier-Williams, lecture also on racial characteristics and evolution. Nor must I forget to mention in this relation the philological researches and lectures of Professors Sayce and Max Müller. Quite recently Prof. Arthur Thompson of the Department of Human Anatomy, University Museum, has included physical anthropology in his lectures.

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The subject is not as far advanced at Cambridge as at Oxford, but an Ethnological and Archæological Museum has been established there, and lectures on anatomical anthropology, on the natural history of the races of man, on the arts and implements of primitive man, etc., are maintained. The subject is also included in the scheme of examinations at Cambridge, candidates who take anatomy as their subject for the second part of the Natural Science Tripos having both paper work and practical examination in anthropology. London has magnificent collections of material for anthropological

teaching, but so far they are not utilized for that purpose.

In Scotland, the Universities Commission recognized physical anthropology as a branch of human anatomy in their scheme for graduation in pure science. The examination on this subject embraces a knowledge of rare characteristics, as found in the skull and other parts of the skeleton, in the skin, eyes, hair, features and general configuration of the body; the methods of anthropometrical measurement, both of the living body and the skeleton; the possible influence of use and of external surroundings in producing modifications in the physical characters of man, and an acquaintance with the "types" of mankind and the structural relation of man to the higher mammals. "These regulations," says Mr. Flower, "came into operation in the University of Edinburgh in 1892." Prof. Sir William Turner of this university delivers a special course of twenty-five lectures on physical anthropology and ten practical demonstrations on osteometry. The Museum under his charge is rapidly increasing. As yet the number of students taking the subject is small. The other Scotch universities have not established specific courses on the subject. Trinity College is the only place in Ireland where anthropological work is done. The Museum has a particularly valuable collection of skulls.

A considerable part of the address from which the above facts have been gleaned was devoted to the subject of anthropometry and its applications, especially in the recognition of criminals. In 1892 the Association called the attention of the Government to the system of the measurement of criminals in successful operation in France, Austria and other continental countries, with the result that a committee was appointed to inquire into and report upon the method employed. The report was duly issued and in June last it was announced that the recommendations of the committee had been adopted by the House of Commons, and that "in order to facilitate research into the judicial antecedents of international criminals the registers of measurements would be kept on the same plan as that adopted with such success in France and also in other continental countries."

HERE AND THERE. -- GERMANY.

Dr. Bosse, Minister of Public Instruction, Prussia, announced in May last that he would shortly present before the Chambers a bill regulating the salaries of teachers. An interesting feature of the measure is the means proposed for insuring a graduated increase in the minimum salary. 'The minimum is to be fixed by the law, and will be at the charge of the commune. This amount is to be increased periodically by a sum proportioned to the length of service.

For the payment of these supplementary sums all the communes of the same district (regierungsbezirk) contribute to a common fund from which the increase is derived. Communes too poor to raise the requisite contribution to this common fund will be assisted by the State.

The new regulations issued, May 31, by the minister, respecting the reorganization of girls' schools and the examination of women teachers show conclusively that the efforts of the "association for improving the education of women "have not been in vain. Heretofore women have only been admitted to the examinations for teachers of elementary schools and of the lower classes of secondary schools for girls. Thus it has come to pass that all the honorable and lucrative positions in the endowed public schools for girls are secured by men. By the new regulations every post in secondary schools for girls is thrown open to women. Candidates for the higher positions must pass the examination for elementary teachers or an examination in pedagogics (Vorste herinnen Prüfung) and a second examination (Ober lehrerinnen Prüfung), which presupposes a training similar to that of the German Universities. Although the universities are not open to women, preparation for this examination may be obtained by private instruction or at the Victoria Lyceum, Berlin, and the courses of lectures arranged for women at the University of Göttingen. The regulations carry little promise of any farther concessions as to university privileges for women. The uniform curriculum prescribed for all the public high schools for girls omits Latin and Greek. Nine years are to be devoted to a course of general instruction in which the mother tongue, history and literature are prominent subjects, and which includes also English and French. Special studies, preferably the history of German poetry and of art, universal history, modern languages and natural science, may be taken the tenth year.

ITALY.

Signor Baccelli, who after an interval of a few years has been reappointed minister of public instruction, shows the same progressive spirit as characterized his former administration of the office. One of his most important measures has been the establishment of relations between the elementary and the secondary schools. During his former incumbency of the office he instituted an examination for the fourth class of the elementary schools. Candidates who passed this examination successfully secured a diploma (licenza elementare) which entitled them to be admitted into secondary schools without further examination. This measure was repealed under the ministry of Signor Villari, but has been restored by Signor Baccelli. The examination is now placed at the close of the fifth class of the elementary school. The minister is also interested in measures for increasing the pensions of teachers.

FRANCE.

The government appropriation for secondary instruction includes 30,000 francs (\$6,000) to enable students (boys or girls) to reside at foreign schools for the mastery of the respective foreign languages. As the amount is small, competitive examinations have been instituted as a means of deciding upon the claims of candidates. Each academic

district is authorized to select two or three candidates for this examination. They must be chosen from students who have already secured State scholarships, and who have pursued successfully the course leading to the bachelor's degree. In the case of young women the final diploma of the *lycées* for girls is accepted as an equivalent for the degree.

ENGLAND.

From the latest report of the "National Association for the Promotion of Technical and Secondary Education," it appears that no less than 69 technical schools are in process of erection in different parts of England. The estimated expenditure for the building and equipment of 43 of these is $\pm 690,000$ (about \$3,400,000). Thirty-two technical schools hitherto managed as private ventures have recently been transferred to the local authorities.

The appointment of women as members of the Royal Commission on Secondary Schools has already been noted in these columns. Farther recognition has been given to the sex by the appointment of four women to serve as Honorary Assistant Commissioners in selected districts.

AMONG THE BOOKS.

To accommodate readers who may wish it, the publishers of Education will send, post paid on the receipt of price, any book reviewed in these columns.

A Memorial of Albert Gallatin Palmer, D. D., prepared by Edward T. Hiscox, D. D., is the life of a well-known Baptist clergyman of Connecticut, who served his fellow men with distinction as preacher, pastor, poet and scholar, and who passed from earth June 30, 1891. Philadelphia: American Baptist Publication Society, 1894.

THE FIRST FIVE CHAPTERS OF A HISTORY OF THE UNITED STATES, for the use of schools, constitutes Number 62 Extra, in the Riverside Literature Series, published by Houghton, Mifflin & Company, Boston.

Bulletin Number 9, Part Three, of Minnesota Botanical Studies, contains chapters on the Mucoraceæ, the Minnesota grasses and the North American species of Astralgus. Minneapolis: Harrison & Smith, State Printers.

FIRST STEPS IN ARITHMETIC and GRAMMAR SCHOOL ARITHMETIC, by William M. Peck, are excellent text-books on the subject of which they treat, and will lead the student up by easy steps, making the study a pleasure instead of the drudgery that many have found it. New York: A. Lovell & Company.

The latest issue in the International Modern Language Series is Burg Netdeck, a novel by W. H. Riehl, edited, with introduction and notes, by Charles B. Wilson. It is one of the best of Riehl's stories and will be capital reading for the classes in German. Boston: Ginn & Co.

Henry C. Johnson, President of the Central High School, Philadelphia, has revised and enlarged, for use in American Colleges, Schuckburgh's edition of Cicero's LAELIUS. This edition contains an introduction in which are given the facts relating to Cicero and a brief discussion of the essay, copious notes, an especially prepared vocabulary and a biographical index. Every help that a student could expect is given, and the edition is a model of its kind. New York: Macmillan & Co.

Prof. Allen C. Thomas of Haverford college, Penn., has prepared A History of the United States, which bears the imprint of the well-known Boston firm, D. C. Heath & Co. The author aims "to give the main facts of the history of the United States clearly, accurately and impartially." And this we think he has done reasonably well. It is no slight task to cover the history of such a country as ours, from the times of Columbus clear down to the close of the Exposition last year, in a single volume of somewhat over four hundred pages. This book is well paragraphed and indexed, and is very fully illustrated.

To Heath's Modern Language Series have recently been added Joseph Victor Von Schessel's Ekkehard, long recognized as one of the masterpieces of German prose. It is somewhat abbreviated for school use, but the value of the work is thereby in no way lessened. Carla Wenckebach, Professor of German in Wellesley College, has given painstaking care to this edition and the notes and introduction are scholarly and helpful. To the same series is added, also, Wilhelm Heinrich Riehl's Das Spielmannskind and Der Stumme Ratsherr, in one volume, edited, with introduction and notes, by Abbie Fiske Eaton. Boston: D. C. Heath & Co.

It is a hopeful sign of the times that there should be a demand for The Life of Robert Ross; the brave young patriot whose blood was shed in the interests of a municipal reform at Troy, N.Y., on March 6th, 1894. Young Ross was in his twenty-sixth year, of Scotch descent, a splendid specimen of physical manhood, a mechanic and a fireman. He belonged to the church and to various religious organizations including the Society of Christian Endeavor. He was shot and basely murdered by Bat Shea, — now in jail, a condemned murderer — a tool of the saloon and of the corrupt element in Troy politics which has long held control of that city. Ross's martyrdom has mightily aroused the Christian and moral sentiment of Troy, and is likely to accomplish great good, not alone in municipal reform. The story of his brave, honorable young life is well presented by Rev. James H. Ross, author of this book. The introduction is by Dr. Josiah Strong. This book will do good by arousing the earnest young manhood and womanhood of the land to fight corruption in every form. Boston; James H. Earle, Publisher.

The thought-awakening Arena presents an article in the September number which is of interest to educators. It is on "Public Schools for the Privileged Few," by Charles S. Smart The author ably argues that the public money should be spent chiefly on the primary rather than on the secondary schools, since only about 3 per cent of the youth enrolled in the public schools ever reach the higher grades.— Harper's Magazine for October is a strong number schools ever reach the higher grades.— Harper's Magazine for October is a strong number. Special features are: "Dahore and the Punjaub", a journey in British India by Edwin Lord Special features are: "Dahore and the Punjaub", a journey in British India by Edwin Lord Special features by C. D. Gibson.— Scribner's Magazine has a notable article by H. G. Frout on "Railroad Travel in England and America," to be followed in November by the same author "Railroad Travel in England and America," to be followed in November by the same author with an article on "English Railroad Methods"; Mr. George A. Hibbard pleasantly concludes with an article on "English Railroad Methods"; Mr. George A. Hibbard pleasantly concludes with an article on "English Railroad Methods"; Mr. George A. Hibbard pleasantly concludes with an article on "English Railroad Methods"; Mr. George A. Hibbard pleasantly concludes Company of Philadelphia, giving glimpess of the interior of the offices of the Ladies' Home Company of Philadelphia, giving glimpess of the interior of the offices of the Ladies' Home Company of Philadelphia, giving glimpess of the interior of the offices of the Ladies' Home Journal.— The Household for October commends itself to the ladies as one of the very best home Journal. The Household for October commends itself to the ladies as one of the very best home Journal. The Household for October commends itself to the ladies as one of the very best home Journal.— The Household for October commends itself to the ladies as one of the very best home Journal.— The Household for October commend

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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INSPIRATION IN EDUCATION.

PRES. JOHN E. BRADLEY, ILLINOIS COLLEGE, JACKSONVILLE, ILL.

The constant temptation of the teacher is to substitute the means for the end. The arithmetic, the science or the language is taught for its own sake, and the success or failure of both teacher and pupil is measured by the actual knowledge of the subject which the pupil has acquired. Even if the purpose of education is correctly apprehended, it is often ignored. The teacher forgets that the branches taught are but instrumental and subsidiary. The real question is not how much history or German does the pupil know, but what influence has the acquisition had upon his habits of thought, his tastes, his ruling purposes.

The English psychologist, Dr. F. W. H. Myers, has told us many wonderful things about the "sub-linnial consciousness," the inner self,—which is so important a factor in our daily life. It is in this deeper self that our habits and preferences and settled opinions lie embedded. It is these which constitute our individuality, our identity, and which like underlying strata cause the elevations and depressions of an outward life. All true education affects this sub-conscious self. That which can be measured by pages in a text-book, or tested by examination papers, is but a very superficial thing. At the best, it stands related to real education as the blossom is related to the fruit. It is prized for its potency or promise, but it is by no means sure to yield strong, well-ripened character. Its value depends upon the influence its acquisition and assimilation have upon the underlying self. wise teacher seeks constantly to measure his work by this higher test.

Education should develop enthusiasm and the appreciation of worthy motives. The test of work is its result. Good teaching will enkindle in the learner a desire for broader culture. Knowledge produces the love of knowledge. But it often happens that the spirit or the methods of a teacher arouse in a pupil quite the opposite feeling. The discouragements or exactions of school life are more deeply impressed upon his mind than the facts which he learns; he comes to dread study and school is associated in his thought with restraint, or a wearisome routine. He readily yields to the temptation to leave school. If home influence protects him from making this mistake, he remains under conditions which are unfavorable to mental growth. faculties require for their normal activity, hearty and spontaneous Their best work cannot be enforced. interest. It must spring The subject itself or its mode of presentation must unsought. attract the pupil and arouse his willing and vigorous thought. It must be related to his previous knowledge or to his natural impulses. As Professor James aptly says, we might as well ask a student to give the Choctaw equivalent of some English word as to perform an action — e. g., to learn a lesson — concerning Practice makes perfect when the aim which he has no notion. is clearly seen and the effort vigorously made—otherwise it simply produces stupidity. In the artificial atmosphere of some class-rooms neither of these conditions is supplied. goal is set up, or too often no motive to effort is afforded. An ideal education will so utilize the natural impulses as to afford constant pleasure in the pursuit of knowledge. The purpose of school discipline is not to repress these impulses but to guide They are the pupil's motive power, and to their development. When their diminish their strength is to inflict lasting injury. development is wisely guided and properly encouraged, spontaneity of intellectual action and moral self-control will invariably follow.

One of the duties of the teacher, especially in the high school or academy, is to stimulate the ambition of his pupils. Indeed he should never lose sight of this important end. As the faculties unfold and strengthen the youth finds a constantly increasing pleasure in their exercise. His intellectual horizon widens and his day-dreams begin to foreshadow his future career. It is a critical period in his life, and it is of prime importance that his

aspirations should be encouraged. To teachers and parents they may seem crude or even grotesque. But one must acquire energy before he can utilize it, and this is the time for growth. The imagination should be fired with high hopes and aims. It is far better that the ideals should be somewhat mistaken or confused than that there should be no ideals. The important thing is that the student should determine to make the most of himself-should feel a wholesome discontent with his present attainments. Too often the school or college is a place where youth grow blase and indifferent, unwilling to interest themselves very much in any subject, especially if it require close thought or hard work; where persistency and moral enthusiasm They ought rather to be places where youth are in bad form. will learn to apply themselves, where they will acquire moral earnestness, where intellect and purpose will grow strong by surmounting obstacles and pressing on to higher ends.

Edward Everett Hale once said that the public schools lack He is not the only observer who has felt this inspiration. To be truly educative the school must afford congreat need. stant stimulus to worthy aims and purposes. Very few of the men who are graduated from our colleges and universities and become a power for good were destined by their parents to such a It will usually be found that some teacher has so guided their study as to yield an ever increasing ambition. In a certain high school two hundred boys were fitted for college during a period of fifteen years. Of these, only eight had any purpose of going to college when they entered the school. That purpose was a part — often the most valuable part — of their education. The instructor who simply does his work from day to day with no thought for his pupil's plans for the future, loses sight of the highest motive. The eight-grade teacher whose pupils do not wish at the close of the year to go to the high school, has failed in a fundamental particular. The high school or academy whose graduates are not eager to go to college is not doing good work. Wherever learning or study or ambition are at a discount inspiration is lacking and the school is weak at a vital point. All good work, all high endeavors are born of inspiration. The boy who does not think high things, whose imagination does not revel in glowing pictures of what he hopes to be and to do is training himself to be contented with the bald necessities of life.

The school should fill his mind with high hopes and ideals. The materialism of our day touches the boy in the public school as with the chill of an iceberg, paralyzing his ambition, stifling his day-dreams and his hopes. It turns him away from the college and even the high school into the factory and counting-room. When, as a boy, his thoughts ought to be on romance and history and literature, it chains him to the treadmill of some belittling routine. It so magnifies a paltry \$2 or \$3 a week that a boy who might one day earn \$1000 or \$10,000 a year and direct great interests shall never rise above the merest drudgery. It deprives him of a career; it deprives him of his normal development, of the capacity to see and enjoy that which is highest, truest and best in life.

Moreover, the community suffers. The evils arising from illiteracy, which are greater than we often realize, are insignificant in comparison with those which spring from incompetence and misdirection in high places. Trained and upright leadership is our greatest need — men of character and culture in every community and every walk of life. We often hear it said that boys are educated away from the industries which need them, and jokes are worn threadbare concerning the poor parson or lawyer who might have been a good shoemaker or trench digger. But the assumption is ridiculously contrary to the facts. The crowding is all around the foot of the ladder. It is the ignorant workman, not the trained student, who is a drug in the market.

If a teacher by his lack of sympathy and personal helpfulness has led his pupils to dislike school and perchance to leave prematurely; if he has made his teaching so dry as to inspire no enthusiasm for literature and science and research, he has inflicted a wrong and failed in his work. He may have been a martinet of discipline and drill, his pupils may show high averages and pass good examinations, but if his instruction has produced in them no love for study, no scholarly tastes, no aspirations for culture and refinement, it has been ineffective at a cardinal point. A true education will yield these elements of power, will gather into a steady flowing stream, the fitful impulses of youth, will harmonize the discordant elements of untrained nature and bring symmetry and strength into the ripened character.

SHOULD POWER TO CREATE OR CAPACITY TO APPRECIATE BE THE AIM IN THE STUDY OF ENGLISH?

PAPER READ BEFORE THE MASSACHUSETTS ASSOCIATION OF CLASSICAL AND HIGH SCHOOL TEACHERS AT CAMBRIDGE, APRIL 6, 1894.

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It has been so much the fashion to begin or end educational and other essays with a quotation from Emerson, that I have hesitated a little in conforming thereto, but as I enter upon the discussion of the matter in hand, a thought of his so apposite and encouraging comes to mind that I cannot refrain from recurring to it, especially as some of the notions which I have to offer will require whatever weight of influence and authority can be adduced in their support.

It is no slight matter to come to the defence of a view which has been at least once openly discredited at the meetings of this Association, and which has, in substance, been dismissed with a good-natured sneer by a distinguished instructor in English in the city of Boston.

If, then, I can fight beneath the shield of so valiant a warrior as Emerson, I shall enter the contest with a confidence which could otherwise originate only in ignorance or conceit.

Towards the end of his essay on Spiritual Laws, after emphasizing the potential importance of every man as compared with all other men, Emerson says: "This overestimate of the possibilities of Paul and Pericles, this underestimate of our own, arises from the neglect of the fact of an identical nature."

This sounds like a sentiment which would bear considerable expounding and elucidation, but the author does neither for it. It was not his way. His sentences were self-illuminative, or else they became oracular. The meaning in this instance is, however, tolerably clear. It is but a better statement of the old saying, "What man has done man may do," a modern recasting of the Scriptural "All things are possible to him that believeth."

Men differ not in the nature, but in the extent of endowment, and achievement in any direction is open to him that willeth.

It is because I believe these things, and because my experience with children and their elders has confirmed the belief, that I undertook to prepare this paper and to present the view of the purpose of the study of English which it contains. In using the term English I shall adopt the divisions, though not the definitions of Mr. Samuel Thurber (whose inspiring instruction in Greek it was once my privilege to enjoy), in his address delivered before the American Institute of Instruction in 1892.

We were then told that the study of English includes the study of literature, of composition and of language.

By literature I understand the thought of the English-speaking race as artistically expressed in words; by composition the method of using words as they should be used in order to express thought artistically; by language the history of words and the principles which have been observed in their most effective use.

The last is, of course, incidental and subservient to literature and composition, particularly the latter.

We study grammar that we may speak and write correctly, that is, as they have spoken and written who have spoken and written to the best advantage. The aim of the study of literature is the appreciation of beauty and truth as embodied in the printed word, the development of taste; the enrichment of life, and the spiritual fructification which may come from contact with the best thought of men who have worked along literary lines. The aim of the study and practice of composition is to develop in the student the power of using his mother tongue artistically, — that is, the power of literary creation.

It should be said at the outset that, so far as I can see, there is here no question of the functions of primary, secondary, tertiary, or any other strata of educational institutions. There can be but one aim in all education, the development of a power, in other words the enrichment of the consciousness. The only questions which can fairly arise from the fact that there are different grades of schools, are such as pertain to method.

Again: the theme does not necessarily involve that much mooted question which has caused so many brilliant pedagogic sparks to fly from this and other platforms, whether the writing of compositions or the study of literary masterpieces should be chiefly emphasized in work in English. Our question is one of aim, not of method.

Assuming that creative rather than appreciative power is to be desired, it may be that it can be gained rather by the contemplation of what has been done by trying to do something one's-self. The child might learn to walk by examining with attentive minuteness the graceful gyrations of a dainty dancer or the mighty stride of a fleet runner. To be sure he does not ordinarily learn in that way, but this does not preclude the question of possibility. It is, however, pretty hard for a teacher to let method alone, and I assume for myself no exceptional grace in the matter. The right to discuss the how of a thing is a pedagogue's prerogative, whether it comes strictly within the scope of his subject or not, and his prerogatives are so few that I may take advantage of the opportunity to exercise one of them at this time. But the immediate question is the aim of the study of English.

Shall a literary taste or a capacity for literature be the aim? Shall we strive to produce in our pupils an intellectual and spiritual sensitiveness to what is excellent, or virility in the production of what is excellent? Shall we teach them to allow their souls to be played upon by celestial harmonies, or shall we attempt to arouse to activity the power of producing for themselves melody similar in kind, however remote in degree. (These words do not, at least need not, suggest a crop of spring poets. Hawthorne's prose is as melodious as Thomson's Seasons, while Matthew Arnold's criticisms certainly had as heavenly an origin as did Pope's iambics.)

These questions would seem to answer themselves. As between the receptive and the creative act there can be little comparison in point of worth and dignity. It has been made a matter of praise with Mr. Lowell, that, refusing to yield to the seductive and readily attained pleasures of mental epicureanism and spiritual sensuousness which the scholar's life affords, he called into play his creative powers and produced works that will live. When the product is of a high character in point of truth and beauty, it becomes a world treasure.

It were a thankless task to comment here upon the transcendent value of good literature. Science may perform its uncouth antics upon what it most unscientifically deems to be the prostrate body of Greek, but is it not grotesquely amusing itself with the shadow which the grand and upright form still casts—and casts because it is upright — rather than with the substance itself.

If Gray sang truly of "Mute, Inglorious Miltons," their graves are of all places the saddest, because of the joy of which both mankind and the singers themselves have been deprived by reason of their silence.

Men fail to exercise their powers for two reasons,— indisposition and ignorance. For the former the individual alone is ultimately responsible. So far as the pupils who come within their reach are concerned, the schools must, in a sense, assume the burden of the latter. To create in the student a consciousness of his intrinsic worth and dignity, to arouse him to a knowledge of his capacities, to teach him faith in himself as an imaginative force, and to give him reason for the faith that is in him, these surely must be among the aims of education.

If by seeking to develop creative power a man or woman is produced, who can and who will embody heroic truth in forms of literary beauty, the result is worth the most strenuous effort, however rare the product may be. It is in a way true that literature does not change, but it is equally true that it does, or at least ought to grow. All truth has not been revealed, and the supply of beauty is, as yet, unexhausted.

We are too much inclined to regard the great masterpieces of literature as having been forever existent, as something akin to nature, like the everlasting hills, not as the product of men of identical nature with ourselves. Yet some centuries ago Vergil started at a blank bit of papyrus wrote "arma virumque cano," and very likely stopped there and wondered if he had not set out on a fool's errand after all, and there was a time when "Paradise Lost" and "Hamlet" were unknown terms in our literature.

Great epics and poems which are not so great, will yet be written by men who sat as pupils in our schools. If by aiming at the stimulus and development of creative power such an one can ultimately be brought into activity, it were surely inexcusable to aim otherwise.

But, even if the product be of an inferior grade, as it is likely to be in most instances, for one reason or another, it by no means follows that creative power should not be cultivated as of more consequence than mere receptivity. The joy of the creative act is something as exquisite as it is unique, however insignificant the outcome may be. The mountain labored and brought forth a mouse, but better that than nothing. When one has read himself

full of a subject, what a relief it is to turn the last book aside, close the eyes, and let one's thought and individuality play a little about the matter in hand, to do a bit of independent thinking on one's own account. And then, sometimes out of the process, in some mysterious way, there at last evolves a thought, an idea, a notion, a what-not of our own, a poor, weak and shivering little creature it may be, which a frown would chill back into nothingness, which might die at once through lack of breath, should we not tenderly fondle it into being and stand its valiant guard with a strange and yearning solicitude, all because it is our own, and we take a pride and joy in it which the fairest and most perfect product of another could never give. This is why parents think so much of their children, -at least if this be not it, it is often hard to imagine what it can be - not because they seem to them absolutely the most perfect children that ever were, but because as parents they bear to their offspring a relation wholly unique. So with the children of the brain, poor they may be, with little grace or beauty, but still ours, and sources of a profound delight because of the fact of our intellectual parent-Nothing is so hard as to think, and nothing is so delight-"The mind conceives with pain," says Joubert, "but brings forth with joy." Candidly, would you not rather have been the author of Sir John Luckling's "Ballad on a Wedding," or even of his magnificent "Lines to a Desponding Lover," than to have thrilled to the deepest harmonies of Milton, without being able to write a line? Permit Matthew Arnold, the literary light bearer of the century, to give a general answer. Speaking of the value of style, he says: "The magic of style is creative; its possessor himself creates and he inspires and enables his reader in some sort to create after him, and creation gives the sense of joy and life, hence its extraordinary value."

It has been suggested that the aim of education is the enrichment of the consciousness; this is equivalent to the impartation of the sense of joy and life. If Mr. Arnold is right it would seem to be our duty in the teaching of English to aim at and emphasize the development of the creative power.

Now this does not mean that an ambition for literary distinction is to be fostered in our pupils, or that a livelihood with the pen is to be gained as a result of the study of English. One does not in most instances study trigonometry to become a

surveyor; yet that would be a poor course in trigonometry which did not teach the pupil how to survey. Do we teach our pupils how to create in our courses in English?

The possession of creative power does not imply its perpetual exercise, least of all its public display. It is to be sought for its own sake, not for the sake of informing neighbors and friends of its possession. To seek accomplishments for the purpose of parading them were indeed a misuse of time and an abuse of education. When the proof of this programme was sent for examination, the subject of this paper read thus: "Should creation or appreciation be the aim of Literary Study?" It was returned in its present form. The possession of the power, not its constant or its public use, is the end proposed. There are very likely in America to-day, a thousand men pursuing the less belligerent callings, who, with a little appropriate training, could batter into insensibility the pugilistic champion of the world, whoever that uncertain character may be. That they do not proves nothing against the utility or pleasureableness of their strength and cunning. It is not a question as to whether the world knows that you have a source of happiness. It is the being happy yourself that is the main thing.

"To have the sense of creative activity is the greatest happiness and the greatest proof of being alive," says Matthew Arnold; not to parade it in public, a light under a bushel is no bad thing after all. It illuminates the bushel and may find much delight in its own radiance.

But there is another and an equally valid reason why original, creative work should be emphasized as of paramount importance The lack of actual intellectual activity in the study of English. is startingly characteristic of the pupils of city schools. them have very few ideas, either of their own or of another, though they are perpetually brought into contact with the latter; nothing is so hard as to get them to think. They not only donot think, but they shrink from the effort as from something strange and unusual, as from a process, not which they are incapable of, but which they are not used to. These statements cannot, of course, be proved as a matter of logic. I make them because they are the results of my observation. If they are not the result of yours, I shall be very glad, though what I have to say at present will not concern you. But the reverse is true of

country bred boys and girls. They are not barren of ideas; when they do any work they incline to do original work rather than imitative work, if the choice is open. To illustrate, I have, in the High School in Worcester, a class of forty boys and girls who, as a part of their work in English, write a theme once a month on subjects assigned by myself. The class consists of four divisions, and I give five new topics each month. It is my rule to assign only such themes as from their nature will compel original work, or, at least an attempt at it. But one is sometimes hard pressed for suitable subjects, and last year, in a momentary fit of weakness. I gave way and included in my list the matter of the Sand-But retribution followed close on the heels of folly, for, during the following month I had to read and correct at least thirty productions on this entertaining theme, all alike, and all taken substantially from current literature. pupils had at least twenty-five other subjects to choose from. Think for themselves! Not they, when so many were at haud to do their thinking and writing for them. (I took a vow at the time, which I have since had no trouble in keeping, with an entirely even mind, that I would never give an historical or topic of the time subject again, and that I would never read another word about the Hawaiian Islands as long as I lived.)

But in the country academy in northern New York, where I first taught, the case was different. When I gave my pupils their topics for their themes, which included those materials for which could be found in books and in themselves, they almost invariably chose the latter,—because their manner of life and their surroundings had compelled them to rely upon themselves and not on books.

Permit my pupils in Worcester to chose their own themes and I shall be inundated with the ripest thought of the age as digested in the Intercontinental Encyclopedia, about Abraham Lincoln, or the poet Longfellow. "Henry W. Longfellow, one of America's greatest poets, was born in Portland, Me.," etc. But when my pupils from the rural districts handed in their choice of subjects they wrote appreciatively about the cow or the squash,—and they did not say the squash belonged to the genus Cucurbita, of the natural order Cucurbitaceæ—or what they hoped to be, or the uses of going to school, or the advantages of knowledge, the republic or the monarchy, statesmanship, or "To be, not seem," or

duty, or ideals, and while the boys were often either very realistic or very satirical, and the girls had extremely noble notions which I have since been frequently told were silly and impracticable and sentimental, but which I still believe to be wise and possible and sensible, yet there was the stamp of genuineness about the work which gave it both worth and dignity. There was no public library in Squashville. It is no accident that men of force are largely country-bred, nor is it due to the blind cast of a die that the half-dozen most influential members of the New York state government to-day, came from the northern counties. It is not because they have more sunshine and fresh air, and berries and cream, and go to bed earlier in the country — the air is as good in Boston as in Berkshire - but because the eager, strenuous, creative might which is the heritage of every normally constituted child, is not choked by an inundation of intellectual material from without.

"To what do you attribute your great success as a jurist?" asked an acquaintance of Chancellor Kent of New York. "To having had no law books," was the significant reply; which, of course meant to having to think, not to read. In the case of our city children their tiny barks containing the germ of creative power, of potent, self-assertive individuality, are swamped and founder in a sea of knowledge.

Young America, and America in general for that matter, knows too much, and thinks too little; and thinks too little because it knows too much. Are not then schools and libraries civilizers? Undoubtedly; but we want the best civilization, and to that end they must be used aright.

[CONCLUDED NEXT MONTH.]

A HUNT FOR THE SHAMROCK.

PROF. FRANKLIN B. SAWVEL, GREENVILLE, PA.

Before quitting Ireland I coveted one more ramble outside city limits and stone walls, free from guides, guide myths and set stories.

So, from the shore town of Larne, twenty-four miles north of Belfast, I walked up and back over the rugged cliffs and rounded hills, turfy fields and glens, through county Antrim toward Londonderry. I had been seized by an unaccountable passion

to pluck the poetical shamrock on its native hills, and had begun the search down three hundred fifty miles away by line of travel, little suspecting that each mile was to be one of so many disappointments.

The first specimen I purchased from flower girls at Glengarriffe, offered in the most anxious and complacent assurance. It was a yellow flower smaller than the common American buttercup, probably Ranunculus Muricatus. I could not avoid the thought that shamrocks at "thripens" a flower is the source of Ireland's large bank account, as I had read somewhere that her bank deposits are larger per capita than that of any other country. But I profess perfect credulity, and understand the writer was visiting this emerald land of legend and beauty for the first time and felt unwilling to pit any theoretical notions of what the sacred emblem looked like, any recollections of the supposed plant as he had seen it growing actually transplanted root and branch on American soil, or any information gleaned from botanies and Bedakers, against the familiar, instinctive knowledge of those who had "always been there;" who had lived on shamrock, slept on shamrock and, judged by an untutored eye, would peradventure die on shamrock.

The next day crossing the mountains I chanced to name the flower in the presence of the coachman, to whom I exhibited my specimen. He halted and proceeded forthwith to find a real shamrock, such as he had carried in his pocket many a day at school "to keep from gettin' licked," as a sprig of it was a sure safeguard against flogging. He soon returned with a dainty yellow flower of five golden petals, short stem from one to three inches long growing from the collum.

The third contribution to my collection was made — gratis, too, which was financially refreshing — by two university students late and fresh from — , who were starting on "a six-months' tour to round up their study." They told the company so at least. Told them several times, and, I suspect, told each one separately, as they were generous and communicative. Their acumen as botanists had received some hint, no doubt, from the flowers already in our possession. Their specimen was found in a deep, damp, woodsey ravine opposite Echo Rock, on the shore of Lake Killarney. When they reappeared on the road it was not certain, even at the short distance of ten rods, what treasure

they had found; each had an armload of something with stems or twigs, uncertain which, bent and broken and hanging half way to the ground. A bright American school teacher suggested the sacred bush; another said palm branches; and a third, spicewood and tinder for an incense offering to Saint Patrick. The latter seemed for the moment the likelier, as on the west side of the lakes loomed up the identical mountain from whose crest this saint had banished the last snake centuries ago. road to knowledge is hard. We were mistaken. After sharing liberally to those really interested in shamrock enough had been reserved to start a university herbarium on their return home. It, too, was a yellow flower, five-parted and about an inch to an inch and a half in diameter; "the finest and largest yet found, a large variety," they assured us, as plant and flower entire with stiff stem one to three feet long was passed around. Two days more and they will go to Tralee and not join us again. They had searched Kenmare for a Gray's Field Book and filmrolls for their kodak and detained the coach fifteen minutes over set starting time, and informed us they had brought but three rolls of one hundred impression capacity each with them, had only six months before them and it was already the afternoon of the third day since they landed at Queenstown. Snap shots of three or more varieties of shamrock and each from several points of view and on the spot where it grew will be no mean help to the scientist. To the other seventeen of us, however, these specimens were locked up in the camera and press-case to await, perhaps, some pressed-flower show across the Atlantic. A wicked suspicion be with camera and case!

Late that evening I thought I would decide the matter by submitting it to a very wise local guide. A glance was sufficient. He promptly discarded all and was in the act of casting away the whole collection when I restrained him, remarking that valuable natural history specimens are not picked up every day or everywhere. He bowed a "beg pardon, sir," and disappeared in the evening shadows. In just three minutes he returned with a specimen — two specimens in fact — of the "original shamrock." Two heads of genuine red clover, — trifolium pratense. The one was the size of a large Scotch gooseberry and lop-sided; the other the size of the egg of a meadow lark with the lower half of about the same color when the egg is nest-soiled. This was encourag-

ing. Two shamrocks for only one shilling, and the faded glory of a Killarney twilight thrown in. The ivied ruins of the old abbey with her crannied walls and their dark, mysterious passages, her silent tomb and voiceless dust of McCarthy More, the founder - voiceless since 1440 - the downy grass and crumbling gravestones around and the quaint tablets within; her enclosure of dark, dense foliage and stately trees vine-trellised between, and the silvery beams showering aslant through trellis and branch and over broken walls, crumbling tower and mouldering tombs; the clear lake reflecting the full moon and dim stars, solitary, snow-fringed clouds, plant-embowered islands, trees festooned with moss, shore-lines of massy shrubbery, hills, mountain peaks and ocean-blue skies; — a sea of verdure and quivering beauty. All to impart charm and sanctity to a national emblem! A sweet thrill of delight like a welcome, lingering joy! The atmosphere was charged with sentiment. Primitive skies, ancient waters, primeval forests, hoary ruins, aged incense rising and antique prayers still winging onward their way; gray-locked myths, decrepit legends and eternal memories — and shamrocks — two whole, original shamrocks!

Laugh at sentiment who dare. It was refreshing—refreshing as goats' milk, evening shade and the odor of fresh meadows and roses all combined.

But the exquisite loveliness of the Abbey ruins and the beauty of her environments cannot be gainsaid. Nature is always truthful if we read her aright; human cunning, greed and baseness alone are false. By this time the subject had become interesting almost to fascination. On the way back, three miles to the Great Southern, through the broad avenue like a cathedral aisle of huge tree-pillars arched and roofed with interlacing foliage, I tried to lull my agitation by repeating a few lines of a native melody.

"Oh, the Shamrock, the green, immortal Shamrock!
Chosen leaf
Of bard and chief,
Old Erin's native Shamrock."

The next day was a failure, and some days to come will be failures. Guides lacked courage. My next advance led diagonally across the basin-like interior to Dublin on the east coast, a distance of one hundred eighty-four and three-fourth miles by rail. On the way at Kilcolman castle, a too much desecrated and

neglected ruin where the Faery Queen was written and where the angel of remembrance still sings

"That all the woods shall answer, and their echo ring."

Here I saw growing on the old garden site a white flower, whose long angular peduncle raised its chaste head out of a wilderness of clover leaves. While making another foot journey in Kildare I saw the same flower in field and garden along the noble foot paths and highways, lifting their modest, pretty faces into the sunshine, as fair and fresh as the cheeks of Kildare lasses, for which the county is noted. From this point northward I hoped for better success. The landscape wears a tamer and more industrious appearance, and the sun of Scotland and England shines on the plenteous vegetation, profusion of flowers and velvety meadows, her fields of wheat, oats, barley and potatoes, herds of the finest cattle, flocks of sheep, geese and poultry, and the comfortspeaking homes—neither palaces nor hovels, but real houses. some frame and commodious—and her generous hearted, kindly. progressive people. I saw the same kind of flower in the public gardens and parks of Dublin, on Parnell's grave, on Old Trinity University campus and at Belfast, one hundred thirteen miles farther north. But these all lacked one essential quality. had not been confirmed by native wisdom. They had no pedigree. Besides, it was one particular flower, the original flower emblem of the Emerald Isle that I was after and not the whole genera trifolium and medicago, or the entire group of clovers and medics to the fourth generation and seventh degree of kinship. I wanted shamrock; the traditional plant, pedigree and all, whose every leaf is a perfect trinity with the image of St. Patrick, plainly visible in each leaflet's face and the flower a forest of silver trumpets attesting the ancient doctrine of the trinity in unity.

After reaching Dublin I delayed further out-of-town and park search till I wandered over the fields and along hedge and highway from Larne. I decided to make one more and last attempt to secure the historic emblem. I had been depending much on guides and escorts. Too much entirely I was convinced. I was now determined on a foot journey all alone—a long one if need be. I climbed through a patch of forest on the steep, bluffy slope back of the town and out to the left into a field where I saw two men and a boy of twelve years gathering hay. I joined their

company and asked for shamrock. The younger of the men shook his head despairingly with an "I've heerd on it, but don't think it grow here abouts." The older skirmished along the hedgerow, assuring me all the while that he had seen one in ten steps of this spot the day before. In the meantime the lad pulled a dwarfed rose from the hedge and coolly offered it as "a shamrock, sir." Possible! Had the species withered away fig-tree like in a single night, and just one night too soon, or does the entire flora from elms to tansy and peat-moss consist of shamrocks? I began to distrust their aesthetic instinct. How could this listless indifference and stupidity be wedded to a lively, even clever perception of the sentimental. I secretly attributed the stupidity of the haymakers to life-long laziness; a noticeable characteristic of peasant life wherever I went. Half the intellectual life of the lower class of peasantry seemed to be myth and legend, and a large part of the other half a lazy, doleful mental agony over their hard lot. I had sixteen hours before me and could spend two weeks if absolutely necessary. I bade them good morning and continued my journey across fields grazed by plump, sleek cattle and small groups of fat sheep, over a bosky valley and up a longer, gentler slope to the crest where I sighted the highway leading west to Ballymena. Here I hailed some cottagers standing about the doorway of a small, ugly hovel, perhaps, remnants of the O'Neils, thirteen in number, and all save four of about the same size half grown. After parlying over the object of my search, a miryfaced, uncombed lass darted around the hut and brought three umbels of bright red clover, a scarlet poppy and two "snail shells" as they called them. She reached them toward me in a firm grasp of the left hand accompanied by the right worked up into a bowel-shaped, yawning pit, deep enough it seemed to hold all the money I had — reduced to Irish pennies. I took the flowers, dropped in a sixpence with an extra halfpenny for each of the bairns and without waiting to hear them strike bottom, hastened along a well-worn foot-road through a patch of bristling barley, by another of oats to gain the highway. Left it again in less than a mile to join a company of laborers who were indifferent, suspicious, close-mouthed. They seemed to have agreed by unanimous vote to be so before I got to them. No shamrock. No interest in flowers, in anything, except leaning on their broad, clumsy, stub scythes or crude rakes. Others were "pitching"

the hay into a cart with their hands. I decided at once whatever they might choose to say I would offer no hint on the question of veracity nor prolong an argument. In fact it had become a standing resolution that that was not the best plan. I trudged to the next cottage, really a comfortable house. Some hovels remain with their occupants as if to remind these fascinating, industrious people of what Northern Ireland once was and what Southern Ireland still is. The three children slipped into seclusion, which seemed to be the established custom on the approach of a stranger, except in the hovels where all were beggars. "No, sir," was the courteous reply to my standing interrogative. "We used to keep a bit by the wall there to keep Ould Nick away o' nights, but 'ad none this foive an' twenty years sir." "Kind o' plant, sir? It was green an' 'ad a bit small green leaves, sir." "The flower? White, sir. Little cups full to the brim each morning of sweet wine. If you drink one before the sun e'd make you 'appy all the day, sir. Things 'ave changed a deal since then, sir." And the grand'am gave way to the housewife. The past and the present stood side by side. The house was typical in its surrounding of the homes from Dublin northward. It was embowered in the cool shade of elms with a copse of ash, hickory and silver maple hard by. Red and yellow roses, large as tin cups, roofed the old stone gateway and mingled with ivy to hide the garden wall away on either A white one climbed the wall to the left side of the door and fragrant white woodbine to the right. Purple woodbine at one corner of the cottage and a red one at the other ran up the corners, along the eaves and partly over the roof. In the gardenfront-door-lawn with us - which is an integral part of every wellto-do home and many of the hovels, were poppies, lillies, nonesuch, wood-sorrel, mint, sweet-william, pink and white daisies. dwarf roses and beds of thyme and tansy, and along the outer margin corn. Every plant and flower was accurately named, and surely they could not mistake the winsome object of my search. For once I hit on a definite plan. It was eleven, exactly five hours since I left Larne. The hostess set me a "good dinner, sir," and I paid the price willingly with "a sixpence extra because it's fresh and clane, sir." Every purchase among the rural folk had an "extra" instead of a "dicker" or "knock-off."

Twenty-five years ago my winsome flower was common here.

Due west where the country is twenty-five years younger it must still abound. In America such sections are less than a day's journey apart, and in this ancient island, where changes work slow, less than half that distance. Therefore, I will overtake the rear column of the genus shamrock not later than four o'clock, and possibly overhaul stragglers an hour earlier. I set out at once taking a "God bless you, sir," and hailed everybody I met or saw at work and halted at every cottage in range, receiving one flower here and a different one there. By four, I had reached a commanding summit looking west over the spires and bleaching fields of Ballymena, south along the river Main to Lough Neagh and northward to Mt. Throstan. A sweep of mines, farms and factories, but no receding army of shamrock. Before me lay Protestant rural Ireland at her best and in her brightest summer green. The country folk wore a livery of leisure devoid of luxury — a kind of respectable laziness with discontent seated on every face.

The chase was ended. I had but one alternative; took it, a "country jaunting car," and arrived at Larne an hour after dark. My driver was a prodigy, a tacitum Irishman, who had never heard of shamrock and whom I managed to worry not a little with intrusive questions. But why did clean people look dirty, or why should not every house have pets if the pigs are agreed; and what right has American ideas to wreck an Irish lunch of barley cake and goats' milk, or why should a nation have a fetich, a venerable flower-emblem for fifteen hundred years and five million people not able to point out the particular flower? I wish I could pay a tribute to peasant veracity. Like the Greek sophists they are so skilled as to be able to furnish anything asked for without delay, and had I been hunting the "Village Chestnut Tree" or the "Big Trees," I could probably have added them to my collection.

INVENTORY, 11 P. M., JULY 11TH, LARNE.

White clover 5, red 2, zigzag 1, sweet clover 1, nonesuch 3, snail-shells 2, white honey-suckle 1, scarlet poppy 1, cress 1, carnation 1, red rose 1, and one each of two flowers unknown to me; besides the buttercup, "the safeguard against flogging," and the "large variety" received from as many different individuals or houses and all shamrocks on accredited native authority.

Sometime afterward I wished to select from this aggregation the one particular flower in question and solicited the assistance of art publishers who make specialties of this class of subjects and work. Accordingly, I addressed letters to three noted art studios and art publishers, one in Dublin, one in Cork, and one in Boston, hoping also to be able to present to the readers of Education a photograph of the flower. From one I received no reply. From another, "We regret to say that we have nothing to offer you in a 'Shamrock' design, nor can we refer you to any one of whom you can procure it." The third replied,

"Cork, Aug. 11th, 1894.

Dear Sir :-

In reply to yours of 31st July, we beg to say, we have not any photographs of a Shamrock, we have never even seen one."

Have never even seen one!

This was first comforting and then shocking. Never saw a shamrock! Native artists never even saw *one*, where innocent, sentimental tourists expect to pluck them by handfuls and bales from every garden, field and mountainside!

"Oh, the Shamrock, the green, immortal Shamrock! Chosen leaf Of bard and chief, Old Erin's native Shamrock."

A noticable feature of the National Educational Association at its recent meeting was the ethical trend and spirit that pervaded the papers presented as well as the discussions which followed. So many different individuals from as many sections of the country represents public and professional spirit fairly; and that sound ethical training is a recognized factor in popular education can no longer be debated, if the uttrances and sanction of teachers and educators are to decide. No class of public servants is more responsible for the moral tone of society than they and the responsibility is not only appreciated, but is engaging their most earnest solicitude and wisest counsel. Any deprecation of lawlessness, insincerity and in subordination in school or state was heartily sanctioned and allusions to public officers, courts of justice, and the chief executive of the nation in their endeavor to enforce the civil law of the land to the suppression of riot, disorder and anarchy were quickly and heartily approved and sometimes loudly applauded. The educators of our country thus publicly sanctioned impartial justice and right and good morals as well as good intellects.

THE CRITIC AT SEA. *

A review of "The Public School System of the United States."
BY THE AUTHOR OF "PRESTON PAPERS," NEW YORK CITY.

V.

NEW YORK CITY.

"A jellyfish swam in a tropical sea.

And he said 'This world it consists of Me;

Again, to suppose, as I've hitherto done, There are other jellyfish under the sun, Is a pure assumption that can't be backed By a jot of proof or a single fact. In short, like Hume, I very much doubt If there's anything else at all without. So I come at last to the plain conclusion When the subject is fairly set free from confusion, That the universe simply centres in Me, And if I were not, then nothing would be.'

That minute a shark, who was strolling by, Just gulped him down, in the wink of an eye; And he died, with a few convulsive twists. But, somehow, the universe still exists."

GRANT ALLEN, in The London Sun.

On page 29 of the book which encloses between its lids the wisdom (?) of the educational Moses who proposes to guide American parents, teachers, superintendents and school boards to the educational Canaan,—a pillar of cloud by day, and of salt by night?—he begins the proposed pilgrimage with the following lucid statement as to the New York schools:

"They show clearly the elements that lead to an inferior order of schools."

He supplements this dazzlingly brilliant remark by the very modest: "The remedy that I propose for the eradication of their evils is applicable to the school system of every large city."

This would be a stupendous undertaking for some of our real educators, men who have spent their lives in the work — but with plenty of fortitude (?) the distinguished layman need not be cast down at the general opinion that it is a large contract, and that even to comprehend the "evils" and their "remedy" implies something more than a theoretical pause at a class room door.

Doubting if his ipse dixit will be accepted without protest or challenge he humbly says on page 30: "In pronouncing a school

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system unscientific, I by no means desire to imply that no good schools can be found in that system, but simply that the good schools that do exist have been developed, not as a result of the system, but in spite of it."

Modest concession, for a man who leads so gently and tenderly up to his pronunciamento (p. 36) that the typical primary school of New York "is a hard, unsympathetic, mechanical drudgery school, a school into which the light of science has not yet entered"—etc.!

He then proceeds to elaborate upon the work of one school (p. 30) "whose principal has been marked uniformly 'excellent' during the twenty-five years or more that she has held her present position."

There is a taste of pepper detected in this description of a teacher, and the Dr. would doubtless be at least surprised if some day this principal — who has held her position for so many years, in spite of laymen's critiques and the hardships of change of Superintendents, teachers, and Board of Education — should be rewarded for faithful service rendered to thousands of pupils and hundreds of parents, by a verdict of "well done" from a higher authority than his, and a crown be given for her earnest labors in the school where instead of "dehumanizing" it (p. 31) she has done her duty for so many years as to be "uniformly marked excellent."

He further tells us that she has "pedagogical views and a maxim peculiarly her own" (p.30), whereat we grieve at the audacity of a woman who has only taught so few years, yet has "pedagogical views." Verily, she ought to look up the statute which positively forbids the harboring of "pedagogical views" and content herself with pedagogical blanks or pedagogical blindness, and set her "pedagogical views" afloat or else buy them at second hand of a pedagogical peddler, or a pedagogical expert! That anyone should have home-grown "pedagogical views" is absurd, and especially with so few years of experience on which to found them! We must call a mass meeting to see about this case of pedagogical high treason which has hatched in our very midst. The Dr. is hereby cordially invited to be present at the trial and testify—and we will guarantee protection in case he fears any attempt on his life for thus exposing criminal audacity.

The next two sentences on the same page are a little difficult to understand, as the versatile critic has departed from the beaten

track and started off on a tangent poaching on the preserves held sacred to Bishop and his followers, and makes some show of mind reading on his own account—though why these feeble attempts of an amateur should be given in these pages is not made quite clear, even by the preliminary "She believes" and "She is consequently of the opinion" with which this metaphysical work is introduced into the regular routine of the book. It is hardly fair to the departed spirit of Bishop, and we earnestly enter our caveat against the intrusion. Let the shoemaker stick to his last and the expert attend strictly to "experting" if he wants to secure a first class job at it when his own "pedagogical views" have acquired permanent value!

The next thing which disturbs his educational equilibrium and agonizes his psychological highness is the "maxim" above referred to, which he says "consists" of three short words — 'save the minutes' — though why his description was considered indispensible is also a mystery, unless for a moment the highly scientific mind went astray, and for the nonce the critic unconsciously addressed himself to the kindergarten class, as there are few teachers of average ability, nor many readers of this wonderful (?) book, who could not, by great mental effort, have discovered the number and also the length of the words in question.

As to the maxim itself — well, I've seen worse, for business and practical purposes. To be sure minutes are small things to harvest, and it takes a large number of them to make a day; but unless the author himself had been brought up ("by hand"?) on some similar mental pabulum he could not have entered into the discussion of such a deep and broad subject upon so short notice! I'm inclined to think that boys from New York Grammar School No. 49 will be at a premium among business men, where clerks are wanted who have an appreciation of the value of time — and that the price of the sweet girl graduates from the same school has been greatly enhanced in the eyes of shoppers in the matrimonial market, by reason of this same precept having been practically taught them for so many years. All honor to the woman who has dared thus provide in part for the future welfare of the children who have been under her tuition, instead of leaving them to dawdle and saunter through the "course" and thus acquire habits which would operate against their final success in life!

That minutes must be saved in the ordinary class of ordinary children, by the ordinary teacher, if she would give them anything beyond the barest "must-be's" of school life in the few days of the few years which most city children spend in school, seems never to have been a factor in the question which disturbs the Dr's peace of mind — but I greatly doubt if he would evolve any better or any less "mechanical" method for accomplishing a large amount of work with a large class, in the same length of time. Truly he has grappled with serious educational questions — but the questions have n't apparently bent to breaking, under the weight attached to the grapple!

The critic objects also to the simply-worded definitions which he found being taught (pp. 34, 35 et seq.) from which I select a few:

"A square has four equal sides and four corners."

"A triangle has three sides and three corners."

"An oblong has two long sides, two short sides and four corners."

"A rhomb has four sides, two sharp corners and two blunt corners."

Well, let him put up any better ones for sale or auction and we'll all purchase! But we're looking for simplicity combined with definiteness, and he can't trade off any big words and large phrases that flow readily but which haven't any more meaning than his dogma as to the supervisor's visits, on page 46.

"The visits are too few to be of real benefit to the teacher, and yet frequent enough to disturb the teacher's mental equilibrium during the intervening period. Under the circumstances, it were better for all concerned if there were no supervision at all, and this is doubly true for the reason that whether or not the supervision find the teachers competent is a matter of very little practical consequence."

Will somebody with sufficient psychological solidity kindly sit on that (verbatim) extract and prevent its escape until its full force dawns upon us? How the visits can be too few to be of real benefit, yet frequent enough to disturb the teacher's mental equilibrium during the intervening period, I will not undertake to ask at present—but it would comfort my cold heart to know just why it were better for all concerned that there were no supervisors, and why this is "doubly" true, and why—so long as it

doesn't matter whether or not the supervisors find the teachers incompetent — the "mental equilibrium" should be disturbed by the advent of so unimportant a factor in the "routine."

I am bound to believe that the Dr. admires Truth; but there is no apparent reason for the rigid economy—at times amounting almost to parsimony—in his use of it, in the book under review. Possibly he did not secure enough at the outset of his memorable journey, and so deemed it prudent to only use it on great occasions—and under pressure?—but his book would possibly have found as good a market as now if denuded of such statements as:

"The pupils learn by heart any number of principles of writing, none of which is known to most of those who earn their livelihood with the pen (How many is "any number"? How does he know that "none" of these principles are "known to most of those who earn their livelihood with the pen?" Can he prove the statement true, or is this testimony "heresay" only? Courts have been known to reject heresay testimony,); and "They are not encouraged to acquire the ability to read new words. "(Idem.) no single exercise is a child permitted to think." (Idem.) [the typical New York City primary school] characteristic feature lies in the severity of its discipline." (Idem.) "There is absolutely no incentive to teach well." (p. 44.) The supervision as now conducted is little more than a farce. The Superintendent of Schools may be said to be simply an executive officer. he does, beyond meeting the assistant superintendents once a month and the principals three or four times annually, and keeping certain sets of books, is a question that no one as yet appears to have answered."

But why multiply cases to illustrate the lack of truth in the report? Evidently the article was both scarce and high-priced and the investment had to be small in proportion, or else —!

On page 41 he says: "In the lowest grade of many of the New York primary schools the reading is exceptionally dry." I do not fully comprehend the expert expression "exceptionally dry"—although I suppose it must refer in some occult way to the "wet goods" advertised in some corner establishments! At all events, with classes that present the appearance "of a traveling pumphandle" (p. 37) there should be no permanent trouble about securing moisture in this quarter.

The next charge is a graver matter, and in effect aims at the

teachers' protection from discharge (pp. 44, 45), and the principal's; and the audacious statement is made that this rarely happens "even for the grossest negligence and incompetency."

I think, if I were a New York City teacher, or principal, or ever had been, I should ask the gentleman to make the above declaration—with those preceding it—so definite that "a way-faring man, though a fool, need not err" in its application; but as I am only reviewing the book from an outsider's standpoint I shall not at present challenge the position taken with regard to the negligence and incompetence of the teachers of this city, and shall only point out that the fact of its being a difficult matter to "discharge" any teacher or superintendent simply to gratify the whim of some discontented patron (or outsider) is one point in favor of the much abused system!

Instead of making it any easier to remove a teacher; I would increase the "number of barriers that must be passed." (*Idem.*) and make it a penal offense for any one to undertake this merely to satisfy a personal grudge, or to gain notoriety!! I would throw around the teacher every incentive to make special preparation for the work, and then protect her in it—from foes without as well as those within!!!

On page 45 we read: "There is no source of inspiration, practically nothing being done by the supervising officers to raise the standard of the teachers." This educational standard raiser ought to be immersed in one of the great waves of all-pervading light which have been breaking upon our shores at intervals for a quarter of a century - more or less - to my personal knowledge, or else take a back seat on some questions. True, supervising officers are "sources of inspiration" in no rare instances - I have in mind one of my own, away back in the seventies, whose visits to my school not only brought a wealth of light, cheer and suggestion, but whose private purse was ever open to supply things for which the "budget" had not made provision. I will go further, and state that in teaching in three different places in this state, I ever found efficient and enthusiastic coadjutors in my "supervisors," superintendents and boards of education; and to me they were "sources of inspiration." But I found my greatest "source" in the work itself, and in my pupils — and I doubt if New York City teachers are not built on similar plans and specifications!

Salary is not the only thing that an honest manly man or womanly woman considers when entering upon the arduous work of a teacher; nor is "reputation;" nor can anything equal the pleasure a real teacher takes in the work — unless it is the pleasure felt by two teachers in the work! Neither do they mainly need to wait until the advent of learning-begrimed pedagogical "experts" or science-bespattered psychologists, before feeling the electric waves of professional enthusiasm overflowing their work, their lives, their pupils!! Educational progress has a "move" on, now and then, in isolated corners, where the propelling force is not advertised as a reformer!!!

On page 46 we find that "In selecting principals expert qualifications are not taken into account." Well, there are experts—and experts, and some of them would be high at ten cents a dozen; but "expert qualifications" may be more valuable. I'ossibly it might be well to import a gross or two genuine whole souled experts to stand around on marble pedestals to do the dictating and draw the salaries for these empty-handed principals who have 'nt even "expert qualifications" to recommend them to the gentle pity and tender mercy of our scholarly critic! Will the New York principals kindly contribute, pro rata, for a sufficient supply of the genus "expert" to tide us over this awful poverty of resources for plain every day work?

It is to be hoped that before the calm of another night settles upon this educationally misguided island, provision shall have been made for garrisoning our educational forts with an army of experts, fully equipped and armed to the teeth — provided these are deemed indispensable to "life, liberty, and the pursuit of happiness." Otherwise we may forgo the luxury and expense yet another few days, and use our surplus funds in housing, feeding, clothing and teaching the little human waifs who are "too numerous to mention."

But the same page holds a "puzzle" to which the old-time "fifteen" was nowhere—in: "As a rule, the newly appointed teachers are better qualified professionally than the principals." That's it! That's just the revolution we've been perishing for, lo, these many years, and did'nt know it! In the trades it takes two or three months of apprenticeship to emulate the master-mechanic; but the science of teaching is so largely to be acquired at second hand as an observation (or "guess so") lesson that

the newly appointed are better qualified than the principals! Only one of two things remains for the Board of Education to do: turn the schools over to the tyros or else "newly re-appoint" the principals!! "You pays your money and takes your drather" as to the horns of the dilemma; but please be quick, gentlemen, as the suspense with which the world at large awaits your royal mandate in the matter is impossible of sustentation for more than a century!

On the same page we read the further edifying truth (?) as to the principals of New York City: "Many of the principals have had no professional training whatever nor have they at any time, with or without guidance, devoted a sufficient amount of time to professional studies to learn the A B () of scientific pedagogy."

Somewhere, like an echo—faint and distant perhaps, but still a "truly" echo—from some dead and gone pedagogue, perhaps, I remember reading that. "The majority of those who engage in teaching commence its duties with little or no professional training." Ah! I have it!! It is in the 1870 "preface" to the 15th edition of Calkin's Object Lessons, first published nine years before!!! Well, twenty-four years is a long time, and possibly things have changed now so that the eighteen-or twenty-year-old graduate of the city normal school is better qualified professionally than the principals who have been actively engaged in the work for so many years, but I doubt it. You see I must doubt that or the axiom of the New Education (?) that "We learn to do by doing" and I'll take my chances with the latter!

But that "scientific pedagogy" is what submerges me—for to my benighted mind pedagogy must be "scientific" or it is n't pedagogy. But in an age of rapidity and change it is possible that I've been unable to keep up with the innovations, and that the McKinley bill made possible the importation of "pedagogics" that were n't so painfully scientific as their predecessors! If not, why then with "Ossa on Pelion" I cannot hope to see the New York principals crawl from under the weight of that "scientific pedagogy." Will not some one come to their rescue?

The zig zag flight of the "highly scientific" pedagogue from point to point of educational evils in New York, has so bewildered my pen (usually obedient enough) that I leave the category

of evils incomplete (though I may happen later to describe the same matters as I have found them, now only "reviewing" the work of another) and call attention to the modest annunciation of the solution of a problem which he seriously assures us on page 50 "has never been solved" namely: how to improve the schools of large cities!

I will not stop to outline this—nor to quote from it further than (p. 51) the dogma "Unity can and must be preserved." I verily believe that some several of our military heroes have thought something of the same kind—so while I should be glad to give the author credit for something strikingly deep and original I shall have to count him out on this; and although I've no doubt of his entire willingness to go to the "steak" for the sake of his "scientific pedagogy" it is just possible that some one would have to go bail that nothing disagreeable should happen on his arrival!

The readers of Education should comfort themselves that his is not a style to "get into their bones" although it may "raise their dander"! Whether New York absolutely needs his advice, suggestions, and molding hand I do not know; for after spending nearly six months in visiting its schools for the purpose of sounding the depths of their mechanical degradation I am only confirmed in the impression forced upon me at my first visit—in January, 1894—that there was much to admire, copy and commend in the very creditable work done. See American Journal of Politics for June. But of that hereafter.

I will say this, however, that it seemed to me in reading this chapter that there was a great scarcity of ideas considering the large number of words used between pages 29 and 54, or at least the larger number of times the same words were found massed in seemingly senseless permutation.

THE UNIFORMING OF SCHOOL CHILDREN.

REV. F. W. RYDER, LAWRENCE, MASS.

Good citizenship is the end sought in the public school. The state may take a child out of the home and compel him to spend five hours a day in the schoolhouse because in no other way can the mass of children be converted into good citizens. The state may take money out of the childless man's pocket for tuitionary purposes because by no other device can the right quality of citizenship be secured. Compulsory education is justified by this plea alone. The right and duty of the state to educate rests solely on this principle. Ignorance is the republic's worst foe. The perpetuity and perfecting of our country depend on the intelligence, the culture, the patriotism of its citizens. A man becomes valuable to the nation, directly as his mental and moral qualities enlarge. Whatever enlarges the child, gives him a broader mind, heightens his self-respect, or promotes in any degree his civic value, the state may foster or command. Here is the solitary paliation for the schoolhouse.

But the right and duty of the state to educate carries with it the right or duty to make that education, to the utmost extent, efficient unto the purposes for which it exists. Everything should be put into the school that will improve its quality as a producer of well-trained and worthy members of the social organism. Contributory influences, and items that are incidental to the main enterprise, often acquire an importance far beyond their intrinsic quality. Calisthenics, athletic sports, military drill, debating societies and what not, though they are not directly concerned in the function of teaching, are encouraged or permitted for their favorable contribution to the principal aim of the school.

What clothes a child shall wear during its pupilage will seem at first blush, a matter of total unconcern. It will be assumed, quite naturally, that he can learn as readily, as thoroughly, in one suit as another And the proposal to make the dress of schoolchildren a question of public concern will be met, no doubt, by a smile of goodnatured derision.

Nevertheless, in all other departments and stages of life, clothing plays an important role. Why not in this? And besides, it is not true that a child can learn as well in one suit as another, especially if that other is very much better than his and occupies the adjoining desk. Teachers in ragged schools and reformatories know that the first step toward self-respect and enlightenment is a bath and a clean shirt. Even if instruction were the final cause of the public school the reasoning would not hold. For it cannot be possible that an article that exerts such a prodigious influence on the last fifty years of mundane experience should

exert none at all on the first twenty. As a matter of fact, no age of life is free from the modifying effect of the question "Wherewithal shall we be clothed" and at no time is life so susceptible to moulding influences as in its plastic first quarter. And further, not mere instruction, but more and ultimately good citizenship, is the end of the public school. Instruction is a means to that end, not the end itself. Along with it, all other means, great or small, that bias the child toward good citizenship, should be dilligently studied. If a cap and belt will induce a boy to straighten up, will give him esprit de corps, and a sense of his dignity as a representative of a great public institution, by all means let him have them. And if a girl, by donning a regulation dress, can be delivered from the tyrannies and foolishness of fashion and led to devote herself to those tuitions that develop womanliness, self-reliance, and knowledge, it will be worth while to consider the proposition to put her into such a dress.

Then let the question be seriously asked: Would the uniforming of our schoolchildren have any beneficent relation to the production of good citizens?

The problem is larger than at first it appears. According to the last census (1890) there are in this country 22,447,392 persons between the ages of five and twenty years. Of this number 14,377,536 are enrolled as pupils in actual attendance. The balance is an army eight million strong composed entirely of those who ought to be in school and are not. If for the sake of close figuring we confine our study to the actual enrollment, and if we allow to each pupil yearly, two complete outfits of clothing, costing ten dollars each, we have for this one outlay, the enormous sum of \$287,550,720. It is impossible to ascertain what it actually does cost to clothe this juvenile host. Most parents will affirm that the assessment per capita is too small by half.

In the experimental stage it will be wise to confine the discussion to the city school. Many of the arguments hereafter to be set forth, do not apply with cogency to the rural district, and there the utility of the project would be correspondingly less. The statement is made on good authority that one-third of the American people, or thereabouts (22,000,000) live in cities of five thousand inhabitants and upward. Unfortunately the enrolment diminishes as the town grows, a circumstance due, probably, to the slums, to the private schools and to the employment

of children in factories and stores. In the whole country twenty-three per cent of the population attend the public school. Great cities like New York, Boston and Chicago show a shrinkage to fifteen per cent. Even this low ratio gives a contingent larger by five hundred thousand than the total number of those who wore the blue blouse of the Union soldier during the civil war. In point of size, then, we have a problem not a whit smaller than the question of uniforming the Grand Army of the Republic in its grandest days.

But a concrete example best illustrates a principle. Large statistics bewilder the mind and have often an effect quite opposite to that intended. To bring the inquiry within comprehensible dimensions take the case of the city of New York:—During the year 1892 the registers of her public schools showed a total enrolment of 202,860 scholars. Here is a force sufficient to furnish one hundred and seventy-seven full regiments in excess of the present organization of the United States army. It outnumbers by more than a hundred thousand, the battle array that faced the Confederate assault at Gettysburg.

Concerning the proposition to put this immense company of children into a distinctive dress it may be said, provisionally, that most of the reasons for uniforming the army or mavy, the police or the mail carriers, or any public department, apply with force to the case in hand. Simplicity, neatness, self-respect, esprit de corps, ease of recognition, and that indefinable elation that comes of wearing a badge, together with numerous other effects, all grow out of it. In detail these consequences may be studied under the caption of the school, the home, and the community.

I. THE EFFECT ON THE SCHOOL.

Imagine now, this great army of boys and girls arrayed in a neat and serviceable uniform, sufficiently modified along the line of sex, but marking distinctly the wearer's relation to the public school. Good taste and other considerations advise that the different grades, like the three arms of the military service, be distinguished by a color. Suppose for example, that the High school be apparelled in navy blue, the Grammar grade in a strong grey, and the Primaries in a shade or shades of red. It would then be possible, as now it is not, to determine at a glance, how many in a flock of children belong to the public school and

to what grade they belong. A parade of these young New Yorkers, two hundred thousand strong would be a beautiful and interesting sight, not less inspiring in its way, than the review of of an army with banners.

This then is the first and not the least valuable consequence. The demarcation of the enrolled from the unregistered children would result in a generous and much needed advertising of the school. At present in New York there is no mark to divide the two hundred thousand who are in school from the two hundred and ninety thousand who are not. On the streets in the homes. and everywhere they swarm together, but no man can tell which are the wards of this great and blessed institution. The result is that though the children throng the city they do little to suggest the public school to the public mind. The average citizen has scant sense of its existence save by the unpleasant reminder of his tax bill. But put the pupils into a uniform and every one of them becomes a living and ubiquitous advertisement. They would call constant attention to it and emphasize its presence in quarters where now it is rarely thought of. Just as the soldier's garb suggests the nation's martial glory, or the policeman's coat spreads about him a pleasing sense of municipal authority, so and much more, would these fifty brigades of boys and girls carry with them into all the lanes of the city, the proclamation of the public school. The favorable effect on popular sentiment will be great. Such advertising is needed. On the one hand the basal postulate of our school system is viciously attacked, its right to exist is flatly denied. On the other, it is supported with a pathetic indifference. An occasional exhibition will not avail. Some constant stimulous to public interest should be invented. The shortest way, as well as the most efficient, to accomplish that will be to put on the scholars the hall-mark of the noble establishment whose representatives and beneficiaries they are.

Furthermore, there can be no doubt that the uniform would immediately become a badge of honor. Those who wore it would carry a sense of superiority over their fellows. Those who did not would aspire to its dignity. Attendance would thus be promoted, the labors of the truant officer lessened, and the problem of universal education advanced toward solution. It is an ominous prophecy for a metropolis like New York that almost three-fifths of her children are not even registered in her schools. Lack

of accommodations may account for part, and the factory or emporium for part, but not by any means for all. Children have an innate relish for distinctive marks. In one great city it is well understood that the military drill, which is essentially the privilege of wearing a regulation cap all the time and appearing in a fuller uniform on special occasions, takes many boys into the high school who would never have gone there on any other inducement. A semi-military organization, the Boy's Brigade, is just now evolving itself in connection with the church. The boys take torpid interest in it till the caps and belts, and perhaps a blouse and a real gun arrive. Then the scheme becomes suddenly and immensely popular. That such would be the effect of the school uniform is beyond question. Whoever wants to solve New York's educational problem should study this simple device.

Of much more consequence is the effect on the pupil himself. The normal action of a uniform on its wearer is to stimulate a feeling of distinction, a sense of elevation above common dressed mortals, and a pride in the institution whose specific vesture adorns him. Thirty years ago the blue regimentals wrought a wonderful transformation in farmers and shopmen. The slouching plowboy lifted himself with a conscious dignity. The hollowchested clerk aligned his brass buttons and bore himself like a superior being. Cadets in military schools carry an air of distinction unattainable by pupils in other academies. The English university man glories in his mortar board and gown. with a local monogram enwreathed in its front has become in some cities the badge of the high school boy. His bearing is visibly affected by it. Governments find it wise to uniform the army, the navy, the post-office department and the police, not merely for ease of recognition but for the morale of the force. Undoubtedly the influence of such a device on the public school would be large and beneficent. No outward sign now separates the enrolled from the unschooled child. Hence all sense of distinction is lacking. Esprit de corps, pride in the institution, selfrespect, loyalty, in short all the bracing that the true soldier gets from his uniform, the child would get. Whatever heightens the scholar's appreciation of the school for the import of his connection with it, is worth considering, though it be nothing more than a forage cap. In case the several grades were marked by a color, either in the body or the trimmings of the uniform there would be a pronounced advance in studiousness as well as deportment. Ambition and personal pride would be stirred. Big boys and girls would not dawdle so indifferently over their tasks if they knew that their inferior standing was to be published abroad unto the ends of the town. Nor would they, willingly, stay in a younger rank if the very clothes they wore were to betray them wherever they went. And since the only road to promotion is diligent study and attainment they would find a new inducement to follow it. The general character of the school would be elevated. Teaching and discipline would become easier.

But best of all will be the levelling influence of the uniform. The public school is the most democratic institution in the world. There the rich and the poor actually meet together, on one plane of absolute equality. Caste disappears almost totally. The children of the mansion and the tenement occupy adjacent benches and toil at the same tasks. The honors are open to all and the son of the coal heaver wins. In theory its gifts are distributed with absolute impartiality and without regard to race, color or condition. In the matter of making good citizens this capacity for levelling up is of vital importance.

Yet class distinctions do appear. Almost the sole point in which they become conspicuous is in the particular of dress. The children of the hovel are not arrayed like the children of the hall. In the same room are some "clothed in purple and fine linen" and others wearing garments poor and patched. It is next to impossible for the meanly clad child to feel his alleged equality. The brand of an inferior social rank is upon him. He will be made to recognize it in more ways than one. The probable result will be that his childish envy will develop into a coarse ambition that regards the wearing of clothes as the main function of life, or else he will accept a permanent situation in the lower orders of society. In either case the efficiency of the school as a maker of free, intelligent, self-esteeming citizens is sadly damaged.

The uniform would do away with all that. Every pupil could feel as well dressed as every other. False demarcations would vanish. The real differences of merit and achievement alone would remain. The lifting power of this removal of poverty's opprobrious stigma cannot be overestimated. For it is a bad omen when citizens of a republic consent to hold a low rank in

citizenship, or her children perceive that at the start of life's race they are heavily handicapped by artificial conditions.

II. THE EFFECT ON THE HOME.

Some benign influences would fall on the family. The presence of a soldier or a policeman in the domestic circle lends a certain dignity to the fireside. An imponderable but potent something has been added to the family treasure. The tribal pride is stimulated, often to such degree that its members get to think more highly of themselves than the circumstances really But this is to be preferred as against the alternative that they should think of themselves more meanly than they ought. A vigorous stimulant to family self-respect is the presence in it of boys and girls who bore the insignia of the school. The inclination of parents to send their offspring to public institutions would probably increase their acquaintance and interest certainly would. The passage of a child to a higher grade would become an event in family history, marked by a definite sign, visible to all beholders. And since these devices promote the family and favor the school why not use them?

In these degenerate days economy is a prime consideration in all questions, public or private. Every good cause must appear before the tribunal of finance and justify its existence by the manifestation of mercenary profitableness. Can our proposition pass that ordeal? At first thought the proposal to uniform the two hundred thousand pupils in New York, or the three million in the cities at large suggests a prodigious expense. The heaviest objection to the scheme will be raised at this very point. moment's reflection ought to convince the stoutest opposer that it will cost no more to clothe a company of children properly and all alike than it will to clothe them properly and all unlike. The probability is that the average expense will be sensibly lessened. For thus a permanent demand would be created for a vast quantity of material of standard quality and invariable style, which on account of its volume could be produced at a low price. Manufacturers could push its production without fear. Patterns would not change. The market could not fail. would be no risk of putting out a style that did not take or of running a popular pattern beyond its popularity. These are the conditions that make for cheapness without sacrifice of character.

As the publication of school books has become a great business by itself, so would the production of stuff for school uniforms grow to a distinct industry of immense proportions. The question of expense is further modified by the probability that large firms would devote themselves to the transformation of this cloth into clothes. The cheapness of ready-made clothing is due, in good measure, to the huge quantities in which it is produced in fixed sizes. It is certain that the uniforms for three million children could be furnished at a price much lower than that incurred by the laissez faire custom now in vogue. Parents would find that the yearly cloth tax was sensibly reduced and that their children were more comfortable and handsomely dressed. Granting this much (and who shall deny it?) we have a powerful

argument in favor of the scheme.

And beyond all this, who can estimate the unspeakable relief from the thrall of fickle fashion that would come to the home through this simple device. The inborn ambition of parents, especially mothers, to outdo their neighbors in apparelling their progeny leads to extravagance, excitement and anxieties beyond computation. Diversity begets rivalry, and rivalry engenders heart-burnings and prodigality. Styles in children's clothing change as frequently and in the same pronounced fashion as do their elders'. A dress that was the pink of fashion one term is all out of style the next. It must be ripped and re-made, or a new one provided. The exasperated and purse-broken father is told that it simply will not do to send the children to school in such ridiculous rigs, and though the aforesaid rigs were a source of eminent satisfaction and family pride only six months agone, there is no escape from the inexorable maternal instinct. Mothers will never consent that their offspring shall look like frumps. Hence come endless be-ribbonings and flounces. Eager discussions over patterns, qualities, prices and fashion plates disturb domestic tranquillity. Questions of complexion and figure absorb the family energy. Vanity and vexation of spirit pervade the home. The sitting room is converted into a tailor shop and for weeks at a time the whole household economy lies paralyzed in the toils of the dressmaker. Worst of all, the minds of the children themselves, are tainted with the lust of the eye and the pride of life, and the petty rivalries of dress. Their ideals tend to express themselves in terms of furbelows and trimmings. The wearing of fine clothing comes to be thought a legitimate end of high By this means the ultimate purpose of the school is thwarted. Two thoughts like two bodies cannot occupy the same space at the same time. A mind that is filled with "Delineators" affords small space for the weightiest matters of honor, wisdom and truth. There will be time enough for the insanities of fashion when school is done.

With the advent of the uniform this worriment and fever will Mothers would then know that their children were dressed just as comfortably, as handsomely as all others. ('onstruction would be reduced to the detail of size, since cut, color and quality are determined beforehand. Boys suits are now, usually, bought ready made, and this would quickly come true of girls' dresses. The main hindrance at present is the fact that their styles alter so frequently that clothing factories cannot keep up with them. When that comes to pass the family will be relieved, to a large extent, of tailoring and millinery. What a blessed balm to homes where now mothers are overworked with necessary duties and fathers overtaxed with inevitable expenses. Time could then be found, perhaps, for an occasional family stroll in Central Park, or a visit to the Art Museum. The life energy could then be withdrawn from vain striving to outdress other people's children and turned into useful channels.

III. THE EFFECT ON THE COMMUNITY.

The effect on the community will be the joint effect on the school and the home. Whatever improves the efficiency of these two factors will make strongly for the betterment of the town. For one thing, a class of citizens would be built up, composed of those who had worn the uniform of this noble institution and who had derived therefrom, self-respect, and mutual esteem. The elevating influence on the poorer portions would be immense. For fifteen most impressible years they would be delivered from false inequalities and nurtured in an atmosphere surcharged with the sentiments of liberty, fraternity and equality. The public sense of the presence and power of this vital agency will be greatly enlarged. All of which will tell powerfully on the future of the city or the nation.

It will be said that valid objections can be raised to the scheme. That is true. The arguments on the other side are not discussed here, because this paper is intended to be suggestive, mainly. But no objections that stand in the way can begin to compensate for the advantages of the plan. There is little risk in prophesying that if the city of New York would try the experiment for five years, no imaginable inducement could bring her back to the present haphazzard style of clothing the wards of her public schools.

But, someone will ask further, how can such a stupendous change be brought about? The task is not so difficult as it seems. Generate a strong popular sentiment in its favor, persuade parents, citizens and teachers of its advantages, and evolution will do the rest.

LESSONS ON THE AUTHORS.

E. W. BARRETT, MILFORD, MASS.

WASHINGTON IRVING.

Where.
Youngest of large family.
How named,

Immigrants.

| Father, a sailor.

Parents. { Later, a merchant.

Mother, English.

Strict and severe.

EARLY LIFE.

Indifferent about it.

Private schools.

Observant.

Did not attend college.

Studied law.

Not successful.

Clerk in law office.

Delicate in health.

Education.

Full of boyish spirits.

Fond of the theatre.

Wrote some.

 $\textit{Traveled through N. Y.} \left\{ \begin{aligned} &\text{Hudson Valley.} \\ &\text{Mohawk Valley.} \\ &\text{Manhattan Island.} \end{aligned} \right.$

Engaged in the hardware business.

Government Positions. $\left\{ egin{array}{l} {
m Spain.} \\ {
m England.} \end{array} \right.$

Travels in Europe.

Travels in West.

Some editorial work.

Literary work.

OCCUPATIONS.

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WORKS.

Sketches.

Sketch-Book.
Bracebridge Hall.
Salmagundi.

Life of Washington.
Life of Goldsmith.
Life of Columbus.

Travel.

A Tour of the Prairies.
Tales of a Traveller.

History.

Conquest of Grenada.
History of N. Y.
                       Easy and charming.
                       Flowing and graceful.
                       Clear.
  STYLE. Playfui humor, droll.
                    Pathetic at times.
                       Never sarcastic or bitter.
                    Accurate and graphic.
 {\bf Pseudonyms.} \left\{ \begin{aligned} & {\bf Jonathan~Oldstyle.} \\ & {\bf Geoffrey~Crayon.} \\ & {\bf Diedrich~Knickerbocker.} \end{aligned} \right.
 Home. { Tarrytown. Sunnyside ("The Roost.")
 PERSONAL APPEARANCE.

Gray eyes.
High, broad forehead.
Medium height.
Stout.
Genial and cheerful.
                                                            Not arrogant or assuming.
F_{ACTS.} \left\{egin{array}{l} A 	ext{ bachelor.} \\ Friends: Scott, Moore, Longfellow. \\ Death. & Time. \\ Place. \end{array}
ight.
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Sympathetic.

Lovable nature.

Warm-hearted and sweet-tempered.

Bright in conversation.

Witty.

CHARACTER.

Refined and polished.
Social and genial.
Generous and cordial.
Affectionate and good-humored.
Honest.
Noted for his purity of life.
Loved by all.

FROEBEL FROM A PSYCHOLOGICAL STANDPOINT.*

EDWARD F. BUCHNER, YALE UNIVERSITY, NEW HAVEN, CONN.

Froebel here again takes up his symbolic terminology and conceives of education as the process whereby the internal is made external and the external, internal. "The purpose of teaching and instruction is to bring ever more out of man rather than to put more and more into him" (§ 94, Ed. of Man). This is what Froebel means, that it shall be by doing, so that definite expression will be given to ideas and images, that true teaching seizes upon the natural trait of creativeness in the child and thus guides the activity of which every being is so full. This principle of activity "gives their very life-blood to all the songs and games; and it is the living element in all the occupationswhich, without it, are mere sticks and stones, and bits of paper." This activity is what Froebel desires to have developed, and it is this feature of mental life which is reached by the quaint games and songs. Even more than this. Froebel by his apotheosis of the child's doing, has dignified human labor into something other than a mere means of livelihood. He has turned it to the credit of man's intellectual enlightenment. In the same spirit he sees in the sportiveness of childhood the varied expression of this activity. Here also the child's spontaneity gradually exhibits By means of this activity the child is led to conitself. nect what he already knows with what he is still learning;

^{*}An address before the Elm City Kindergarten Association, New Haven, March 28, 1894.

"his inner desire for activity, his ideas, feelings and will must be connected with what he outwardly does and makes," and thus the inner becomes the outer. This innate creativeness is peculiarly provided for in the gifts and occupations. Based upon play, that state of consciousness most full of imagination, feeling, and will, each child is led insensibly to assert his own individuality. For in all and through all each child busies his own hands, while his own and his whole mind is on his immediate work. He is thus giving outward form and expression to what he has himself conceived.

Although self-activity on the part of the young pupil is the keynote to whatever is Froebelian in the kindergarten, yet I must hasten on to the third element which appears as distinctive of this great reformer in our education of children. Other educational reformers have busied themselves with improvements in methods of teaching subjects of a scientific character. They make the effort of having the mind of the child leap over the period of youth, and at once to assume the attitude of adult consciousness towards things and truths. Froebel himself labored with some such an ideal in the Education of Man. But when he had once given his entire genius over to the education of children, as such, we find him taking the position described in our third proposition; education must endeavor to put man into harmony with his immediate environment, etc. "Freebel seeks above all else to give the child experience rather than instruction, and to educate him by action rather than by books, or anything in the nature of abstract learning" (Bowen, Froebel, etc., p. 103). The main object of the kindergarten is to aid the child to come to himself by recognizing the objects which make up his environment, and recognizing by a perceptual reaction which is not passive, but essentially active. It is in the mutter-und Kosc Lieder where this aspect appears most clearly. In these Froebel keeps the child in touch with his own every day life. Actual life and actual nature around children are the Froebelian means of education. Thus the kindergarten is not a school, strictly speaking; for it has banished all that abstract and dwarfing artificiality which attends the study of books. And this makes clear why so many, who have grown accustomed to the regime of the ordinary school, think the Kindergarten is worthy of contempt because of its exceeding artificiality and symbolism.

the contrary, may not the Froebelian feel, and justly, that somehow the proverbial school has wandered from that which is truly natural, and has become a place of arid abstraction? It is also this feature of Froebel's invention, namely, that he is constantly leading the child to react on his own environment, which will make intelligible the verdict of a host of primary and intermediate teachers that most of those who have been trained more or less on Froebel's plan, exhibit an extra brightness and teachableness.

But I have been depriving you of the assurances that may be derived by testing the principles of Froebel with the truths attained by modern psychology. You will recall that I emphasized the fact that Froebel gained his insights chiefly from a speculative standpoint. He scarcely knew of the department of psychology, and could less have satisfied the wants of his genius from its limited store of facts and conclusions. Since Froebel's time, this science which undertakes the investigation of the phenomena of mental life, has grown with marvellous rapidity, and has attained indisputable conclusions regarding the nature and growth of our consciousness. These results have been secured by scientific procedure; and each one can readily appreciate the world of difference between the method of Froebel and that of science. If, now, we inquire into the psychological validity of the three foregoing principles, we shall find in each case a more or less complete agreement between Froebel and science.

Froebel does not take the child as a fully equipped psychical being, possessing the faculties and powers of developed consciousness, nor as differenced from the latter by a mere lack of intellectual content. He and psychology both recognize that all forms of mental life,—attention, discrimination, judgment, the feelings and will, etc.—have their incipient stages, and that they do not bud at the same time, nor blossom in the same order. Genetic psychology, or child study, is busied just now with accurately recording the development of the young mind. Froebel also is truly psychological in his recognition that the mental life takes its start from sensations,—those curious awakenings of consciousness which result from the influence of the physical world upon our senses—and that the earliest forms of mental developments consist almost wholly in psychicial reaction upon, and manipulation of this order of consciousness. Indeed, as has been said, "it

is precisely in the period of the A B C of sensation, emotion [and will] that the genius of Froebel is most at home and most original" (Bowen, Froebel, etc., p. 5).

Again, it was a day of no small moment to future generations, when Froebel decided to devote his whole power to the education of little children. Psychology is forcing upon us the weighty truth that it is the first few years of life which determine, by almost inexorable psychical laws, just what the order and content of that mental life will be when fully developed. The true psychological foundation of the Kindergarten is just this: We cannot expect a teacher to break in upon a growing mental life at a latter stage of its development, (say the tenth or fifteenth year), and then secure the same results as are assuredly attainable when that same consciousness is deftly guided in its earlier and embryonic stages. If education means something ideal, and, if all things develop, then the Kindergarten is the mode of pedagogic treatment which will secure educational fruits from the mechanism of mental evolution. There is no time to carry out this psychological comparison as it may be done in detail; e. g., the "gifts" are based upon an adequate psychology; the fundamental acts of intellection are brought into gradual activity, and are constantly guided. The later teachableness of kindergarten children is undoubtedly due to this fact that the cognitive mind, from the beginnings of sensation to the conclusion of real perceptions, has been awakened in this orderly manner.

Again, Froebel insists on the child's self-activity. By this he does not mean a forced exertion, but more truly that the results of the child's activity shall incorporate the products of his intellect and the attainments of his feelings. Into this one phrase, "self-activity" Froebel pours all the functions of the young mind, and that this is a truth, perhaps, above all others, is an achievement of recent science of mind. The mind does not have faculties, each operating at such times and in such manners as each alone may choose. On the contrary, in every aspect of consciousness and in every moment, the whole of the mental life is active, and it is almost the mere fortuity of accident whether it will be a consciousness of feeling, or knowing, or willing, moreover, mental acquisitions, i. e., perceptions, memories, judgments, feelings and choices, etc., are assured only as they embody or cluster around mental activity, and in this sense the Froebelian

method leads the child to positive knowledge,—such as its partially developed consciousness will admit.

Again, and finally, from the standpoint of genetic psychology, which reveals to us the fact that mental developments always take their start from the immediate surroundings of the babe and youth, it must be agreed with Froebel that true education, as to content, begins and ends with a cognition and a more or less complete interpretation of that which is at hand. He who persists in making education deal with the remote, either in time or space, is the affected educator and knows not the truths whereof he would teach. Froebel recognizes and incorporates this pedagogic truth, and, in fact, makes it the basal content of his whole educational scheme. But this environment must not be that of any sort. On the contrary, that which the child is to meet in his conscious life and on which he is to react with all the intensity of his infantile power, must be carefully selected; hints towards the character of this selection were the fruit of fifteen years on the part of Froebel.

I wish there were time to speak of the relation there is between the kindergarten and technical or industrial education. Our city is, happily, providing for the future industrial career of her citizens. Between the form of education which you represent and are fostering and that of manual training, there is such an intimate connection that the Kindergarten becomes the best preparation for the facility and excellence so desirable in that skill of the hand which is to be guided by an intelligent head.

I do not fancy that all the interesting points have been touched upon, nor that the critics and opponents of Froebel have been answered. But this is not an hour for criticism, but one for encouragement. If there be any truth in the insights of genius, and, if there be any truth in the toilsomely won acquisitions of science, then I bid you feel and accept the encouragement which comes from these two voices. The ancient world had its synagogue; the mediæval world its confessional box. In their respective ages, each was the most powerful pedagogical machine which man had devised. Shall we forget our own time? With the leaven of three thousand gardens reaching one hundred thousand children even in our own land, may we not justly expect mighty things of Froebel's heritage? May our own city be mindful of the no small part it may take in aiding the Kindergarten to become the educational engine of to-day.

EDITORIAL.

WO noted men have recently passed away, one in Germany and one in the United States, who have had great influence in the world of letters and who deserve the title of emminent educators.— Professor von Helmholtz and Oliver Wendell Holmes. was the last of a group of celebrated literati who have made New England famous. Longfellow, Emerson, Hawthorne, Whittier, Lowell. Holmes.—these men established a school of thought and culture. a "style" in literature, the influence of which has been world wide, All were born early in the present century and belong to the latter part of the constructive period of New England history. One by one they have passed on, leaving not only New England but the entire land and the whole world in mourning for their loss. Dr. Holmes lived in constant touch with his fellow men. His humanity was what constituted the charm of his writings and endeared him to his readers. The bright sparkle of his wit, the cheerful outlook of the healthy soul upon life, these struck home to the hearts of thousands and did them good like a medicine. Dr. Holmes loved life, but he grew old cheerfully and adorned that stage of human development which is sometimes made very unlovely. "He has added immensely," says one writer, "to the enjoyment of life." What pleasanter epitaph could any one covet?

Dr. Helmholtz, the famous German scientist, died in Berlin on the 8th of September. Like Dr. Holmes he was educated as a physician and the first few years of his manhood were devoted to that profession; but his treatise on "Conservatism of Force' was received with such marked favor that he resolved to devote himself to scientific research. Last year he visited the World's Fair and while in this country delivered a lecture on his discovery of the ophthalmoscope before a convention of physicians. In his death, which was due to paralysis, the world loses one of its greatest teachers of Natural Philosophy.

WE are informed that the Boston Hancock School, named from Old John of Revolutionary fame, is the centre of a school population of 2,100 children, not one of whom is of Yankee descent; 1,000 Russian, Polish and German Jews; 600 Italians; the remaining 500 of all sorts and nationalities; one class including representatives of fourteen different nations. A similar condition of affairs may be found in every considerable city of the northern, western and pacific

In schools like the Hancock, the first thing to be done is to teach these little folk the English language, which is best done by American teachers skilled in the object system of primary instruction. It is said that in six months these children are able to use the English language and go on successfully with school work. It is pleasant to read that among these new comers are large numbers of exceedingly bright children; that the Italian parents generally send their children to the public schools and that one of the last graduating classes from the Hancock school distinguished itself by an exhibition entitled:-"A Morning Hour with Oliver Wendall Holmes." Here, in the going on of our great American system of free, unsectarian, profoundly moral and disciplinary system of instruction, if kept clear of fads and held with a firm hand to its own proper vocation, is found the answer to a great deal of the loose declamation against European immigration. Out of this body 2,100 polyglot boys and girls is being developed a new American life; certainly broader than the ancient Puritanism of old Boston, with such an outfit of intelligence and executive power as no generation this side the water has yet known. It only requires the additional emphasis on the training to morals, patriotism and intelligent industry to send this new "Army of the Rupublic" out, consecrated to American civilization.

After all, the later achievement of New England, through her vast educational, industrial and philanthropic efforts of the past generation in assimilating her multitudes of new European and Canadian populations, may turn out to be no less worthy of historic commemoration and beneficient to the Union than her earlier training of the regulation New Englander, whose name and fame is now secure around the world.

A T the October meeting of the New England Association of Colleges and Preparatory Schools, among other able addresses was one by President William DeWitt Hyde, of Bowdoin, on "Educational Values as Assessed by the Committee of Ten." It was a clear, cleancut, vigorous address. He criticised the Committee of Ten for not insisting rigorously on Latin as a necessity for entrance to college. Towards the close of his remarks he called attention to the schedule which he had prepared concerning sixty year periods; or fifteen each week for the four years. He would make sixty per cent (36) of these compulsory and would divide them among three fundamental studies as follows: Latin, 16; Mathematics, 12; English Literature, 8. The other forty per cent (24) of these periods he would have elective and gave a list of six studies to any two of which the student might devote twelve periods. Among these electives he would class Greek, German and Physical History and Geography. It is not to be expected

that any man's classification will commend the assent of every one of this unusually able body of educators. But we are much pleased to see the emphasis which President Hyde places upon the study of Latin

Which we are enabled to offer to our subscribers The Encyclopaedic Dictionary—a massive work of 5,346 large pages, just being issued from the press—at a phenomenally low figure. There are four large volumes, well bound in cloth, such as one would naturally pay five dollars a volume for. We offer to furnish with this choice set of volumes, postpaid, to old or new subscribers to Education, and the magazine a year all for \$9.00. For farther particulars read the advertisement on advertising page xx.

PESTALOZZI'S LEONARD AND GERTRUDE.*

NANNIE BROWN, BOULDER, COLORADO.

The name of Pestalozzi is associated in our minds with the patient, self-sacrificing, sympathetic characters who have left behind them a legacy that will tend to uplift humanity long after their names and works have been forgotten.

In Pestalozzi's Leonard and Gertrude, which was published about 1792, we have objectified some of his most important educational ideas. The book, while neither a treatise on pedagogy in the present use of the term nor a good story, contains a truly realistic picture of the Swiss peasant life of the last century. The pedagogical truths only appear when looked for, and among the most commonplace circumstances. In this little village of Bonnal the methods for the uplifting of the people represent views on some of the political and social questions puzzling us today.

In the principal characters of this book we see portrayed a deep humanity for the poor, the wretched, and especially the children of the village. Pestalozzi's high regard for woman is noticeable in Gertrude, a loving wife and mother, first, endeavoring to help her

^{*}The present article is a specimen of a kind of pedagogical work of which the general educational public rarely catches a glimpse. The introduction of pedagogy into undergraduate work in our colleges as an elective equal, say, to Greek, is an achievement of today. In the University of Colorado, pedagogy is attached to the chair of philosophy. The grade is thus kept up to its proper level. In Freshman work this year, in connection with the history of education, pedagogical classics were assigned as follows. For students electing Greek: Cyropædia. For students electing Latin: Quintilian. For students electing French: Compayré. For students electing German: Pestalozzi. After partial reports, the present paper is Miss Brown's final report. She is now engaged upon a complete translation of Pestalozzi's epoch-making educational novel. Wm. J. Eckoff, professor of philosophy and pedagogy, University of Colorado.

husband, who was a much weaker character than one would select for her companion, fond of drinking, but who through her efforts became an industrious, steady man, working with her for their own children and those of the neighbors. Gertrude's executive ability extended beyond her well-managed home into the homes and lives about her. She executed her plans with the greatest exactness and in detail. She taught her children to do many things well. Spinning and housework formed part of the education of her girls, and the common branches, reading, arithmetic, spelling, etc., were presented to the children in an easy, agreeable, practical way, so that it did not appear to them mere study and work, but a real pleasure. She believed they should be taught to rely upon themselves, and directed all their lessons toward the accomplishment of this useful aim. The father taught his son the art of plastering, and how to calculate the time and material necessary for his work.

Leonard also extended his help beyond his own children to the ignorant workingmen under him; gaining their confidence he could assist them in many ways beside their daily labor. Even though their kindnesses were often rewarded by ingratitude, both Leonard and Gertrude bore it patiently, never showing revenge, but by some other friendly act, striving to assure these people of their good intentions.

Their efforts went beyond those immediately around them to the Bailiff, who, as we read in the first part of the book, had done them much injustice, and to Rudy and his seven motherless children. Here Gertrude accomplished much. She took these children to her home and cared for them with her own. Firmly, but kindly, she made them understand what she expected of them if she gave them her time, namely, that they were to improve and that they must use their time wisely. Their condition when Gertrude found them was pitiable. Their home was a wretched hovel, and with little or nothing to eat the children had learned to live by theft. Through the influence of Gertrude, Rudy secured work, and under her teaching his children improved. By the combined effort of all, though not without a severe struggle, their home was repaired and kept neat, and when things were in a fit condition for a woman of some intelligence to enter the family without sacrificing herself, Rudy married again.

Gertrude taught her little folks the beautiful lesson of charity—one which we must admit contains the true idea of Christian giving—that unless one feels the sacrifice, it amounts to very little. These ideas of education—kindergarten ideas mainly—which made a sure foundation for a higher and broader education, extended beyond Gertrude's home and Rudy's. A retired lieutenant, Arner, the magistrate, and the pastor, hearing of her success, visited her home twice, and seeing the order and interest which prevailed there, could not see why those very plans could not be executed on a larger scale and the benefit shared by a greater number of children. The result of these visits was that the young lieutenant determined to become a school-master in the village, provided he could get Gertrude's assistance. He believed that a woman's mother heart was necessary to manage and understand children. After much persuasion Gertrude decided to help him. The result was marvellous. Though there was mu

opposition among the ignorant, superstitious villagers, they in course of time came to see and realize that good was to be obtained for their children and were willing they should have it. Not alone were the children benefitted. Arner provided work for the men in order that

they might have less time for loating and evil pleasures.

The wife of Reynold and the wife of the pastor also did considerable to aid these people. Everywhere throughout the book Pestalozzi shows us that the love and devotion of a noble woman spread abroad from her immediate home circle into the community can do much for the uplifting of humanity. If the great mass is to be enlightened and raised up to a higher, nobler existence, he believes it is to come about through the work of woman.

The results of ignorance in this village were very apparent. Superstition had been firmly rooted in these people for generations. Ignorance of the results of their own actions had brought upon them much misery. Stealing and lying were almost universal. Through the tireless efforts of the pastor the most harmful man in the village is made to reform,—the Bailiff Hummel, who owned a tavern and had succeeded in getting under his control all the villagers, even Leonard at first. The means used for his reformation from one standpoint seems severe, but it is just.

Arner and the pastor expose the existing wrongs, and the whole village is roused to an intense excitement. Measures are taken to correct these evils. When the Duke heard what had been done so successfully at Bonnal, he visited the place, and as a result of his visit determined to establish schools throughout his country, modelled according to Gertrude's plan. He was convinced that men can only be happy when they have discovered how they can best help themselves, and he saw that these methods would bring about just such results.

The world in general must agree that the "Duke" was right—that Pestalozzi's theory is the correct one, the practical one. When we have attained his ideals we will have a mental and moral development such as will make people competent for self-government, which is the best and the most enduring test of any educational system.

DEPARTMENT OF PROFESSIONAL STUDY.

THE TEACHERS' INTERNATIONAL READING CIRCLE. SECOND MONTHLY SYLLABUS FOR THE THIRD YEAR.

PREPARED BY DR. CHAS. J. MAJORY, NEWTON, N. J., SECRETARY. FOR THE USE OF CORRESPONDENCE MEMBERS.

In reports of State Superintendents, City Superintendents, and others, there is found more and more commonly commendation of progressive teachers who are engaged in the reading and study of professional books and periodicals. The leaders in educational progress who have been so persistent in the past in declaring the need of professional reading are correspondingly ready to recognize its present prevalence.

The best teachers everywhere are interested in the line of reading and to a considerable degree they have become the best teachers through the influence of this reading upon their daily work. No teacher who feels at all ambitious to attain recognized success can afford to neglect the stimulus and the aid that come from the professional book and the professional journal.

I. ROUSSEAU'S EMILE, PAGES 41-67.

- 9. Is it wise to ignore a child's slight sufferings in order to make him more patient and courageous?
- 10. Should the end of education be found in future, or in present happiness?
- 11. To what extent should parent or teacher follow the maxim, "Keep the child dependent on things alone."?
- 12. Are the formulas of politeness in any sense conducive to false education?
- 13. What valuable benefits may result from early suffering? Are they certain to result?
- 14. Are children at the age of ten utterly incapable of reasoning upon questions of good and evil?
- 15. Does the practice of reasoning with children upon their conduct generally tend to make them deceitful and untruthful?
- 16. In what respects is it important in education to lose time rather than to gain it?
- 17. Can we discover the bent of a child's mind before beginning to instruct him?
- 18. Can punishments be limited to the direct consequences of wrong doing?

II. HERBART'S PSYCHOLOGY, PAGES 26-35.

- 7. What prime objection is to be met in regard to considering psychological questions from a mathematical stand-point?
- 8. In general, to what source must feelings and desires be ascribed?
- 9. How is it shown that inner perception is an active process, never a passive apprehension?
- 10. To what limit only may the power of inner perception ordinarily extend?
 - 11. Of what elements must every concept be made up?
- 12. How does the period of manhood differ from the period of childhood in the matter of acquiring simple sense-concepts?
- 13. What is the essential work of mature mental life in relation to these simple concepts?
- 14. What influences may the body exert upon the psychical process?

III. ADLER'S MORAL INSTRUCTION, PAGES 27-46.

- 11. In what relations does science-teaching have moral influence?
- 12. What portions of history should be made most prominent in order that its highest moral use may be attained?
- 13. What advantages and what disadvantages belong to literature as compared with history in the presenting of moral teaching?
- 14. What special adaptation to moral instruction has any branch of study not specified by the author?
- 15. In public school work is it practicable for the teacher to join in the games of the pupils to any considerable extent.?
- 16. Is it the personality of the principal or that of the class teacher that exerts chief influence upon pupils?

LECTURE IV

- 17. Why is it better to classify duties with reference to their subjects rather than with reference to their sources?
- 18. Is the classification of duties as set forth by the author specially adapted to the moral questions arising in school discipline?
- 19. Why is the logical arrangement of a subject usually not the one most suitable for presentation to children?
- 20. How may all the various duties of the child's school life be brought into due relation with the prime duty of acquiring knowledge?

IV. FROEBEL'S EDUCATION OF MAN, PAGE 40-70.

- 10. A parallelism between the development of the individual and that of the race.
 - 11. Process and order of the development of the senses.
 - 12. Line of separation between infancy and childhood.
 - 13. Nature and value of the child's play.
 - 14. Importance of due attention to matters of food and clothing.
- 15. The aim of parental care is to arouse to full activity all the child's physical and mental powers.
 - 16. The child's early efforts at investigation of properties.
 - 17. Value of the early attempts at drawing.
- 18. Early knowledge gained from association with the older members of the family.
 - 19. Line of separation between childhood and boyhood.
 - V. PICKARD'S SCHOOL SUPERVISION, PAGES 20-87.
 - 8. Advisory duties of the State Superintendent.
- 9. Influence of political partizanship in the choice of state super-intendent.
- 10. Need of an advisory power above the several state superintendencies.

- 11. The efficient state superintendent needs to be conversant with the various relations of intellectual, industrial and social life in his state.
- 12. He should be discreet in recognizing the limits of public sentiment.
 - 13. He should possess and exercise tact in controlling legislation.
- 14. He should mould public opinion by use of the platform and the press.
- 15. He should be of judicial turn of mind, and will be the better if possessed of a course of legal training.
- 16. He should be patriotic and religious without being partizan or sectarian.
- 17. County superintendents subject to various influences opposed to good results.
- 18. The conditions growing more favorable for efficient work of the county superintendencies.
- 19. The examining and excusing of teachers the most vital work of the county superintendent.
- 20. Varied professional, clerical, judicial, and advisory duties devolting upon the county superintendent.
- 21. Advantages of a combined county and township organization for purposes of grading schools.
 - 22. The county superintendents especial avenues of usefulness.

VI. LAURIE'S RISE OF UNIVERSITIES, PAGES 39-74.

- 11. The work of Charlemagne in reviving learning first pertained to the episcopal and monastic schools.
 - 12. The call of Alcuin to direct the scholastic work of the empire.
- 13. The Palace School designed for the laity and securing political preferment to its successful scholars.
- 14. Imperial orders for renewed zeal in learning and in teaching issued to the clergy.
- 15. Elementary instruction provided gratuitously through the clergy to the people.
- 16. Continuance of reform efforts after the death of Alcuin and of Charlemagne.
 - 17. Alfred, in England, imitates the work of Charlemagne.

CHAPTER IV.

- 18. Primary instruction included reading, writing, singing, arithmetic and Latin.
 - 19. Secondary instruction based essentially upon Latin Grammar.
- 20. Higher instruction limited to the one aim of understanding the Holy Scriptures.

- 21. The chief books of learning in the early schools.
- 22. Plan of organization and discipline.

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VII. PREYER'S DEVELOPMENT OF INTELLECT, PAGES 33-04.

7. Case of the child before learning to speak, similar to that of the adult who has lost the power of speech.

8. Disturbances of speech include whatever interferes with the understanding of words heard as well as whatever interferes with the production of words.

9. On the basis of physiological relations, disturbances of speech

are classified as perceptive, central and articulatory.

10. Representations by diagrams of the relations of nerve centers and paths of excitation and of impulse.

11. Analysis and classification of speech disturbances.

FOR PROFESSIONAL STUDY.

The books mentioned below are very strongly recommended by our leading educators. Of this list when a little smaller than at present, Dr. Harris said: "It does not contain a book not worthy to go on any teacher's reading list and the best list." The list of books made out for teachers by Professor Payne of the University of Nashville, Professor Hinsdale of the University of Michigan, and Col. Parker of the Cook County Normal School, also contain a large number of the following:

Compayre's History of Education, of which G. Stanley Hall mays: "It is the best and most comprehensive universal history of education in English." Compayre's Lectures on Education, of which Superintendent McAllister of Philadelphia says: "I regard it as the best work in existence on the theory and practice of education." Compayre's Psychology Applied to Education, of which Professor Payne says: "There are thousands of teachers who have neither the taste nor the leisure to master the details of educational science, nor even to read the profounder treatises on the science and art of teaching, but who are sincerely anxious to find a rational basis for their art; and for all such I know of no book that I can commend so heartly as this."

Rousseau's Emile, of which Voltaire raid: "There are fifty pages that should be bound in velvet and gold." The publishers have recently made a cheap paper edition of this, which is sent postpaid for twenty-five cents, and also a similar edition of Pestalozzi's Leonard and Gerraude, of which the New York Nation says: "Except Rousseau's Emile no more important educational book has appeared for a century and a half than this." Lange's Appearance prion, of which Dr. Harris says: "It is far more important for education than Pestalozzi's Perception." De Garmo's Essentials of Method, of which Professor Stearns of the department of pedagogy in the Wisconsin State University says: "It is the first real step towards the development of the science of methods in this country." Tracy's Psychology of Ohildhood, of which Professor Barnes of the Leland Stanford University says: "No book has come from the press during the past year which I have been so giad to see as this one."

The above mentioned books may be had of the publishers, D. C. Huarm & Co., Boston, New York, Chicago, Atlanta, London.

FOREIGN NOTES.

A FRENCH REPORT ON THE MEDICAL SCHOOLS OF THE UNITED STATES.

One of the most important and interesting reports of which the Columbian Exposition was the occasion, is that of Dr. M. Baudouin charged by the French government to investigate and report upon the Medical schools of the United States. The volume which has just been issued forms a quarto of 368 pages and is claimed by its author, and justly I believe, to be the most comprehensive work on the subject to be found, not omitting even reports by Americans themselves. To quote the author's own words, "One may search in vain, even in America, for a study of the whole subject comparable to that which is here outlined." That this is not a pretentious claim is indicated by the mere number of institutions that are described with more or less fullness of detail. Besides the Bureau of Education and the scientific institutions of Washington, thirty-one institutions are considered separately and fully in the first part of the report which also deals with groups of institutions, and with social customs, especially such as affect health and sanitation. The second part of the report comprising 78 pages, presents a general survey of the conditions, standards and results of medical instruction in the United States considering the schools by classes i. e., as Regular, Elective, Homeopathic, Physio-Medical, schools for women, etc., also a resum? of the laws governing medical practice in the United States and a discussion of the role of women physicians. The appendices comprise a complete list of the medical schools existing in 1893, and a very full description of the exhibitions of surgical instruments and apparatus for physiological and anthropological laboratories displayed at Chicago from all countries. The work is enriched by 81 illustrations. It is impossible in a brief notice to give any clear idea of the views and estimates of professional study and standards among us which give especial value to the report. It may be said in brief that the author is impressed by the liberality, prodigality even, of endowments and equipments for instruction and by the rapidity with which new foundations arise and develop. The ordinary medical course seems to him less thorough and complete than the required course in France. Our post-graduate schools, however, he considers worthy of being imitated in his own country. With respect to them he says, "I should be pleased to see similar schools created at Paris, but our

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EDUCATIONAL MOVEMENTS AFFECTING WOMEN.

According to M. Louis Frank, a Belgian publicist, who has made an exhaustive study of the progress of women. Switzerland leads all foreign countries in the number of women studying in its universities. They reached a total of 641 in 1892, of whom 161 were registered in the medical faculty, 46 in the philosophical; 21 in natural science and 9 in law.

As early as 1863 a woman secured a diploma from the Sorbonne and in 1868 the Medical Faculty of Paris had four students; the number of women enrolled in the French faculties has increased from year to year; the total in the period 1876 to 1888 being 262; of these 137 were at Paris. The greater proportion (207) were French women.

Women are admitted to the universities and to university degrees in Belgium but medicine and teaching are the only learned professions as yet open to them in that country. The need of women in the medical profession is recognized even in Russia where stringent measures have recently been adopted against women students in general. Russia possesses a Medical High school for women and a royal ukase of 1890 empowers women to officiate as surgical assistants on Russian railways. The concessions to women students in Germany amount as yet only to special arrangements for their attendance upon university courses. In Austria-Hungary, as in Spain, the universities are closed against women.

The spirit which the various associations of women students and teachers of Great Britain manifest with respect to their interests amounts almost to aggressiveness. It is explained by the fact that higher education and all that it implies as to opportunity for honorable and remunerative careers, have been won by a struggle which is hardly yet finished. Even now, of the older teaching Universities of Great Britian only those of Scotland admit women to professional courses. Thanks to the prevision, enterprise and good judgment of the "Glasgow Association for Promoting the Higher Education of Women," Glasgow University is the first under the new statues to confer professional degrees upon women. Two women passed with distinction for the degrees of Bachelor of Medicine and Master in Surgery during the present year.

The "Association of women for promoting the education of girls in Wales" carries on an active propaganda by the circulation of pamphlets, by public discussions, addresses, etc. Just now the society is

engaged in securing the practical enforcement of the Welsh University Charter which expressly states that "every degree and every office of the university and membership of every body and authority in it are to be open to women equally with men." This is as broad and as explicit even as Chicago University.

Bedford college for women, London, which has recently made extensive additions to its buildings and equipments has been admitted to share in the Government grant for university colleges; the \$3,500 received annually from this source will enable the college to reduce fees, increase salaries and laboratory provisions.

This year is made memorable by the opening of the City of London School for girls which in the words of its founder, William Ward, "shall correspond, as near as may be, to the City of London School for boys." The Association of Head Mistresses is already calling the attention of the public to violations of this purpose by the Municipal Committee appointed to execute the trust. They note especially that the salary of the head Mistress will average only about one-fourth of that of the head-master. They appeal to able women not to offer themselves as candidates for the position on these terms. The bequest of Mr Ward for this important institution amounts to \$100,-000.

The Royal Commission on Education have requested the "Association of Assistant Mistresses" to give a statement of their views on each of the following points:—

- 1. The recommendations of the Select Committee of the House of Commons of 1871, on the Registration of Teachers.
- 2. The desirability of making provision for instruction and training in the profession of teaching, and the best method of doing so.

The Commission have also invited the Association to submit the name of some person to give oral evidence on their behalf.

SUMMER CONGRESSES

In the proceedings of the eighth international Congress of hygiene and demography held in August at Buda-Pesth the question of physical training occupied a prominent place. The section was opened by an address from M. Albert de Berzeviozy who contrasted the gymnastic training maintained in Germany and the military exercises (hataillons scolaires) characteristic of France with the out-door sports fostered in England, giving the palm to the last as a means of producing the highest degree of physical development comportable with mental culture.

The Revue Internationale de l'Enseignement for September gives a very full synopsis of the paper presented by Dr. Kehrbach before the

philological congress held at Vienna. The subject was the programs and methods elaborated and applied by Herbart in the pedagogical Seminar of Königsberg. The matter was worked up chiefly from unpublished manuscripts of the philosopher.

A. T. S.

AMONG THE BOOKS.

To accommodate readers who may wish it, the publishers of Education will send, post paid on the receipt of price, any book reviewed in these columns.

The Century Book for Young Americans is the Story of the Government, by Elbridge S. Brooks, author of "The Story of the United States," etc. It tells in attractive story form just what every American lady and girl ought to know about the Government, the functions of the President, the Senate, the House and the Supreme Court, the duties of Cabinet officers and the work of the various departments—how State, municipal, and town governments are carried on, and what are the duties and responsibilities of an American citizen. It is bright, breezy, attractive, modern, and American. In the book Mr. Brooks takes a party of bright boys and girls to the city of Washington, and gives the young tourists a capital idea of the Government. Parents will find this an admirable book to give children at Christmas-time, and principals of schools might use it for supplementary reading. The book is issued under the auspices of the National Society of the Sons of the American Revolution, and its introduction is written by General Horace Porter, New York. The Century Co., \$1.50.

Walker's Comprehensive Concordance, by Rev. J. B. R. Walker, with an introduction by M. C. Hazard, Ph. D. is a practical, convenient and accurate text-finder that will be highly prized by all students of the Scriptures. It is in one handy volume and yet contains more than fifty thousand more references than are found in Cruden. This is rendered possible in a volume which is still "handy" by the omission of small, unimportant words like a, an, if, is, etc. which never would be consulted in seeking for a given passage. The proper names are all accented, and the arrangement of the words is strictly alphabetical. The book is thoroughly up to date and is conspicuously fir t in the field it occupies. It is published by the Congregational Sunday-School and Publishing Society, Boston, Mass., at the low price of \$2.00.

THE PSYCHIC FACTOR, is an outline of Psychology, by Charles Van Norden, D. D., LL. D., of Elmira College. It gives a summary of modern discovery in this somewhat obscure department of scientific research, teaching the reader what may safely be accepted as practically settled, and disclosing the large areas of mystery which are so attractive to the investigators who are earnestly seeking to extend the bounds of human knowledge. Such subjects as hypnotism are fully and sympathetically treated. We have found this book most fascinating and should think it would be indispensible to all students of mind-phenomens. New York, D. Appleton & Co.

STUDIES IN THE EVOLUTION OF ENGLISH CRITICISM, by Laura Johnson Wylie, is a thesis presented to the Philosophical Faculty of Yale University in candidacy for the degree of Doctor of Philosophy. It is an elaborate, scholarly essay and gives evidence of much study, research and thought. It is in four parts — John Dryden, Evolution out of Classicism, German Sources of Coleridge's Criticism, and Samuel T. Coleridge. Boston: Ginn & Co.

The full title, A Short Comparative Grammar of English and Ger-MAN, as traced back to their Common Origin and Contrasted with the Classical Languages, by Victor Henry, serves to show somewhat of the scope and purpose of the book before us. Dr. Henry is professor of Comparative Philology in the University of Paris and is an authority on all branches of his subject. His earlier work, "A Comparative Grammar of Greek and Latin" placed him at once in the foremost rank of philologists and has had an extensive use among students. In the present work the object of the author has been to set forth to students the relations existing between modern German and modern Finglish, their phonology and grammar, and their common relation with Latin and Greek. The work is divided into four parts, the first treating of Sounds, the second of Words, the third of Declension, and the fourth of Conjugation. Under each of these heads there is a most exhaustive treatment of the subject matters. Teachers of languages and students of philology will find this work of Dr. Henry a necessary adjunct in the prosecutions of their investigations. New York: Macmillan & Co. For sale in Boston by Willard Small, Franklin St. Price \$1.00

THE GATE TO THE ANABASIS, with calloquia, notes and vocabulary by Clarence W. Gleason, is the latest addition to the series of School Classics. The author too, by his arangement of the sentences in the Anabasis, made the road to that work comparatively easy. It is a most valuable book to put into the hands of students, as their firstr reader in Greek. Boston: Ginn & Co. Price 45 cents.

Wm. Edward Mead, Ph. D., professor of the English language in Wesleyan University, has prepared an Elementary Composition and Rhetoric, which for variety of information, method of arrangement, and completeness of expositions is unsurpassed. The author has tested his work in the class room, knows what studeets require on the subject and gives no unnecessary matter. The work is divided into two parts, theory and practise. The first treats of words, sentences, paragraphs, the theme, the plan, kinds of compositions and style; the second part has the same headings but treats with practical example. Were this text book used in secondary schools there would not long exist grounds for the severe criticisms passed upon the graduates of the schools by reason of their defective knowledge of the structure of our language and lack of ability to use it intelligently. Boston: Leach, Shewell & Sanborn. Price 90 cents.

INSTRUCTIVE STUDIES IN ENGLISH GRAMMAR, by William R. Harper and Isaac B. Burgess, were printed originally with the authors' Instructive Latin Primer. He met the approval of teachers and to make them available in lower grade schools they have now been issued in a volume separate from the Primer. We called attention to their merits when noticing the Primers. New York: American Book Co. Price 40 cents.

Hitherto the tyro in telescopy has had no assistance from books. All works on this subject were bulky treatises and served but to be wilder and discourage the beginner. To remedy this defect Dr. Frank M. Gibson has prepared The Amateur Telescopist's Handbook in which is given the fullest explanations to the beginner in this study. The telescope is explained and all its accessaries. Chapters are given on the object glass, the stund, care and use of the telescope, and directions for observing stars, nebulae, sun, moon and planets. One-half of the book consists of a descriptive cutalogue of celestial objects, specially cutalogued for amatuers. Every student of the heavens will find this small work a valuable aid in his facinating study. New York: Longmans, Green & Co.

We have received a revised edition of Prof. Webster Well's PLANE AND SOLID GEOMETRY in which we note many changes and improvements. The most important changes are in Book I, the changes being such as to commend themselves to every teacher of geometry. It is now one of the best text-books on the elements of geometry and will in its new state find new friends. Boston: Leach, Shewell & Sanborn.

WHITTARER'S ANATOMICAL Model is a pictorial representation of the human frame and its organs. The descriptive text is by Dr. Schmidt. His text, only a few pages in all, is a satisfactory work on physiology and anatomy and in the hands of pupils will serve admirably to fix the satient points in the study of the human body. There are five colored plates, one overlapping the other, showing the skeleton, muscles, viscera, heart, etc. The model is a very compact work to be placed in schools and merits extensive use. New York Thomas Whittaker. Price 75 cents.

We have received a revised edition of Isaac Pitman's Complete Phosographic Instructor, one of the most thorough and satisfactory manuals on short hand. The Isaac Pitman system is probably the most extensively used of any system and every year demonstrates its worth and popularity. This revised book is designed for class or self-instruction and contains everything needed by teacher and student. It is a model text-book of a model system. Published by Isaac Pitman & Sons, 33 Union Square, New York.

VAILE'S VERTICAL WRITING BOOKS are unique in form and arrangement, simple in copy and perfect in make up. They are five in number and meet every requirement. Teachers interested in this style of writing should examine these books. Published by E. O. Vaile, Chicago, Ill.

THE MAN WHO MARRIED THE MOON, by Charles F. Lumis, author of "Some Strange Corners of Our Country," "A New Mexico David," etc., consists of stories told to the author in the long winter evenings by the Pueblo Indians, among whom he lived for five years. There are thirty-one stories altogether and many taking pictures. The author re-tells the stories for American boys and they are full of thrilling interest. New York, The Century Company.

THE COMMON SENSE COPY BOOKS are an attractive series of hooks of penmanship, illustrating the more and more popular system of vertical writing. The series is progressive, and the books are models of compactness, neatness and simplicity. New York, A. Lovell and Company.

The Encyclopardic Dictionary is a superb work which ought to be in every library and in the hands of all teachers. It is in four large volumes of over 1300 pages each. It was first published in England, but has been brought out in this country after being very fully and thoroughly revised. One is surprised to find so massive and superiora work offered at such phenomenally low rates as we are able to offer it till January. (These four volumes, postpaid, and EDUCATION one year, all for only \$9.00). One finds on examination that it is a remarkably complete dictionary because it contains every known word in the English language, both current and obsolete, from the Tenth to the Nineteenth centuries, each word being exhaustively treated as to its origin, history development, etymology, pronunciation and various meanings. It is also a very concise Encyclopaedia of Botany, Chemistry, Astronomy, Geology, Zoölogy, Physics, Mechanics, Philology, Art, Music, History, Mythology, Philosophy Metaphysics, Law, Medicine, Agriculture, Biblical Knowledge, and every other field of human information. In the single department of Electricity alone hundreds of words and special terms will be found that do not appear in any other Dictionary or Encyclopedia. It surpasses all other dictionaries, as the latest edition of Webster's Dictionary is only one volume, contains only 140,-(60) words, and costs from \$12.00 to \$15.00; Worcester is one volume, contains only 116,000 words, and costs from \$12.00 to \$15.00; the Standard is only two volumes, contains but 200,000 words, and costs from §12.00 to \$22.00; the Centory contains but 225,000 words, and costs \$60.00 to \$100.00; while the Escyclo-PARDIC Dictionary contains 5,346 pages in four volumes, has 250,000 words and costs but \$2.50 per volume, or \$10.00 for the complete set. We are greatly pleased with both the contents and make up of these handsome volumes. Published by the Syndicate Publishing Co., Philadelphia, Pa.

Gilderskers's Latin Grammar, new edition, issued by the University Publishing Company, New York City, is too well and favorably known to need extended comment. As now revised and enlarged it is a complete text-book for latin study. The historical features are particularly helpful and attractive especially to the mature student. At the same time these matters are so arranged in notes and remarks as not to obtrude upon the attention of younger students who are sequiring the ability to understand them. The book is exceedingly valuable for comparison and reference and will be found in every well-equipped library. 12 mo., 550 pp. \$1.20.

THE LAND OF PLUCK, stories and sketches for young people, by Mrs. Mary Mapes Dodge, author of "Hans Brinker; or the Silver Skates," etc., and the editor of St. Nicholas. This is a collection of interesting stories about life in Holland by this well-known author. Her former tale above mentioned is said to have been written before the author had visited that country, but it is so true to life that it has been translated into Dutch and become a popular children's book in that language. These tales will be sure to interest the little folks. New York, The Century Company.

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CITIZENSHIP, a book for Classes in Government and Law, is a compact and well-thought-out sketch or outline of the most important rights and duties of the good citizen of a modern state. Old students in the classes of the author will recognize the old vigor of the master teacher, and all students of this important subject will find much that is timely and suggestive in the volume. Boston, Published by Ginn & Company.

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Students of German, and their name is legion, will be interested in the neat pamphlet on German Accidence, which serves as a supplement to the "Beginner's Corner" of the well-known magazine "Germania." This magazine, with this supplement and the German Copy-Book, published by Spanhoofd & Spanhoofd, 120 Tremont St., Boston, Mass., make a complete outfit for learning German with or without a teacher.

Every thing that aids in fostering a love for our country, its founders, its institutions, its history is always acceptable and especially so if it comes in a guise suitable for the young. We have received from the publishing house of John E. Potter & Co., Philadelphia, a unique volume entitled Makers or Our Country, by Edward S. Ellis. The work consists of a collection of short, bright, biographical sketches of the famous men of our country. The study of their lives is told in a most fascinating manner, is full of human interest and will captivate every reader, be he old or young. History is the sum of biography and children reading these biographies are reading and studying the best that is in history and are cultivating a spirit of love and veneration for the real makers of our country. It will make an admirable supplementary reader in schools, it is in fact just the book that has long been needed. Price (8) cents.

To the Athenaeum Press Series is added Selections from the Poethy and Prose of Thomas Gray, edited with an Introduction and Notes by Win. Lyon Phelps. The editor has taken infinite pains with his work which is plainly a labor of love and his text may be considered accurate. His notes are full and exhaustive and furnish much to the student and general reader. Gray's prose is not much read and of his poems only his Elegy and Distant Prospect of Eaton College are known to modern readers. But his other pactual are delightful reading and his essays and criticisms are valuable parts of English literature. Boston: Ginn & Co.

UP AND DOWN THE NILE is the third volume of the second series of "All-Over-the-World-Library," in which the voyage of "The Guardian Mother" is temporarily suspended at Alexandria, while the boy-excursionists make their trip up and down the great river of Egypt in another steamer more suitable for inland voyaging. The author, the world-renowned "Oliver Optic," well knows how to weave together fascinating fiction and reliable history into the warp and woof of a juvenile story. This book is one of his happiest efforts, and it will be read with deep interest by the boys and girls of to-day, and by their parents, most of whom were the author's devoted readers a generation ago. Lee & Shepard, Publishers, Boston. Price, \$1.25.

THE PHILOSOPHY OF TEACHING, by Arnold Tompkins, discusses the essential nature and laws of the teaching process. The philosophy of education is not attempted, but is held in reserve for another volume. The present volume is an able contribution to the literature of pedagogy and will command wide attention among thoughtful teachers. Boston: Ginn & Co.

The 47th bound volume of THE CENTURY MAGAZINE presents the usual extensive variety of literary and artistic matter. It covers the period from November, 1893 to April, 1894. There is amusement, instruction and literary education for young and old in every one of these sumptious volumes, each of which represents the triumphs of modern magazine production. New York: The Century Company.

THE SPECIAL KINESIOLOGY OF EDUCATIONAL GYMNASTICS, by Baron Nils Posse, M. G., presents the subject of systematic physical training in a masterly and exhaustive manner. The basis of the work is the Swedish system which the author holds to be the foundation of all rational gymnastics, since it is the only system which is derived from and founded upon the laws of mechanics, anatomy, physiology and psychology, and is thus thoroughly scientific. The theories of this system have survived the close scrutiny of scientific experts all over the world. In this volume they are carefully set forth and abundantly illustrated with accurate drawings. Teachers in schools, public and private, physicians, athletes and others interested in the development of an exact science of bodily culture will find in this work a full exposition of the marvellous progress recently made in this department of education. Boston: Lee & Shepard. \$3.00.

THUCIDIES, Book III, edited on the basis of the "Classen-Steup" edition, by Charles Forster Smith, Professor of Greek in Vanderbilt University, is another volume in the college series of Greek authors. The work is handsomely printed, and the foot notes and comments in the appendix are accurate and judicious. Boston: Ginn & Co. \$1.75.

THE FIRST FOUR BOOKS OF XENOPHON'S ANABASIS, edited by William W. Goodwin and John Williams White of Harvard University, is adapted to the latest edition of Professor Goodwin's Greek Grammar, and to Hadley's Greek Grammar as revised by Allen. An interesting "Introduction" prepares the student to take up the study of the text, while excellent notes and a convenient dictionary, together with graphic illustrations and the latest maps, make this book all that can be desired by teachers and students of Xenophon. Boston: Ginn & Co. \$1.65.

A GRAMMAR SCHOOL GEOGRAPHY, descriptive, industrial and commercial, is a good example of the progress which has been made of late years in methods of teaching this formerly dry, but now most interesting subject. The present volume is by John N. Tilden, A.M., M.D., and it describes not simply the world's continents, oceans, rivers, etc., but also the interests of the human lives that dwell on or use them. The dry bones of this science are thus clothed with life and rendered comely and attractive. There are many beautiful maps and illustrations and the mechanical execution of the volume is admirable. Boston: Leach, Shewell & Sanborn. Cloth, \$1.25.

OLD ENGLISH BALLADS, selected and edited by Francis B. Gummere, Professor of English in Haverford College, belongs to the "Atheneum Press Series" and is a scholarly and judicious selection of some of the best and most celebrated ballads that are near the sources of our English literature. An introduction and copious notes put the latest results of scholarly research within easy reach of the student, and the book is neatly published by Ginn & Co., Boston.

THE SKETCH BOOK, by Washington Irving, edited by Elmer E. Wentworth, is another attractive addition to our handy volumes for the study of the English classics. The author is a genuine enthusiast on Irving and his notes are a real aid in catching the spirit of this fascinating author. Boston: Allyn & Bacon. Introductory price, 60 cents.

INFLECTIONS AND SYNTAX OF THE MORTE D'ARTHUR OF Sir Thomas Malory, is a study in fifteenth century English, by Charlee Sears Baldwin. It is clear, accurate and comprehensive and makes a capital text book for anyone who would gain a mastery of early English forms. Boston Ginn & Co. Mailing price, \$1.50.

ROGER WILLIAMS, the pioneer of religious liberty, is by Oscar S. Straus, author of "The Origin of the Republican Form of Government in the United States." The author shows that the Reformation, the Puritan Revolution and the establishment of religious liberty are the important strges in the development of freedom from medieval despotism to the modern recognition of the inalienable rights of man. He exhibits Roger Williams's connection with the last of these three movements, and brings out finely the salient points in his unique life and character. New York: The Century Co.

A collection of songs for school purposes, songs that are worth learning and worth singing, is a desideratum. It is too often the case that music readers contain matter designed solely for voice training, and that in schools few songs are learned. The School Singer is not a book of exercises, but a careful compilation of popular songs and choruses especially adapted for school purposes. The selection of songs is admirably made, and the book will find great favor with school children. Boston: Ginn & Co.

Two dainty, delightful little volumes that tempt one to read by their very convenience and daintiness are Mr. W. D. McCrackan's Romance Switzerland and Teutonic Switzerland. They are in no sense guide books, vet every person who contemplates visiting Switzerland will as soon think of going without his Baedeker as without these volumes. Written in the author's well-known finished literary style, they are packed full of most interesting historical and biographical details of places and persons. The author, though now residing in Boston, has been for most of his life closely identified with Switzerland, and the recent preparation of his Rise of the Swiss Republic has saturated him with his subject. The two volumes supplement in some senses the former more pretentious one, and every reader of it will wish to own and read these latter works. Together, they present the interesting Repulic of which they treat in the various aspects of its fateful history. Boston: Joseph Knight Company.

Harper's Magazine for November is a heavily freighted number with excellent subject matter and admirable illustrations. The opening article, "The Sea-Robbers of New York, by Thomas A Janvier, makes use realize, even in these days of Tammany liad, that there has been progress in public morals since the early days of the city's history. Mr Chas D Lanter's "On the Trail of the Wild Turkey," is timely.—McClure's Magazine for November opens the promised Napoleon series with fifteen portraits of Napoleon in early manhead, and portraits of his father and mother. There is also an interesting article on how Allan Pinkerton frustrated a plot to assassinate Abraham Lincoln.—The Popular Science Monthly contains two matable educational articles,—"Preparation for College by English High Schools," by John F Cesey, of Boston, and "Manual Training," by Dr. C. Hamford Henderson, the well known educator—The Forum has an interesting and timely sketch of the "Political Carser and Character of bavid B. Hill."—The selections in Little's Living Apc offer something for every cultivated literary taste.—The sales of Funk & Wagnall's new Standard Dictionary are said to be phenomenal. A mathematician has figured out that if the copies required to fill advance orders were laid one on top of the other, the stack would be over three miles high.—We extend the right hand of fellowship to Art Education, a new journal devoted to "manu-mental" training,—the training of hand and mind in unison. The first number shows careful editing and broad ideas of the Monthly for November contains an article of interest to educators by Horace E. Soudder, upon The Academic Treatment of English, Supplementary to one by the same author in the Pebruary number upon The Educational Law of Reading and Writing.

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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FORCES IN EDUCATION.

SUPT. C. F. CARROLL, WORCESTER, MASS.

The life of any representative American citizen will furnish us with a very acceptable theory of education. Our model citizen represents the enterprise, the intelligence, the skill and the moral qualities of the race, and we enquire what influences have combined to produce such a man.

Nine times out of ten the man himself will inform you that his early home influences were most powerful in developing his character, in fixing his tastes and in determining his success in life. This evidence is confirmed by the fact that, as a rule, brothers and sisters are alike. A family name has ever been a badge of honor in New England. Every town is proud of its family histories. Worcester is not an exception to this rule.

The force of this statement is fully brought to mind when we consider that many of the strongest characters in New England history were entirely deprived of what we call early advantages.

It would be interesting to ask if the family name means less than it did formerly. No institution has been more thoroughly modernized than the home. It has lost something of its dignity, much that was sternly beautiful. The children seem to be in possession; they are our companions and friends, the chief objects of our sympathy and love. No revolution in sentiment has ever been more marked and more complete, and it has been accomplished, or at least executed, within a generation. As a result, the light of a deeper and wider sympathy shines in the face of man and shows itself in his deeds of love. But this change has

not altered the force of the home upon the life of its inmates. The type is being repeated, and it will soon be difficult to prove that it has not existed for centuries in its present form.

The school comes next in order as a force in character building. Originally, the intelligent home employed the teacher to perform duties that could not be otherwise provided for. By common consent, several families appointed such a person to instruct their children, in common, and we have the evolution of the private school, reaching through centuries. The public school adds a new principle in providing for the education of children whose parents could not or would not furnish educational advantages. In many parts of the country the public school system has existed but a few years.

Moreover, the spirit of the school is as changed as that of the home. A few years ago corporal punishment was not only common, but was regarded as especially beneficial to the child in large amount.

It is now well understood that instructors of the highest ability never strike a blow upon the quivering flesh of a helpless child. As a rule, parents and teachers who punish children mentally utter an apology and confession of their own weakness. or severity is repugnant to the modern mind. The teacher is in the parent's place, and is responsible for the existence of the best influences. The more incorrigible the child or the school, the more need of the spirit that the best home furnishes, and such we find to be the conditions in the approved public school of Where there is real companionship between teacher and pupil, body and mind and spirit may thrive together. The hope of our modern civilization is largely centered in our school system. We have faith in it as a moral and an intellectual force, It is a business corporation, and calls for the most skillful and scrupulous business management, and it is the most sacred trust given into the hands of the intelligent community.

The modern church reflects the improved home life of the community. It is distinctly new, as the home is new, in many of its sentiments and methods.

The work of the church is both general and particular. It is tutor to the individual member, to the youth in the Christian Endeavor society, and is responsible for the spiritual nurture of the child in the kindergarten. It is charged with the solution of great moral questions in the life of the community, and essays to win the heathen from barbarism to the arts of peace. It includes a great hierarchy of men and women as preachers and teachers, practically unpaid, alert, cheerful, indefatigable in every good word and work. The history and present power of this great army win our admiration, command our confidence and give us faith in man's indefinite, moral and intellectual advancement.

The influence that comes to my mind next, is that derived from a child's associates. In manner, morals, theory and practice, he is largely a resultant of the influences of association with his friends and companions.

Three centuries ago, the rich hired men to be the companions of their children. They called them tutors, but in reality the child was expected to become a gentleman by contact with one. Information was supposed to come by the process of conduction. This principle is as valuable as it ever was, though a man is now seldom paid for the exercise of an unconscious influence, that is, for the value of his society. In church, and school, and daily life, such rare companionship is worth money and, if necessary, ought to be bought for a price.

We might add that our sentiments, tastes, beliefs, biases political, religious and social, are acquired by contact and are seldom changed in later life. They become fixed beyond the power of change by the individual himself, and are not modified save by the impressive, overwhelming influence of some stronger character.

There is a theory that children would better meet evil, and taste it early. A few exceptions are sometimes construed into a rule, and men often boast of sowing wild oats in the very presence of their children. Teachers of both older and younger children are familiar with the consequences of bad companionship, and I shall venture to affirm, without further argument, that every child and man whose life is marred by sin and shame has learned his evil arts from others, and, as a principle, we may just as confidently affirm that we learn all that is beautiful in life in the same way.

The public library is another powerful factor in our educational system. It is a most important duty of the school to lead children to read books, and to estimate books at their proper value. A careful record should be kept of the books read by children.

Home reading should stimulate interest in school work and, to a degree, be co-ordinated with it. The child who is interested in good literature has just begun his education when he leaves school. The child who does not become interested in good literature early, is likely to lose entirely the delight and culture it supplies. If we are educated men we are, or have been, readers. If we have not read widely, we suffer severe limitations in educated circles.

These forces that I have attempted to describe may be termed popular. The list is familiar and might be enlarged. The members of the clergy present know it by heart. But out of it arise fundamental propositions upon which, in common, we have based our labors in behalf of our fellow men. But there is another variety of forces that demand attention. In the bodily organism we find physical forces operating as strongly and unerringly as in inanimate nature around us.

Thus far, we have had in mind individuals more or less mature, with fixed tendencies. The metaphysical and popular theories of education of the past have given little head to the physical and emotional conditions of childhook

Of late, we have been told that the reactional life of a child is, at first, mostly confined to animal functions. Potentially, a child's activity broadens indefinitely, beyond the limit of what is implied in the term animal intelligence. But every new movement and utterance comes by some form of muscular effort, and any perfect art follows long practice. The multitude of new acquisitions thus made are definite and permanent, and, to a large extent, the individual becomes a self-governing machine. Early in life additions and improvements may easily be made upon that machinery.

The brain is at the centre of this mechanism. Every experience, every impulse and wave of feeling, is said to start from the brain, to involve a chemical reaction, to consume a given amount of fuel, and to leave a physical record and tendency in the brain and nervous system, as a whole. The different parts or areas of the brain are said to be developed and what was potential becomes real. Each part once made alive by use, and made to work in harmony with other parts, continues to act and react automatically upon the slightest stimulation.

A variety of such brain action, which means the activity of different parts of the brain, marks a child as intelligent. This explains why a person may be master of what is merely mechanical and yet not be intelligent. This bears directly upon the much discussed theories of concentration, co-ordination and correlation.

This co-ordination, or correlation, is not an outward event. The organization of the brain grows to the mode in which it is used, and the term henceforth expresses the way in which the brain must aet again, under similar conditions.

The child's tastes, his sense of beauty, his love of truth, his hatred of wrong, his habits of industry, his intelligent skill in any occupation, all these become a part of him, and by that we mean that they depend for their expression upon the regular action of physical forces.

If this is true, there is an economy possible in methods of education, that calls for the most careful consideration. The kindergarten, manual training and physical training, are the first fruits of the views that I have voiced above. I hope I shall not be misunderstood, here,— I do not say that there is not something more than these material conditions, I only affirm that these well established physical phenomena are indispensable.

I should be glad to go a step further and refer to the effect of proper nutrition of exercise upon the strength of the intellectual or brain action, upon its tone, upon disposition, upon the emotions and the imagination. The healthful and vigorous action of all that is best in a child does not imply that he is to be unhappy. The school, like the home, is best ordered when there is joy in all its activity and hard work. Work becomes delightful and healthful to all of us when our emotions are rightly affected. Nothing obstructs the supply of blood to the brain and hinders digestion more than an interruption of the healthful emotions.

Nervous prostration or break down is physically explained as a clogging of the system, and the consequent accumulation of waste material in the tissues of every part of the body. An abounding physical life is a priceless possession. The body has sometimes been held in contempt. The greatest discovery of this great age is that which emphasizes the fact that physical and moral education are often synonymous terms.

The kindergarten recognizes this, and proper boddy conditions are here considered of the first consequence.

By some singular process of reasoning, we see fond parents look upon the wan face of an older child and call him spiritual when he is sick. His lack of vital force and natural energy, his languor and feebleness, are sometimes secretly admired. Our schools everywhere contain many such children, and the colleges contribute their annual quota of lives blighted through lack of our information and a proper theory upon this vital subject.

It may, indeed, be said that in spite of disease a certain screnity of temper may be attained, and that an invalid may shed blessings on mankind. But such physical deficiencies should be defined as a handicap, and physical abundance should be rated at its full value.

How shall I summarize and harmonize this double review of forces that I have attempted. On the one hand, are the home, the school, the church, the press, the daily companion; on the other are the inherent emotions, swelling like a flood, the unsatisfied curiosity and master passions and the tremendous energy of childhood. The child is ever in motion; these forces are all at work from infancy, and we must anticipate the next phase if we would meet the conditions upon which his development depends.

Parents, teachers and preachers need most a theory based upon clear information.

The training of the home, the school, the church, the development and regularity of the delicate mechanism of the body, all imply a vast amount of drill or repetition in what is essential. The order and progress of the community depend upon the certainty and regularity of the habits of its individuals. The great industries of our cities, the arts and accomplishments of society, the items of information that redeem us from ignorance and mark us as intelligent, the deeds of kindness that distinguish us as Christians, these are all arts learned by practice and wrought into the very fibres of our bodies. We have no choice, our willing feet carry us to duty almost without effort, and the great tasks of life are made a delight, and by practice it becomes easy and natural to do right.

Still further, it has been shown that we are creatures of imitation. We place a child in the presence of what we desire him

to absorb. He will take color from his environment. In body and mind he will be like his fellows. The injurious increment to his character will come in the same way, and as surely make a lodgement. This doctrine is both old and new, and may be engrossed into our educational creed, and proclaimed from the housetops.

Third, all acquisitions are useful somewhat in proportion as they are put into proper working relations. A child's enquiries and capacities are as extended as the elements of human knowledge.

A parent does his best to open the eyes of his children, to answer his questions, to impart to him the most possible of his own information. The teacher has a similar responsibility. The themes studied should be but centres of inquiry. All knowledge is valuable as it is fortified and illuminated by kindred information.

The smallest being in the universe, and the most tiresome, is the man of one idea. A thoroughly developed brain, a large, full life keeps right on working. The whole world supplies it with food. The owner thereof has no choice. He must light others; he must live in the light himself. Certainly we must rise out of the range of any limited curriculum, if we would lead children abroad and give them power to think and act for themselves.

We may still further seek unity in our theme by referring again to our model citizen.

His life is marked by many graces and accomplishments, by great ability, strength of character and largeness of heart, and by an insight that appears phenomenal.

But each new generation must provide for the more complete training of its citizens. Our men of years are said to belong to the old school, and this term always suggests changes in society.

Men of science, literary men, clergymen, teachers and business men have rapidly drifted apart, during the last generation, because of a great increase in many forms of knowledge, and because of changes in the established order of things. They cannot get acquainted with one another; they sometimes distrust one another. The coming leaders of the next generation should receive a training that will supply such deficiencies, and insure needed sympathy. Our educational systems must be as broad as our civilization.

If we desire a more perfect type of a man, we know where to find it. Before the final educational creed is pronounced, we shall ask what kind of training will produce such wisdom, gentleness and power as mark the life of this man

Christ was a teacher and the author of the world's great text book. He knew the strength and limitations of mind and body, and his spirit and methods are affecting, most powerfully, every form of learning.

We may confidently believe that he who is the source of all knowledge will finally harmonize our apparently varying theories through our better understanding of his revealed truth.

INEFFICIENCY.

SOLOMON SCHINDLER. CAMBRIDGE, MASS.

Professor Felix Adler of the Society for Ethical Culture came, lately, from New York to Boston to address the Norfolk County Teachers' Association, at their meeting in Union Hall. The Professor is a clear reasoner, an experienced pedagogue and a profound scholar, uniting with his rare accomplishments the gift of eloquence; every sentence that fell, therefore, from the lips of the eminent speaker, in his lecture on "Education and Character," became worthy of earnest consideration, especially, as the orator hurled the grave accusation of inefficiency and incompetency into the face of the present state of civilization, and intimated (even if his insinuation was an indirect one) that tenchers, as a class, are not paying sufficient attention to "fitting the man for the position which he is to occupy."

Would it be irreverential to pause for a moment and to examine, whether and in how far his preamble coincides with facts; and whether and in how far his proposed remedy of the evil can be applied with hope of success?

Professor Adler is reported to have uttered at the meeting the following two ponderous phrases, which, even when elucidated and elaborated by the context of his memorable oration, are admissions on the one hand, and insinuations on the other, which must start a long train of thoughts in the minds of all, who, like

the learned Professor, take a lively interest in all that tends to improve social conditions. He said literally:

PHRASE L

"The one thing that strikes me, is the enormous amount of inompetency in this world. Among merchants, 90 per cent fail, and among the professions it is the same. Inefficiency is the one reat damning fact that stares us in the face everywhere."

PHRASE II.

"You may say this is due to a lack of brain power. It is not only this fact but another, that not sufficient attention has been paid to fitting the man for the position he is to occupy. The end and aim of education must be to educate every child to perform the functions for which nature (italics mine) intended him. The mission of teachers is to train children for their proper vocations in life."

A man usually sees the world, and conditions in it, with his own eyes - it is his privilege to use his own optics - but does that prove the world to be in fact as he sees it? Professor Adler may have met numbers of bankrupt business men, lawyers without clients, physicians without patients, preachers without congregations, writers without readers, painters or sculptors without customers, but is he not culpable of exaggeration when he swells the number of the unsuccessful to 90 per cent, and, what is much more, has he been guided by the spirit of fairness and justice for which he is otherwise renowned, when he traces their failures to inefficiency and incompetency? Granted that efficiency is one factor — and an important one at that — to success, is it the sole factor? Do not a multitude of conditions combine to produce either success or failure? Is it not, therefore, as preposterous to declare that 90 per cent in all professions and trades are total failures as it is to accuse them all of incompetency to fill the positions which they hold? If, indeed, the result of man's efforts during his long career on earth were 90 per cent of inefficient and incompetent persons, the pessimism of a Schoppenhauer would receive its fullest justification, and the question would rise with irrepressible force, how long before the remaining 10 per cent will be swallowed by the insutiable whirl-pool of growing incompetency?

The Professor has, evidently, been misled, like many other individualists, to ascribe to incompetency certain social conditions that are mystifying, at present, the minds of even the ablest thinkers. We behold, indeed, with wonderment how, in the business world, the small shop-keepers are driven out of employment and supplanted by the mammoth stores; how they are turned into clerks at low salary; how, in the industrial world, labor has become so sub-divided that the former artisan is changed now into a mere feeder of some machine; in a word, how opportunities for individual success have been reduced to a minium. As a matter of fact, not 90 per cent have been thus driven to the wall, losing their independence, but 999 out of a thousand. One large firm now occupies the place upon which formerly a great many small ones were flourishing. Driven out of one vocation, people have in vain crowded into others, and their ill success in any new venture is not so much the consequence of their personal incompetency, as that of an overstocked labor-market. mands have been raised at the same time so that even competent and efficient doctors, lawyers, elergymen, literateurs, etc., are driven by necessity into the ranks of the 90 per cent of unsuccessful competitors.

Be it admitted, however, for sake of argument, that, as the Professor forcibly expresses it, "inefficiency is the one, great, damning fact that stares us in the face everywhere," is it equally true that this inefficiency is, as he says, partly due to a lack of "brain power," partly to the fact that "not sufficient attention has been paid to fitting a man for the position which he is to occupy," i. e., the position for which his nature qualified him:

Can it be true that, indeed, only 10 per cent of all the people have sufficient brain power to become competent in any of the various walks of life, and that 90 per cent — horribile dietu — are lacking it? If it were true, suicide should not alone be defended, but recommended.

Moreover, will, in such a case, the brain power of the favored few be strong enough to discover a method by which to create the brain power needed for the supply of the 90 per cent of people whom nature seems to have arbitrarily neglected? If it were true that 90 per cent were lacking the requisite brain power to make them competent workers, would it not be by far better to give up the vain struggle against such odds at once? (Gegen

die Dummheit Kaempfen ja selbst Goetter vergebens.) Can any amount of teaching make up for brain power that is lacking?

The professor surely did not mean to say that 90 per cent of our fellow men are idiots; it is more plausible that he meant to say that of the 90 per cent of incompetent persons a few may lack brain power while the majority have grown inefficient because "their teachers had neglected to fit them for the kind of work for which nature had destined them."

Here we touch the meat of the nut (des Pudel's Kern). The Professor—addressing an assembly of teachers—desired to show them: first, their shortcomings, and, second, the way how to do better in the future.

Now, is it right to hold the teacher responsible for conditions over which he has no control? Is it possible for any school or any teacher therein, under the present state of society, to "fit the child for the position in life for which he is qualified by nature?" Leave alone that the teacher, in our present state of social order, is hired to teach a certain branch of science to an over-crowded class composed of all sorts and conditions of pupils, will his advice be heeded by the parents of the child, who, unquestionably, will insist upon having a voice in the matter? Let us see.

Little Johnny Upstart is a strapping youngster; his muscles are hard, his limbs large and bony; he promises to grow up a tall and robust man. He is good-natured, but his grey eyes are rather dull, and his forehead rather narrow. Johnny delights in physical exercises, but his tender mother is ever afraid that he might fall and hurt himself or catch a cold. He envies children that are allowed to play in the sand, but he would not think of joining them for fear to soil his velvet jacket. To possess a knife would be ultimate happiness to him, but mother does not permit him to touch any sharp instrument, such as a knife, not even a pair of scissors. He has learned with difficulty how to read and write; the multiplication table is yet a puzzle to him and books must have plenty of gay colored pictures to interest him. Nature has evidently destined this child to be a horny-handed laborer, a long-shore-man, or a wood-chopper, while his wealthy parents feel confident that their own, dear, little Johnny is destined to shine one day, a bright light, in society. His father can well afford to give him a college education and, talent or no talent, Johnny is persistently told that he is to become a lawyer, or a doctor, or what not. "What are you going to be, my little man?" the parasitical friends of his parents will ask him, patronizingly patting him on the head. He would like to say, a coach-driver, or a carpenter, but he is too well-bred to forget himself so far: "I'll be a lawyer, sir," is his polite reply, upon which he is told, and hence learns to believe it, that he is a smart boy, the brightest boy that he,—this particular parasite—has ever met.

Now, let the teacher, endeavoring to pay sufficient attention "to fitting Johnny for the position for which nature intended him" tell his fond parents that the vocation which their beloved scion would efficiently fill in the world would be that of a rail-splitter; that hence they should develop his muscles, teach him how to handle tools, etc;—Let him speak thus to Mr. and Mrs. Upstart, and then let him report their answer to Professor Adler, provided the indignant parents will condescend to give an answer. The parents' verdict, mildly expressed, will be: That teacher is a crank.

Jimmy Starveling is the son of a poor widow; the oldest of her five children. His limbs are small, his constitution deliente, though he otherwise enjoys good health. Curls cluster around his arched forehead, and intelligence sparkles through his lustrous eyes. He is quick in observation and his memory is reliable. He learns his lessons with ease; he relishes books, and never rests until he has found the solution of a given problem.

The teacher, desirous to "fit the boy to the position for which nature has qualified him," tells his mother that James ought to study, go to college and enter on some professional career. "I know it," says the mother, with tears in her eyes, "Jim is a smart boy, but I must soon take him from school; he is the oldest of my five children; he must help me to support them. Neighbor Blank, the carpenter, has promised to take him as an apprentice and to pay him two dollars a week to begin with; that will pay my rent."

Jim is made a carpenter. Once in a hundred cases it will happen that a talented boy does find his proper sphere in spite of adverse circumstances that beset his way; such cases are then trumped up as if they were the rule and not the exceptions. Jim unfortunately, belongs to the 99 who make up the rule. He would have made an efficient lawyer or a competent physician;

as a carpenter he is, and ever will be, a failure. Of course, it was the teacher's fault, he has "neglected to fit the man, etc."

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If incompetency does exist to a lesser or larger degree, its causes are not the wilful negligence of the schools or the teachers employed therein to "fit the man for the position which he is to occupy;" the true cause of the fact, that "square plugs are driven into round holes" is to be sought for in the present economic condition of society. As long as one employment will bring better income than another; as long as, on account of the larger income, one kind of work will be looked upon as more honorable than another; so long will the temptation lie near to suppress natural talents and to force ones self into positions that pay well and are honored besides. Both the rich and the poor will join in the scrambles for such positions, never minding their inborn talents, with the difference that the opportunities will ever be with the wealthy and exceptionally only once in a great while with one out of the poorer classes. Freedom in the choice of occupation, which will be directed by the peculiar talents with which nature endows a person, will not become a reality until " Economic Equality" will have become an established fact. At that time, however, schools will be by far different institutions than they are now, and teachers will find no difficulty to "fit the man for the position in life for which nature has qualified Negligence on their part will be out of the question.

Beholding inefficiency and incompetency, the necessary and natural results of the present social order that is based upon competitive warfare, the learned professor should have raised his voice in a plea for the establishment of "Economic Equality," instead of censuring the teachers for the existence of conditions over which they have no control.

THE CRITIC AT SEA.

A review of "The Public School System of the United States," BY THE AUTHOR OF "PRESTON PAPERS," NEW YORK CITY

1.1

BALTIMORE

"In the pictures of the Victoria Cross there is one of a young dandy officer with an eyeglass in his eye and a sword in his hand, among the thick of the foe. He knows he is in that place to kill some one. "And he is taking his time and looking through his eye-glass to try to find some enticing man through whom to run his sword."—Dowling, Innovant Essays.

Perhaps we have all heard the story of the man who was wrestling with the bear, and who prayed, "Lord, if you can't help me, don't help the bear, but stand one side, and you'll see the all-firedest bear fight you ever did see;" and of the chief who once prayed before going into battle; "Be on our side! An' gin ye canna be on our side, aye lay low a bit, and ye'll see that carles get a hidin' that must please ye."

The teachers of our public schools have taken their "hiding," although I am not positive that the castigation was either preceded or punctuated by prayer!

Baltimore seems to have been the second enticing victim through which the expert ran his educational sword: but there must have been some legerdemain about it, for the sword came out bloodless and the victims all live, and are apparently unconscious of the stupendous feat accomplished by this educational prestidigitateur.

On page 55 we read, "As in New York, so in Baltimore we find a school system that represents mechanical education almost in its purity." That stab at New York is so fierce that the Manhattan teachers may be pardoned if they shake as though in an ague fit; but the Baltimore teachers ought to congratulate themselves on that "almost in its purity" as a saving clause from the surrounding statements.

"Indeed, all things considered, the schools of Baltimore compare unfavorably even with those of New York." (*Idem.*) Let the New York teachers take heart of grace, for behold there are

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VI.

BALTIMORE.

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those whose depth of degradation is "even" lower than theirs, as seen through the eyeglass of this school-system perambulator!

"A characteristic feature of the schools of Baltimore lies in the fact that in the lower primary grades an amount of time entirely beyond the needs of the case is devoted to the study of arithmetic." (Idem.)

Here's charming naivete that is refreshing! To be sure we wonder how the casual visitor (of a few hours at the longest) could have determined with mathematical exactness just the amount of arithmetic that is necessary; but the definite article before the noun case relieves that part of the statement from all ambiguity, and we do not need to inquire into the antecedents (nor pedigree?) of case, as "the case" must be easily understood even by the most undeveloped mind!

A description of a lesson follows this brilliant denunciation of the time that is "devoted" to the supercrogatory study of this wholesome branch of mathematics—but I spare the readers of EDUCATION the infliction of the painful attempts at pleasantry and the mechanical description of "discoveries" (he made two on page 57) and give you the benefit of his star observations on reading.

On page 58 he says "There was a ludicrously mechanical introduction, including the calling off of the words placed at the top of the page thus" — giving the page and lesson numbers, the lesson subject and, doubtless, the new words which are often placed at the beginning of the lessons in primary readers, of which process he makes about the same weak criticism which characterized his remarks concerning arithmetic — though what "ludicrously mechanical" means, under the search light of psychology, I have not yet learned, nor shall I burn the midnight oil to discover!

"Besides reading and arithmetic there is in this grade (second school year) oral spelling, a subject which is by no means neglected. This exercise is earried on both individually and in concert. The children also have instruction in penmanship. The remainder of the time is occupied as follows: Drawing twenty minutes twice a week, an object lesson of thirty minutes once a week, and music fifteen minutes daily." (Idem.)

To the work-a-day mind of an ex-teacher, that has a fairly substantial look for a fundamental block on which a practical school

education might be reared without great difficulty; but if the caustic critic will get right down to bed-rock work of his own, and demonstrate any real improvements upon it, we shall all be delighted to accept the amendments. We are open to conviction and challenge him to lead off with six months' work on a program cut (and dried?) by himself after he has tested its practical work on a class of "average" children.

I can remember when neither penmanship, drawing, nor music was put into the second year of school work — but I'm a relic of antiquity, and it may have been common for a century!

"Now as to the various modifications of the above methods in the various schools, I found but few." (Idem.) Will he please state exactly how many and what schools he "visited" in Baltimore, and the exact length of time devoted to finding "modifications"? In some unaccountable way, for some unaccountable reason, there is a feeling—somewhat hazy perhaps—of reluctance to believe that there was anything more than a "still hunt" for these obstreperous "modifications," which seem to have successfully cluded his "grasp" (no disrespect to his mental capacity is intended by use of the word grasp). On affidavit to the effect that he advertised for "modifications" or that he pursued them with some of his "scientific pedagogy" would allay the suspicion that he did n't really hunt heartily nor devotedly!

"In arithmetic this was mainly confined to the skill with which the children at the board wielded the baton while pointing to the figures and beating time." (Idem.)

I shall not linger over this parting caress except to quarrel with the "scientific pedagogy" which does not furnish better English and less dubious grammatical (or ungrammatical) construction for an educational reformer's use. The sentence last quoted is verbatim and entire, as was the preceding — which it joins without "modifications"—and I do not hesitate to assert that the ordinary child in the schools so roundly scored by this expert could not only point out the defective construction but could easily discount it at his own Bank of English.

Closely following this, the next sentence steams with vigorous effort of expression: "In some cases this was extremely complicated and still more ludicrous."

On general principles I object to the use of the word *Indicrous* twice on the same page (*supra*) and only twenty-two lines apart! See "various" also, above. The word can't stand such close proximity without suffering and causing pain. Will not the psychological disciples of "scientific pedagogy" please provide this pedant with an automatic box of words which will relieve the congested situation of "ludicrous" and "various" in this place, and of other words in other places?

"In one class I found that the children did use inflections while reading. They religiously raised their voices two tones at commas and dropped them four tones at periods." (Idem.) Religiously raised their voices must indicate another "mix." I cannot account for it in any other way. It was probably a dream of the distinguished pedagogue, wherein the sacred rites of a church (in which the wafer is elevated) were by some hocuspocus of his grey matter confused with primary class work until he actually thought they "religiously raised their voices"; but he should have expurgated the text before allowing it to go before the public a stray lampoon on modern teaching, as it leaves him open to the suspicion that he's not over well or strong! As a rule when American children raise their voices it is not a religious act, but quite the reverse!!

On page 60, the doctor found a class studying physiology, hearing a ten-year-old boy "cry out at the top of his voice and at the rate of a hundred miles an hour" in answer to the question "What is the effect of alcohol on the system?"—"It dwarfs the body, mind and soul, weakens the heart, and enfeebles the memory."

I do not in the least question the rate of the boy's voice—having no doubt that the doctor tested it, watch in hand, by some new principle of "scientific pedagogy"—but I do exclaim at the position of the boy with regard to the voice, and should have thought that the same instinct of humanity which started the "scientific pedagogue" on his tour would have impelled him to call the boy down from his perilous position and place him in safety below his voice!

Another boy called off "in rapid succession, more diseases than are known to most physicians" in answer to the question: "What are the effects of tobacco?" Are Baltimore boys experts in scientific nomenclature, or do the "physicians of the critic's

acquaintance" have but a limited number of "diseases" on the list which they (claim to) "know"? He must not judge his contemporaries entirely by himself, in the matter of "knowing" diseases, for they have not all slept while he has been threading cities on his traveler's string!

When the question "What brings on these diseases, excessive or moderate smoking?" was asked, the native humor of the prompt reply "Moderate smoking," (Idem.) failed to catch the attention of the critic, though I should have thought he would glory in this "modification" of "purely mechanical" thought and teaching.

Of course he "did not succeed in discovering any evidence that the science of education had as yet found its way into the public schools of Baltimore" (page 61); but somewhere I have heard, or read, or dreamed, that men still exist who carry guns thro' turnip fields all day expressly to save partridge's lives, and on the same principle he may have failed to make certain "discoveries" in the cities visited.

Page 61 is further embellished by the men of straw which he has set up only to have the pleasure of knocking them down in such phrases as: "Is the fundamental law of pedagogy not absolutely ignored when all interest is crushed out of the process of learning?" etc.

On the next page he "discovers" the causes of this "deplorable condition of affairs," naming as such (in truly "scientific, pedagogical" style),—"The citizens of Baltimore glory in the fact that their schools are among the best in the country, or, as the more modest claim, second to none but those of Boston." (I will tarry in passing, long enough to say that they might be "second to those of Boston" and yet be very good—from my point of view, as a whole!) "The Board of Education is a purely political organization." (I'm glad to find politics tinctured with "purity," however faintly!) "The supervision is by far too meager." "The schools of Baltimore are almost entirely in the hands of untrained teachers."

On page 63 he incidentally gives the key to permanent "appointment" as follows: "The teacher is at first appointed on probation, the probational period being ninety days. Should her services during this time prove satisfactory, she receives a permanent license, which entitles her to teach ten years."

To the casual observer that seems like a fairly wise plan, — a sort of educational civil service, of which there ought to be no very general complaint. The teacher has three months in which to demonstrate her aptitude for the work, her fitness for and delight in it, or the reverse; if she cannot do so in this length of time, even by reason of untoward outside circumstances, she should be willing to give up in that particular city and "move on" if she still believes her calling to lie within the school room; for it is true that sometimes, in the beginning year, a new teacher will fail to command success in one place and yet in another school do the very best work.

On the other hand, the "ninety days" ought to satisfy the supervisor that she is or is not qualified for and entitled to the "permanent license" and be governed in his verdict by what he sees and hears demonstrated.

The wail of complaint which further clouds the summy critic's "observations" is couched in the following doleful language on the same page:

"But, unfortunately, the supervisory staff is so small that each school can be visited but seldom by its members, and the ninety days' probation may elapse before either one of them gets a single chance to see the teacher at work in her class room."

This dismal foreboding is like unto that of the old maid who burst into tears over the possibility of an accident to a possible child of the future! "The ninety days may clapse"! Well, cheer up, Dr.! They may not clapse; but if they do clapse, young America is not dead, and is a vigorous kicker; and as, according to your own history of things in New York, parents spend more or less time (more, according to your version,) in complaining (page 47) it is to be hoped that the "may clapse" will not cause the probability of fairly good work to go into eclipse.

Besides, you know you thought—or said—(p. 46)" it were better for all concerned if there were no supervision at all," and now you weep over a possibility of "no supervision" of a probational candidate! Verily, thou art somewhat difficult to appease! Dyspepsia?

Dr., let me whisper something in your willing ear. (Which one is it?) Supervisors do not always set up as mind readers; but I have seen a few who were tolerable logicians, and who could rea-

son from "effect" backward to "cause" even in school matters; and who, in the occult way which only the "initiated" can understand—therefore I spare its rehearsal for your benefit—they can know something of a teacher's work without once entering the shop when she's "at home" in it!

So be comforted and let your fears be calmed, as the probabilities are that the Baltimore novitiate will get her just desert. At all events, whatever may be the wisdom of crying for "spilt milk" in wholesale lots, it is hardly worth while to weep over the prospect of a bare possibility of a drop or two forgetting the laws of gravity and climbing up to the edge of the bucket!

On page 64 he says: "The discharge of teachers for negligence or incompetency is an almost unheard-of affair." Hello, here's cheer, although it may be unconscious cheer! We have a right to infer that negligent or incompetent teachers are almost "unheard of" in Baltimore, and we at once extend our hearty congratulations to the City of Monuments, its Board of Education, its supervisory staff, its principals, teachers, patrons and pupils, in token of admiration at the degree of excellence attained by the teaching force! To be sure we are not accustomed to the rhetoric which sanctions the use of "affair" as synonymous with "discharge," but we can forgive the uncouth language in view of the general rejoicing.

"There was one teacher who remained at home every time it rained, and yet she was not removed." (Idem.) This seems a trifle ambiguous, yet we do not despair of elucidating the point. If she "remained" at home, she must have been at home "every time it rained" If she was at home "every time it rained" it must have rained before it was time for her to leave home. If it rained periodically and with such regularity, why, maybe—just maybe; I don't state it as a fact, only as a presumption—she kept her school wound up so that it didn't need its automatic, mechanical-drudgery teacher when it rained; or possibly this was one of the "exceptional instances that trained teachers are added to the corps." (P. 55.)

Of one thing we are sure, something was "trained;" but whether the rain was trained, or the school was trained, or the teacher was trained, we can only surmise.

But the "yet she was not removed" is quite as uncertain. If she were at home "when it rained" why should she be removed?

Where to? On what authority? Qui bono? If she were at school, and was responsible for the rain descending and the floods calling at untimely hours, why then surely removal would be justifiable—at least out of the rain!

Seriously, although I do not know the circumstances, I can imagine a woman whose good work warranted the School Board in retaining her services, even when the delicacy of her health may have forbidden her presence in the school room on rainy days. Whether this had always been the condition, or whether health had given way under the numerous and arduous duties of a teacher, the fact is equally ground of praise for her who could by faithful service command this immunity and for the Board that granted it. No higher tribute is needed of noble work on the one side, and of thorough appreciation on the other. Out upon the one who would make it cause for removal!

Modesty does not forbid the eminent (?) critic (?) from planning for Baltimore as he already has for New York (Idem;) and he frankly encourages the adoption of his suggestions in the following words, after referring to his New York plans: "Under a management of some such nature the schools of Baltimore would undoubtedly, within a very few years, present an entirely different aspect." So Baltimore is not without hope, for this educational pilot stands ready to steer her schools (or any other?) into the port of success. Will not some one give him a chance? Surely such talent ought not to "blush unseen" if at all, nor "waste its sweetness on the desert air," as it seems to be doing.

"Until a material change is effected, those attending the schools of that city will be doomed to a miserable childhood." (Idem.) There's no escape! The "doom" is announced and Baltimore childhood foreordained to a "miserable" existence. Well, it may be better to pass a miserable childhood and not know it, than to have a happy childhood and deem it miserable. If there is consolation for the Baltimore children, I wish it might be passed around to them, as I fancy their tears have not ceased to flow since hearing to what they are "doomed." Lesser contributions of comfort will be gratefully received, and large ones in due proportion!

WHAT IS THE OBJECT OF READING IN SCHOOL? REV. WM. M. THAYER, FRANKLIN, MASS.

Our answer to this question is—to make good readers. Without the least reserve we put this reply against any answer the "new education" offers. Good reading and correct spelling are as fundamental to-day as they ever were. A poor reader and speller is as much out of place in good society now, as he was a generation ago. We think he has far less excuse for incompetency on this line. For, by all the laws of progress, a child should be the second edition of his parents, revised and improved.

An advocate of the "new education," who is a college professor of chemistry, said to the writer, when this subject was under discussion, "Why should a scholar read well?" If he had discharged a six-shooter, we should not have been more startled. If he had asked "Why should a scholar become a true man or woman?" we should not have been more surprised. In our astonishment we answered bewilderingly, "to be decent." Thinking the matter over, afterwards, we concluded that we answered better than we knew. Certainly the answer was an improvement on the question. No scholar will ever see the time when good reading and spelling will come amiss. Nor will he ever reach a period when poor reading and spelling will serve him well. The former will make him appear decent, the latter very indecent.

In many schools (we will not say all), the teachers, following the instruction of school committees, discourse upon the "best literature" instead of the best reading. Pupils understand that they are expected to become familiar with good literature rather than to become good readers. The latter object is lost sight of in the craze over the works of the best authors. So that, on the whole, pupils are not drilled to become good readers at all. To know whom the masters of the pen are, and to commit and recite gems from their elegant productions, is the purpose of the exercise. Whatever good may be derived from this acquaintance with the master-pieces of prose and poetry, we do not hesitate to say, that good reading will prove vastly more advantageous to the average learner in the practical duties of life.

But one says that "reading books must be compiled from different authors, that scholars may have a variety of styles before them." A very unphilosophical thing for pupils, as a whole!

- 1. Not one scholar in twenty has any literary style, nor cares for any. The average pupil has no literary taste and never will have. With all the drilling and lecturing possible, he will be profited only by that which he can use in his common-place life. To understand his trade well, and be able to read a description of it well, will be worth more to him than to understand and read the finest poem well. He has not time or talent for both. His school-life is too short and his talents too few for only the absolutely necessary acquisitions.
- 2. The young mind is confused by a variety of styles. The teacher of penmanship gives his pupils only one style; a variety would hinder progress. The painter confines himself to one example. Raphael studied Michael Angelo at Florence, and from that time rose to fame. Benjamin Franklin, at sixteen, studied Addison for his style; but no other writer. And this has been true of the great artists and authors of the past. The idea that beginners should have a variety of styles in anything, was not entertained. It belongs to the new education of our day.
- 3. When pupils have passed through the preparatory schools, and have made some progress in the higher education, a study of different styles may improve their own. A few of them have a style that was born with them, while others have one that was partly acquired. Both classes may derive benefit from the study of different authors under competent instructors. But an earlier attention to a variety of styles bewilders and unsettles the pupil.
- 4. But this concession applies to not more than twenty per cent of the pupils in our public schools; for no larger number than that ever pass from the preparatory to higher seats of learning. So that the unwisdom of talking about literary style for the masses of pupils in public schools becomes still more manifest. Indeed, not half of the twenty per cent passing on to higher education will ever make any practical use of literary style. The eighty per cent who lag behind better employ their limited time in distinguishing themselves in common branches and character.
- 5. Here and there a prodigy is found like young Everett or Longfellow, who masters anything a school curriculum may

include; we do not speak for them. Sensible rules are not made for prodigies; prodigies are exceptions to rules.

6. For these reasons we repudiate the idea of pupils in our public schools studying style. Thought is greater than style, any time and any where; and, without it, no style is fresh and The rank and file of writers in colleges never studied style; they had a style of their own. Matthews says, "a good style can never be acquired by copying the manner of another. The only effect of such copying is to annihilate individuality by substituting process for inspiration, mannerism for sincerity, and calculation for spontaneity." And this condition of things is aggravated by the fact that no committees or teachers can tell whose the best style is. One considers Addison the model; another, Shakespeare; another, Cobbett; another, Macualey; others, Irving and Longfellow; and so on to the end. Mrs. Stowe says. "A faultless style sends you to sleep; defects arouse and excite the sensibility to seek excellencies. Some of Shakespeare's finest passages explode all grammar like sky-rockets; the thought blows the language to shivers." Robert Waters, author of "Shakespeare as Portrayed by Himself," says to writers, young and old, "Express your own thoughts, feelings and experiences in your own way, and never imitate any man's style or manner, nor attempt to appear anything but what you are."

Many schools have eliminated reading from their curriculum, strange as it may seem. By so doing they repeat the question of the college professor, "Why should a pupil become a good reader?" implying that no reason exists why he should. A professor of elocution in Boston was teaching in a New England college, a few years since, where he was waited upon by the Superintendent of schools in the city where the college was located. He inquired of the professor if he could not be of great service to the teachers of the city by lecturing to them. The professor answered that he could. The subject was canvassed further, when the professor said, "first of all, it will be necessary for me to visit your schools, and hear at least some of your classes in reading." The Superintendent replied, "we have no classes in reading. At times, selections of choice literature are read by some scholars, that is all."

The professor was struck dumb with surprise at first. The folly of dispensing with reading seemed almost criminal to him,

and he responded, "Then I can do them no good. It would be foolish for me to waste my time in teaching what they will never use, and still more foolish for them to spend their money for the same useless acquisition." The fact needs no comment.

Mrs. Mary A. Livermore severely criticised the modern depreciation of reading as an exercise, by saying to a gentleman who inquired, "Mrs. Livermore, where did you study elecution?" "In the old Hancock School, Boston, sixty years ago, where Richard Parker drilled his scholars in reading until they could give the meaning of the author clearly, with enunciation so distinct, expressive, and loud as to be heard in any part of the room." No part of her education in that school served her better than the drill in reading; and that has served her best of all, the last thirty-tive years. The fact deals a heavier blow upon the present method of detracting from the value of reading than any argument that can be framed.

"THE PHYSICAL CULTURE FAD."

BY MARA L. PRATT, MEDICAL DIRECTOR DURANT GYMNASIUM, BOSTON, MASS.

"Surprising that we must have systems of physical training in our public schools now-a-days. In times past nature was given credit for a little intelligence, and children raced and ran and played. That was enough."

Very true, but times have changed; perhaps not for the better—that, of course, is a matter of taste—but they have changed, and we must change with them.

Time was—and is now back in the country villages—when children did race and run and play, and had space and time for it all. Perhaps those children did not need physical training for health's sake; but I am not at all sure, judging from the heavy bearing, the awkwardness and the round shoulders of the average country child, that a little well directed physical training for beauty's sake would have been amiss.

But for city children, it is no question but that physical training is an absolute necessity, both for health's sake and for beauty's sake.

In the first place, children need this work as a substitute for the exercise that would—even as the school board member has said—be theirs naturally were they given half a chance.

But what chance is there, pray, for a city child? He walks to his school, to be sure, but the schoolhouse is only "just around the corner," comparatively speaking, in any town of size, and if the child's parents have the child's welfare at heart, he will be "let out" only in time to reach school on time—street acquaint-ances not being desirable for any child.

Reaching school, he is placed before a desk that may or may not be suited to his size, and there he spends five hours, at least, of his time each day, hunching up his shoulders, especially the left, or craning his head forward over book or slate, all of which combine to ruin chest and shoulders, spine and head as to their carriage. For bones at this time in life are quite as susceptible to influence as morals and manners.

Coming out from the school room at night, what is there for him then? A small back-yard, perhaps, or at best a dull brick sidewalk; and even there he must not romp nor shout too loud. Is it any wonder, then, that the city boy or girl, finding the play of imagination about the only play that he may enjoy freely, betakes himself or herself to the big chair in the window, where, at any hour after school, the passer-by may find the city children in their homes, busy with their books of stories.

And even if the health of these children does not break down from this unnatural child-life, they are surely making for themselves weak and deformed frames, which, as they grow to young manhood and young womanhood are sure to deprive them of their one birthright,—erect, fine bearing and noble carriage—and we have, then, children, both of city and country, the one from too little exercise, and the other, perhaps, from over exercise, developing one set of muscles at the expense of another, proving to us their need for physical training.

And it is because of this — not for the sake of a "fad," — that physical training has pressed its demands upon us. It is a need of our times, and instead of ignoring it, or sneering at it, let us rather thank fortune for the children's sake that we have it in our power, at last, to place within their reach a really scientifically arranged system of exercises, which shall not, as has been too

often the case under the old-time calisthenies, do more harm than good.

The "Day's Order" upon which modern scientific gymnastics are based, is itself based upon anatomical and physiological laws. In the continuous execution of the entire Day's Order, every muscle in the body has taken its part in the exercise, every blood vessel has been stretched, and the whole body has, in consequence, been refreshed and re-nourished in every part.

The Day's Order has been divided into ten parts, the movements of which follow each other in physiological sequence. It might well take a whole book to explain it fully; but even in this brief space we may perhaps be able to give some idea of the principles of action behind the system.

- 1. Introductory.
- 2. Arch Flexions.
- 3. Heaving Movements.
- 4. Balance.
- 5. Shoulder Blade.
- Abdominal.
- 7. Lateral Trunk.
- 8. Slow Leg.
- 9. Jumping and Vaulting.
- Respiratory.

These are the "ten points" of the Day's Order:

- I. Introductory: These first exercises may be any simple movements that shall serve to bring the wandering thoughts of the various pupils together, concentrated upon the work before them, in attention!
- II. Arch Flexions:—Uniformity of purpose secured, the pupils proceed to the first work in the Day's Order proper,—the Arch Flexions. Starting upon the supposition that the pupil's circulation has, from long sitting, become torpid, the Arch Flexions,—that is, the bending backward—may well come first in order, for by these the large blood vessels of the trunk are stretched, and so, consistent with the law of vacuums the vis à fronte being produced, the circulation in the large vessels is at once accelerated, and, in a few seconds, acceleration is effected even in the remotest and smallest blood vessels of the body.
- III. Heaving:— With this increased tendency of blood towards the chest come the upper chest or heaving movements. These, properly, are done upon a bar from which the pupil hangs, though

in school work various free exercises in which the chest is fixed are substituted. By these upper chest exercises the thoracic space is increased, and this, of course, means increased respiratory capacity, which, in turn, means, always, improved health, since to breathe rightly is half the battle.

- IV. Balance: But we must not continue these upper chest exercises too long, lest congestion be produced, and so, in order to equalize the circulation, we follow at once with Balance movements heel raising, for example by which the blood is drawn to the lower extremities, and the chest thus relieved.
- V. Shoulder Blade:—The circulation being thus equalized, we may go back again to the chest region; but this time let the objective point be the shoulder blades. Too much attention could hardly be directed towards this part of the trunk, especially among school children and students of all ages, who sit so much bent over their work, thus hollowing the chest and protruding the shoulder blades.
- VI. Abdominal:—The chest having, by these upper chest and shoulder blade exercises, become strong and firm in its position, let the abdominal movements be added,—that is, exercises in which the muscles that form the abdominal wall shall be exercised. Since exercise means increased strength to contract, the abdominal walls will become flattened, and the consequent pressure upon the intestines sets up an increased activity, constipation is cured, and the whole process of digestion and nutrition improved.
- VII. Lateral Trunk: In the abdominal exercises, the circulation was accelerated in the mesenteric veins, which, converging, empty their contents into the great vein of the trunk which passes up through the thorax to the heart. Following this rush onward through the mesenteric to the Vena Cava, as the large vessel is called, come the side bending exercises by which the Vena Cava is stretched, a vacuum made by which of course the mesenterics are assisted to pour their contents into the Vena Cava, all possible engorgment is thus prevented and the accelerated circulation equalized. There are many other physiological effects of the Lateral Trunk movements, but we give this one especially to show how perfectly physiological is the sequence of these points in the Day's Order.
- VIII. Slow Leg:— The Slow Leg movements are of the same nature physiologically as the Balance, and are given just here, following the Shoulder Blade, Abdominal and Lateral Trunk, for the same reasons.

IX. Jumping and Vaulting: — During these exercises the body has been gradually rising to its highest point of possibility for work. The jumping and vaulting demand of a pupil all the power for action he can command, all the nervous force, all his mental power of concentrating, estimating and summoning for quick action; hence their place here in the Day's Order.

X. Respiratory: — The muscles have now worked enough; the waste matter stored away in the muscles has been eliminated; sufficient tissue has been broken down, and now the body needs to rest. As preparation then for rest, let the pupil inhale deeply, thus storing away in the system oxygen for future use, removing such CO₂ as may be in the body generated during exercise, and also, as it may be, to overcome the breathlessness following the violent preceding exercises.

Thus endeth the Day's Order, and thus endeth our very brief condensed outline of the meaning of it. But, brief as it is, we trust it will show to those who have wondered, and wondered in vain, what this new basis for work in physical training is, for which its advocates urge their claims so hotly, and because of which they oppose so bitterly the old-time calisthenics which, it is quite true, often did more harm than good.

SHOULD POWER TO CREATE OR CAPACITY TO APPRECIATE BE THE AIM IN THE STUDY OF ENGLISH?

PAPER READ BEFORE THE MASSACHUSETTS ASSOCIATION OF CLASSICAL AND HIGH SCHOOL TEACHERS AT CAMBRIDGE, APRIL 6, 1894.

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The public library does not civilize the tramp who haunts the reading room—it merely keeps him warm; nor the school boy who copies his theme there—it nearly cripples one who should be made to walk alone. In some way there must be kept alive in our children that spark of heavenly fire called, not conscience, but creative power. English affords the opportunity as nothing else in our school curriculum does. It is not enough that pupils be brought into contact with the best and fairest thoughts of good men; that is no guarantee of good and fair thoughts for them. We do not get the best results from studying the work of others; we get the best results by trying to produce good work ourselves. The capacity to produce good work should be accepted as a fact,

and its production carried out and insisted upon. In this connection, I cannot forbear quoting a sentence of Hazlitt's, a writer who has a message for the latter part of the century as well as for the first. In the introduction to his Lectures on the Dramatic Literature of the age of Elizabeth, he says:-" The first impulse of genius is to create; the contemplation of that which is so created is sufficient to satisfy the demands of taste; and it is the habitual study and imitation of the original models that destroy the power and even the wish to do like. Taste limps after genius, and from copying the artificial models we lose sight of the living principle of nature. It is the effort we make and the impulse we acquire in overcoming the first obstacles, that projects us forward; it is the necessity for exertion that makes us conscious of our own strength; but this necessity and this impulse once removed, the tide of fancy and enthusiasm, which is at first a running stream, soon settles and crusts over into the standing pool of dullness and The living principle of nature! but is not this a crecriticism. ative rather than a receptive principle? Knowledge and books are excellent things, but they may be abused. Intellectual stimulus is more to be desired than intellectual satisfaction. The one leads to activity; the other to a merely acquiescent delight. And it seems to me that the mind is never so active along literary lines as when it is trying to produce something.

Further, creative rather than appreciative power should be the aim of the study of English, because the first of necessity involves the second, while the second by no means carries with it the first. The keenest art critic may be impotent with brush and chisel, but the most inferior artist finds pleasure in his art. One cannot know how to do a thing and fail to appreciate the excellence of the thing which is done, but the profoundest enjoyment of a piece of literary art is no guarantee of an ability or even of an ambition to reproduce it or anything like it. If creative power can either be aroused or generated, its content comprises the aesthetic faculty also.

And that, I fancy it will be said, is exactly the difficulty. Children cannot create; we cannot create. "I cannot, cannot write!" How often do we hear words like these, voiced in accents of despair, with a feminine insistence on the negative. All can learn to enjoy, but to do, and to do well is the privilege of only a Heaven favored few. "Poets are born, not made," as

though a hundred instances do not give this dictum the lie. Besides, even if all can do something after a fashion, the product is likely to be of little value. But granting this - though I never will admit that a genuine mental product can lack either dignity or worth - it proves nothing. The helpfulness to the individual lies in the exercise of the power, not in the result. Are we however quite sure that creative power is a peculiar and not a common heritage? Nothing is easier, or more natural than to confound the difficult with the impossible. Thought is the hardest thing in the world, yet all men can think if they choose to,- if they will. One's view of human nature is likely to determine his opinion on this branch of the theme. Of course, if you believe that you are merely a temporal and spatial projection of your progenitors, and therefore only a bundle of inherited tendencies, or that you are the product of your environment and a plaything in the hands of an impersonal destiny, that your will is of less consequence than your ancestors, you will probably think that a man's capacity for achievement is entirely dependent upon circumstances over which he has little or no control. But if you sincerely believe what we have, in theory at least, been taught to believe, in these latter days, that the divine efflatus is merely a very prosaic capacity for hard work; that one can court the Muses to better purpose at his desk than on Mt. Helicon; that he can work about as hard as he chooses to work; that under the spur of a relentless will the dullest faculties can be aroused to valuant service in any direction, then we shall cease to talk about the impossible in connection with our children. Wordsworth once remarked that he could have written tragedies as perfect as Shakespeare's if he had a mind to, and though Lamb did say that that was probably the one thing wanting, there was yet as much of elemental truth in the poet's assertion as in the surcusm of the While I am continually impressed with the mental and spiritual barrenness of school children, I am never impressed with any lack of potential energy. They have all the power they choose to have. The dullest boy, or the most intellectually infinitesimal girl can learn and can do, if they only will. not believe me: Listen to Emerson: "I do not believe that the differences of opinion and character in men are organic. * * I do not believe in the classes. Every man has a call of the power to do something unique." But it may be that Emerson

was a dreamer and impractical. Let Joubert speak who was sane and sound if ever man was: "Let us bear well in mind that education does not consist merely in adorning the memory and enlightening the understanding. Its main business should be to direct the will."

The will is the faculty which not only chooses the tasks for the other faculties, but which sets them at work — nay more, which compels them to perform the tasks assigned.

The present Professor of Mathematics in a leading American College abhorred the subject when an undergraduate. He resolved to master it because of his abhorence, and now his students reverence him for the mathematical radiance which he sheds. Still you may say: the child cannot create: he gives no token of significant creative power. But what, pray, has become of it all? It was surely at one time his. I have at home a little boy aged two, who, as generations of boys have done before him, prances gaily about upon a broomstick. Yet he is as truly mounted as if he were astride Bucephalus. What magic has transformed a stick into a steed? Merely the mighty creative power of the child's imagination. Yet in a dozen years or more, it may be, not a trace of this wondrous energy will be manifested. The other faculties will overpower it; or, what is more likely, it will be dwarfed by lack of proper training in the schools, or stifled in the spiritually stagnant atmosphere of scientific materialism.

I know that science continually assures us that it is full of poetry, and that it will yet glorify literature as it never has been glorified. But it has yet to do so. "I do n't think much of the Psalms," said a student to President Wayland, "anybody could write them." "Write some, sir," said President Wayland. An ounce of performance avails more than a ton of announcement. The creative imagination of the young finds but little encouragement in our day.

Years ago, a child held a sea shell to his ear, as he sat on his mother's lap, and said, "Mamma, what is that?" And the mother answered:— "The shell once lay upon the sea beach, where the waves rocked it gently to and fro, and it listened to their song and learned it well, and even now, away up here, it still murmurs with the ocean's melody."

The child smiled and put the shell to his ear again and yet again, and when weary with his other playthings he returned to

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it, once more to listen to the music of the loud resounding sea. Was what he thought and learned fantastical? I think not. But the more modern child, alive with the instinct for poetry and beauty, despite the unfavorable character of his intellectual atmosphere, puts the shell to his ear and is struck and awed by its faint vet mighty echo. He runs to his manima and says: "Mamma, what is that which I hear?" and the mother, with more knowledge than wisdom, replies, "My child, your blood coursing through your veins and arteries from your little heart, as a result of its systole and diastole, sets the shell in vibration, and its vibrations are in turn communicated to the auditory nerve by a membrane called the tympanum and three little bones - the hammer, anvil and stirrups - thence to the brain, where they are transmuted into consciousness." And the child drops the shell. wonder: he didn't suppose that he heard any such thing as that, and kicks a chair and bites his baby sister, and is as naughty as a child can be when he asks for bread and is given a stone.

How different the atmosphere of the Greek child, who heard in the thunder the voice of Zous, and saw in the red lightning the evidence of his dread omnipotence - positive and negative electricity can never fill the places of the gods - who looked for a nymph in every fountain and a dryad in each wooded glade. Small wonder that he developed a taste for perfection in form and expression which the genius of a Phidias or a Sophocles alone But with no manner of unfavorable surroundings could satisfy. or attendant circumstances, can you kill the faculties of the human soul. They may be deadened, they may be dwarfed, but they still contain the element of life, they can still be aroused to vital activity. Every child has creative capacity, simply because he has a will.

Such at least is the theory which is proclaimed from our pulpits, however little hold it may have on our habitual manner of thought, and which the most inspiring of our poets and philosophers have sanctioned and spiritually discerned. confirms its truth. Two years and more ago, the definite and systematic study of English by first year pupils was introduced into the Classical High School, at Worcester, by its present princi-After a little, the work developed itself substanpal, Dr. Wight. tially along three lines - a careful study of a portion of the works of two American authors; of the grammatical and rhetorical principles which are most frequently violated by users of English; and persistent work in English composition.

In some classes the pupils were, and still are, required to write a little every day. The results were surprising. Boys and girls, at the end of a year of such work, wrote better on the average than members of the same class who had never had regular and systematic drill in English. We have had some excellent original production, in which the thought was not only neatly and correctly expressed, but also strikingly and beautifully expressed. That is to say, in some cases we have succeeded in developing style, not in the general run, to be sure, but could the work be maintained throughout the course, I am confident that the majority of pupils could be brought to produce work of genuine literary merit.

This brings the question of method fairly into the field, and I have but a moment for it. So far as my own experience in teaching English is concerned, I am convinced that persistent work in composition is the key to ultimate success; that is the one thing on which chief emphasis should be placed. The themes which I have in mind should have a definite and well considered form; should be carefully planned, and methodically developed.

Every one has been delighted with the inimitable grace with which Mr. Thurber ridicules the set composition, with its introduction, its orderly paragraphs, and the bow and flourishes with which it concludes. But after all, an introduction is merely a beginning, and there are beginnings and beginnings. If you doubt it, study Matthew Arnold's marvelous introductions and then look at the next bit of commonplace criticism which you encounter.

There are paragraphs to be sure, but paragraphs are simply indicative of the orderly and accurate progression of the thought, and thought ought surely to be orderly and accurate. One must finish somehow, and it must be as well to retire gracefully from the stage, if grace be possible, as to shuffle off or jump down. A courtesy is preferable to a grimace. It is easy to laugh at grammars and rhetorics, by whose aid some teachers seek to better the work of their classes in English; but these unfortunate books, it must be remembered, are only attempts to state as the result of empirical research, the principles by which, wittingly or no, the masters of English prose and verse have been governed in their work.

Such knowledge, though imperfect, is yet very valuable. I know that an imaginary pedagogic prudery in the use of English has been made the subject of much good humored reproach, and that Professor Lounsbury refers to "that school master English whose Professors are found in every hamlet and cast a gloom over nearly every fireside."

But one surely might be allowed to remind Professor Lounsbury that there is such a thing as inothersive precision outside of Rhetorics as well as in them. The eleverness of his remark is only equalled by the difficulty of its verification. I cannot speak for the nation, but there are no school masters of the type referred to in Worcester, and I remember meeting none in St. Lawrence County, New York.

Such a pedagogue is as much a myth as the loquacious barber, the terrible enfant, and the plain girl from Boston. These, with the school master, furnish materials for the pleasantries of newspaper men and Professor Lounsbury, but they are as non existent as Don Quixote's Duleinea. Barbers are silent men, children are seldom embarrassing, and school masters — well, their English is rarely above reproach of any kind.

A direct and persistent study of English, whose only view is the improvement and perfecting of one's self in the language, is the sole method by which any permanent and decisive attainment in English can be gained. It is a favorite doctrine that, so far as form and expression go, English can be taught sufficiently as a part of the general work of a school, because in all classes pupils, when they speak and write, speak and write English. To an extent this view is sound, but only to an extent.

Exclusive of the studies which deal with English specifically as such, the curriculum of the average secondary school comprises ancient and modern languages; mathematics and a little of most of the sciences; history, with civil government and perhaps political economy; and, it may be, a touch of mental and moral philosophy.

Just how much is likely to be accomplished for the advancement of English by these? By the study of the Classics and of language in general, much, did not the demands of grammar and syntax—demands which are legitimate, nay, more, inevitable—make it impossible to devote much time to the perfection of translation. Bright pupils, who are willing to work hard and who strive for

excellence and finish in their English renderings, find the classics of exceeding value in acquiring proficiency in the vernacular. But for the mass of pupils, such study does little in behalf of English. As regards the work, both oral and written, in all the other branches there is, as it appears to me, one decisive objection to their being either efficient or sufficient aids in the improvement of written or spoken English, except in so far as the general increase of mental power derived from their pursuit conduces to that end.

It is this. In these studies the thought is so largely independent of the particular language in which it is couched, it so overshadows in importance the form of words which embody it, and it requires from the immature pupil who is endeavoring to state it such unqualified attention to prevent its eluding him completely, that he cannot give to his language that care and consideration which language demands if it is to be used to the best advantage.

Neither does the nature of the subject warrant such extreme care and consideration. The average pupil, unless he learns a demonstration in geometry by rote, inevitably states it in dubious English, since the matter so wholly absorbs his attention that there is nothing left to bestow upon the form. It is, in fact, absurd to expect that a boy or girl can state and explain Ricardo's Theory of Rent in unquestionable English, either on examination or in Those studies which are not directly literary and recitation. whose thought is new and difficult of apprehension, from their very nature afford little scope for developing facility and grace in the use of the mother tongue. Such studies afford an opportunity for applying literary principles which should have been learned and practised elsewhere, to wit: in the definite study of English and its composition; they cannot properly be made instrumental in acquiring these principles. In them literary tools may be used and sharpened, but not made.

Still further, it is not enough to be learned, or to think both clearly and profoundly, in order to write well. Kant, with his verbal rather than mental difficulties, and Hegel, with his camps of hostile followers at the centre and on either wing, sufficiently demonstrate this.

A few months ago a prominent New York publisher said, in reply to a remark of mine relative to the high grade of his books;

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"It is the hardest thing to find men who know their subjects and can write about them well. A good style in a professor is very unusual."

It may as well be recognized first as last, for at last it is sure to be recognized, that good English is neither an incident, an accident, an efflorescence, nor an indirect result; it is an acquirement, gained, as are all other acquirements, by direct and unremitting effort in its immediate direction, that is, along lines of study in which the expression is so inevitably a part of the thought that one cannot exist without the other, which is a poor way of saying, along distinctly literary lines.

The substance of the whole matter was summed up by President Eliot when, at last year's meeting of the New England Association of Colleges and Preparatory Schools, he remarked, "I have an impression that the only way to learn to write is by writing;" and he might properly enough have added, not by writing geometry examinations — thus one would learn to write geometry but by writing on themes which afford at least the possibility of literary art. Thus one learns to write anything.

METRIC WEIGHTS AND MEASURES.

PROF. JOSEPH V. COLLINS, STATE NORMAL SCHOOL, STRVENS POINT, WIS.

A curious thing developing out of the use of standard time in this country has been the refusal of large numbers of towns to give up their local time, usually that of some neighboring city, and replace it by standard time. It merely illustrates the ultraconservative spirit present, in such matters, in the minds of the masses, and shows the difficulties in the way of the general be sincerely hoped, however, that just as the milroads secured for us a uniformity in time, so, some new and potent influence will come into existence to force the adoption in this country of the metric weights and measures now so widely used by other nations of the world.

The French Commission, appointed in 1790 to devise a system of weights and measures, consisted of LaGrange, LaPlace, Monge, Borda and Condorcet, five as eminent men as ever brought in a scientific report. One of the most difficult questions which they set

themselves to decide was the choice of an invariable unit. They finally chose as the basic unit of their system, the meter, defined as the one ten-millionth of the earth's quadrant, reasoning, it may be presumed, that if an error should afterwards be found in the measured length of the quadrant, this error would have to be divided into ten million parts for that of the meter, and the latter would thus become inappreciable. It has turned out, however, that the original value found for the length of the quadrant is too small by an amount not exceeding 1-5600 part of itself, or the meter is short of its theoretical value by the width of a moderately fine penmark. This is not much to be sure, but is vastly too large for scientific work, which measures lengths with its comparators to millionths of meters. Singularly enough an English commission appointed thirty years later fell into the same grave mistake in the determination of its unit by the vibration of a pendulum. The error in the yard by Captain Kater's method was relatively less than that in the meter, but still altogether too great to be tolerated. When, therefore, the members of the International Bureau of Weights and Measures came to decide the question of introducing a new standard meter conformable to the old definition, or to another; or, of retaining the original meter and kilogram of the archives as the units, they unanimously chose the latter. Hence the old and much used objection to the metric system that its unit is not correct, is no longer valid. The theoretical values have been given up, and the real standards of length and weight are the concrete ones made and kept as such at the laboratory of the Bureau near Paris.

But whatever may be said of the theoretical unit, the meter, the metric system itself is wonderfully simple and compact, and singularly well adapted for use in the every day affairs of men. The original plan was to make every denomination, indeed everything in the system, depend on the meter. Just as the foot, square foot and cubic foot give the units for the linear, square and cubic tables, so the linear meter, the square meter, and the cubic meter serve as the principle units for the corresponding tables in the metric system. Then the cubic decimeter, called for short a liter, was made the unit of the capacity table, and the gram, defined as the weight of a cubic centimeter of water, was taken as the unit of weight. As far as the system goes this is the whole story. But "the best laid plans of mice and men gang aft agley." It

turned out, owing to the practical difficulty in the way of making a perfect cube, that the kilogram of the archives does not have its exact defined value; and, still further, that it is easier to determine the magnitude of the liter from the kilogram than from the meter. Thus two of the units are not exactly consistent with the third; but this discrepancy is very slight, so that for all practical purposes the system is consistent. The failure to properly understand what is involved in the foregoing was the occasion of a controversy in one of our scientific journals in which a good deal of cloudy reasoning was exhibited on one side.

Properly speaking, but six tables of weights and measures are needed. They are those for time, length, area, volume, weight and money. The table for time does not conform to the decimal scale, having come down to us from antiquity. What is called the sexagesimal division of time and angles was the work of the Babylonians. It is thought that they allowed 360 days in a year, and were thus led to divide the circle into 360 degrees, the sun moving forward among the stars one degree each day. Then, when they laid the radius of the circle divided into 360 degrees on the arc, it covered, as every school-boy now knows, exactly 60 of these degrees. In this way, time measure and circular measure came to be inseparably connected, and 60 came to be the scale number. There is authority for the belief that the Babylonians divided the day itself into 60 hours, though Herodotus distinctly says their day was divided into twelve parts. Only once has any systematic effort been made to change the division of the quadrant from 90 to 100 degrees or grades. It was planned by the French in the present century in the hope that the decimal system could be extended to angular as well as to linear quantities. They even prepared complete natural and logarithmic tables. But all their efforts were in vain. The degree is in use now as it always has been. In analytical investigations, however, as all mathematicians know, the angular unit is made to depend on the linear unit.

The Money Table in the metric system is quite like that of this country, except in the value of the unit. The franc, worth 19.3 cents, is the principal unit, corresponding to our dollar, and is equal to one hundred centimes, the latter corresponding to our cents. Dropping out of consideration the time and money tables, four remain, viz., Linear Measure, Square Measure, Cubic Measure and Weight. To these is added in the metric system, for convenience, a fifth,—the Capacity Table. The different denominations in the several tables, as almost every one knows, are formed by means of the Greek and Latin words for multiples of ten used as prefixes to the units of the tables. Thus kilometer means one thousand meters, chilioi being the Greek word for one thousand. Centigram is one one-hundredth of a gram, the Latin prefixes always denoting fractions. In this way the system complete comes to have some forty denominations, but only about half of them are much used. To show into what small compass the metric system can be put, we give, in a foot-note, a scheme of its tables, including all their different denominations. Those denominations most used are marked by their abbreviations in the proper squares. This arrangement might possibly be found convenient by teachers in the work of instruction. It has this advantage, that it appeals to the eye, rather than to the memory unaided.

The law which made the metric system legal in the United States was passed July 28, 1866. From the time of the passage of the act until now, practically all our arithmetics have contained the metric tables with exercises on them. Unhappily, we seem to

| COMPLETE METRIC TABLES WITH RULES. | | | | | | | | |
|------------------------------------|---------------------------------|------------------------|---------------|------------------|------------------------|---------|--|----------------------|
| Tables 1. | 10000 Myria. | 1000 Ki lo . | 100 Hekto. | 10 Deka. | Principal Unit. | Deci. | Centi. | toog Milli. |
| Linear | | (Km.) | | | Meter ² (m) | | (cm.) | (mm.) |
| Square | | (8q. Km.) | 8 | 4 | Sq. Meter. | | (mi. em.) | (eq. tum.) |
| Cubic | | | | | Cu. Met. 5 | (Liter) | (1 cu. em of water weight 1 gram.) | A Lice of the second |
| Capacity. | pages are consistency on larger | | (hl.) | Total tribust to | Liter. (1) | | (°1.) | |
| Weight 6. | | (Kg.) | - | | Gram.(*) | , | (%) | |

^{1.} General Rule for Reductions .- In the linear, capacity, and weight tables, move the decimal point in the direction of the reduction one place for each successive step; in the square table two places; and in the cubic table three places for each stop.

 The fundamental unit, the meter = 30.37004 inches.
 A square Hektometer of land is called a Hektar (Hs.).
 A square Dekameter of land is called an Ar (*). 100 Ars = 1 Hektar.
 When a cubic meter is used to measure wood it is called a Ster (st.). 1 decister = 1 ster.

^{6. 10} myriagrams = 1 quintal; 10 quintals = 1 metric ton (T.); or, 1000 kilograms = 1 metric ton.

have made very little progress towards its general adoption. It is true the metric system is used largely in scientific work, in the custom houses and to a certain extent in the Post Office department, and is now being taught and used in the medical colleges for pharmaceutical purposes. Also the smaller metric divisions are quite commonly seen on small wooden scales designed for use in the schools. But as regards any general use of the system, we seem to be nearly as far from it as we were when the law was first passed. The desire to learn and use the system is not lacking. The main trouble seems to lie in the way we have set about learning it. The metric system should be taught in the schools simply and purely for its own sake, and not in its relation to our own system. When taught in the latter way it is in danger of becoming repulsive to the learner, and for the following reason. The nomenclature of the metric system is taken entirely from foreign languages, and, though it is not so, is bound to appear strange, and even difficult, to a scholar whose studies have been confined entirely to the English language. Granted that the metric reductions once understood are extremely easy, yet the difficulty of mastering the unfamiliar terms and notation is sufficient to require careful and prolonged drill. It is doubly difficult, then, to reduce from any given denomination in our system to any given denomination in the metric system, or conversely, particularly if the metric part of the reduction, though really very easy, is not well understood. The remedy for this is easy to find. Let the metric tables and reductions be first thoroughly learned by an abundance of exercises on them alone. Then, if cross-reductions must be made, a full table of equivalent values will enable anyone quite familiar with both systems to make any desired reduction quickly and intelligently. In a recent arithmetic from one of our best publishing houses, rather more than one-half of the exercises were of the cross-reduction kind, and these were given after the pupils had solved only about two pages of exercises in a foreign system and in a strange notation, all entirely new to them! Is it any wonder that the school children, as a rule, dislike the metric system and never learn it except in the purely memorizing way. They are not philosophers and do not see that the real trouble lies in the old system and not in the new. It would be a great aid towards learning the system if the state were to provide for the school rooms the metric lengths, measures and weights in common use, and the scholars were to be drilled into familiarity with them. How can they come to know that which they have never seen nor handled? Taught in this way the metric weights and measures would come to be recognized as a beautiful and connected system complete in itself. From this study the scholar would grasp the idea of a scientific metrology, and would be prepared to better understand the systems of connected units used in physics.

In the early days of the republic some of our most eminent statesmen, notably Washington, Jefferson and John Quincy Adams were much interested in the introduction into our country of a simple system of weights and measures. In 1792, our present convenient denominations of money came into use, instead of the English pounds, shillings and pence. Though empowered by the constitution to establish weights and measures, Congress has largely left the whole matter to the states. In 1828 it enacted that the English standard yard and pound troy, copies of which were made for us by Troughton, should be the American standards of length and weight. About the same time, by executive order, the old Winchester bushel (2150.42 cu. in.) and gallon (231 cu. in.), then in common use in England, were made the government standards of capacity, and thus came into general use in this country. Unfortunately, in 1834, the English standards were destroyed by fire, and the commission appointed to restore them adopted, not the Winchester units, but new ones called the imperial gallon (277.2 cu. in.) and imperial bushel (2218.2 cu. in.), whose use was made mandatory in 1836 by the English government. By these changes the imperial gallon of water was made to weigh exactly ten pounds avoirdupois, and the imperial bushel to contain exactly eight imperial gallons. But the outcome of all this has been that in this last decade of the 19th century, the five principal units of capacity of the two greatest nations, though they have the same names, are appreciably different in size. The English pints, quarts and gallons are very nearly equal to 6-5 of the corresponding American denominations, and the English pecks and bushels are approximately 34-33 of the American ones. Moreover there are in use in this country three kinds of drams, three kinds of ounces, two kinds of pounds, two kinds of hundred weights, two kinds of tons, two kinds of pints, two kinds of quarts, and two kinds of miles. It must be admitted that progress has been made when we remember that before the metric system was introduced there were at least 400 different pounds in use in Europe alone, and probably quite as large a number of units of length and of capacity. But then no systematic effort was made to connect them. We, on the other hand, have exact scales of relations for all our different units, and to properly make all the reductions which may arise is enough to distract mathematicians, to say nothing of scholars in school.

One who had never looked into the matter would be amazed at the number of inquiries made, and reports presented in Congress, in state legislatures, and in scientific bodies on this general question of weights and measures, and the metric system in particular. It is a curious fact, notwithstanding, that interest in these questions seems latterly to be rather abating than increasing. If statesmen were willing to interest themselves formerly, why cannot some be found now who would be willing to investigate the questions involved, and to urge forward this important reform. If the time is not ripe, it ought to be made ripe. A system which has been found adapted to the needs of the great European nations besides France, and to many of the South American countries, could surely be used to advantage in the United States.

MULTUM IN PARVO.

- 1. Change brings rest, in brain work as elsewhere.
- 2. The value of a theory lies in its practicability.
- 3. Your school room should not become a morgue for dead ideas.
- 4. Skillful arrangement of your program means a saving of mental and moral force.
 - 5. Despotism begets desperation even in the school room.
- 6. Real dignity is a useful characteristic, but—it may get lonesome sometimes.
 - 7. Thoroughness is the backbone of honesty, even in teaching.
- 8. Do you sufficiently emphasize the bright side of your work, or do you always wear the willow, play funeral dirges, and deal more largely in groans than in singing or laughter? Then, as an honest fortune teller, I can predict nothing brighter for you than failure, nothing easier than to get left in the onward march of the profession.

EDITORIAL.

NE of the most important of recent educational publications is a document of thirty-two pages with the title, "The Trustees of the John F. Slater Fund; Occasional Papers No. 3; Education of the Negroes since 1860; by J. L. M. Curry, L.L. D, Secretary of the Trustees of the John F. Slater Fund."

Dr. Curry is now the best known among Southern educators; the secretary of both the Peabody and Slater Educational Funds, and one of the most inspiring and effective American public speakers in the interest of universal education. His time is largely occupied in visitations through the Southern states; and his appearance before a Legislature is almost certain to be followed by more favorable enactments and more generous appropriations in the interest of the public schools for both races and all classes. He is one of the few "Great Educators" who have brought to the consideration of school work a long experience in public life, a broad scholarship and a generous and discriminating political philosophy. He also possesses the rare literary faculty of presenting an important subject in brief space, with such discriminating selection of its salient points as leaves nothing lacking to its correct understanding. In the present pamphlet of thirty-two pages, Dr. Curry has presented the leading facts concerning the education of the negroes since 1860. No Southern man has shown such a thorough appreciation of the work wrought by Northern benevolence for the schooling of the negroes, and nobody sees more clearly the danger of complicating the schooling of this race by the well-meant efforts of the different religious sects to build up the wornout parochial school system, as an annex to their new churches for the negroes. He also brings forward the most important fact in the matter, that, while the North has given freely of money and conse--crated missionary service for the freedmen, and still supports secondary, common and collegiate schools in the South for 30,000 colored children and youths, the Southern states, since 1870, have paid, from their own poverty, with small help from the colored folk, \$79,000,000 for the education of the children and grand-children of their former slaves, in common schools. Although the paper closely follows the lines of historic development, yet the writer throws in an occasional suggestion that opens long vistas of thought on the whole subject of the relation of the races in our country. Like all competent inquirers, he has no question of the general value of the work already done,

and a thorough conviction of the competence of the negro people for education into good American citizenship. Altogether, it is by far the most valuable tract recently printed on this vexed question of the education of the Negro, and in its calm, Christian and patriotic spirit is a model for the discussion of a theme which seems attractive to a multitude of writers in proportion to their lack of competence to grasp its central facts or measure its dim and distant outlines.

INCIDENTALLY, this publication brings before the thoughtful reader a contemplation of the most prominent fact in the progress of popular education in Christendom, within the past thirty years. We do not forget that the period between 1865 and 1870, when the two Virginias established the common school for all children, was also notable for the new departure of popular education in England. We also remember the great progress in the same direction, especially in Italy and France, and in several of the South American republics since the close of our Civil war. But, certainly, there has never been a movement so radical and so fraught with untold advantages to a people hitherto only known as barbarians or slaves, as the organization of the American common schools, during this generation, in all its departments, in every state hitherto connected with slavery, including the emancipated race, and the wonderful persistence of all these commonwealths, despite the hindrance from prejudice, poverty, the exasperations of civil war, and too often the lack of national appreciation in this good work. A table, furnished by the National Bureau of Education, covering the sixteen years from 1876 to 1892, quoted in this pamphlet, is wonderfully suggestive. During these years of recovery from a calamity that might well discourage all effort, the common school enrollment of the South has risen from 1,827,139 white and 571,506 colored pupils, schooled at an expense of \$11,231,073. in 1876-77, to 3,607,549 white and 1,354,316 colored scholars, with an expenditure of \$27,691,448 in 1891-92. The total amount expended in the twenty-four years since 1870 for the common school by the Southern states, reaches the enormous sum of \$300,000,000, beside a large outlay in rebuilding the academical and collegiate institutions of the old time, with the establishment of many new agencies and institutions for the higher education, representing an endowment of several millions; among which may be named, as specially important, Johns Hopkins, in Baltimore; the Washington University, in St. Louis; Vanderbilt, in Nashville; and Tulane, with its annex, the Sophia Newcomb College for women, in New Orleans. A change so radical and complete, so resolutely entered upon and persisted in, mainly with remarkable wisdom and courage, with such remarkable results in one generation, certainly entitles the people of these sixteen states to the post of honor in the record of achievement in the field of popular education in all civilized lands. Here is the most potent element of hope and confidence for the favorable outcome of our Southern Commonwealths in their conflict with the peculiar dangers and difficulties of their exceptional situation. In itself, the history of the establishment and steady growth of the people's school in these states, under these circumstances, during the past thirty years, is an unanswerable argument in behalf of republican society and government.

IN the line of the suggestion seconded in a recent editorial in this magazine, an earnest effort is being made to improve the health conditions of the Boston schools. Trained physicians have for a month past visited every school daily, inspecting the scholars, selecting any doubtful cases for further and more careful examination, and quarantining any who may be centers of infection. For instance, one child was found who merely felt a little ill, but showed no sign of serious indisposition to an ordinary observer. The trained specialist however, detected some obscure signs of diptheria, took a "culture" from the child's throat and found multitudes of bacteria. The child was at once removed from the school and undoubtedly a serious epidemic was averted. One such case is enough to justify all the expense of the experiment and we understand that there have already been a number of such cases. Along with this most praiseworthy movement in the schools a thorough examination is being made, under the auspices of the cattle commissioners, of all the cows in the state, with a view to stamping out that dreaded and fearfully prevalent disease, tuberculosis. The "tuberculin" test, pronounced practically infallible by scientific men, is being systematically applied under state authority, and many cows which have been furnishing milk for home and market are being killed as seriously infected with tuberculosis.

What is being done in Massachusetts in these two lines of experimentation will be of immense value as object-lessons, and when the full statistics shall have been gathered, we believe one of the greatest, movements of modern times will have been inaugurated for the preservation and prolongation of human life.

THE REPORT OF THE COMMITTEE OF TEN.

THE MATHEMATICAL CONFERENCE.
PRES. H. H. SEERLEY, CEDAR FALLS, IOWA,

There have been sundry attempts, recently made, to ridicule the conference report regarding mathematical study in secondary schools. Several prominent, thoughtful superintendents have appeared in print, in leading educational journals, treating this conference report as if its makers were either ill advised and ignorant, or thoughtless and indifferent of what good schools are now actually doing.

It might be well to remember at the outset, that this report was not prepared for the sole benefit of large cities and towns, such as these writers represent, but for the benefit of multitudes of schools which have very little professional supervision, and which do not claim to be leading the world in progressive methods of educational thought. College men know that their students are more likely to come from the country districts, than from the thriving, prosperous cities and lively business centers, and these destructive critics ought to take this into consideration in discussing the report, and treat its recommendations honestly on its merits. Even if it is granted that the large cities are up to the standard required by this conference, and that they are under the direction of presumably well-qualified and practical, common-sense superintendents, needing no such instruction as this report presents, yet it must be conceded that there are multitudes of public school children remaining, who are taught by teachers whose only guide is the text-book; and certainly it cannot be denied, that the majority of the most used text-books contain much work and instruction of the very kind condemned so strongly by the conference.

No sensible person can deny, that the so-called commercial arithmetic, that has assumed so much prominence in works on practical arithmetic and in the teaching of the schools, has really been barren of the expected results, and the time and strength given to it might have been more profitably expended on other lines. The emphasis put upon a sort of book-keeping, and upon sundry applications of percentage, assumed to be in accordance with business methods, has really developed a sort of work and study that possesses no similarity to actual business used in the counting houses of the country, and has not developed the accountants or the mental power needed. The great popularity of the commercial or business schools, and the seeming demand for the supposed practical, has induced the secondary school

to attempt to usurp the province of the commercial college, and do a special line of technical work for which it is not fitted and for which its pupils are not prepared in age or in intentional future.

It is certainly best to leave to the commercial college this technical part of education, since its patrons will specially want this kind of training, and it is an error to conclude that every boy and every girl in a secondary school should be given this technical instruction, with the idea or the hope that he and she will some time need it, and that it is remarkably practical and useful.

In the next place, the conference is right in demanding a return to the old-time rigid training in ready reckoning, - mental arithmetic. The demand for this reform is very great, and the need for ready reckoning, and for ability to read results accurately and quickly, will be evident to any one who will take the trouble to investigate. Written arithmetic, - pen and pencil work - has absorbed almost the entire time and attention of the pupil, and also the teacher; and while there has been a general advance in the knowledge of arithmetic among the people, there had been a retrogression in the ability to do such ready reckoning in the ordinary business pursuits of life, when compared with the knowledge of arithmetical students, the attendants of the schools of forty years ago. This result is induced and maintained by the system of tests so generally in use now, in all sorts of examinations, from those required by the U. S. government to those ordinarily imposed to determine a pupil's passing from grade to grade. The written test has become universal, and schools naturally prepare their pupils to meet the system in vogue.

This plea is not a discovery of the Committee of Ten, nor of the mathematical conference. It is a fact cogently stated by many educators, and by all careful critics of the tendencies of present educational efforts. It is certainly to be expected that this recommendation will be acted upon in good faith by all professional, thoughtful teachers, as the times are ripe for the change. It is to be remarked that Chicago has just decided to place a text-book on mental arithmetic in the hands of the pupils of the grammar grades, at an expense to the people of \$30,000,—a certain evidence that the report has begun to take effect, even where supervision should be supposed to have been at its best.

The conference is certainly in the right in asking that mathematical language be used correctly in all the varieties of studies, and that in teaching arithmetic, algebraic principles should not be violated. Many primary teachers use algebraic signs in expressing arithmetical work, and very frequently violate the proper and correct usage, not seeming to know that it is wrong to teach erroneous applications of

these signs, and compel afterwards the unlearning of these things that could easily have been taught right from the beginning, without loss or trouble. There should be harmony in all schools in regard to mathematical language; and the teachers in elementary grades should heed and act upon these suggestions.

Another thing much emphasized by the conference is the importance and the necessity of correlation. It is an error to teach arithmetic, algebra and geometry as though they were not related to each other. By attending to correlation, duplicating could be avoided and time actually gained. Cube root, powers, square root, etc., do not need to be taught several times as is frequently now done; and the grammar school does not need give attention to such subjects, thereby having time to devote attention to topics necessary to enrich the course, and give a more living interest to the work of those grades, than does at present exist in even many very good grammar schools.

Not a suggestion of the mathematical conference is "wide of the mark" if it be properly and fairly considered. They are, as a whole, pertinent and desirable of attainment. All the more flagrant abuses mentioned are commonly found in many public schools, and some of these can be found by the unprejudiced in the better schools. These recommendations, if they become universal, would make progress and would bring about needed improvements. Despite the talk about objective teaching of denominate numbers and mensuration, that has been heard in educational circles the past decade, there are multitudes of good, well-informed teachers that are entirely indifferent to the method proposed, and are well satisfied to give the ordinary text-book exposition without a single piece of apparatus and without any laboratory demonstration. Objective teaching of number and the sundry applications of arithmetic are taught in the occasional school rather than in the common school, and the old-time ideas and methods dominate the whole country much more largely than the radical educational writer might see fit to admit. It is well, therefore, to send out the ideas of the conference in this regard; to get its notions into institutes, normal schools, method classes and teachers' meetings; and by all the agencies, to do what can be rightly done to reform current conditions, and thus develop more rational work, and secure in the end a more effective mathematical training.

DEPARTMENT OF PROFESSIONAL STUDY.

THE TEACHERS' INTERNATIONAL READING CIRCLE. THIRD MONTHLY SYLLABUS FOR THE THIRD YEAR.

PREPARED BY DR. CHAS. J. MAJORY, NEWTON, N. J., SECRETARY, FOR THE USE OF CORRESPONDENCE MEMBERS.

In the city and town graded schools, the study of pedagogical literature has been made general. Few teachers in those schools now go on with their work from day to day without such study, more or less definitely and earnestly pursued. But in the ungraded,—the rural school—the great mass of the teachers are yet to be reached by this influence. The county or state officers who can best stimulate the rural teachers to the study of educational magazines and books, will do the greatest work now required in the advance of popular education.

I. ROSSEAU'S EMILE. PAGES 67-100.

- 19. Would it be wise to leave a child untaught from a fear that he might be taught wrong?
- 20. May it be right sometimes to require memory-work beyond the child's full grasp of the ideas involved?
- 21. How early may it be wise to instruct a child in a language other than his mother-tongue?
- 22. May the instruction given to children be limited to that of which they can see the actual and present advantage?
- 23. Can school government be based on other foundation than the authority and direct command of the teacher?
- 24. Under home influences alone, would Rosseau's scheme of government prove successful?
- 25. How can the lessons learned upon the play-ground be made use of in increasing the value of lessons learned from books?
- 26. What general principle as regards clothing might avoid the evils from which Rosseau warns us, as well as those to which his directions would be likely to lead us?
- 27. What argument for manual-training, as a branch of school work, may be drawn from the plea for the exercise of all the senses?

II. HERBART'S PSYCHOLOGY. PAGES 36-53.

- 15. Can all well-known facts in psychology be explained from accepted fundamental principles?
- 16. Why cannot elementary facts in psychology be determined from a study of the action of the mature minds?

- 17. Upon what distinctions are the author's two classifications of mental faculties based?
- 18. Why cannot these classifications be deemed either final or complete with regard to the acts of the mind?
- 19. What reason is given for declaring the causal relation from sense to reason to be untenable?
- 20. How is the mental faculty of brutes to be regarded as compared with that of man?
- 21. In what sense is the power of directing attention to different acts a characteristic of human mind?
- 22. Shall concepts be viewed as combining in consequence of an act of the understanding or because of external conditions?
- 23. What necessary limitation of capacity in the training of brutes finds a parallel in the case of man?

III. ADLER'S MORAL INSTRUCTION. PAGES 41-60.

- 21. In what respects is it difficult to trace the beginnings of moral life in the child?
- 22. What aid must mothers give in the study of child development if ascertainable facts are to be generalized into valuable principles?
- 23. In what manner may regularity of care become an important factor in early moral training?
- 24. Why is it important that the habit of obedience be sought as early as evidence of wilfullness is manifested?
 - 25. What constitutes the basis of an act of conscience?
- 26. Is the distinction of right and wrong wholly an acquired faculty, or is it inherent in the child's mind?
 - 27. With what moral habits does a child ordinarily enter school?
 - 28. What is the first form of moral training at the school?

IV. FROEBEL'S EDUCATION OF MAN. PAGES 94-127.

- 20. Boyhood is the period for learning, on the child's part; for training, on the part of parent and teacher.
- 21. To strengthen and direct the will is the essential work of the school.
- 22. The true basis of right will culture lies in the proper activity and firmness of the feelings and of the heart.
- 23. The family is the type of true life and the source of active interest in all surroundings.
- 24. Importance of wisely nurturing the formative instinct as manifested in the child's efforts to assist in work.
- 25. The early adventures of the boy are in quest of knowledge, and they result in parallel development of power.

- 26. The games of boyhood educate for life by awakening and cultivating many civil and moral virtues.
- 27. The love of story and of song are further manifestations of right mental activity, and should be utilized to the child's development in knowledge and power.
- 28. The evil characteristics so often manifested in boy-life have been developed by neglect of right tendencies, and by arbitrary and willful interference with right activities.
- 29. The true remedy for any evil is to find the original good quality that has been repressed or misled, and then to foster and guide it aright.
- 30. Much harm is done by attributing wrong motives to deeds that were mere results of impulse without any due appreciation of consequences.

V. PICKARD'S SCHOOL SUPERVISION, PAGES 38-48.

- 23. City supervision properly differs in character from state or county supervision.
- 24. The usual organization of the city school board frees the superintendent from mere matters of financial and material management.
- 25. The qualifications and work of teachers, and the instruction and discipline of pupils constitute his field of active labor.
- 26. As an adviser, he needs to be familiar with all elements and details of school matters, though free from responsibility outside his immediate domain.
- 27. The superintendent has necessary duties toward many phases of his school work.
- 28. He is in danger of giving undue attention to some lines of duty while neglecting others.
- 29. Into the best possible scheme of manifold duties it is necessary that he put his own vigorous personality.
- 30. In relation to pupils, the superintendent should be prepared to lead his teachers into right knowledge of child-life.
- 31. He should see that the course of study and the teachers' methods of instruction duly foster the child's desire for knowledge.
- 32. He should be careful that discipline tends to nourish and build up the inner life of the child.
- 33. He should provide for due exercise of the child's powers of expression.
- 34. He should furnish sufficient opportunity for physical and manual activity.
- 35. He will find his most valuable field in the primary classes of his schools.

VI. LAURIE'S RISE OF UNIVERSITIES. PAGES 75-106.

- 23. Meager results of the work of Charlemagne in learning or literature.
- 24. In the accumulation of materials and the forming of libraries much was done for education.
- 25. The art of grammar, the only branch of learning generally deemed valuable.
- 26. A vivid picture of domestic fidelity and of personal zeal in education.
- 27. Moral, rather than intellectual progress during the ninth and tenth centuries.
 - 28. Influence of the rise of chivalry.
 - 29. Greater intellectual activity among the Mohammedans.

LECTURE VI

- 30. The era of universities inaugurated in the twelfth century.
- 31. The unity of reason and philosophy with religion asserted.
- 32. Great central schools for layman as well as for ecclesiastic made possible by great social changes.
- 33. Civil freedom secured in city charters and city schools resulting therefrom.
- 34. Increased communication with Africa and Asia, resulting from the Crusades.
- 35. The university a development of the cathedral and monastery school under the external influence of Saracenic learning.
 - 36. The university defined.

PREYER'S DEVELOPMENT OF INTELLECT. PAGES 64-98.

- 12. The impressive and the expressive paths of the organs of sound separately active before any communication is established.
 - 13. Vowel sounds first uttered.
- 14. The vowel sounds only of the first-learned words apparently recognized.
- 15. Recognition of first-learned words not different from that in the case of lower animals.
- 16. The correct repeating of a heard sound, syllable or word, the evidence of established communication through the entire speechtract.
- 17. Early imitative speech not usually associated with early development of true understanding.
- 18. Concepts must be in the mind of the child before the language expressing those concepts can have any meaning.
- 19. Words are essential to the forming of clear concepts of the higher sort.
- 20. The child's process of learning to speak fully in accord with his later process of learning to write.

FOREIGN NOTES.

GREAT BRITAIN. EVENING SCHOOLS IN LONDON.

The new regulations of the English education department respecting evening schools virtually change these from elementary to continuation schools. Although sufficient time has not yet elapsed to show the full effects of the measures, it is evident that the attendance upon the schools and the interest of the students are increased. The London School Board anticipated the action of the department so far as possible in the conduct of their evening schools. The following are interesting features of the policy adopted by this board in 1889: To provide for efficient supervision they resolved, that nine persons, interested and experienced in the work of the evening classes, should be appointed to organize and visit the classes, and to act as correspondents. In accordance with this resolution, nine organizers and correspondents were appointed as an experiment, for one year from August 23d, 1889, and have since been re-appointed each year. Adults are, as far as possible, taught apart from junior students. The schools are entrusted to the care of special bodies of local managers composed of ladies and gentlemen residing in the vicinity. They are opened only where it is believed that they will be well attended.

The two sexes do not, as a rule, meet at the same time in the same building. A school for male pupils is held, if possible, in the boys' department, and that for female pupils in the girls' department, of a school.

In order to make these "Evening Continuation Schools" thoroughly well known, the board invite, by various means, the cooperation of ministers of religion, superintendents of Sunday schools, employers of labor, secretaries of clubs, and of any other ladies and gentlemen who, by virtue of their position, are able to influence persons to join the schools. Posters, also, are largely employed, and this year much good has been done by distribution of handbills, through the agency of the attendance officers.

Prizes are awarded to students who attend regularly, and who obtain a good report from the responsible teacher. Special prizes are also given by the board to students who pass the examination of the Science and Art department. There are also the prizes and certificates offered by the Science and Art department and the Society of Arts. Certificates are awarded to students who have received at least twelve complete hours' instruction in one or more subjects, and have

made diligent progress in the same. If any students are unable to attend the whole time, they are urged to attend for as long and as often as possible, and to regard even an attendance of one hour a week as better than none at all. Among advanced subjects taught are Book-keeping, Shorthand, French, German, Latin, Science, Algebra, Geometry; also domestic work, dress making, etc., for girls; wood-carving and other manual arts for boys.

Social gatherings, entertainments and lectures for the students and their friends, are held in connection with many of the schools. Clubs have also been formed for football, swimming, chess and draughts. The libraries of the schools are open for the free use of the students. In some cases periodicals are also provided by voluntary donations, and lanterns are used to illustrate the lessons. An assistant teacher is allowed in the school when the average attendance exceeds twenty; a second assistant, when it reaches forty; a third assistant, when it reaches sixty; a fourth assistant, when it reaches ninety; a fifth assistant, when it reaches 120; and a sixth and last assistant, when it reaches 150. The net cost of conducting the classes in 1892-93 was 28,113£, 2s, 3d, (about \$140,000) or 2£, 8s, 9d, (\$12) per pupil.

THE RELIGIOUS INSTRUCTION CONTROVERSY.

The controversy over the question that has agitated the London School Board for nearly two years, and affected in some measure the entire country, is on the eve of settlement by the ballot. If the Progressives carry the School Board election, the settlement of 1870 will probably not be disturbed: if the clerical party triumph, it will be greatly strained if not actually violated. Pending the election, the air is full of statements and manifestos. The Progressive members of the board are out with a statement protesting against denominational tests, denying the imputation of godlessness, and asserting that the "theological activity of the present board has hindered its legitimate work." Mr. Stanley denounces the denominational spirit and stands by the settlement of 1870. The present chairman of the board, Mr. Diggle, in his address to his constituents, affirms his intention to maintain "Christian Education," but is evidently prepared to give up the "test circular" that has given so much offence to teachers. Mr. Athelsan Riley follows suit characterizing his position as "Trinitarian." Cardinal Vaughn has issued an appeal to Roman Catholics calling upon them to strike a blow in defence of Christianity. The Bishop of London, although not in favor of the circular, "does not hesitate in his choice between its advocates and the Progressives," whom he charges with an endeavor to destroy "the settlement of 1870" "by gradually interpreting all religion out of it."

The London Baptist Association declares "that through the combined action of Mr. Riley, the English Church Union, Cardinal Vaughn, and the Bishop of London," the "entire Board school system of the country, and especially the use of the Bible without creeds and without priests," is in "grave peril," and urges a full Baptist vote against the sectarian policy,—and so the battle wages.

Dr. Jex-Blake has at last won a triumph at Edinburgh University, which may be regarded as the end of a contest begun in 1869. In that year, Miss Jex-Blake entered the medical course at Edinburgh, but was subsequently obliged to withdraw, on account of the opposition of students, and going to London became instrumental in founding there a medical college for woman. Of the recent successful appeal to the University, the London Journal of education gives the following account:

"In March, 1893, the University Court of St. Andrews, in response to an application from Dr. Jex-Blake, agreed to recognize the lecturers of the Edinburgh School of Medicine as 'lecturers specially appointed' by the Court, and to admit to matriculation and graduation the students of the schools. Since then, however, various difficulties and delays have intervened, and recently, a Draft Ordinance (general, No. 28) was issued by the Universities Commission, providing that 'the classes of University lecturers must be conducted at the seat of the University,' so that classes conducted in Edinburgh. London, or elsewhere, could only be accepted as partially qualifying for graduation, i. c., could not be considered as the equivalent of the two years required at the University itself. Under these circumstances, Dr. Jex-Blake made an earnest application, in May last, to the University of Edinburgh, that the University Court would do what the Court of St. Andrews was willing, but apparently unable, to do, viz., recognize all the lecturers of the Edinburgh School of Medicine for women as 'lecturers specially appointed' by the University for the instruction of women in Medicine, and admit the students of the school to matriculation and to examination for medical degrees. After some months' consideration the University Court has decided to comply with Dr. Jex-Blake's application, and she has received an official letter to that effect; so that henceforth, on payment of the ordinary matriculation fee, and on compliance with the usual regulations, the students of the school will practically become students of the University, and will be able to proceed in due course to the ordinary medical degrees."

FRANCE.

The action of the present Minister of Public instruction in France (M. G. Leygues) in several instances seems to justify the apprehension that professors and school officials are to be the subjects of the

repressive course inspired by the assassination of President Carnot. M. Robin, the accomplished director of the Orphan Asylum of Cempuis, the earnest advocate and consistant exemplar of integral educacation and of the co-education of the sexes, has fallen under the ban of his superior, and been deprived of the position in which he has done such valuable service for education and for humanity. His advanced ideas are the cause of his downfall, and in respect even to these, his friends assert that he is grossly caluminated. M. F. Buisson, the eminent director of primary instruction in the Ministry of Public instruction, has not escaped attacks for his well known advocacy of co-education, and of secular education, policies despised by the clericles. M. Chauveton, a distinguished professor who had been appointed to a position in the lycée, Louis le Grand, at Paris, has been transferred to a provincial school. He is under discipline, it is alleged, for an article in favor of M. Robin. It is stated farther, that professors and school officers who have been sent to the chamber of deputies by the votes of socialists, will be excluded from the service of public instruction. It would appear from these rumors, that professors, like the press, are to be muzzled.

As this goes to post, word is received that M. F. Buisson has resigned, probably under pressure.

THE NEW REGULATIONS FOR STUDENTS OF MEDICINE.

The new regulations respecting medical courses in France, authorized by decrees of July, 1893, went into operation in November. The decrees were noticed in a previous issue of Education. To sum up briefly, the changes affected are: A new course in science, opened in the faculties of science for students who desire to enter the medical faculties. This course is for one year and comprises the theoretical and experimental study of physics, chemistry, zoölogy and botany. At the end of the year students are admitted to an examination, which, like the course itself, includes both theory and practical demonstrations. Those who pass the examination receive the certificate of physical, chemical and natural sciences. This, together with bachelor's degree in letters, is requisite for admission to the medical course. The special course in science relieves the medical faculty of this general instruction, and permits them to concentrate all their energies upon medical instruction. The course in medicine is four years. Hospital practice must be ma ntained through three of these.

BELGIUM.

The sessions of the new, private university founded at Brussels were opened in October. The two faculties of law and of philosophy are organized, with full power to confer diplomas. Special provis-

ion has been made for courses in biology, anthropology, legal medicine, psychiatry, diplomatic and legal practice, etc. Tuition fees are about the same as in the existing universities. Belgium, whose system of education resembles in many respects that of France, has an advantage over the latter in the higher degree of local authority and the greater development of private universities. The Catholic University of Lourain and the University of Brussels, maintained by private and municipal funds, have the same powers, in respect to conferring degrees, as the two State Universities. The same is true of the new University. The provision for higher instruction is also increased by the recent foundation of T Institute des Hautes Etudes, which like the Ecole Pratique des Hautes Etudes at Paris is to be devoted to pure science.

M. Robin has been appointed a professor in the new University and also in the "Institute."

A. T. S.

AMONG THE BOOKS.

To accommodate readers who may wish it, the publishers of Enroamon will send, post paid on the receipt of price, any book reviewed in these columns.

One of the most agreeable outcomes of the World's Fair at Chicago last year, is the growing list of choice volumes detailing the proceedings of the various Congresses. We have before us two substantial volumes, edited by Mrs. May Wright Sewall, presenting in a clear and strong light the work of the World's Congress of Representative Women. This Congress, under the presidency of the charming Mrs. Potter Palmer, convened in Chicago on May 15, 1893, and lasted a full week. It was the first of many important Congresses. Seventy-six sessions were held, over 600 took part and the aggregate attendance was over 150,000. The leading women of America and of the world brought their best thought and freely poured it out for the enlightenment of their sisters. Among those taking part were, Mrs. Potter Palmer, Julia Ward Howe, Elizabeth Cady Stanton, Susan B. Anthony, Mary H. Hunt, Mrs. J. Ellen Foster, Rev. Lorenzo Haynes, Rev. Anna H. Shaw, Mrs. French-Sheldon. Alice May Scudder, Prof. Helen L. Webster, Dr. Mary Putnam Jacobi, Mrs. Sarah B. Cooper, Lady Henry Somerset, Helena Modjerka, Laura Ormiston Chant, Mrs. Jacob Bright, The Countess of Aberdeen, Baroness Gripenberg, Jane Addams, Mrs. Bedford Fenwick, and many others, famous on both sides of the water. Men will be surprised at, and women will rejoice in, what is here presented; "A complete and comprehensive yet condensed and readable library on all the great themes in which the enlightened women of our time are concerned. No other book or collection of books on these important subjects can take the place of this history of woman's progress. To every woman who holds any place of leadership among her sex, these volumes may be truly said to be indispensable." These are just and true words which the careful realing of these many papers will fully justify. The publishers (Rand, McNally & Co., Chicago and New York) have done their work well and in good taste.

We have examined, with much interest, Miss Irene Jerome's Banners. There are four of these,—Joy Banner, Rest Banner, Every-Day Banner, and What Will the Violets Be. Each consists of four panels, beautifully decorated in colors and gold, attached by pretty ribbons, with choice extracts from leading authors; as Dr. Gannett, Emerson, Lowell, Browning. Havergal, Dr. John Hall, Drummond, Howells, Whittier, etc. Some of these words are wonderfully uplifting. The flowers on these banners are violets, sweet peas, bachelor's buttons and nasturtiums. Take these from Dr. John Hall as a sample: "Kind looks, kind words, kind acts and warm hand-shakes,—these are secondary means of grace when men are fighting their unseen battles." They touch the secret springs of sorrow as well as of love. Boston: Lee & Shephard. Price, 50 cents each.

MARY MORTIMER is a memoir of one of nature's noble women. Endowed with rare spiritual gifts, with a thirst for study and a love for teaching, she devoted a long life to the cause of education, and touched many hearts for good while training the mental powers of those under her care and oversight. The discriminating title of the memoir is "A True Teacher," and a perusal of the story of her life confirms the aptness of the term. The memoir is told by one who loved her and the story is full of human interest. It appeals strongly to every teacher who will, we feel, find much inspiration in its record of a true teacher. Edited by Minerva Brace Norton, and published by the Fleming H. Revel Company, New York.

First Book in English, by W. H. Maxwell, is designed for one in primary grades and is an admirable book for the purpose. The exercises are new and bright, the arrangement is after a well-defined plan, and the development of the subjects logical and systematic. By the same author is Introductory Lessons in English Grammar, for use in intermediate grades. New York: American Book Co.

THE WORD-BUILDER, by A. J. Beitzel, is an illustrated, systematic, spelling book, designed for common school grades. The author gives everything needed in a spelling book for an ungraded school, and arranges the lessons in a progressive manner. It is a practical speller, made by one who knows what the schools need and has the ability to supply the need. Philadelphia: Christopher Sower Company.

In these days less is desired by teachers of the theory of education and more of the practice, hence methodology has grown with rapid strides and books multiply. One of the most exhaustive works on teaching is The Principle and Practice of Teaching and class Management, by Joseph Landon, F. G. S. It is a volume of nearly five hundred pages and is written entirely for teachers. It contains information, directions, methods, devices, etc., on every subject taught in the school-room and all is given in such a lucid, practical manner, entirely free from fad urging, that every teacher must be benefited by its study. We know of no better work on the practice of teaching. Published by MacMillan & Co. New York.

GLIMPSES OF THE PLANT WORLD, by Fanny D. Bergen, is a work written for little folks telling all about plants. The author is a lover of out-door life and has made botany an absorbing study. She tells in the most graphic and interesting way, facts about plants, and awakens enthusiasm which will lead to investigation and study. Published by Lee & Shephard. Boston.

THEORY AND PRACTICE OF TEACHING, by David P. Page, has stood the test for half a century and is today an authority for all teachers. To the tyro and the veteran in the profession the book is one of the best extant, and its value is demonstrated by the demand for a new edition of the work, which contains an interesting account of the life of Mr. Page. In its new dress and form it is an attractive book, and one of the best for the teacher's library. Published by E. L. Kellogg & Co. New York.

READINGS FROM THE BOOK OF NATURE, by Simeon Mills, is an attempt to explain, by some new and startling theories, some of the mysteries that surround us. Within the compass of one hundred and thirty pages the author discusses Matter, Force, Light, Heat, Electricity, Colors, Chemistry, Creation, Decomposition of Water, Wave Theory, etc., etc., by a philosophy all his own, He is at variance with nearly all of the accepted theories, and states his conclusions in vigorous language. It is an interesting and vigorous book and merits study. Chicago: Chas. H. Kerr.

ELEMENTARY LESSONS IN PHYSICS, by John B. Gifford, Supt. of Schools, Peabody, Mass., is a clean-cut work cast on new lines and made by one who knows just what teachers need in this subject. The burden of the work is thrown upon the student and the exercises are so simple, the experiments so easy, that there is little apparatus required. The book is intended for the higher classes in grammar schools, and is one of the best of the newer kinds of text-books. Boston: Thompson, Brown & Co.

Practical Lessons in Fractions, by Florence N. Sloane, is a book of nearly one hundred pages, containing problems in fractions for primary and intermediate grades. There is nothing especially new about the method used or the kind of problems, but it will be a useful book to teachers of numbers. Boston: D. C. Heath & Co.

G. A. Wentworth's FIRST STEIN IN ALGEBRA, is designed for use in the upper grades of the grammar school and is cast along approved lines. Simple equations are introduced at once and the steps that follow are easy and progressive. It is like all of Prof. Wentworth's text-books in mathematics—accurate, scholarly, satisfactory. Boston: Ginn & Co.

A PREFARATORY GEBMAN READER FOR BEGINNERS, by C. I. Van Daell contains nearly eighty choice selections in prose and verse. The earlier pieces are easy, gradually increasing in difficulty, but most carefully graded. An excellent vocabulary is added. The notes are on the page with the text and are few in number. Beginners in German will find the book very helpful Boston: Ginn & Co.

LA PETITE FADETTE, George Sand's well-known story, has been edited with notes by F. Aston - Burns, and added to Heath's Modern Language series. Boston: D. C. Heath & Co.

EXTRAITS CHOISIS DES ŒUVRES DE PAUL BOURGET, edited and annotated with the author's consent by Alphonse N. Van Daell, contain poems, pastels, criticisms, etc., taken from Bourget's published works. Bourget's recent visit to the United States and his published impressions on our manners and customs have served to bring him into prominence with all readers and this little work is timely and purposeful. Probably the most striking feature of the book is the autobiographic letter written by Bourget to Prof. Van Daell expressly for this volume. Boston: Ginn & Co.

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MANUAL OF CHEMISTRY, by F. H. Storer and W. B. Lindsay, is a revision and re-writing of Eliot and Storer's well.known text-book. In its present form it is abreast of the times, full, complete, and exhaustive. With its new lease of life it is destined to receive the wide use which the earlier editions enjoyed. New York: American Book Co.

English Grammar, by Robert C. Metcalf, Supervisor of Schools, Boston. and Thomas Metcalf, Professor in the Illinois State Normal University, is an entirely new work, based on lines running in harmony with present-day theories. Supervisor Metcalf is well known by his books and lectures on language teaching, and his practical work in the Boston schools has given him a substantial reputation. The principles underlying the subject of this grammar have all been exemplified in the public schools, and the work may be said to have grown up in the school-room. The authors have no fads to work out, no novel methods to advocate. They have made a practical grammar for common schools and have made one of the best in the market. Examination of the book will demonstrate its worth and excellence. New York: American Book Co.

ELEMENTS OF ALGEBRA by William J. Milne, LL. D., President of N. Y. State Normal College, and author of a series of mathematical text-books, contains a course designed for grammar schools and beginners in public and private schools. The commonly followed order of classification of subjects has been departed from, and the author proceeds at once to interest the beginner in the subject. The equation is introduced at the outset and the problems are so easy that one may study them without the aid of a teacher. It is an admirable text-book and will doubtless have extensive use in Grammar schools. New York: American Book Co. Price 60 cents.

GESCHICTEN AUS DER TONNE, by Theodor Storm, has been edited, with an introduction and notes, by Churles F. Brusic, professor in Kenyon College. Storm's charming stories are great favorites in Germany and this story will be eagerly read by those fortunate to have it in their course of study. Boston: Ginn & Co.

OBJECT LESSONS IN ELEMENTARY SCIENCE, by Vincent T. Murché, contains expositions and outlines of lessons following the scheme issued by the London School Board. Vol. I. is limited to standards I and II and has lessons on common objects, plants and animals. The lessons are elaborately worked out and all needed information is furnished the teacher in giving these lessons to the class. It will be a suggestive and helpful book to our teachers, particularly to those of the lower grades. New York: Macmillan & Co. For sale in Boston by Williard Small, Franklin St.

SELECTIONS FROM WASHINGTON IRVING, STRANGED by Issae Thomas, Principal of Hillhouse High School, New Haven, is designed for use in grammar and high schools. Among the selections given are Rip Van Winkle, Christmas Sketches, Stratford-on-Avon, The Stout Gentleman, Dolph Heyliger, Surrender of Granada, Palace of the Alhambra, Oliver Goldsmith. A few directive notes are appended to the selections. Boston: Leach, Shewell, & Sanborn.

Herbert Nichols, Ph. D., assisted by William E. Parsons, have, by a great number of experiments, arrived at certain definite conclusions regarding our noting of Number and Space, and as a volume under the title have tabulated their experiments. Boston: Ginn & Co.

EXERCISE BOOK IN ALGEBRA, by Matthew S. McCurdy, is de igned for supplementary or revised work in connection with any text-book on Algebra. The book contains hundreds of problems and these for the most part are new and practical. A very few definitions are given. It will prove of great value to students in this branch of mathematics. Boston: Leach, Shewell, & Sanborn.

THE BEGINNERS' READERS, by Helen M. Cleveland, are three in number, in paper covers, and in large type. The stories are charmingly told and are properly graded. The new words in each lesson are few and are not too difficult. Each book consists of sixty-two pages and is admirably adapted for study primers or for supplementary readers.

DIALOGUES DE ORATORIBUS — TACITUS, edited, with introduction, notes, and indexes, by Charles Edwin Bennett, Professor of Latin in Cornell University, is a recent addition to the College Series. It is a much less ambitious work than Gudeman's edition of the Dialogues, and is designed for use in schools and colleges. Boston: Ginn & Co.

THE ROMAN PRONUNCIATION OF LATIN, by Frances E. Lord, Professor of Latin in Wellesley College, is an essay in which is shown why this pronunciation is used, and how to use it. It is a scholarly and argumentative effort and merits the attention of teachers of Latin. It is a small work of fifty old pages. Boston: Ginn & Co.

School English, by George P. Butler, is a manual for use in connection with the written English work of secondary schools, and is a model text-book. It is divided into two parts — rhetoric and composition. The first part deals with English words, correction of errors in the use of words and in construction, clearness, force and harmony, figures of speech, and errors in the use of figures. The second part treats of letter writing, exercises from abstracts, description and narration, essays, debate, punctuation and capitals. In the appendix is found a short history of the English language. It is a book which every student of English can profitably study, and it will find extensive use in the upper grade grammar and high schools. New York: American Book Co.

Geometry for Grammar Schools, by E. Hunt, I.L. D., Supt. of Schools for Winchester and Medford, is an admirable presentation of the elements of geometry for beginners. Dr. Hunt has made a careful study of the requirements for grammar schools, and has arranged his work to suit the age and ability of the pupils of this grade of schools. Every step is taken with great care and the lessons are all progressive. The burden of the work is thrown upon the student and when he has mastered the contents of this book he is ready for the larger work on geometry. The book merits the attention of all grammar school teachers. Boston: D. C. Heath & Co.

Selections from the letters of the Younger Pliny have been edited, with notes and introduction, by Sameul B. Platner. It is designed for sight reading and is excellent Latin for that purpose. The notes are very few and consist of translations of unusual words. Boston: Leach, Shewell, and Sanborn. Price 25 cents.

An Introduction to French Authors, by Alphonse N. Van Daell, is a reader for beginners in French, and contains nearly thirty choice selections in prose and verse, from the best French authors. A vocabulary is appended, the notes are few and on the page with the text. Boston: Ginn & Co.

We have received Vol. 3 of Sir Francis Bacon's Story, as discovered and deciphered by Orvill W. Owen, M. D.—The former volumes of this series have been noticed in these pages and we have nothing to add to our orginal statement regarding this strange cipher exposition. All that are interested in the curiosities of literature will find much diversion in these volumes. Published by the Howard Publishing Co., Detroit, Mich.

GRIMM'S FAIRY TALES, edited by Sara E. Wiltsie, contains twelve of the most popular stories, told in a style easily read by the youngest of readers. The editor has the rare faculty of knowing how to write for children, and these fairy stories take on new beauties under her magic pen. Boston: Ginn & Co.

THE BOY'S OWN GUIDE TO FISHING, by John Harrington Keene, contains everything that the average boy either knows or needs to know about fishing. The author says his book is "a plain, precise and practical explanation of all that is necessary to be known by the young angler." It contains directions for fishing in each of the seasons, and has a comprehensive chapter on the breeding of fishes. It is a book that will delight the heart of every boy and send him to stream or lake after every reading of its facinating pages. The veteran fisherman will find much valuable information in its pages. Boston: Lee & Shephard.

TACITUS: DIALOGUS DE ORATORIBUS, edited by Alfred Gudeman, of the University of Pennsylvania, is a work of nearly five hundred pages. It is a critical, exhaustive, and comprehensive study of the Dialogus and is a monument of scholarly research, crudition and critical acumen. Besides the text, the volume contains a prolegomena, critical apparatus, exceptical and critical notes, bibliography, and copious indexes. It is a work of profound scholarship and will receive the merited palm from all classicests. Boston: Ginn & Co.

THE NATIONAL SCHOOL LIBRARY OF SONG, No. 2, edited by Leo R. Lewis, contains advanced solfesgios, songs of nature, of the seasons, of home and secular four-part songs. It is designed for Normal and high schools, seminaries, etc. Boston: Ginn & Co.

INEBRIETY: OR NARCOMANIA: ITS ETIOLOGY, PATHOLOGY, TREATMENT AND JURISPRUDENCE. An American verbatim reprint of the third edition of this standard work has been authorized by the author, Dr. Norman Kerr, and the book is now published for the first time in this country. It has excited much interest abroad, both because Dr. Kerr is regarded as the greatest living English authority on the subject on which he writes, and also because of the new auggestions and exhaustive information contained in the book. The author contends that inchricty in all its forms is a disease and is amenable to treatment. As an expert in the matter he gives a great number of cases from his own exceptional experience to establish this assertion, together with the treatment which he has found to be efficacious. He is an attractive writer and by avoiding the use of technicalities he has given to the world a book which all classes can read. As a public educator against the use as well as the effects of alcohol and other narcotic poisons, this book will be of inestimable value, while in the medical profession it is destined to become a text-book as a most valuable contribution to medical literature. To lawyers, clergymen, insurance managers and others interested in this vital question, "Inebriety" will be a revelation. J. Selwin Tait & Sons. 650 pages. \$3.50.

FIRST LESSONS IN READING, by Elizabeth H. Fundenberg, is one of the best of primary primers. The author has combined the various methods and has made a primer which will gladden the heart of every primary teacher. The sentences are easy, the new words few, the arrangement excellent and the pictures admirable. A teacher's edition has been prepared to accompany the text book. New York: American Book Co.

Practical Flora, by Oliver R. Willis, Ph. D., Instructor of Botany, etc. in the New York Military Academy, gives a new arrangement of a science which should be more extensively taught in our schools. The author has made not only a well-arranged text-book on Botany, but a bandy work of reference, and its features, which are many, will commend it highly to all teachers. New York: American Book Co.

THE CENTURY CYCLOPEDIA OF NAMES is a sumptuous volume, edited by Benjamin E. Smith, A. M., managing editor of the Century Dictionary, and bound in unison with that work. It is a pronouncing and etymological dictionary of names in geography, biography, mythology, history, ethnology, art, archaeology, fiction, etc., and is probably fuller, richer, more modern and more accurate than anything yet attempted in this line. It is a direct outgrowth of the Century Dictionary, the original plan of which included an appendix covering this ground. But with the elaboration of the work, the material demand. ing treatment was found too voluminous to be made a part of the already over-crowded volumes, and so it was decided to gather it all into a separate volume. This plan has given scope to include much that must otherwise have been excluded. The names treated are not only those of geography and biography, but also those of races and tribes, legendary persons and places, characters and objects in fiction, stars and constellations, notable buildings and archaeological monuments, works of art, institutions, historical events, wets. parties, noted streets, vessels, horses, books, etc. The real wants of readers and students have been steadily kept in mind, and the result is a work which will be a standard for many years to come. Whoever buys the Century Dictionary will wish this volume, and it will find its place on the consulting table of every well-equipped library. The public owes more than the price of the copies sold to the publishers. Such works put all people under a debt of gratitude to the wisdom, energy, taste and good judgment of those concerned in their production. New York: The Century Company.

To the excellent College series of Greek authors has been added Homen's Odyssey, Books V-VIII, edited by B. Perrin, Professor in Yale University. The text is that of Dindorf, revised by Hentze. The notes are copious and critical, and are on the page with the text. Boston: Ginn & Co.

OUTLINES OF PSYCHOLOGY, by Henry G. Williams, is a pamphlet of not quite one hundred pages yet contains in this condensed form the entire scheme of psychology as applied to teaching. It contains also a history of education from the earliest times to the present, sketches of great educators, outlines of methods, over eight hundred questions and answers on psychology and theory, etc. It abundantly answers the off repeated questions, Of what value is a knowledge of psychology to teachers? It is a book that should be owned and studied by every teacher of whatever grade. Lynchburg, Ohio: Henry G. Williams. Price 40 cents.



DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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THE PROGRAMS OF THE COMMITTEE OF TEN.

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The report of the Committee of Ten suggests, it will be remembered, that the colleges should agree to accept as candidates for the freshman class, students who have satisfactorily completed any one of the now familiar courses of Table iv. At the meeting of the New England Association of Colleges and Preparatory Schools, last October, resolutions were introduced approving this suggestion and requesting the New England Colleges to take steps to make it immediately operative. The vote on the matter was postponed to a special midwinter meeting. The question is, therefore, converted from a theoretical into a practical one: Is any such change in secondary-school programs and college requirements advisable at the present time? And to those who answer this in the affirmative, a further question presents itself: Can the programs be changed in any way so as to fit them better to become the ideals of our schools and teach-Ideals they will certainly be for many years to many schools and to many teachers, even if they are eventually pushed aside for something better. And we must not forget that they are bound to exert, during all those years, a moulding influence whose extent and power we can only dimly foresee. It behooves us, then, to ask ourselves with sober earnestness, whether in any way they can be better fitted for the work which lies before them.

It is a difficult and an ungracious task to criticise the work of men so able as those who made up the Committee of Ten. The programs as they now stand, if introduced into our secondary schools, would mark a vast advance over the present condition. Yet I cannot but think that before accepting them as ideals, even as temporary ideals, certain changes and enlargements might well be made. It is the purpose of this paper to present two points in which I believe they might be improved.

It seems unnecessary to reproduce here, in full, the programs which have become so familiar, but a condensed statement of them is subjoined, in the form of a table, which shows the subjects recommended for the secondary-school program and the proportionate time devoted to each during the entire course of four years:

TABLE.

| | CLABBICAL. | LATIN SCIENTIFIC. | MODERN LANGUAGES. | KRGLIBH. |
|---|------------|----------------------|----------------------|----------|
| | 1. | II. | III. | IV. |
| Foreign Languages (3, 2 or 1) | #8 | 18 | 18 | 17 or 18 |
| English | 11 | 18 | 18 | is or is |
| Mathematics | 11 or 11 | li or it | li or is | 18 |
| History | 50 or 18 | go or go | to or to | 18 |
| Sciences (in classical course 3, in each of the other courses, 8) | **o | 18 | 18 | 18 |

As one looks over the programs one is struck, first of all, with the fact that each provides for the study of some one subject throughout the entire course. The advantage of this method is admitted by everybody. We all agree with the Committee when they say: "If... Latin is steadily pursued for four years, with four or five hours a week devoted to it, that subject will be worth more to the pupil than the sum of half a dozen other subjects, each of which has one-sixth of the time devoted to Latin." But when we ask the subjects selected for this most important place in the program, it is with a feeling of surprise that we find invariably one: foreign language. The boy who is unable or unwilling to devote himself to Latin may try French; if that does not suit him, German may be substituted.

But if these programs are adopted, every secondary-school student, whatever his tastes or abilities, must spend one-fifth of his time for the whole course on some one foreign language. Beside this, three out of the four programs provide for his spending at least one-sixth of his time on a second foreign language, in addition to the time which all four require to be given to English. This additional requirement of foreign language may, however, be passed over with mere mention, since it is found in only three out of the four. The point of importance is that every student must, if these programs are accepted, make the backbone of his course a foreign language.

The study of foreign language has a twofold value. It serves to train a student in minute accuracy, to provide him with a rich and flexible vocabulary, and also, by acquainting him with history and poetry, with philosophy and oratory, to endow him with a broader and more generous culture. In a word, it instructs both in language and in the humanities. But is it absolutely necessary that these two ends should be accomplished by the use of a single means? May there not be youths who would be more richly cultured by a prolonged and earnest study of the best history and literature of our English language than by an equal devotion to those written in any foreign tongue? And if teaching of the humanities were provided for in this way, might not less than the minimum time which the programs suggest for foreign language be sufficient to accomplish that other aim, - the training in accuracy, elegance and flexibility of the vocabulary? In other words, might it not be possible to add or to substitute in this list of programs one in which the backbone of the course should be a four-years' study of history, opening out into geography, civil government, political science, biography, art and literature, and in which the study of foreign language should take a subordinate place?

The arguments against compelling a high school student to spend a large part of his time on foreign language are almost too familiar to need repetition. They are essentially two: First. As minds are so widely different, curricula should differ correspondingly and should provide not only for the boy who finds foreign language easy and profitable, but also for him who finds it difficult of acquisition and niggard in its returns for the outlay. Second. A youth who closes his schooling at seventeen or

eighteen is most unlikely to undertake thereafter a line of study which is entirely new, or to carry on any study of foreign language or literature; but he is quite likely to pursue subjects in which he has already become interested and which may be carried on by the use of English. So that English branches are much more directly promotive of later study than is foreign language. To these general arguments, which would weigh equally whatever substitute might be proposed in place of foreign language, we may add one in favor of the specific substitute suggested. In a country whose fate depends upon general political intelligence and high moral standards, there is no subject which ought to be more thoroughly understood than the history of other nations. — the contributions which they have made to the problems which we are today trying to solve; there is no inspiration which should be more eagerly courted than that of the noble men and women who have known how to die and how to live for God and humanity. Though many of the questions which would arise in such a course would be beyond the powers of boys and girls, they present muterial for later thought; while the information acquired and the patriotic enthusiasm aroused would be the surest guarantee the schools could offer for a new generation of thoughtful, intelligent, devoted citizens. The more earnest the attention and the more profound the respect paid to this noble subject, the better the prospect of a country which we can not only love but honor. For all these reasons, we urge that among the ideal programs of our secondary-schools shall be included one which devotes a fifth of the course to history, using the word in its large sense, and make room for this by giving a shorter time to the chief foreign language.

Another point which catches the attention at once, as one glances over the programs, is the number of sciences taught and the relative time given to them. In three out of the four programs, 18-80 of the entire time is given to science; in three out of the four programs 29-80 to 39-80 is given to foreign languages. But the time spent on languages is devoted to two or three, while the much less time spent on sciences is divided among eight. Imagine the mental condition of a youth of eighteen who should be required in a single year to master the rudiments of chemistry, physics, geology, astronomy, physical

geography, meteorology, anatomy, physiology and hygiene, and botany or zoology. Yet should be required to do this in a single year of attendance at a high school, he would have at his disposal for the task more time, in actual hours, than is provided him for just this work by the programs under discussion.

It is easy to trace the steps by which this arrangement was reached. No other subject in the secondary-school curriculum has so obvious, so almost tangible a connection with everyday life, as have the sciences. A knowledge of any one of them puts meaning under certain familiar facts, adds a richness of interest to certain daily happenings which would otherwise be empty and stupid. The boy who is asked to choose between the sciences named is in the condition of a man who is asked to choose between his food and his fire,—life he would find very unsatisfactory without both; and it seems almost better to have a scant supply of each than an entire dearth of either. So that the first reason for including all these sciences appears to be a strong appreciation of the value of each, and an unwillingness to let any one drop out.

A second argument for this course may undoubtedly be drawn from the condition of the various natural and physical sciences. All of them either are absolutely new or have suffered, in recent years, such a revolution in ideas as amounts almost to a re-creation. The general principles universally recognized as settled are few; uncertainty hangs over large portions of the field. It may be claimed that no science offers enough material suitable for the purposes of secondary-school instruction to occupy more than one year; that the universally accepted facts of importance can be presented in that time, and that debatable points should not be touched upon. Or it may be said that debatable points require a kind of treatment that young students are not prepared to give. It is undoubtedly true that the unsettled and incomplete state of these sciences renders their handling in secondary schools far more difficult.

The first argument, however, is completely met by the announced plan of the committee. These gentlemen have agreed that, spite of the sacrifices involved, it is better to "omit all short information courses" and "give time enough to each subject to win from it the kind of mental training it is fitted to supply." The information furnished by a study of the various sciences

mentioned, interesting and valuable as it is, is useless in comparison with the mental training to be obtained by a prolonged study of a single one of them. This the committee practically affirm in a passage already quoted; and the whole body of educators agree with the committee. It remains, then, merely to ask whether some, at least, of these sciences do not offer material which could be wisely studied for several successive years in a secondary school. I believe that a course could be planned in physics, let us say, which should extend over three or four years, and should open out, in some small measure at least, into chemistry, geology, physical geography, meteorology, and anatomy and physiology, both of plants and of animals; and that such a course, supplemented by one in chemistry, or, if it should be thought more desirable, two courses, each of a single year, in chemistry and botany or zoology, would result both in a far better mental training, and in a keener appetite for those sciences which had been merely suggested.

Such a course might well consist of a two-years' study of general physics, followed by more thorough work in some one or more divisions of the subject. Molar physics would naturally open out into molecular physics and this into chemistry proper. In connection with the consideration of various forms of matter, many questions relating to meteorology might be discussed; in dealing with machines, the mechanics of animal and vegetable bodies might well receive attention. No better suggestion of the way in which one science might be linked with others can, however, be given than that briefly hinted by Prof. J. P. Cooke in his little book on "Laboratory Practice."

That there would be any difficulty in finding enough suitable material to fill up the time I cannot believe. The advantage of continuous, minute, detailed work, such as is done by Latin and Greek teachers, has never been fully felt by science teachers, because the time allotted to any given science has never made it possible for them to do much of it. But it is just this minute drill work, continued until the fibre of the student's mind has been altered by it, which is needed to confer upon him the benefits which science can give. And this remaking of the mind is not done in a day or a year, or indeed in a succession of years, if they are spent in dabbling in different sciences. A single synthetic line of work which, while hold-

ing the mind to a consideration of one subject for several years, shall be broad enough to show the relations between this and other subjects is the ideal science requirement for our secondary schools.

Two of the most important principles which underlie the work of the Committee of Ten are these: First. The education which will fit a boy to undertake, with advantage, collegiate work is not to be gained solely by pursuit of the so-called "preparatory subjects." Second. Prolonged study of a single subject is more profitable than brief study of several. It will be seen that each of the changes proposed in this paper is merely a further step along one or the other of these two lines marked out by the Committee.

A GREAT AUSTRALIAN SCHOOL.

(ST. PETER'S COLLEGIATE SCHOOL, ADELAIDE, SOUTH AUSTRALIA.)
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In each of the five self-governing colonies of Australia there is at least one school which aims at reproducing the features of the "public school" of England. In Melbourne, Sydney and the five chief towns of Queensland there are endowed grammar schools, and in South Australia there are two schools of this kind,—the Collegiate School of St. Peter and Prince Alfred College. The former, while not confining itself to any particular class, is strongly identified with the Church of England and the better class of residents in the colony. The latter was started as an opposition school by the members of other religious bodies, and has attained great success. There is hot rivalry between "the colleges," as they are usually termed, both in university examinations and on the cricket and football fields. It is with St. Peter's that I propose especially to deal, my acquaintance with it having been much closer than with the rival school.

St. Peter's school was founded in 1847 by certain members of the Church of England who were desirous of having in the colony a school capable of giving a good classical, mathematical and commercial education. Sixty-five subscribers furnished the necessary funds, and the cumbrous title of the Church of England Collegiate School of South Australia was at first adopted. In December, 1847, the first Bishop of Adelaide, the Rev. Augustus Short, D. D., reached the colony, funds for the establishment of an Episcopal see having been given by the wealthy and munificent Miss (now Baroness) Burdett-Coutts. The bishop brought with him the Rev. T. P. Wilson, M. A., of Brasenose College, Oxford, who was next month appointed head master of the school. The Society for Promoting Christian Knowledge had placed in the hands of the bishop before he left London the sum of \$10,000, to be applied by him, as trustee, as he should think best for furthering the interests of the society. The bishop thought that he could not do better than transfer this money to the governors of the collegiate school, and so he did, stipulating that accommodation should be provided for four theological students within the walls of the college.

In 1849, a Mr. Allen promised a donation of \$10,000 towards the erection of suitable school buildings, on condition that the property should be vested in a council of governors, of whom the bishop of the diocese should be ex-officio president. The existing board of directors accepted the offer, and by an ordinance enacted by the Governor of South Australia, and assented to by the Legislative Council, the Governors of the Collegiate School of St. Peter, were incorporated. The name was adopted out of compliment to Bishop Short, whose old school in England was St. Peter's, Westminster. The school hat-ribbon bears the legend S. P. S. C., the initial letters of Sancti Petri Schola Collegiate.

The boys were at first taught in the school-room of Trinity church, the foundation-stone of the present buildings not being laid until May 24, 1849, and the school-room not being ready for use until January, 1850. There being no accommodation, as yet, for boarders in the school buildings, they were taken into Norwood house. At Michaelmas, 1853, the present boarding house was ready. Since that time, the buildings have been much enlarged and improved, apartments for the masters, the matron, and the servants having been added; also three dormitories, capable of accommodating sixty boarders. The buildings are of solid stone, and present a front like that of an Oxford college, consisting of two wings with a square tower in the center. To the right and left of the entrance hall are two large rooms, one of which was originally intended as a school-room

and the other as a dining-hall. The former was used as a dining-room for the boarders, and the latter was fitted up as a chapel. The school now has a handsome chapel, which is attended on Sundays by many parents of the boys and friends of the school; also, a fine stone-built gymnasium, ninety feet long; two fives' courts; a good house, garden and stable for the head master, a stable for the second master's horse; and an excellent field for cricket and foot ball.

The board of governors has always been strongly clerical. The council in 1857 comprised the Bishop, the Dean and the Archdeacon of Adelaide, another clergyman, one member of the legislative council, two members of the house of representatives, four doctors of medicine, and four others. In 1884, the governing body consisted of the Bishop, the Dean and the Archdeacon of Adelaide, Dr. Farr (a former head-master), Sir R. D. Ross (Speaker of the House of Representatives), two other members of the house, a civil engineer and seven others.

The school owns a good deal of landed property, and by the end of this century, or early in the next, will probably be richer than any school in Australia. In 1849, it purchased about 38 acres of land for less than six thousand dollars. This land is distant little more than a mile from the center of the city of Adelaide, and has increased very largely in value. Sir H. Young gave 111 acres of land at Dry Creek, to found an exhibition. The school also owns 115 acres at Mount Gambier, 168 acres in the Hundred of Light, 209 acres in the Hundred of Kanmantoo, and 503 acres in other parts of the colony. Mr. Allen's donations to the school amounted in all to \$35,000, and from other sources came about \$30,000 more. Friends of Bishop Short in England gave funds which enabled the governors to offer the Westminster and Christ church scholarships to the boys most proficient in Latin or Greek, and mathematics, provided that their religious and moral conduct should have been satisfactory to the head-master.

There are now attached to the school sixteen scholarships and exhibitions, six of which are of the value of \$250 per annum, and are tenable for three years, viz.: four Farrell scholarships, the Vansiltart, and the Adelaide St. Peter's Collegians.' The Vansiltart is intended to provide for the education of a boy from the Mount Gambier district, and the St. Peter's scholarship

is tenable at the University of Adelaide, and is to be given to a boy under 18 years of age who has attended St. Peter's school for at least two years immediately preceding the examination. Four scholarships, the Westminster, Christ church, Allen and Short, are of the value of \$50 each for two years, the remaining six being worth \$50 for one year. Of these last, two are given for physical science, two for mathematics, one for modern languages, and one for botany and zoology alternately. Of the Farrell scholarships, two are "open" and two are limited to sons of clergymen of the Church of England.

With regard to the studies, the governors, in an early report said that the course of instruction differed then from that of the ordinary grammar schools in England, in that more attention was paid to mathematical and English studies, and somewhat less to classics; but that it might be expected that, as the institutions of the colony assumed a settled character, the boys educated in South Australia would require an education more assimilated to that in the mother country. In the report of 1857, the subjects prescribed for study were the Holy Scriptures, in the original languages; the principles of the Christian religion; and such languages, arts and branches of science and literature as the visitor and governors should think fit. As there is now a theological college in Adelaide, under the supervision of the bishop, the theological work outlined in this early report is now done there and not at the school.

Early in 1884, I arrived at Adelaide, having been appointed second master by a committee in England, of which the late Dr. Benjamin Jowett (Principal of Balliol college, Oxford), the Dean of Windsor, Sir Arthur Blyth (the Agent-General of South Australia in London), the Rev. the Hon. F. G. Pelham, the Manager of the Bank of South Australia in London, and others were members. The following were my colleagues: The Rev. F. Williams, M. A., of Lincoln college, Oxford, head master; Herr Kirchner (of the University of Berlin, and an ex-officer of the German army during the war of 1870), master of modern languages and teacher of gymnastics, fencing and drill; A. H. Champion, B. A., of Trinity college, Cambridge; E. H. Wainwright, B. A., of London University, and E. W. Graham. Afterwards T. A. Caterer, the first B. A. of Adelaide University, and an excellent cricketer, and the Rev. F. T. Mathews, B. A.,

of London University, were added to the staff. Teachers of drawing and music visited the school.

The school was divided into eight forms, denoted as First, Second, Upper and Lower Third, Fourth Modern, Fourth Classical, Fifth, and Sixth, the last being highest. The school hours were from 9:15 to 12:30 in the morning and from 2 to 4 in the afternoon. The first ten minutes in the morning were taken up with the chapel service, so that morning school did not really begin till 9:30. For instruction in mathematics, the school was divided into eight divisions.

There are four terms in the South Australian school year, beginning February 1st, May 1st, July 15th, and October 1st, and at the end of each term is a vacation of one week, at Easter and Michaelmas, two weeks at midwinter,—early part of July—and six weeks at Christmas, which is the hottest season.

The charge for boarders, including board, tuition, washing and mending clothes, is \$325 per annum, with some reductions for younger brothers and sons of clergymen of the Church of England.

At the end of the school year in June, an annual speechday is held, at which the boys sing and declaim, after the usual fashion, and the head master reads his report of the year's work. The governor of the colony, with an attendant aide-de-camp, the bishop with his chaplain, the members of the school council, and "sisters, cousins, aunts," mothers, fathers and brothers of the boys muster in great force. As St. Peter's is decidedly the socially correct school, the gathering is sure to be described in next day's paper as "brilliant." After the entertainment and report comes the distribution of the prizes. Prizes are . awarded for highest marks in the examination on the classical and the mathematical sides, and also for general diligence, in each form, besides special prizes for singing, neatness in homework, books, to the best prefect, and to the school librarian; also, for drawing, painting, and regular attendance at the college choir. The bishop gives an annual prize for study of the Greek Testament; Sir Henry Ayers, prizes for French, German and elocution; and Sir E. T. Smith, a prize for history. There are also three essay prizes, two being given by old scholars now resident in the northern territory of South Australia, and the third by The Advertiser, one of the leading daily morning papers in Adelaide. Dr. Stirling, M. P., gives prizes for reading.

It has been said that the examination prizes were awarded according to the results obtained at the annual examination, but this is not quite true to fact, and upon this very matter arose a conflict between the head master and myself. I was, and still am, strongly impressed with the idea that a prize offered for excellence in a subject should be awarded for excellence in that subject, and for nothing clse: that moral or other considerations do not enter into the question at all. The Head Master thought that moral character is an element in the distribution of prizes offered to encourage the study of English History or of the Greek Grammar. Another curious result, as it appeared to me, of the principles on which prizes were awarded, was that in 1884 a boy of obviously German origin gained the French prize, but failed to gain the German prize, though he was highly industrious and obtained the highest marks in the German papers. It seemed odd that a knowledge of one modern language should debar a boy from winning (or rather from receiving, for he did win it) a prize in another modern language. It has always seemed to me that, if a boy who wins a prize in one subject also does best in another, he doubly deserves both prizes, for having beaten his competitors though his attention was distributed over two subjects.

But these eccentricities were largely accounted for by a desire to send home as many boys as possible with prizes or certificates. This desire also explains why, throughout the whole school, the same boy never won the prize for examination and the prize for diligence also; though it is surely not inconceivable that the most diligent boy might sometimes do the best examination papers, or that the eleverest boy might also be the most diligent. I well remember the brilliant author of "Epicurus and the Epicureans" saying to me that he could not understand how an able, ambitious man could be idle; and I suppose the same remark might be made of clever boys.

That none might return home unrewarded, there were, besides the Class Prizes, certain certificates called "Honors," of the first, second, and third class, both on the Classical and Mathematical side. From seven to fourteen boys in each form were thus decorated, reminding one of the saying that there are two things that no German can avoid,—Death and the Iron Cross. So it required considerable ingenuity in a St. Peter's boy to

escape "honors" and prizes. To me, accustomed as I had been to a very chary distribution of prizes, this wholesale awarding of honors was ridiculous and even dishonest.

The work of both boys and girls at the High Schools of South Australia is tested by the examinations of the University, called in my day the Matriculation and the Junior, but now termed the Senior and the Junior. At St. Peter's, the fifth form boys were prepared for the Junior, and the sixth form boys for the Matriculation examination. At the head of the school were a few boys, who, having passed the Matriculation, were working for University scholarships. The keen rivalry between the schools with regard to these two examinations amounted, in the case of St. Peter's and Prince Alfred's, to positive jealousy. These institutions were not only the largest and richest, but were representatives of the Church party and the "Dissenters," and of the "society people" and the outsiders. While St. Peter's had on its staff graduates from Trinity College, Dublin, from London and Colonial Universities, as well as Oxford and Cambridge men; I think that an Oxford or Cambridge degree would have been considered a disqualification for a candidate for employment on the staff of Prince Alfred College.

The Head of St. Peter's being a mathematical man, the preparation of the boys in mathematics fell to him, while to me was committed their instruction in Greek, Latin, and English. The preparation in the elementary subjects, such as Geography and English History, should have devolved on the Third Master, but he had been so signally unsuccessful with his pupils that this work had to be provided for otherwise. He was retained in his place partly because he was an old pupil of the school, and so had many connections in the colony, but mainly because, being in Holy Orders, he was a useful assistant in clerical matters to the Bishop, whose beliests he was ever ready to obey. What should have been his schoolwork was partly done by Mr. Champion, an old boy of the famous Shrewsbury School, and a graduate of Trinity College, Cambridge. A good scholar, and a most painstaking teacher, he is now Head Master of the Church of England Grammar School at Launceston, in Tasmania, the Emerald Isle of Australasia. Mr. Wainwright, the Science lecturer, and Herr Kirchner, the Master of modern languages, were

both very successful in preparing boys for the University examinations. Mr. E. W. Graham was a good disciplinarian and a devoted teacher of the little boys, but his work lay so entirely at the bottom of the school that it did not make any show in outside examinations.

At the Junior examination in November, 1884, eighty boys and girls passed from all the schools, three girls standing at the head of the first class. St. Peter's School did very well; two boys were placed in the first class, three in the second, and eight in the third. The subjects for the Junior examination were English, Latin, Greek, French, German, Mathematics, Chemistry, Elementary Physics, Botany, Animal Physiology and Physical Geography. The girl who took first place passed in six subjects, and in five of these "with credit." None passed in fewer than three subjects.

At the Matriculation examination, in the same year, thirty-two boys and eight girls from the various schools of the colony, including a few privately prepared, passed. Of these, ten were placed in the first class, four of whom, including a boy who was bracketed first, were St. Peter's boys. Two St. Peter's boys were placed in the second class, and three in the third class. The subjects of examination were English, Latin, Greek, French, German, Mathematics, Chemistry, Natural Philosophy, Botany, Animal Physiology, and Geology. Enough marks to secure a pass could be gained in two of these subjects, but only one boy got into the first class with fewer than four subjects, and some boys passed in five. The amount required in each subject can be inferred from the requirements in Latin and English. In the former subject, a book of Virgil, or one of the shorter treatises of Cicero, such as the De Amicitia or the De Senectate, together with grammar, and easy Latin Prose, was required. In the latter, a play of Shakespeare, to be carefully studied, with Grammar and Analysis of sentences, was prescribed.

In March, 1885, one of the two University scholarships, value \$250 per annum for three years, fell vacant, and was won by my pupil, C. W. Hayward, who later went to Keble College, Oxford. Besides being a hard-working student, he was a capital cricketer, scoring 126 runs in the match between the two colleges on Adelaide Oval, and even making a stand against the team of English professional cricketers visiting Australia. In November,

1885, a second University scholarship was won by my pupil, R. B. Andrews, son of Canon Andrews.

To turn from examinations to some other matters. Unmarried masters at St. Peter's were expected to live in the school-buildings (where unfurnished rooms were allotted to them, rent free). and to supervise the Head Master's private boarders. For their board and washing, they paid \$5 a week to the Head Master, who reaped all the profits of the boarding-house, and turned over the work connected with it to the resident assistants. In my time there were four resident masters, who contributed nearly \$1000 a year to the very man whose work they were doing, and whose income they were doubling. masters divided between them the "duty," or supervision of the boys out of school hours. Owing to the independence and selfreliance of the colonial boys, this task was much less minute and inquisitorial than at private schools in England, where it destroys all the comfort of the resident masters, and tends to make them mere spies upon the boys. But there is something about the supervision of a school boarding-house which is hopelessly petty, and this part of the work was constantly causing

With regard to the boys: while I had some intelligent and industrious pupils, none of them—though the Sixth form was considered the best the school had ever had—in any sense reached the standard attained by the boys of a large provincial grammar school or "public school" in England. The two best boys—very nice fellows—were just beginning to read Plato and Aeschylus, and could translate Virgil fairly, but of Greek or Latin verse, composition, or of the higher refinements of scholarship they had no conception, and would have made very little out of an unseen Greek or Latin passage, unless of the simplest kind.

Boys of Australian birth take things much more easily than boys bred in the intellectually stimulating atmosphere of an old country: the southern climate is enervating, and it requires a great deal of energy to drive boys a few yards upon the road to knowledge. As Mr. Walter Besant, who was at one time a Professor in the island of Mauritius, says: "Even in quite temperate zones it requires an amazing amount of talk, persuasion, entreaty, tears, expostulations, kicks, shoves, cuffs, boxes

on the ear, admonitions of stick to move the people a small six inches; in tropical countries it wants ten times the energy to produce a far more miserable result." The keen competition that exists among the boys of a good English school is undreamt of in the colonies, where a very moderate effort suffices to put an intelligent boy at the head of his form or school. Besides all this, though scholarship is by no means unrequited in Australia, boys do not see many of the glittering prizes of public life held by scholars, nor do they observe that a brilliant career at the University is, as it so often is in England, the foundation for the highest success in politics, diplomacy, the Church, or the public service. The successful Australian is usually a lawyer or a man of business, intelligent enough, but suspected by no one of high scholarship or literary attainment. Thus boys, noting few instances in which the prizes of life are won by scholars, are not ambitious to become scholars. The results, both in money and notoriety, of playing in the Australian Eleven are much more nearly present to the schoolboy's mind than the rewards of learning.

In Australia, the Professors and Lecturers at the Universities, the Head and Second Masters of the large schools, are all imported from England; and the burden of the higher teaching work in the colonies is borne almost entirely by men from the old country. Though the Boards of Colonial Universities and Schools are constantly falling out with and dismissing their Professors, Head and Second Masters, yet they immediately afterwards set to work to import successors. In 1883, the Rev. W. Bedell Stanford, an excellent scholar, who had been a Head Master in England, was dismissed, and succeeded by the Rev. F. Williams, who soon took a trip to England, his place being filled by Mr. J. H. Lindon, a graduate of Trinity College, Cambridge. Soon the Rev. P. E. Raynor, a double first class Oxford man, became Head, and now I hear that the Council is rausacking England for a new principal.

These conflicts between the representatives of the Old and the New World are much to be regretted, but no Australian institution of learning is free from them, and, unquestionably, the efficiency of the work is much marred by the insecurity of tenure. Governors of Colonial schools would do well to remember that, if they have to put up with some ideas they do not

like in their imported teachers, the teachers find some distasteful things also; and the work of teaching, already particularly hard, owing to the laxity of discipline in the homes presided over by these same Governors, should not be rendered harder by conflict with the very people whose aid and encouragement ought always to be at the teacher's service.

There is in "the Colonies" a readiness to welcome the Englishman socially, but a tendency to regard him with jealousy professionally. Whenever a man is appointed in England to a post in a colonial university or school, his appointment offends some one who fancies that he has a claim upon the emoluments of the position, however unfitted he may be to fulfill its duties. Thus the new arrival finds his work exposed to unfriendly criticism at the very outset, and often without even knowing who his critics are. A well known Head Muster in New Zealand told me that he held on to his post through mere obstinacy and a determination to fight the battle out, but that his position was made a burden to him by the anti-Old-Country-methods party in the Governing Board. Nor could be have maintained his position had he not been fortunate enough to have the Board bound by a contract, from the terms of which it was impossible to escape without paying heavy damages for its breach. Yet he is an excellent Head Master, as some of the men who would long ago have turned him out, if they had had the power, have confessed.

At most, if not all, Australian schools, there is current the fatal doctrine that size is the true and infallible test of merit, and that a school's success is to be measured entirely and solely by the number of pupils in attendance. My own view of the matter being the same as that of the great Dr. Arnold, who once said of Rugby, "It is not necessary that this school should be a school of 300, or of 100, or of 50 boys, but it is necessary that it should be a school of Christian gentlemen," it was not likely that I should approve of the retention in the school of boys, who, after reasonable warning and reasonable probation, failed to respond to the teacher's best efforts in their behalf. Yet at Australian schools boys who were notoriously a burden and a daily recurring nuisance to every Master who had to deal with them, and whose continuance at the school was entirely subversive of good discipline, were retained, either because their

removal would offend some "honorable" man, or would reduce the number of pupils on the school roll.

Estimable as the work of reforming unruly boys may be, it does not seem to me to form any part of the work to be undertaken by a good school. Accordingly when one of the most notorious of these boys had worn out my patience for some time, I expressed to the Head Master and to the boy, sentiments so violent that the animal was at once removed from my class. This was all very well for me, but in three days his new master, unfitted by the condition of his health to cope with ruffianism, was in despair. Yet, I suppose that a dozen strokes a day with a hazel stick upon what a German friend of mine used to call "the most sensible part of his body" would have reduced him, in a week, to absolute docility, and would have reduced the wear and tear of teachers' nerves and constitutions to an almost incalculable extent.

PERMANENT TENURE OF OFFICE FOR SCHOOL SUPERINTENDENTS.

BY WILLIAM A. MOWRY, Ph. D., HYDE PARK, MASS.

"Yes, it is true, I have never been to Europe. I started for Europe one summer, intending to spend a long vacation in studying the educational conditions in France and Germany. said that since the Franco-Prussian war, France has improved her educational advantages amazingly. I have heard it stated that she is now appropriating, in her annual budget, about eight times as much money to public education as she expended before that But I did not reach Europe. We fell in with a terrific cyclone in mid-Atlantic, and were driven with great fury, first south, then westerly, veering to the northwest, and then we lost all reckoning, and for twenty-four hours could not tell points of compass at all, but finally, the steamer was beached on the sandy shore of a new country called Alteria. I spent six weeks there and then was banished by imperial orders, and taken back home in a government transport, being kept in the cabin during the whole voyage so as to prevent my making known the whereabouts of that land. The people of Alteria are very jealous of foreign people, and they keep the knowledge of their institutions, and, indeed, of their country, away from all beyond their borders."
"Alteria? You say the country is called Alteria? What is the significance of the name?"

"The name indicates their policy in regard to all officials and all employes. They are always looking for the other man. They have a horror of seeing one man continue in an office or in any position a great length of time. They believe in rotation of office and rotation of everything,—rotation of crops and rotation of wealth, and in the whirligig of time. The cashiers of banks hold office only one year. The same is true of the superintendents of all their manufacturing establishments, and, in fact, all their industries. Every workman, every laborer, in their manufacturing establishments, on their farms and in their shops, is discharged as often as once a year, or oftener."

"What a ridiculous custom! Can they not see that such a plan entails endless loss upon all parties; that continuity of service is essential to the greatest success, indeed, to any real success?"

"If you place an old-fashioned penny before the eye, it will shut out all the rays of the sun. He, therefore, who always keeps pennies bound on before his eyes will not be troubled with minor questions, as to the qualities of light; he scarcely knows what light means. Moreover, if you demonstrate to them the advantages of continuous service and the evils of frequent changes in important offices, they are accustomed to taunt you with certain methods among our people. They remind us that we cannot put into practice the boasted advantages of Civil Service, and that we still adhere to rotation in office, especially in some offices of the highest importance, and they invariably point to our practice in regard to superintendents of schools. They are accustomed to say: 'Is anything of more importance than your schools - the education of the young? Yet you have no laws for permanent tenure of school superintendents. If your practice is best for superintendents of factories, machine shops and overseers of farms and other kinds of business, it certainly would be best for the But, there you have no laws for permanence in office, thereby proving that you have no faith in the theory of permanence. Moreover, turn about is fair play."

"Well, well, that is a singular theory. How do you account for it?"

"How do you account for the absence of laws securing permanence to the office of superintendent of schools?"

"I am sure I cannot tell, can you?"

Well, I have thought somewhat upon the subject, and have come to some such conclusions as the following:—

Our public school system is a growth of some two and a half centuries. During two hundred years, the schools in the several states were universally under the control and supervision of the school committees. The office of the city superintendent has sprung up within the last half century. It is true, it has now become quite universal, but the powers and duties of the office have not yet got adjusted, especially in the laws of the several states. In the school statutes of Massachusetts, for example, there are more than forty pages relating to the supervisory duties of school committees, but the only authority yet given to the city superintendent, by state law, is the power to sign certificates enabling a child under fourteen, who has attended school thirty weeks, to be employed in some manufacturing or mercantile business for the remainder of the year.

All further authority which the superintendent may receive must be delegated to him by the school committee. As this school committee is the power which appoints the superintendent and at the same time has the power to assign such duties to him as they choose, it is certainly natural that they should be slow to part with the power which, by law, has been exercised by them from generation to generation. Moreover, most valuable improvements are of slow growth. The office of city superintendent of Schools has won its way to universal favor in all parts of the country. In many places the school board has in its by-laws delegated necessary powers to the superintendent, and they work in harmony together. But there are multitudes of cities where the superintendent, in order to keep his office, is obliged to suppress his opinions and defer to the views of men who, in the nature of the case, cannot know so well about the matter as he who has given it special study as a professional expert.

'The difficulty in the case, primarily, is this,—that the same body which appoints the officer assigns to him his duties, retaining in their own hands what is not delegated to him. How much better, philosophically and practically, would it be for the state to determine the duties of the superintendent, assigning to him his proper place as the executive of the school system, and relegating all legislative duties to the school board.

The advantages of a proper system of supervision are so plain and so universally acknowledged, that in the Commonwealth of Massachusetts, at the present time, not only do the cities have superintendents, but the country towns, by joining together, have very generally appointed "district" superintendents, who have already succeeded in elevating, materially, the schools, both in regard to their courses of study and their methods of teaching.

It would seem then, that the time has come for Massachusetts to pass laws transferring from the school committees the proper professional and executive duties, and defining the various important duties of the school boards.

Then there remains the other most important change which, sooner or later, will be brought about by special enactment of the great and general court, viz:—permanent tenure of office for School Superintendents.

No man can perform the most effective service in this office without a permanent and far-reaching plan. In regard to methods of teaching, courses of study and all that pertains to the improvement of the schools, important changes should be introduced slowly. It would take eight or ten years to carry through all the grades a well digested series of changes. Now if one man holds this office for a year or two, and then another takes it, and a little later another, how can even well-directed efforts result in permanent good?

When a farmer finds the right man to manage his farm for him, or when the manufacturing corporation finds a competent superintendent, they do not change him every few years, but they regard his services as more valuable year by year, from the experience he has gained in the business. Cashiers and clerks in banks, salesmen and others employed in stores are regarded as holding permanent positions, but when it comes to the office of superintendent of public schools, many a competent man refuses to enter the arena, on account of the notorious insecurity of the position.

The schools of a Commonwealth are as important as any institution or branch of service, public or private. They should be managed on business principles. Politics and party management should have no place there; permanence of service and a proper remuneration should characterize the positions of both superintendents and teachers. It is high time that the legislatures enacted laws defining the separate duties of school committees and superintendents, making these separate duties uniform throughout the state, and making the tenure of office of superintendents permanent. Committees would then exercise extreme care in the selection of a superintendent, because when once elected he would hold the office till he should resign or be displaced by vote of the committee.

Such a law would at once give not only permanence but dignity to the office. It would make this service more attractive, thereby bringing into it the highest and best talent to be found.

EDUCATION IN DENMARK.

KRISTINE FREDERIKSEN, COPENHAGEN.

The present arrangement and administration of the schools of Denmark is founded on two laws from 1814, which have, however, been altered by later decrees. One of the laws regulates the common schools in towns, the other those in the country; but the fundamental principles are alike for both. Still, it must be noted, that in the course of some twenty or thirty years, most of the larger towns have themselves re-organized their common schools, which now-a-days give the pupils an amount of knowledge that greatly surpasses the standard fixed by the laws. All children at the age of seven to fourteen years must attend some school, unless their parents or tutors take care to have them taught satisfactorily in some other manner. Sometimes children are permitted to leave school at the age of thirteen, provided that they have reached what knowledge and ability they have to acquire during their school-time. Parents who neglect to send their children to school are fined. In the common schools are taught religion, writing, reading, arithmetic, music, gymnastics, history of Denmark and geography. Besides, the teachers have to teach the children as much as possible of all that will counteract prejudices and develop their ability for work. The aim of the school is to make the children good Christians and citizens, and to give them such knowledge and powers as will serve this end.

Every parish is to have a school, but several of them have more than one. This is necessary, partly because the law forbids any child to go a longer distance to school than one English mile, and partly because no single teacher must have a greater number of children than one hundred in the country—eighty in towns. In towns, every school has two teachers or more, but in the country it is common that one teacher has two schools, namely,—a primary school, for children from seven to ten years, and the usual common school. Each parish must pay its school expenses, but the government gives yearly 400,000 Kr. to the salary of teachers, and 365,000 to the school funds, out of which are paid pensions for teachers and contributions to the salaries of assistant teachers.

Every appointed teacher who has held a situation for ten years is entitled to a pension in case of his being unable to work any more. After ten years of service, his pension will be half of his salary, and after twenty-nine years, two-thirds of it. Teachers' widows only receive one-eighth of the salary, but every teacher has to secure to his wife some life insurance, and the government takes care that he performs this duty. Every parish or town has its school board, which works under the superintendence of the government. The supreme authority, under which come all the schools of the country, is the Ministry of Church and Schools.

The Latin schools were formerly superintended by the Board of the University; but, since 1848, they have been placed under the Ministry of Church and Schools. A bill of Parliament is necessary to change the material foundation of the higher schools. These schools are superintended by a Board of three members, selected, for three years, by the government. They have special superintendence of gymnastics and vocal music. The number of public Latin schools is twelve. Only one of them, that of Soro, is a boarding-school. The number of pupils is, for the present, 1863. At every school is appointed a rector, several head-masters and assistants. The salary of the rector is 4000 to 5000 Kr. The teachers are all entitled to pension, their widows too.

The conditions on which a boy is admitted to a Latin school are: he must be twelve years of age and have a sufficient amount of knowledge. Most Latin schools have founded preparatory schools. The schools have six classes, each of one year. As a rule, the number of pupils in a class is not to surpass twenty-five.

The daily school time is not divided, according to a general wish of the parents. It is six hours a day,—in summer, from eight until two and in winter, from nine until three o'clock — with ten minutes' play every hour, and twenty minutes for breakfast. Only at Soro the school time is divided. The aim of the Latin schools is chiefly a sound, general culture, besides to prepare the pupils for the university, and finally, to give them the scientific education which, also, is necessary in other positions. The instruction falls into two sub-divisions,—the linguistic-historical and the mathematic-scientific one.

The following subjects are taught: Danish (including Old-Icelandic and Swedish), German, French, English, Latin, Greek, religion, history, geography, arithmetic, science, drawing, writing, vocal music and gymnastics. French is considered the most important of living tongues. English is only taught as an experiment. In Latin, 120 chapters of Cicero must be read, one book of Livius, one of Tacitus, two books of Virgil's Æneide, the Letters of Horace, two of his Odes, besides as much cursory reading as will be equal to two books of Livius. In mathematics, the pupils learn arithmetic and algebra, stereometry, plane geometry, analytic geometry, a. s. o: in science, chemical and mechanical physics and astronomy. There is taught gymnastics, military drill, swimming, and sometimes dancing and sloyd.

Except in the two highest classes, the housework is not to exceed three hours a day. The pupils graduate publicly every year. Part of the pupils graduate from the fourth class, and then have the same rights as those who have passed the so-called "Preliminar-examen," which will be mentioned later on.

From the sixth class, the pupils graduate to the University. Those who belong to the linguistic-historical branch are examined in Latin, Greek, French, exercise and science. The mathematic-scientific, in mathematics and science. Common for both are, Danish, French, German or English, and history. Those who have graduated in the mathematic-scientific branch have access to the Polytechnical School, besides to the University.

The payment for instruction at the public Latin schools varies from 120 to 170 Kr. yearly. It is not difficult for poor, diligent pupils to obtain stipends. Gratis instruction can be given to one-sixth of the pupils. Pupils who have been taught privately can obtain access to the University by passing an examination, either

at a public Latin school, or at a private one which has the right of graduating pupils. A private Latin school can be founded with the permission of the King. The government controls the examinations passed there. There are, for the present, twenty-two private Latin schools, of which one is a school for girls, managed by a woman; so is one of the boy-schools also. The number of pupils in private Latin schools is 2,221.

"Praeliminaerexamen" is an examination introduced in 1881, instead of different smaller and greater examinations. It can be passed at public and at private schools. The pupils graduate in Danish, English, German or French, history, geography, mathematics and science, religion, writing, drawing, gymnastics; vocal music is generally taught also. This examination gives access to the Veterinary and Agricultural College, the lower Law School, the School for Pharmacy, for Dentists, for Officers, to appointments in the mail and telegraph service, etc. With several additions it will also give access to the University.

Women are not admitted as pupils to the public Latin schools, but they are allowed to graduate there. From 1882, they have the right of passing the "Pracliminaerexamen" and many secondary schools take pupils of both sexes. "Pracliminaerexamen" gives to woman the same access to schools and examinations as men have, but it gives them no right to public appointments. Women are admitted to the University on the same conditions as men; they may also pass all examinations at the University except that of theology; here there is a special examination arranged for them, which does not give them any right of preaching.

To the University belong a great many donations for the benefit of poor students, houses where they can live free, etc. There is a library, a botanical garden, a zoological and a mineralogical museum, an observatory, several laboratories, etc. The University is a state institution, to which belong several funds, consisting partly in lands, partly in money. Denmark has only one university, founded in 1478, by King Christian I. It is superintended by the Ministry of Church and Schools. Before a professor is appointed, the special faculty is consulted. If there are several candidates, a public competition will take place. The election is to be confirmed by the King. Everyone who has acquired the degree of a Doctor has the right of giving lectures at

the Faculty to which he belongs. All the professors form an association which assembles four times a week, or whenever the rector of the University desires it. This association selects the rector. There are five faculties, the theological, the medical, the philosophical, the mathematic-scientific faculty, the faculty of law and that of political economy. The number of students who in 1893 graduated to the University was 400. These students must have graduated from a Latin school. They have liberty to hear whatever lectures they choose, when the professor permits it; others, too, who do not prepare for any examination, may attend his lectures.

All lectures and exercises, belonging to studies of examinations, are gratis. The academical year is divided into two semesters of four months each. After the first year's study, every student passes an examination of philosophical propaedeutic. The students are examined, now and then, to try their diligence and progress. Every student must prove that he has followed a certain number of lectures before he is admitted to the final graduation. The students are examined by their own professors. Censors are appointed and paid by the government.

Besides the above mentioned schools, Copenhagen has a very large and excellent State University for farmers, gardeners, and foresters, another for engineers ("Polytechnie" school), a Manual Training school ("Technic" school) and an Academy for Pharmacists. Only the first of these schools admits women (till now, only one woman has graduated there). Four State Normal schools for teachers (in the country) admit only men, while a number of private Normal schools educate either female or male teachers. A special Danish kind of schools (adopted, however, after Danish pattern by Sweden and Norway) are the so-called High schools, where in winter time young men, and in summer, young women (sometimes both sexes together), mainly of the laboring classes, seek a relief from manual labor and a renewal of their school knowledge. The chief object of these schools is to give the young people a more ideal view of life than is generally found amongst hand laborers. In some of these schools the course is longer, and then manual training may form part of the curriculum. Yet, generally, the chief part of the teaching is oral (lectures), no part of it is compulsory, and no examination ever takes place. These schools are, from the beginning, wholly

due to this private initiative of the enthusiastic followers of the poet-pastor, Grundtvig (1791-1877). For years they were considered dangerous (as fostering too much political independence). In later years, they have been imitated by the more conservative factions. Now, it is thought that they may counteract socialism in a happy way, and they are, accordingly, supported by the government.

SECONDARY SCHOOLS AND THE CO-ORDINATION OF STUDIES.

L. E. RECTOR, JERSEY CITY, N. J.

All reforms are brought about slowly; the deeper the need, the longer in coming is the remedy, and the more far-reaching the result. To no class of reforms is this truism more applicable than to those which concern education. The schools, instead of leading the advance, too often follow it, and that, too, a great way behind.

It is my purpose, in this article, to inquire briefly into the conditions which surround the secondary schools, with a view of answering two questions. First, why have the secondary schools neglected the problem of co-ordinating their studies? and second, what may be done toward its solution under the existing conditions?

We note at the outset, that High Schools and Academies fall into two general classes. First, those which come directly under the control of the state, as we find them in New York and Michigan; and second, those which are independent of such state control. In the former class, pressure more or less severe is brought to bear upon students and teachers. The examination must be passed and the certificate granted by the state university, or the student fails to obtain the coveted diploma, the reputation of the school is impaired and the teacher's position is rendered insecure. In the second class of schools, graduation depends upon the successful completion of a course of study laid down by the Board of Education. The examinations are given by the school itself. Those members of the classical course who intend to enter college, in many instances, are made into a class by themselves and systematically coached or "crammed" for the end in view.

It is obvious that the co-ordination of studies has little to hope for among the schools of the first class. Success in these schools means that a majority of the students shall receive the certificate or pass-card. The end is definite and invariable: the means are generally cramming, or what you will, to secure that end. I trust I am not unfair to the state-examiners when I say that they ask only for Gradgrind facts. There lies before me a paper in English history for January, 1894. The paper contains fifteen questions, of which the student may answer ten. Of the fifteen, there are but two which call for anything more on the part of the student than the bare exercise of memory. It may be urged that the university has to adapt itself to the secondary schools as they exist. It is, however, far more true that the school, and especially the teacher, must conform to the requirements of the university.

The work of regeneration must begin in these schools, independent of state examinations. With them, in large measure, rests the solution of the co-ordinative method for secondary schools. Granting that those who desire to enter college will be prepared as they have been prepared for a century past, what may be done for that large majority who step from the High School directly into the world? Are they to learn simply the rudiments of a number of isolated subjects, or shall they be given a glimpse of the universe and of their social and moral relations to it?

Since the school which sets the standard prepares the papers for that standard, it would seem that reform in any line might be rapid and effective. And yet, what do we actually find? In the best of our secondary schools advance has been made in the direction of more efficient teaching of the separate subjects. Specialists have charge of the sciences, of mathematics, history, and languages. In those cities in which co-ordination has been tried with success in the elementary schools, we look in vain for its application in the High Schools. Is this attributable to ignorance, or timidity, or both?

A little study may throw light upon the subject. Modieval education centered about the university, and its methods controlled secondary and even elementary school-work. Comenius, in the 17th century, was the first to make a break between the higher and lower education as regards methods of instruction.

Pestalozzi and Froebel sent the movement forward. But it was left for the latter half of the present century — almost, indeed, for the last decade — to recognize that adult-psychology is not child psychology; that methods applicable to the college and university are not suited to elementary instruction. The secondary schools, constituting a link between the higher and lower, have been in a measure untouched by the changes which have affected both. In many instances, weaknesses have not been recognized; in others, college methods have been considered preferable to the anxiety and uncertainty of re-adjustment. The numbers involved are small compared with those of the elementary schools; and national pride has not been appealed to, as is the case where our colleges are concerned. Occupying thus an inferior position, secondary schools have been slow in pushing themselves to a rank which would impose new obligations upon them.

The state control of secondary schools has brought about a happy result in stimulating both pupils and teachers to higher efforts. However much we may deprecate the evil of cramming and other mis-directions of energy, and deplore its waste, it must be admitted that state examinations mean the thorough awakening of the schools. But at what a cost is the activity gained! The school with which I am connected has in its charge one victim of nervous prostration, the result of five months' study to pass a state examination on one subject. Several other students have been obliged to leave, fearing similar results. In at least one city in New York, the teachers were informed, a few months ago, that their positions for the coming year would depend upon the number of students that should pass the state examinations. Such conditions imposed upon pupils and teachers can have but one result, and that a pernicious one. A school thus hampered has no time to give to the problems of co-ordination. They are like individuals whom poverty forbids to be either clean or honest.

And yet, in schools thus fettered co-ordination is most needed. Few teachers will deny that our courses of study are over-crowded. Children are sent to us poorly prepared; we must turn them out at the end of three years, or four, with the required number of certificates. To respond to the pressure from above, and yet to do these boys and girls justice, at their adolescent

period, is a problem which has troubled more than one thoughtful teacher. Can we serve God and mammon?

During the past three, years the writer has made an earnest attempt to apply the principle of co-ordination, if not the letter always, in a High School situated in one of the larger manufacturing cities of New York. Although there are several thousand children in the elementary schools, not more than one hundred go to the High School, from which fifteen, on the average, may graduate every year. Political activity in school management means a poor equipment of books and apparatus. Until the last six months, there were neither library, maps, nor reference books, except those furnished by the regular teacher. In some instances, two or more students used the same text-book. Surely, a condition of affairs calculated to dishearten the bravest teacher!

The task set before me was the co-ordination of general history, English history, rhetoric, composition, literature, drawing, algebra, with review of United States history and civies. For students of good minds and thorough preparation, the above might not be considered too much for a year's work. For children who could neither read, write, nor cipher well, who understood very little comparatively of geography and United States history, and nothing at all of general literature, the outlook was dark. And yet, these students were expected to obtain state-certificates of proficiency in each of the subjects named.

Instead of plunging in medius res at the beginning of the year, some time was spent in determining the capacity and preparation of the class as a whole, and of each child as far as this was possible. My next task was to inspire each pupil with a love for work and with a determination to do his best. General history was taken up in the order laid down in the text-book. The literature and geography of each country were studied, and comparisons were made so far as the knowledge of the children would permit. An outline of the history of art was begun at the same time, the drawing based upon it. The rhetoric and composition constituted what might be called the drudgery of literature and history, but it was drudgery of which few complained.

In all the work I made an effort to show the essential relation of all the subjects, and, especially the subjects of the year's work, to each other. Civics received unexpected gleams of light from the study of Greece and Rome, no less than from English history. The American Civil War meant more after a study of the Peloponnesean War. United States history became a part of the one history of the world by which it was, in a measure, interpreted and explained. English literature, when it is studied next year, will be felt — vaguely, no doubt — but still felt, to be a part of a great world-literatue, not merely a study of authors, but as a feature of human advancement. English history meant a more careful study of one division of general history. United States history supplemented European history until the period following the Revolutionary War. Civil government in the United States was reviewed from the first, and shown to be the out-growth, if not the summation, of all that history has done for law and liberty.

But did your pupils pass the examination? the teacher asks. The answer is in the affirmative. Not only were the examinations a success, but the results far exceeded expectations. The pupils were able to think and to express themselves with more confidence, if not always correctly. Facts were not confused, they were either known or not known; and more facts were remembered. Lastly, there was less nervousness and hesitation on the part of the student, not only on sitting down to the examination, but in the daily recitation as well. No attempt was made to correlate the algebra with any of the other subjects of the course, and for a part of the year it was taught by another teacher; but the good effects of co-ordination were manifest even here. The student was more confident, more ready, more accurate. A child who can discuss intelligently the influence of Greece on modern times and draw his illustrations from European and American history, may be safely entrusted to the tender mercies of a quadratic equation.

In view of these facts, it would seem that a beginning in co-ordination might be made in our secondary schools. The Report of the Committee of Ten foreshadows it only in history, civil government and political economy, and it may be daring of the teacher to walk where this learned company fear to tread. It is also true that courses of study are poorly arranged for correlation by the individual teacher; in departmental teaching the difficulties seem almost insurmountable. Yet I believe that

co-ordination is possible in spite of any one or all of these difficulties. Courses of study are changed continually, and must be subject to revision till the end of time. An effective course of study must be adapted to circumstances, and circumstances vary with progress. Even in departmental teaching, that teacher will be most successful who knows how to make his subject an organic part of the curriculum. The child's attitude toward truth is what we strive to develop. The subject of the moment is the instrument for the moment; the artist has many tools, the artisan one. Truth remains a unity though many-sided. When the teachers in our secondary schools realize that co-ordination means economy in the physical and mental energy of themselves and of their pupils, co-ordination will be tried, and tried successfully.

THE CRITIC AT SEA. *

A review of "The Public School System of the United States."
BY THE AUTHOR OF "PRESTON PAPERS," NEW YORK CITY.

III

THE PUBLIC SCHOOLS OF BUFFALO.

"The fun of all talk is to find out what a man really thinks, and then contrast it with the lies he has been telling all dinner, and, perhaps, all his life."

Disraeli: Lothair.

In describing the schools of Buffalo, the Dr. was obliged (p. 65), for some occult reason, to explain what he means by "mechanical schools", although it would seem unnecessary to formulate the thought in words so frequently. But printer's ink is as cheap and abundant as his rhetoric, and the two have at last combined to produce a volume of — what?

He further says (Idem): "It is certainly not proper for school officials to condemn strongly all that pertains to the mechanical, and to endorse warmly the views of educational scientists, and then to convey to the public the impression that they practise in their schools what they preach outside of them, when, in truth, the schools in their charge are pervaded with just those things which they condemn, while those which they commend cannot be found in them."

^{*} Copyright, 1894, by Kasson & Palmer.

That seems like a truism which ought not to require so many 32-caliber words and phrases of an "educational scientist" to elucidate, even to the "grossly ignorant" teachers of America. Disraeli saw the "fun" of such talk, but the dolorous Dr. saw only the certain impropriety of it; and he might safely have left it out of his patent process for enlightening pedagogues, as most of them are capable of the severe effort required to make the deduction for themselves!

On page 66 he says: "A striking instance of this nature may be found at Buffalo, and, in order to illustrate my meaning, I shall compare what the superintendent of schools in that city remarks in his annual report of 1889-90, in regard to what schools should do, and what they should not do, with the instruction as I found it in the schools in his charge."

It is lamentable that the "feast of reason" to which we have been invited needs so much "illustration," and that there seem to be no short cuts, even in the illustrating. Surely, one whose chief claim to attention lies in his scathing criticism should at least furnish "ignorant teachers" with English that would interpret itself occasionally!

Quotations are then made as promised, and also expounded—doubtless on the presumption that the language of the reports was too profound for the ordinary reader—and he minutely describes "some of the teaching that I witnessed in the public schools of Buffalo, in order to give the reader an opportunity to judge for himself how well the claim to superiority bears the test of actual investigation." (P. 67.)

I may be mistaken, but in some way it has never occurred to me that action could precede thought, as it seems necessary to do in order to satisfy this impatient expert. To my mind, the Buffalo superintendent's words (quoted, as stated would be done, by our author), "my desire to keep the school department of our city abreast of the foremost in the race for supremacy" show the thought which naturally precedes action, even in reforms!

I would ask, before sitting in condemnation on the humiliated Buffalonian (since elevated by some mystic process to the office of state superintendent?), What is meant by "actual investigation?" Who made the investigations? What "expert" or other qualifications did he bring to the work in Buffalo? How many schools, and what ones, did he inspect? What was

the proportion of that number to the entire number of schools in Buffalo? How long a time was spent in each? In all? "Actual investigation" means rather more than entering the edge of the system, and demands some traits of which the book under review doesn't seem to give any very indisputable evidence, "it being a well known fact."

Again: I am not sure, even if the teaching was faithfully reported, and the very best he found there was conscientiously discussed, that he really needs to (covertly or otherwise) accuse the Superintendent of willful misrepresentation as to the actual condition of the schools under his charge, it being a well known fact that there may be a difference of opinion, however slight, as to just what application of the "universally accepted psychological law" (p. 66) to which he refers may be made in a given case.

Our quaint old humorist, "Bill Nye," has given us an apt illustration of the thorns that protect the roses of the "universally accepted psychological law" from the too common grasp of the "ignorant" but enthusiastic teacher when he tells us that—

"Sometimes, when the children were slow to remember a word, and hence its corresponding letter, I have drawn the object on a blackboard or on the side of the barn. For instance, we will suppose that 'D' is hard to fix in the mind of the pupil, and the words to which it belongs as an initial do not readily cling to the memory. I have only to draw upon the board a Deuteronomy, a Delphi, or a Dishabille, and he will never forget it. No matter how he may struggle to do so, it will still continue to haunt his brain forever. Those who have used my method say that after mastering the alphabet, the binomial theorem and the rule in Shelly's Case seemed like child's play."

Had not "Universally accepted psychological laws" better be left out of the question by the uninitiated?

Evidently, even the expert repented that he had borne quite so heavily on the fact of the responsibility of the Superintendent in question, for on page 76 he says:

"The supervision itself is of the scantiest, the city superintendent being the only supervising officer, although there are seven hundred toachers in the system."

This would seem to demonstrate the possibility that the Superintendent might have a very high ideal, and be working toward it (as hinted in his report) yet be unable at once to compel its attainment by all, or even to know that all, or just who, did not teach after his exalted pattern, and still be entirely sincere in his wish that it should be done, and honest in his conviction that it is being done as a rule.

Again: the superintendent may be (I do not know him personally, so I am only reviewing the may be's in his case) more of an educator than the "expert" credits him with being; and it may have dawned upon him that no matter how earnestly he desires immediate perfection, reforms in education, like other important changes of a radical nature, require some time to work out, and that this would be especially true where the main instruments are American teachers whose "professional weakness is the greatest sore spot of the American schools." (P. 14.) Again; with his wide practical knowledge of schools, he may be able to detect the under-current of philosophy used where a tyro would not.

We cannot afford to be too severe upon the Buffalo Superintendent for giving expression to high-minded aims in his work, if we concede the truth of the author's proposition as to superintendents in general, found on page 12: "He seldom fails to stamp the schools with his individual pedagogical ideas, thus giving the education, in his schools at least, a tendency in a certain direction."

In order to stamp the schools with his individual pedagogical ideas, he must have individual pedagogical ideas, which the quotations from the Buffalo report show, per se, that the Superintendent has—for language can never rise beyond the level of ideas, and his language surely demonstrates this. His report, taken in connection with the assumption that some of his teachers were mechanical in their methods, would be evidence to me that if he planted a bean one day, he would not dig it up the next, because it had not followed the example of the fabulous leguminous herb grown by the traditional "Jack" of the nursery tales; and therein, at least, he shows the good sense that is worth as much, "pound for pound," in the educational market as some other qualities with higher sounding appellations!

On page 68, a lesson in geography is described, in which the author has unwittingly (if not unwillingly) shown that at least one of the greatly-to-be-despised teachers of Buffalo had attacked the question of personal correction of class work—the bete noire

of many an over-worked (and over-criticised?) under-paid teacher; also, that her treatment of the class, by allowing each to report from his own work, seems in line with good ethical culture and self-government everywhere.

On page 69, another teacher opens a lesson in geography with the question, "How long does it take to go to California?" which she changed to "Tell me first why you would like to go to California;" two of the answers being: "I should like to drive around the mountains;" "I should like to see the Golden Gate." These, coupled with the learned author's statement that "The children appeared to do more toward the enlightenment of the teacher than the latter did to enlighten them," might lead some people (who are not saturated with psychology) to believe that the eminent critic did not "observe" quite deeply nor broadly enough when he condemned the Buffalo work as being purely mechanical. He ought to be given another half hour, in which to "investigate" and "study."

"The pedagogical absurdities were numerous" (p. 70) in another school that he visited, but "for the purpose of economizing space" he agrees to "confine my remarks to the curiosities which I found in one of the lower grades." If a "curiosity" was the real game for which the hunter tramped, surely a "lower grade" class-room in a cosmopolitan city was a most excellent place in which to trap his object, be it what it may.

As to the method used in the spelling class, at which he had the honor to be present, I really think there have been much worse ones than having "lower grades" read in concert, from the open book, the words which were to be learned for that lesson. Some very good educators still contend that spelling is largely done through sight; and surely, if they studied the words directly from the printed page, these lower grade children had the correct form before them, and of itself, this is a step in the right direction. That it was done "in concert" showed an economical use of limited time (quite as important to some teachers as "space" to authors—supra!) and also, to encourage the timid and strengthen the weak, besides, possibly, correcting some erroneous or vague ideas as to the names of the letters, which may have seized upon some infantile mind. In these ways, concert recitations are desirable aids as preliminary to individual work.

With the "sing-song so marked that it resulted in a well-defined melody" I have no fault to find, either; but should consider it infinitely preferable to the effect that must follow if given harshly, in tones that could not be reproduced upon the staff—as the author did with this lesson, in presenting it to us with characteristic sarcasm, and in fair imitation of a distinguished feminine author across the briny deep.

"After the words had been spelled in this manner for the second time, the lesson took a new turn. The children were now told to close their books, and when this had been done, the teacher heard them spell, individually, the words they had just studied in concert. When all the words had been spelled individually, I expected to hear another subject announced, but I learned, to my utter amazement, that the pupils were to be treated to a third course, for the teacher here remarked: 'We will now write the words;" all of which shows that at least one of the "mechanical" teachers of Buffalo appreciates the educational value of thoroughness, a quality for which some of the critics seem to have no use! She also, evidently, knew that a lesson just learned would be clinched by writing it; and that the "drill" was necessary in order to impress the word-forms on the minds of her little five-year-olds! Of course it would be somewhat "amazing" to one unacquainted with child-life and childish needs, such knowledge coming quite freely, however, to "lower grade" teachers in most of our public schools!!

Just here I want to call attention to the words these "lower grade" children were spelling, and contrast them with the "Up. Go up. Do go up. We do go up," of our childhood, and the "ab, eb, ib, ob, ub," of our ancestors' day and generation.

The words of the lesson selected by the distinguished critic of our public schools as a target for his scathing denunciation were "steal" and "their," and were taken from the reading lesson for the day! This method seems to carry common sense with it, and to lose nothing by comparison with the above quotations from more antique methods; so we may comfort ourselves with the reflection that the educational world does move, and not always backward!

Number work was next on the program of this "lower grade" class and it came in for its share of withering scorn. On page 73 the critic describes the class work, saying among other things:

"The first example the teacher gave them was the following: 6-2+4=? After the children had written this upon their slates, motions were made by them which indicated that they had had a considerable amount of experience in counting on their fingers."

"Amount of" looks superfluous to me, but from a psychological standpoint it may be indispensable to a full understanding of the somewhat ambiguous statement. "A considerable" experience in a lower grade class presupposes that some of it must have been gained outside of the schoolroom, in which case it is hardly just to blame the teacher for the "experience" which is not acquired within her jurisdiction.

The same paragraph reads further: "One boy displayed quite an original method of calculating. He performed the example in this way: he made six strokes upon his slate, rubbed out two of them, added four strokes to those remaining, and finished by counting the number of strokes then on the slate. It was all done with remarkable rapidity."

Commend me to a "system," or a teacher, which allows so much originality! I see nothing objectionable in a five-year-old child ascertaining for himself, in the quickest possible way, just what 6-2+4 equals. This is not the generation when several months and a vast amount of philosophy are run to waste to develop just such truths, and dozens more of a similar nature. Time is money in the common school and in the business world. Strokes on the slate are counted with more comfort, mayhap, than strokes on the person; and the boy who, in a "lowest grade" has learned to do the one with "remarkable rapidity," will not be likely later to suffer the other without a vigorous protest!

On the next page, in the same connection, the learned author says: "I visited a number of classes in this building, and before leaving it I saw things which convinced me that the pedagogical skill of other teachers employed there was not much above that displayed by the one whose work I have just described."

I hope that the "things" seen were more common than the "invisible see-saw," the "traveling pump-handle," and the "fly with chalk legs" to which, at various times in his progress of triumph, the scholarly (?) author has referred, some of which

were given with their "settings" in the October number of Education! To the darkened intellect of the "average American teacher" such scientific comparisons are practically worthless for every day use, however necessary or entertaining in the realms and functions of psychological pedagogy, or pedagogical psychology.

On the same page the eminent author disclaims the necessity for further descriptions of class work, in the following "scientific" English: "Space will not permit me to enter further into the detailed description of Buffalo's class-room work. Indeed, it were needless to do so, for, owing to the general uniformity of methods in vogue in the public schools of that city, their general characteristic features may be summed up in a few words"—and he devotes the next page-and-a-half to these "few words."

I can remember so far back as when my own public school teacher would not have permitted such a paragraph as the above quotation to remain uncorrected in any of my juvenile efforts at composition; and I can today point to dozens of public schools in the cities "observed," whose twelve-year-old pupils could put the same thoughts (?) into better English and less space, at the first trial. As an experiment, how would the following substitute do:

"Space forbids further detailed description of class-room work in Buffalo. The uniformity of methods there in vogue make it needless, and the general characteristic features may be briefly summed up."

Fifty-two words, as against thirty, where economy of space is considered, and to state a seemingly unimportant fact! Well, doubtless, there may be room for improvement in Buffalo schools; but there certainly is in the rhetoric which sanctions the use of such a word as "general" twice in a five-line sentence, and nearly twice the number of words necessary to express the thought. Quantity of "space" should not elbow ideas entirely out of sight!

In the first paragraph on the next page, "Indeed" is used twice to introduce sentences which would have been fully as keen if beheaded, even if less "scientific" in construction. They read, in part: "Indeed, the scientific teaching of geography is an art" and "Indeed, I found but few cities where so little had been done toward lightening the burdens of the children."

Suggestions, theories and directions for "improvement of the schools" abound here as elsewhere in the book; but paper educationists are not always the most practical in dealing with large problems of this nature, nor especially modest in announcing their dogmas. I cull from pages 77–79:

"First, the board is composed of laymen, and consequently of persons not qualified to inquire (Why are they not "qualified to inquire"?) into the true competency of a teacher, true competency depending on a knowledge of just those things of which laymen are supposed to know nothing, namely,—psychology and pedagogy, the sciences upon which scientific teaching is founded."

Candidly, that paragraph seems not even tinetured with doubt nor humility, but unquestioningly asserts the lack of qualifications of the laymen in the same magnificent way in which "true competency" is made to depend upon a knowledge of psychology and pedagogy. We could have spared the definition of psychology and pedagogy, however ("the sciences"), and the sentence would not have been fatally marred by the omission!

"Besides, as has been pointed out, the quality of the schools does not depend nearly so much on what the teachers know at the time of their appointment, as it does on what is done toward educating them professionally after their appointment."

I will leave this "scientific" absurdity, the rhetoric (or want of it!) that requires "appointment" to here officiate twice, and all—to the judgment of the intelligent readers of EDUCATION, and make but one more quotation from this highly scientific chapter:

"It follows that something much more radical must be done before the schools of Buffalo may be expected to improve to an appreciable extent. As the causes of evil in Buffalo,—politics, untrained teachers and scanty supervision—are identical with those which were found at Baltimore, I can but suggest identical remedies for their eradication. To rid the schools of politics, nothing but a complete reorganization of the whole school system will suffice, for the reason that at Buffalo, politics enter (sic) into every branch of the system. And to remedy the evils arising from incompetent teachers, I know of but one thing that can be relied upon, namely,—thorough supervision."

The Buffalo laymen who are "supposed to know nothing of psychology and pedagogy," the "one-third of a superintendent"

(p. 77) and the incompetent teachers of that wind-swept city, are under a weight of obligation to their kindly critic from which this generation can hardly expect to recover; but it is to be hoped that ere the calm of another century fills their eyes with scientific dust, their mouths with scientific phrases, and their heads with scientific nonsense, their critic will have learned at least the rudiments of scientific "observation" of schools and teachers!

I hope to visit Buffalo in the near future, and see for myself how these unscientific schools are kept alive. Until then, I can only wail with Campbell, in his "Pleasures of Hope:"

"O star-eyed Science! hast thou wandered there, To waft us home the message of despair?"

MORAL INSTRUCTION IN SCHOOLS.

8. EDWARD WARREN, NEWTON, MASS.

The times loudly call for serious consideration of this great subject. This is sufficiently evident, without labored argument, from the perennial object lesson afforded by the daily spectacle of rogues, only too keenly intelligent, flying hither and thither to escape the consequences of their offences against good morals—in other words, the consequences of their misuse of knowledge.

Since character determines the uses to which knowledge shall be put, the value of everyone's knowledge, both to himself and to society, depends on his character. Character is therefore of prime importance.

But the formation and fortification of good character, by precept, example, and systematic teaching, is the very purpose of moral instruction. Hence, bearing in mind that intelligence and virtue are the equally indispensable twin foundations of permanent free government, we may proceed to apply to our subject the favorite American idea of equal rights, in behalf both of society as a whole and of its individual members, by laying down the two following propositions.

1. The state has as good a right to protect itself against vice by teaching virtue as it has, by common consent, to protect itself against ignorance by teaching the elements of know-ledge. Likewise:

2. Every child has as good a right to instruction in morals, as a means of defence against vice and its train of evils, as, by general agreement, he has to instruction in the knowledge by which he can escape the evils of ignorance.

No one questions the right of every child to learn to read, in order that he may possess the pass-key to the whole temple of printed knowledge. No one would deprive him of the right to a knowledge of the elements of arithmetic and geometry, that, being thus enabled to measure and calculate, he may be fitted to enter upon various business or industry. Then, since intelligent care can confirm and preserve health, on which the value of the body as the servant of the mind so greatly depends, every child has the right to all the instruction he can get in practical physiology. Every youth, too, having taste and opportunity for it, has a right to study history, that he may profit by the world's experience; and geography, that he may know the scenes of great events, and where the actors in them lived. Much more then, by reason of the relation of character to knowledge, has every child an especial right to an education in morals.

If the progression of thought has thus far been natural and reasonable, the question must here immediately arise: Why, then, is not instruction in morals universally demanded, and everywhere enthusiastically given?

Perhaps the greatest hindrance to giving this most desirable instruction is that undeservedly influential, yet really most unsubstantial, of bugbears,—the cry of "sectarianism." To show how this is so, and also to point out a way of escape from the difficulty, it is necessary to turn aside to make a few explanations in answer to certain questions that arise respecting the plan and the method of moral instruction.

First, as to the plan of moral instruction. Since man, as shown by his acts, is everywhere found to be a religious being, as well as a moral being, the important question at once arises: Shall moral instruction, by recognizing as thinkably separate what is in fact vitally united, contemplate man as only a moral being, and so limit itself to the consideration of those duties, or grounds of duty, which concern man simply as man? Or, shall

it, by recognizing the vital union of morals and religion, be grounded on a religious basis, and thence regard man as the child of one God and Father of all, and, accordingly, contemplate all men as brethren, as well as competing fellow creatures? In other words: Shall moral instruction be purely secular, that is,—shall it recognize no other foundation or higher authority than human opinion and custom? Or, shall it have some kind of religious basis, some reference to a wisdom and goodness and authority superior to man's, whether apprehended through nature and life, or known by revelation?

To aid in answering this fundamental question, let us briefly define morality and religion. By morality we mean, conduct determined by the thought of, and regard for, the nature and consequent claims of man. So far, and in such things, as he is really sufficient unto himself, man is an independent sovereign, who only asks a fair chance. But so far as subject to common limitations and liable to common misfortunes, all men are mutually dependent, and each is his brother's keeper. Complete morality then contemplates man as in part self-sufficient, and in part as mutually dependent.

By religion is meant conduct governed by thought of and regard for the being, character, relation to us, and consequent claims upon us, of God. But though morality and religion are thus thinkably separate, they are, as said before, vitally united in normal life, as can now easily be demonstrated. For, first, one of the foremost of the relations of God to us is that of the common Father of all; from which it follows, that one of his foremost claims upon us is that of right treatment of our fellow creatures as his. I have no right to abuse or injuriously neglect what belongs to another in a higher sense than it does to me, but which is associated with me and for my benefit. Again, since every possible act is in some way either beneficial or injurious to man, and also loyal or disloyal to God, moral acts and religious acts are not necessarily, and, indeed, never ought to be, totally distinct and separate acts, but are the same acts done on different If I aid my suffering neighbor simply as being a grounds. creature of like kind with myself, I perform a moral act. If I add the further motive that he is a child of God, and care for him as such, my moral act takes on also a religious character,becomes an act of piety as well as of morality, by being done

with a thought of God as well as of man. Or, if I can trace a connection between reverent and sincere worship, and honesty and fidelity in daily business, my worship, so far as done as an aid to right conduct toward man in daily life, becomes a moral as well as a religious act.

We are now ready to answer the question as to the basis of moral instruction, and that reasonably, or without a shade of partizanship — from which may Heaven defend all discussion of such a question.

First, then, the fundamental objection to purely secular moral instruction - though it may be better than none, and may be given, and have its characteristic fashion of text-books - is, that it puts asunder what is divinely joined together. Thence, as might be expected, other disadvantages flow. Individualism only too easily learns to say that one man is as good as another, each one's opinion as good as another's, and the pupil's as good as the teacher's; and morals may come to be regarded as only a matter of individual sentiment, or more or less general custom, having little power to check unruly human passions and their evil manifestations. Merely secular moral instruction also lacks warmth, from a deficient sense of brotherliness between men as children of God. The boundless rage of anarchism is associated with furious rejection of the thought of one Almighty Father of all; and so man comes too much to deem himself a self-sufficient sovereign, empowered and entitled to right his own wrongs, and remedy evils in his own time and way, whether those wrongs be real or imaginary, or those evils greater or less than those unknown ones which might result from violence, which is in itself a great evil.

But if we accept the substantially unanimous verdict of the human race that there is a God, who is, moreover, to a certain degree profitably knowable by and through the application of the best minds of the race to the study of nature and life; and if we can go just one step further, and accept as one of the most natural of suggestions that a creating Father should respond to, and go out to meet this capacity of His creatures for knowing Him by a revelation, then moral instruction, thus having a religious basis, will have a stronger ground to stand upon, and a higher authority, sanction and standard to which to appeal, than can be afforded by capricious and variable human opinion and

custom. With moral instruction thus grounded, the mind is, moreover, neither fettered nor left to grope in darkness, but, walking in the light of well settled first principles, is left in happy freedom to discover their applications to the many details of individual and social conduct.

Finally, having brought into the moral sphere the better conception of man, as not merely a rival in life but as the Father's child and hence my brother, not only is the moral judgment enlightened, but wholesome play is given to new and higher motives and purer affections.

After so much about the plan, now, second, as to the method of moral instruction. Shall it be conveyed only, or mostly, through the character of the teacher, operating, as indeed it always should, as a constant object lesson and persuasive influence, in both the major and the minor morals; in both the righteous substance and the gracious form of conduct? Or, shall there be also systematic oral or text-book instruction in morals?

We declare decidedly in favor of a union of both methods. True, actions speak louder than words; and example is better than precent. But it does not follow that words and precepts have no use. Personal devotion to an admired, trusted and loved leader is one of the strongest and most generous of motives, as is seen in the case of great parties and veteran Nevertheless, the leadership may sometimes be a bad one. Hence, without rejecting, or underrating the importance of the method of communicating moral character through the leaven of personal influence, the obvious reason for including systematic instruction in morals is, that the personal popularity of the best-loved teacher, acting winsomely on susceptible young affections and impulses, and so making it especially easy to do right, is not enough, without a clear understanding, gained by study, of what is right, and why; so that a measure of intelligent judgment, as well as sympathetic feeling, can be enlisted in behalf of well-doing and against evil-doing; and so that thus right will be done and wrong resisted under difficult as well as under favorable conditions.

The proper purpose of moral instruction being the formation of stable personal character, we would not, indeed, as has already been plainly implied, make it a matter of cold, dry, bloodless, loveless science. Yet, at the same time, the human mind should not, like a satellite, be centered in another mind — which condition is just what causes one to be called a satellite — but, by intelligent judgment, right feeling and good-willing should, while not rejecting sympathetic aid, counsel and advice, be, as much as possible, self-centered in relation to its fellows, with respect to stability of virtuous character. Justice to the analogy here introduced demands that it be completed, so that all to which it points may be seen, by adding that, so far, with respect to character, as the mind is properly centered in aught outside itself, it should, as the planets are centered in the comparative infinity of the sun, be centered in the Supreme Being, so as thus to be more surely held in its proper orbit of well-doing.

If what has thus far been said be essentially sound, the question returns with added force: Why then is not moral instruction everywhere enthusiastically given? And if the humbug cry of "sectarianism" be really, as it seems to be, the chief hindrance to such instruction, we may well hasten on to the final step in clearing the way for that greatly needed instruction, by showing the needlessness of the cry.

Happily, this needlessness is easily shown, in two ways: It is shown, first, by a clear view of what secturian instruction really means, coupled with the then evident absurdity of supposing that anybody would want it. Second, it is further and otherwise shown by turning from vague generalities and unmeaning cries on the subject to concrete examples of moral instruction, not on a basis of natural religion only, but even on a biblical foundation.

First, then, what is sectarian instruction? As everybody knows Christendom is divided — whether for good or ill matters not to our present purpose — into numerous sects, which, however, group themselves according to their prevailing affinities. Each sect is marked, and accordingly sometimes named, by certain distinctive doctrines and usages. Moreover, each sect defends its distinguishing peculiarities by an appeal to the Bible, or, also, to Church History and to Reason. But, as to the Bible, it is here to be particularly noted, in behalf of a correct understanding of our subject, that looking at the Bible simply as one of the world's great books, it contains, though not in systematic form, a body of moral teaching, or ethics; and likewise, a body of

distinctively religious teaching. The latter, again, includes both the religion of development, or evolution; and the religion of salvation, or rescue. It includes the former in all that flows from the word; "Thou shalt love the Lord thy God with all thy heart"; the normal result of perfect obedience to which would be the evolution from infancy of a man perfect in every particular toward God, toward man, and towards all inferior creatures and things. The religion of salvation, or rescue, necessary as it may be, especially belongs, as we fully and cheerfully grant, to the church, the home and the denominational school, not to the non-sectarian free public school. The answer to the question in hand is now ready.

Sectarian instruction then means instruction in the distinctive doctrines or usages of the various sects; or the presentation, especially of the religion of salvation or rescue, as held by each sect. Now, with homes, churches, Sunday schools, missions and denominational schools and colleges everywhere free to teach all these things, and with all desired help from the religious press, can it be supposed that any approxiable portion of the people want to have taught, in their free schools for all, the Baptist's insistance on immersion; the Congregationalist's insistance on the ecclesiastical independence of the local congregation; the Episcopal conviction of the importance of the episcopate; the Presbyterian insistance on clerical parity; the Papist's claim of the supremacy of the Bishop of Rome over his fellow-bishops; or Calvinistic election; or the Methodist's belief in universal salvability; or the Universalist's trust in universal actual salvation for all; the Unitarian's doctrine of the simple unity, or the Trinitarian's of the composite unity, of the Divine Nature? Indeed, we think not.

Yet, with none of these things, there is still left free, for the use and benefit of all, the whole body of moral teaching which flows, as from a fountain-head, from the word: "Thou shalt love thy neighbor as thyself." This, in turn, naturally flows only from the one higher word concerning love to God; since it is only as man is felt to be the child of a common Father, that he can be fully recognized as a brother and an object of affection, so that, as occasion offers, I minister to his necessities—taking care to give myself with my gift, and so fulfil the excellent word of the poet: "Who gives himself with his alms feeds three, — himself, his hungering neighbor and me."

We now, second, will show, as proposed, the needlessness of a fear of sectarianism in connection with moral instruction in schools, by means of a few examples of such instruction, though supported by the Bible, as a reference book in morals. Cannot the parable of the sower be well used to teach the importance of a faithful and wise use of opportunities for improvement, and of freeing ourselves from unfavorable conditions for it? Is not the parable of the Good Samaritan unexcelled as a model for all illustrative examples of, "who is my neighbor?" Could anything better show the glory and beauty of whole-souled magnanimity in heartily forgiving any offence in whatever relation of life committed, when it is suitably acknowledged, than does the parable of the Prodigal Son? And what an example of magnanimity, and of incorruptible fidelity, too, with wit and wise thrift, is found in the story of Joseph.

Or, having real examples, or supposed cases, for visions of noble ideals, what inspiration to lofty ideals of character may be drawn from the Beatitudes.

Or, turning to plain didactic instruction, what a storehouse of it for all occasions is found in the Book of Proverbs.

Or, finally, to mention a few particulars: Is neighborliness to be encouraged? Then read, "Withhold not good from them to whom it is due when it is in the power of thine hand to do it." Is the emptiness of boastful pride to be exhibited? The bubble is thus pricked: "What hast thou that thou didst not receive? Now if thou didst receive it, why dost thou glory?"

Is the vanity of doing apparently philanthropic or heroic deeds out of ostentation or obstinacy to be exposed? Then see that "though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing."

Now, without meaning to be querulous, it is impossible not to ask: Where is the sectarianism, or the chance for any, in years of time, or thousands of such examples of the use of the Bible as a reference book in moral instruction on a religious basis; or, at the least on a broader and deeper foundation than individual opinion, or the average sentiment of the school room?

But supposing some measure of sectarian difficulties to be imagined as possible, the case would not be exceptional. Such difficulties may and do arise to some extent in connection with

other subjects, notably with history, literature and natural science. Protestant, Papist, Deist, Agnostic, Evolutionist—all can find many a chance to insinuate their opinions in connection with these subjects, either by their comments, explanations, or selections for reading. Yet no one thinks of excluding any of these subjects from even the most religiously mixed schools no, not even history, over which great contentions have sometimes arisen. If, then, these subjects can generally be peaceably and usefully retained in schools, the superlatively important subject of training in good moral character respecting self, fellowman and society ought to be retained. Probably in nothing do the schools suit everybody. But that is no reason for abolishing It is thus far better that there should be sound and simple instruction in morals by precept, example and study, and such as nobody can reasonably find serious fault with, than that the schools should impart knowledge without wisdom also; and train intellects without training character.

From all that has now been said, it appears that moral instruction is highly, nay, fundamentally necessary; that it should naturally be more effective when given on an appropriate religious basis, than when placed on a merely secular one; that it should be imparted largely through living object lessons in character, as seen in the lives of teachers who, so far as man can be, are living models of what their pupils should be; that it should also be imparted through systematic study, attractively appealing to intelligence, to the end that when the pupil is out of reach of protecting or persuasive personal influence, he may, of his own mind, know what is right and what is wrong, and why; and so may, with wisdom of mind as well as warmth of feeling, choose the one and reject the other; and that all this necessary, excellent and beneficially influential instruction can be given without admixture of sectarianism.

What, then, is the final conclusion in view of the beginning and progress of this discussion? This: Prevention is better than cure. But if not by sagacious foresight, then it must be by regretful backsight upon a still further accumulation of embezzlements, frauds, wild speculations, corruptions and violent contentions, with accompanying disgraceful flights, murders, suicides and ruin of homes - all owing not to want of knowledge, but of character - that the lesson will at last be effectually learned that it is at least as important, and hence as much a right, that the state should protect itself against vice by teaching virtue, as that it should protect itself against ignorance by teaching the knowledge that enables one to earn his bread, and take care of his earnings; also that every child has an even better right to an education in the elements of good character - without which knowledge is possibly but a tool of mischief - than he has to any or all other learning, however precious it may be.

Farsting Harman - Maria

EDITORIAL.

DUCATION moves steadily along despite the hard times. The prospects of the magazine were never brighter than now. We are trying to furnish our readers with the fréshest and best educational thought. In return we would be much obliged to those who are behind in the payment of their subscriptions if they would remember us at this time. To the many who are prompt in payment we extend hearty thanks. What does your label say? Is the date in advance?

THIRTEEN million children in the United States are now studying the effects of alcohol on the human system. Scientific temperance teaching has also been introduced into Canada, France, England, Germany, Norway, Sweden, Russia, Denmark, the Danish West Indies, Bulgaria, Turkey in Asia, India, Siam, China and Japan — "The Child's Health Primer" having been translated into Chinese by an American missionary — Australia, New Zealand, Hawaiian Islands; and South Africa should be included in this estimate; and every State and Territory of the fifty subdivisions of the United States (five only excepted) now enjoy the advantage of a law requiring instruction on this subject. It has been well said that if the W. C. T. U. and Mrs. Hunt, its great leader in this work, had accomplished nothing more in twenty years, they would have had abundant reason to be satisfied because of the millions of children who are now building character on a higher plane than any others that have lived.

THE crusade against disease, inaugurated in Boston by the appointment of fifty regular physicians to make daily inspection of every public school, has been reinforced by a movement against slates and slate pencils. It is argued that the use of slates is not neat, and trying to the nerves of teacher and pupil; that it tends to develop muscles which are not needed in writing on other materials where the resistance is much less than that of the slate to the slate pencil; and that it establishes habits which have to be unlearned and corrected by the writing masters. Accordingly, slates have been abolished in the Boston schools, and likewise in those at Gambridge. These movements show a disposition to faithful study

a recenting thowever precious it may be,

of the important subject of school health on the part of the authorities, and an intelligent public opinion behind them. Now let something be done to secure a properly regulated temperature in the country school houses, where, various visits have convinced us, but little attention to healthful conditions is bestowed. The heat is usually almost unendurable in at least one such country school that we know of, and the almost universal prevalence of colds among the scholars is thus easily accounted for. The simple expedient of investing in a thermometer and systematically consulting it will do something toward remedying this difficulty, and there is no question but what the intellectual as well as the physical well-being of the scholars will be subserved thereby.

AREFUL attention to little things in the school life is not only required by a sensitive conscience and a high ideal of personal attainment, but it has a positive commercial value. This is illustrated every day by countless incidents in business life, the moral of which has its significant relation to the duty of teacher as well as pupil. For instance, we were recently interested in the fate of a number of candidates who were recommended for an important position in connection with a large business house having a capital of several millions. The winning of that position meant an attractive and remunerative life-work, in all probability, for the successful candidate. We happened to call on the member of that firm having the matter in charge just as he returned from a conference with the other members, at which a decision had been reached and a choice made between the applicants. He laid several letters before us and said that the contest was very close between the writers of two of them, and that the decision had finally turned in favor of one because of the neat handwriting, careful wording, and business-like heading and addressing of his letter. Probably the candidate himself never will know about this, much less his teachers who required of him carefulness in the details as well as in the main objects of his school work. All the same it counted materially in his favor, and the slovenly methods of the other candidate were a handicap on his success. Elaboration of the point is not needful. A word to the wise is sufficient.

GENERAL MARION'S WIFE.

BY MCDONALD FREEMAN.

The Revolutionary struggle, with its battles and trials, was over. Poverty stared General Francis Marion in the face; during the war his property had wasted away until it was much reduced. He was appointed commandant of Fort Johnson, with a liberal salary, but legislative reformers reduced the salary to five hundred dollars The General had never married, and just at this time, when he was in poverty and getting old, occurred the romance of his life. Mary Videau was a wealthy Huguenot lady, whose years already numbered over forty. She was yet single, and admiring the bachelor warrior, she delicately expressed a desire to some friends to become his wife. The pleasant sequel to this little romance was that they were married, and, to use the language of the dear old fairy stories, "lived happily until they died." After his marriage, General Marion led the life of a quiet, hospitable Southern gentleman. His death occurred in 1795, and his last words were an index to his lofty character. "Thank God," he said, "I can lay my hand upon my heart and say, that since I came to man's estate I have never intentionally done wrong to any one."

General Marion had no children, but adopted a grandson of his brother Isaac as his son and left him his property. The name of this adopted son was Francis Dwight, but he changed it to Francis Marion. A granddaughter of his (in the female line) is the wife of Dr. Ellison Capers, Assistant Episcopal Bishop of South Carolina. During the Confederate war he was a Brigadier General in the Southern army, and was wounded no less than three times during that struggle. He entered the ministry of the P. E. church after the war.

DEPARTMENT OF PROFESSIONAL STUDY.

THE TEACHERS' INTERNATIONAL READING CIRCLE. FOURTH MONTHLY SYLLABUS FOR THE THIRD YEAR.

PREPARED BY DR. CHAS. J. MAJORY, NEWTON, N. J., SECRETARY, FOR THE USE OF CORRESPONDENCE MEMBERS.

Everywhere the call is for better teachers,—for teachers capable of rising above the mere routine of their daily work to a fair conception of the important task that is theirs in the training of the human mind and the immortal soul. It is this element that must constitute the professional part of teaching. The teacher who rightly attains this will not be less efficient, but more efficient, in the routine work, and will both accomplish more and enjoy more in its accomplishment.

- I. ROUSSEAU'S EMILE. PAGES 100-130.
- 28. How are children to be practically trained in school so as to "arm them against unforseen accidents?"
- 29. Can a teacher be justified in adopting a willful deception in order to promote in a child that acuteness of perception that will detect the deception?
- 30. What relation has the sense of sight to that of touch in its earliest development?
- 31. What is the especial great advantage in drawing from objects rather than from copy?
- 32. What is the argument for combining drawing from the copy with object drawing?
- 33. What advantages has experimental geometry, as suggested for Emile, over the geometry as commonly presented by theorem and formal demonstration?
- 34. When should the latter properly come in to supplement the former?
- 35. To what extent should the physical exercises of the school-room have for their purpose muscular dexterity and agility?
- 36. For what chief purpose are the arts of recitation and singing to be included in the training of youth?
- 37. From the age of five to twelve, can all needed instruction be acquired through experience and the senses under any conditions that can be assumed?

II. HERBART'S PSYCHOLOGY. PAGES 53-73.

- 24. Which of the "five senses" seem sufficiently complex in respect to the variety of sensuous impressions to justify the naming of more than five distinct senses.
 - 25. What constitutes the work of the "inner sense?"
- 26. What analogy as to organ or function can be traced between this "inner sense" and the several outer senses?
- 27. What test may serve to show a series-form to be distinct from another series-form in which it might otherwise be included?
- 28. In what matter, especially, has the science of logic tended to obscure the findings of psychology?
- 29. Is the highest value of the reproduction of concepts to be found along the line of memory or of imagination?
- 30. What bearing may the determination of this question have upon the methods of good or bad teaching?

III. ADLER'S MORAL INSTRUCTION. PAGES 63-79.

- 29. In what does the chief value of fairy tales, as educational material, lie?
- 30. What are the two useful results of stimulating the imagination by proper fairy tales?
- 31. What are the reasons for telling fairy tales to children rather than giving them as reading exercises?
- 32. Would it be better to let the fairy tale "teach its own moral" than to use the tale solely for its moral teaching?
- 33. Is there any right use with young children for those fairy tales that arouse fear and distrust?
- 34. Do the conditions of the primary school add any duties of childhood to the four that are specified in this connection by the author?
- 35. What fairy tales can you add to any of the four classified lists?

IV. FROEBEL'S EDUCATION OF MAN. PAGES 128-139.

- 31. The purpose of the school and of its work is to give to the child the inner relations and meanings of what was before merely external and unrelated.
- 32. However inefficient the teacher may be, the child naturally comes to him with a spirit of faith and hope.
- 33. The intensive power decreases and the extensive power increases in passing from youth to old age.
- 34. Errors in dealing with these powers result in serious and permanent harm.

- 35. The essential work of the school is to associate facts into principles, not to teach isolated facts.
- 36. The personality and the surroundings of the child constitute the essential subjects of school instruction.

V. PICKARD'S SCHOOL SUPERVISION. PAGES 49-68.

- 36. The superintendent's ability to lead should be clearly recognized by himself and by others.
 - 37. This ability must be an outgrowth of experience.
- 38. It requires familiarity with the current work and thought of fellow-laborers in the profession.
- 39. The wise superintendent must be progressive and at the same time conservative.
- 40. Care to be exercised in giving and in valuing written recommendations of candidates for positions as teachers.
- 41. The written examination of candidates as a first test of qualifications.
- 42. Trial in the school room to be provided for candidates before permanent appointment is made.
- 43. Inspection of work after appointment the only basis of the superintendent's confidence in the teacher.
- 44. He should not destroy the freedom of the teacher by dictating detailed modes of procedure.
- 45. He will need to help some teachers to better work by restraint; others by encouragement.
- 46. Patience and justice should characterize his dealing with all his teachers under all circumstances.
- 47. His helpfulness must depend upon the co-operation between his teachers and himself.
- 48. The appointment and dismissal of teachers should rest primarily upon his recommendation.

VI. LAURIE'S RISE OF UNIVERSITIES. PAGES 106-171.

LECTURE VII.

- 37. The first specialized schools or universities were the outgrowth of individual zeal in teaching and in learning.
- 38. Their aim was to minister to the immediate practical needs of society.
- 39. The medical school at Salernum was the first to be entitled to the name of university.
- 40. Its fame originated with the monastery established by Benedict in 528.
- 41. The body of teachers evidently was organized as a "college" during the eleventh century.

- 42. The degree conferred at Salernum constituted a license to practise rather than to teach.
- 43. The schools of law, of theology and of medicine, constituted a university at Naples.

LECTURE VIII.

- 44. A school of Roman law, established at Bologna, at the beginning of the twelfth century, through the teaching of Irnerius.
- 45. Out of small beginnings there grew a great university school numbering its students by thousands.
- 46. Organization of the students for mutual help and for common protection from civic interference lead to special assumed privileges, recognized by the emperor and by the pope.

LECTURE IX.

- 47. From the impetus of Abelard's teaching in philosophy, Paris became the center of theological study.
- 48. Disruption of the Paris university in 1229, in consequence of civic interference with assumed privileges of the students.
 - 49. The university as a self-regulating body.
 - VII. PREYERS DEVELOPMENT OF INTELLECT. PAGES 99-113.
- 21. The beginnings of speech acquirement are expressive, consisting chiefly of inarticulate sounds.
- 22. The *impressive* processes in speech acquirement are manifest at first in look and gesture when a meaning of words is partially recognized.
- 23. Later, in the imperfectly spoken replies to simple questions, there is manifest a *central* process uniting the impressive with the expressive functions.
- 24. The details of speech acquirement must vary with different children, and will be largely determined by surroundings.
 - 25. The earliest vocal utterances in crying consist of vowel sounds.
- 26. In the case presented a single complex vowel constituted the sole utterance for a period of five weeks.
 - 27. The first consonant heard on the forty-third day.
- 28. Association of several consonants with the vowels during the period from the sixth week to the sixth month.
 - 29. During this period all utterances of sound are expiratory.
- 30. Syllables pronounced to the child were first correctly repeated in the eleventh month.
- 31. At the close of the first year the child but begins to manifest an association of an articulation with an idea.

FOREIGN NOTES.

A FRENCH EXPERT ON THE EXHIBITS OF LIBRARIES AND PUBLISHING HOUSES AT CHICAGO.

One of the most important reports called forth by the Chicago Exposition is that of the exhibits of publishers and book-sellers, by M. Henri le Soudier.

Two tasks were committed to M. Soudier, — first, to secure complete information as to the state and future possibilities of the trade in French books in the United States, with suggestions of such reforms as it might seem well to adopt; second, a comparative survey of the French book exhibits and those of other countries. Both subjects are treated in a masterly manner, and the report has scarcely less interest for the general reader than for the book trade.

M. Soudier recognizes that Germany is the only serious competitor against France in our market. The lessons which he draws for his countrymen upon this point need not, however, concern us here; we are interested, rather, to know his impressions of the various exhibits, and especially of the German. It must be remembered that Germany was not represented in the Paris Expositions of 1878 and 1889, and hence the Columbian Exposition afforded the French the first opportunity in twenty years for effective comparisons with their rivals. To the credit of M. Soudier, it must be said that he has been thoroughly impartial in his estimate of the German exhibit, praising both the quality and the method of display. The value of his appreciative criticism is enhanced by the added details as to the rise and progress of the most important German publishing houses.

While placing no exhibit above those of the French publishers, as regards quality or effective arrangement, he notes the keener business instinct that led the German exhibitors to give the public freer access to their treasures. He advises his countrymen to abandon the exclusive use of closed cases; "only works of great value," he says, "should be under lock and key; for the rest, it is necessary to take risks."

He gives a detailed account of the American book exhibits, noting in particular, the excellence of paper and type. The display of literature for children interested him, but most of all, the number, enterprise and equipment of our libraries. It did not escape his attention, that the majority of the patrons are women, and hence their tastes and preferences determine largely the choice of books. "This intellectual predominance of the feminine element," he says, "assures a large place to works of literature and romances in the public libraries."

In summing up his conclusions, after reference to the publishing activity in Germany, he says, "if the United States produce less, they achieve surprising results, thanks to their admirable processes, fine paper and perfected implements."

UNIVERSITY NOTES.

Activity in respect to building, and the increase of general resources, marks the current history of the facultés (University) of Montpellier. The new scientific laboratories are well advanced. Funds for the biological institute have been pledged to the amount of \$40,000 from the state, and an equal sum from the city. The zoological station at Cette is in process of construction, the department of Herault having given \$2000, the city of Montpellier \$10,000, and the town of Cette \$15,000 for this purpose. The natural outcome of these increased provisions is an increase in students; the total for 1893 was 1560, exceeding by 143 the total of the previous year; of these, 570 were in the faculty of medicine, and 368 in the faculty of law.

PRUSSIA.

In 1893-94, the budget for the Prussian Universities amounted to \$102,225 for administration purposes, and to \$1,261,474 for salaries. The latter item has increased by 92 per cent. in 25 years.

The following showing, with respect to salaries, is from a compilation published in Italy, i. e., "Appanti di Statistica comparata circa gli onorari dei professori delle Universita in alcuni Stati d' Europa."

In Bavaria, the salaries of professors range from \$1000 to \$2850. Twenty professors receive the lowest sum mentioned, one only the highest; the average salary is about \$1400.

Outside of Prussia and Bavaria salaries range about as follows:

Strasburg, \$475 to \$2850.

Erlangen, \$1000.

Giessen, \$950 to \$1425.

Heidelberg, \$820 to \$2520.

Leipzig, \$960 to \$3050.

Postock, \$830 to \$1350.

Tubingen, \$960 to \$1050.

These salaries are increased, in most instances, by tuition fees.

In Austria-Hungary, University salaries range from \$640 to \$1140.

In France, professors of the Paris faculties receive from \$2400 to \$3000 annually, and of the departmental faculties, from \$1200 to

\$2200. The salaries at Cambridge University are from \$1450 to \$4860. Scotch Universities show the following:

Glasgow, \$486 to \$2810.

Saint Andrews, \$486 to \$2910.

Aberdeen, \$1870 to \$7600.

These sums are often doubled, and even tripled, by various bonuses; especially is this the case at Glasgow. The salaries in the Edinburgh faculty of medicine run from \$950 to \$2000, to say nothing of extra emoluments which greatly exceed the original sum. In the State Universities of Belgium (Ghent and Liège) professors receive a fixed amount of \$1400, which may be increased by from \$200 to \$600. At Barcelona, Spain. \$700 to \$2000 is the range; in Holland, at Groningen and Leyden, \$1600 to \$2400; at Amsterdam, \$1800 to \$2000. In Prussia, salaries are from \$1800 to \$2500 at Helsingfors, \$1700 at Kiew and Saint Petersburg, and from \$680 to \$700 at Varsovia.

In Switzerland, the minimum and maximum are: At Basle, \$600 and \$800, respectively; at Berne, \$460 and \$1100; at Geneva, \$200 and \$2400; at Zurich, \$600 and \$1200. Professors are entitled to pensions in nearly all European countries.

The bill for the suppression of six out of the seventeen Italian Universities, drawn up by M. Martini, formerly Minister of Public Instruction, was noticed in "Education" of April, 1893. The project was supported by a report which is reviewed very fully in the November issue of the Revue Internationale de l' Euseignement. Published in book form by Hoepli (Milan), the report forms a valuable addition to the current literature of education. Naturally it relates chiefly to the status of university work in Italy, but its interest for the general student is enhanced by the comparative views with which it abounds. M. Martini urges the suppression of a few universitiesthat the remainder may be more vigorous and fruitful. He notes that France has only one group of faculties (i. c., a university) for every 2,556,138 inhabitants, Germany one for every 2,471,423, while Italy would have one for every 1,774,024, if the seventeen were equally distributed. The want of such distribution is simply an added reason for the change proposed. Necessarily a number of the universities have but meagre attendance, with a proportionate increase of expenditure per capita. At Parma, Sienna, and Sassari, a student costs the state \$220 per annum; at Turin only \$60. At Sienna, in 1891-'92, there were but 104 students for 16 professors. Meanwhile, provision is wanting for many lines of scientific work and the prestige of superior instruction in Italy is threatened. While these facts are everywhere recognized, the proposition to suppress the smaller universities is destined to meet with serious opposition.

HERE AND THERE.

The London School Board election resulted practically in the defeat of the clerical extremists. The Moderates will have a majority of three as against a majority of fifteen on the old Board. Of the three, one is an independent and at least two others opposed to any disturbance of the existing settlement of the religious problem. So far as actual votes go, the Progressives had a majority of nearly 150,000 and their candidates led the poll in every district. The interest now centers in the organization of the new Board. The proposition to appoint an outsider as chairman meets with much favor.

Nature presents the following summary of a return recently made to the British "Department of Science and Art." "The total amount spent on technical education during the year 1892-'93, in England, Wales and Scotland, was \$2,648,590, and that the estimated total amount allocated to technical education for the year 1893-'94 was \$3,481,640. Forty-one out of the forty-nine county councils in England are applying the whole of the residue received under the Local Taxation (Customs and Excise) Act to technical education, and eight a part of it to the same purpose. Of the councils of the sixty-one county boroughs, fifty-three are devoting the whole of the residue to technical education, and seven a part of it. The thirteen county councils and the three county boroughs in Wales and Monmouth are not only devoting the whole of the residue to intermediate and technical education, but six of them are also levying a rate, or making grants out of the rates, for the same purpose. In the case of Scotland, twenty-three out of the thirtythree county councils are applying the available funds to technical education, and seven a part. Of the 194 burghs and police burghs, however, 122 are applying the whole to the relief of rates."

The estimated appropriation for elementary education in Spain for the current year is \$5,829,810, i. e., \$5,244,932 from municipalities, \$371,152 from the provinces, and \$213,730 from the state. This is at the average rate of 34 cents per capita of population. The annual appropriation from the State alone for the Catholic denomination is \$8,000,000.

School excursions are becoming a common feature of Normal School methods in Spain, and it is noticeable that the students of both sexes participate in the exercise.

A medical school for women is again projected at St. Petersburg. This endeavor is attributed to Prince Wolkonsky, whose eloquent address on the education of his country-women will be long remembered by those who attended the Educational Congress at Chicago.

A. T. S.

AMONG THE BOOKS.

To accommodate readers who may wish it, the publishers of Education will send, post paid on the receipt of price, almost any book reviewed in these columns.

Progress in Language, with special reference to English, by Otto Jespersen, Ph. D., Professor of English in the University of Copenhagen, author of "The Articulations of Speech Sounds," etc., is an exceedingly thorough and pains-taking investigation of some of the deeper problems that now engage the attention of students of philological science. It is a book for scholars by a most scholarly author, who will take any trouble and venture any expediture of mental effort to gain or verify the smallest fact. This is the same as saying that the book is conceived and carried out in a profoundly scientific spirit, and is a worthy contribution to an obscure, difficult, but interesting subject. New York: Macmillan & Co., \$1.90.

The Step by Step Primer in Burnz' Pronouncing Print, by Eliza Boardman Burnz, presents the pronunciation of English words as clearly and exactly as possible, without change of spelling. It is an admirable book for beginners in English, whether little folks in the primary schools, or foreigners who crowd our shores and find it so difficult to master our language. The objects secured are clear articulation, correct pronunciation, a thorough knowledge of elementary sounds and a great saving of time in learning to read. The book is recommended by high authorities in the educational world. It is published by Burnz & Co., whose advertisement appears on another page.

St. Rockwell's Little Brother, by Mrs. Harriet A. Cheever, is one of the most helpful books of the season to put into the hands of the young, and its interest and profitableness is not confined to any particular age either. No one can read it without feeling the desire enkindled in the soul to be a better and more brotherly member of the race. The story is the working out of the problems involved in the adoption, by a wealthy and benevolent Club-man, of a little fatherless and motherless New York street waif. The final success attained was wrought out by no conventional methods, and the touches of human nature throughout the book are provocative of laughter and tears. It is a thoroughly good book for Sunday School libraries. Boston: Congregational Sunday School and Publishing Society, \$1.50.

RELIGION AND BUSINESS is a neut volume of sermons by Rev. Henry A. Stimson, full of practical suggestions to men of affairs. New York, Anson D. F. Randolph & Company, 75 cents. From the same house we have Fundamentals, a brief unfolding of the basal truths of the Christian Faith, by

W. Fisher Markwick, price 75 cents; and FORTY WITNESSES TO SUCCESS, a series of talks to young men, by Charles Townsend. This book is based on the testimony of a number of statesmen, lawyers, merchants, bankers and others in regard to the causes of success or failure in life.

Physiology for Beginners, by M. Foster, M. A., M. D., F. R. S., and Lewis E. Shore, M. A., M. D., is a simple, clear, and compact treatise designed for those who have no previous knowledge of the subject. The work is well done and the book ought to find a place in many schools. New York, Macmillan & Co., 75 cents.

A Moral Blor, a novel by Sigmund B. Alexander, is a poor attempt to clothe a "dime novel" in the garb of respectability. We can find little excuse for the existence of such a book, which can help no one and has infinite possibilities of harm for some. The Arena Publishing Co., Boston.

Messrs. Leach, Shewell, and Sanborn will soon issue: Cicero, de Oratore, Book 1, by Dr. W. B. Owen, Lafayette College. Horace, Odes and Epodes, by Dr. Paul Shorey, University of Chicago. Ovid, Selections from the Metamorphoses, by Dr. B. L. Wiggins, University of the South. Burke's Speech on Conciliation with America, by Prof. L. Du Pont Syle, University of California. Tennyson's Elaine, by Fanny More McCauley, Winchester School, Baltimore. Introduction to English Literature, by Prof. F. V. N. Painter, Roanoke College.

BECAUSE I Love You is a beautiful book of poems of love, selected and carefully arranged by Anna E. Mack. One is surprised at the wide range of thought which here finds expression. The compiler has ranged far and wide to get the choicest material for this book. Among the contributing authors are Edwin and Matthew Arnold, Robert and Mrs. Browning, Burns, Byron, Alice and Pheebe Carey, Coleridge, Dickens, George Eliot, Emerson, Gilder, Goethe, Havergal, Hayne, Hood, Holmes, Holland, Hugo, Hunt, Ingelow, Kingsley, Lucy Larcom, Longfellow, Lowell, Marston, Morris, Nora Perry, E. S. Phelps, Riley, Rossetti, Saxe, Scott, Shakespeare, Shelley, Stedman, Stoddard, Swinburne, Taylor, Tennyson, Celia Thaxter, Edith Thomas, Whittier, Mrs. Whitney and Ella Wheeler Wilcox. These poems are judiciously selected and are full of life and passion. The book will make a charming holiday gift. Young lovers and all lovers of true poetry will delight in it. It is most beautifully brought out by the publishers. Lee & Shephard, Boston.

HISTORY FOR READY REFERENCE AND TOPICAL READING FROM THE BEST HISTORIANS, BIOGRAPHERS AND SPECIALISTS. Their own words in a complete system of history for all uses, extending to all countries and subjects, and representing for both readers and students the better and newer literature of history in the English language. By J. N. Larned, President American Library Association. With numerous historical maps from original studies and drawings by Alan C. Reiley. In five imperial volumes. Vol. I, A-Elba; Vol. II, Eldo-Grea; Vol. III, Gree-Nibe. Sold only by subscription. Springfield, Mass.: The C. A. Nichols Co., Publishers. Charles Jacobus, General Agent, 36 Bromfield St., Boston, Mass. Four volumes of this great work are now ready for the public, and the fifth and last volume will soon be forthcoming. It may truly be said to mark an era in book-making. Instead of the more or less random quotations of the ordinary encyclopædia, the very choicest selections from the most "classic" writers on every conceivable

historical subject have been selected by a master-mind and arranged in the most accessible and convenient form; so that instead of being obliged to hunt for hours, or days, or even weeks, for the quotation and authority which is wanted, the student, editor, statesman, or other seeker for historical illustration, finds his work done for him better than he could do it for himself. In these days of high pressure and concentration of effort, this is a service that will be deeply appreciated by vast numbers of men in different walks of life. The study of history has in the past few years become almost an exact science, and the age is fond of historical illustration because it is a scientific or truthloving age. Theories, the truth of which has been demonstrated by the experience of men, can be convincingly stated. Hence, the method of historical reference has become very common with clergymen, teachers, debaters in the halls of Congress, and all other public speakers and writers. This creates a demand for just such a work as that furnished in these sumptuous volumes, and we do not heritate to foretell that in the future no books will be more consulted, whether in the private or the public libraries of our country, than Larned's History for Ready Reference and Topical Reading.

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A HILLTOP SUMMER, by Alyn Yates Keith, is a bright, breezy story of a summer sojourn in a country town. The author has a graceful pen and depicts in charming style the scenes, incidents, and people of a New England town. A reading of the little story gives to one a delightful picture of the almost forgotten ones on the hilltops and in the valleys, and the picture lives in the memory for many a day. Boston: Lee & Shepard.

In Mollie Miller, Mrs. Effie W. Merriman has told a story which will be an inspiration to any boy and girl and a valuable aid to parents. It is the story of the struggles and trials of some young folks who are endeavoring to rise above their circumstances and become of some use in the world. The story is full of incidents, is bright, fresh, clean and wholesome. Boston: Lee & Shepard.

A Manual of Analysis and Parsing, by Martha R. Orne, contains a large number of classified, simple, compound and complex sentences, designed to be as a supplement to any grammar. The sentences have been selected with great care and discrimination, and teachers will find the book a valuable ally in their grammar lessons. Boston: Lee & Shepard.

ELEMENTARY CHEMISTRY, by George R. White, of Phillips Exeter Academy, is a work designed to meet the needs of students preparing for a further course in college. The lessons are arranged in a systematic manner and the student is compelled to find out all things for himself. The experiments are those given by the author to his own pupils and the manual grew up in his own laboratory. Boston: Ginn & Co.

I Am Well! by C. W. Post, is a treatise on cure by natural suggestion. The author has given long and deep thought to the subject, and writes out of a full heart and a deep sense of the uselessness of the modern system of cure by physicians of the regular schools of medicine. He advises the casting of physics to the dogs, and urges upon all suffering from any of the ills that flesh is heir to, to adopt a method of mental treatment the efficacy of which is, to his mind, unquestioned by those trying it. Explicit directions are given to all desiring to practice the system. The book is quite free from the mystical terms so common in such works and is intensly readable. It is suggestive, and will doubtless convince many, of the truth of the author's theories. Boston: Lee & Shepard.

The Christmas number of Harper's Magazine is notable for the first chapters of a new story, "The Simpletons," by Thomas Hardy, and an incomparable further table of contents, covering a rich field of literature, art, travel and adventure, - Robert Grant, whose story, "A Bachelor's Christmas," was a great success last year, contributes to Scribner's Magazine for December another Christmas story, entitled "The Matrumonial Tontine Benefit Association," - The Popular Science Monthly continues to give to the general public, in a simple and readable way, the latest facts and theories of the scientists. An article of value to educators, in the January number, is Professor Sully's "Psychological and Theological Ideas," in the Studies of Childhood series. — McClurc's Magazine for January continues the thorough and interesting study of Napoleon, begun in a previous number. Professor Drummond contributes a second paper on D. L. Moskly -- The Atlantic Monthly for December has a timely article on Christmas Eve and Christmas Day at an English Country House, by Sir Edward Strachey, - Lippincoll's Magazine contains a stirring story by Francis C. Regal, showing how a plucky reporter defeated a conspiracy and brought the criminals to justice, - The December Arena opens with a fine article on "The Real Significance of the World's Parliament of Religions," by Professor F. Max Muller, and the frontispiece gives an excellent portrait of this distinguished author. - The Jenness Miller Monthly is packed full of Christmas cheer. - Babyhosel maintains its high standard of excellence, and is indispensable to mothers, - The Political Science Quarterly (Ginn & Company) gives us the conclusion of Professor R. Mayo-Smith's study of the "Assimilation of Nationalities by the United States," and is otherwise full of material of profound interest to students of public questions.

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THE FUTURE OF THE COLLEGE.

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I am neither a prophet, nor the son of a prophet; I am not a seer of visions, nor a dreamer of dreams; I have not even a familiar spirit on whom I can call to draw back the curtain of the future and reveal to me the things that are to be. Pretending to no higher vision than is vouchsafed to others, I purpose, in this paper, to examine some of the tendencies of college growth, inquire into the reasons for those tendencies, their advantages and disadvantages, and finally to suggest some things which are worth the striving after in the future development of the college.

In the first place, let us frankly recognize that the college is a living organism. Like all vital forces it has laws of natural development, conditions essential to its growth, which are not theoretically evolved from any man's inner consciousness, but are the results of causes which must be investigated. Colleges have not been founded for the same reason everywhere. When founded they have not followed identical lines of development, nor even the lines laid down for them by their founders. They have sprung from many motives. They have had purposes ecclesiastical, political, purely intellectual, broadly philanthropical, or have combined two or more of these purposes in a single foundation. Thus the development of many of our colleges has been conditioned by the purposes for which they were founded. Less consciously, but not less really, they have been influenced by the views of those who founded them, and the time when and

the place where they were established. The same ultimate object has taken a different practical shape in the hands of different men. One age does not use the same means as another, and one locality cannot adapt itself to the usages of another. The New England and the Southern mind have different roads to the same goal. The Eastern and the Western States have different ideals and standards of home training. The educational facilities of city and country are varied alike in form and efficiency. The result is that Yale and the University of Virginia, Princeton and Oberlin, Columbia and Lafayette, are the creatures of different conditions and cannot be judged by a single standard, and neither can be, nor ought to be, reduced to a uniform system.

Individuality is as desirable in the college as in the man. To represent something, and represent it truly, is as important in institutions as in men. To form a great college trust, agree on identical entrance requirements, courses and conditions of graduation, would rob our colleges of their vitality, and destroy the usefulness of the great majority. Competition, great as are the evils it entails, is the one condition of vigorous life. By it alone can a college know whether it is meeting the educational demand; by it alone can the college be driven to keep pace with the progress of human thought in its protean courses. In all this, the college but reflects the humanity of its founders, directors, benefactors and patrons. And in this lies the best guaranty of the future of the college.

So long as men are men, their educational ideals will differ, their early advantages will vary, and their intellectual abilities will demand dissimilar methods of instruction. To very many the instruction of youth is primarily a moral training. They regard the intellectual training as highly important, but yet as distinctly subordinate to the moral. To such men the college must be distinctly a school of morals; its object the making of men; its organization religious; its atmosphere spiritual. From this position there is a gradation through many shades of opinion to those who hold that the purpose of the college is purely intellectual; its principal purpose the equipment of men with special training for some vocation; its organization directed merely to secure thorough teaching in the branches demanded by the students; its atmosphere frankly materialistic, or, as the cant phrase puts it, practical.

Such differences in personal opinion in large things are reflected, also, in smaller things. One man believes that a small college brings the students into closer contact with the professors, develops the individuality of boys, secures more effective teach-Another thinks the large college more representative in its composition,—that it is the influence of man on man that produces the best result — and prefers a wide student influence to a close professorial contact. Yet another unites the views of these two and prefers a small college for a backward boy and a large one for a strong, able, aggressive spirit. Again, the question of location as between city and country; of accommodation as between dormitories and boarding-houses; and many other considerations of greater or less weight, determine the patronage of colleges now as they did a century ago — as they will a century hence.

Such differences of opinion, entrenched as they are in church and other affiliations, deepened as they are by the loyalty of the alumni to their almae matres, is the best guaranty of the permanence of the so-called small colleges in the face of the aggressive spirit of a few so-called great universities, which are really colleges in the transition stage, neither all tad-pole, nor quite frog.

As it appears to me, there are two questions for our colleges to answer, and on the answer to these questions their future depends. First, do they mean to be colleges and colleges only? Second, do they mean to strive after university development?

It is the fad of the day to insist that an institution ought to be one thing and only one thing at a time. This is very good advice, but it is not always practicable. You have seen boys who were being boys with all their might, yet their trousers were steadily resisting the law of gravitation and climbing up their shanks. It was necessary for them to grow in order to live. So it has been with our colleges. They have had to grow with the demand for larger and better educational facilities, and I cannot see that there is any valid reason why a well-tested institution should not grow up into a higher class.

Historically the course which is emphatically the college course, that is, the course leading to the degree of bachelor of arts, is a part of the university—is, indeed, the indispensable part of the university. The abnormal part of American university history is the development of separate professional schools of law, medicine

and theology, without a fundamental course in arts. Though abnormal, this needs no further justification than is found in the real public demand which once existed, and which yet exists in a certain degree.

Our colleges began with the work which was crying out to be done. They did it as well as the circumstances of each decade permitted, and they pressed forward steadily to a higher standard and a larger scope. They earned the confidence of the people, and are the proper leaders in the work of giving America universities worthy of comparison with the best of Europe. In the processes of development they have fallen under many and various influences from without,— England, Scotland, France and Germany have, at one time and another, profoundly impressed their national ideas on our educational progress. The highest praise our colleges deserve is, that they have been robust enough to assimilate such foreign infusions without violence to their individual and national character. Though still under the shadow of German dominance, there is daylight enough to see a safe and sure deliverance from the once threatening danger of slavish imitation of German models.

The distinct character of many of our colleges, as institutions instructing only in the branches leading to the degree of bachelor of arts, led to the formation of an American ideal of three terms in the educational progression,—the school, the college and the professional school, in opposition to the historical European type of school and university, the latter embracing two degrees at least. But in America there were a number of forces uniting to produce this result. First, the earlier custom of pursuing professional studies under a preceptor, which, in time, led to the forming of professional schools in cities where law courts and hospitals gave greater facilities for instruction than the country towns, which were the seats of the colleges, afforded. the paucity of schools and the common custom of ministerial tutoring as the only college preparation in many parts of the country, gave a definite, uniform and low standard for college examinations. And third, the college, especially because of the low standard of admission and the clerical influence, was not more a distinct institution of higher education than a place for the inculcation of morals. The two marks of the old world, post-renaissance universities, the freedom of teaching and learning

and the studium generale, were lost in a fixed curriculum and a hard and fast dogmatic discipline; that these things were so was due less to the narrowness of vision of the teachers, than to the lack of funds to supply a large teaching force, and to the demand of the public who patronized the colleges. Yet, more, the new education had not been devised; the new scientific disciplines were unknown; and there was no demand for anything outside the old humanities. As a matter of fact, American colleges outran the English universities in adopting new ideas and methods, and have, so far as the under-graduate work goes, rivalled the world in liberality of thought, if not in depth and system.

In nothing is the American method more clearly seen than in the adoption of polytechnic schools into the college organization. As a feature of university growth this is an anomaly. The medieval university had for its model four faculties,-the fundamental faculty of arts and those of law, medicine and theology. The polytechnic was a posthumous child and was not admitted to share the inheritance. The American college took it in. generally as a distinct school, treated its students, though pursuing professional studies, as under-graduates, and introduced a singular paradox into its educational councils. The polytechnic callings ignore, as no other professions do, the ideals of the elder college. Humanism, with its culture and its disciplines, is an offense unto them. With a minimum of preliminary study and a maximum of purely techical training resting on an intellectual basis, almost exclusively developed through mathematical training, these callings are content to take their candidates from school at a very early age and draft them into actual work while still immature. The union with colleges of the older type has been of some value in keeping the value of a general training before the students of these professions, and imposing restraints upon their youth and inexperience, more usual in colleges than professional schools.

If colleges can be justified in co-ordinating with their original work such polytechnic work, surely they are much more justified in gradually enlarging and enriching their courses; in adding training for pedagogical purposes in the master of art's course; and in developing new studies in the higher humanism of the scientific renaissance of the Nineteenth Century. If, also, they

are able to affiliate or create professional schools of the older type, who are so fit to do so as they?

The conditions under which these things should be done are, however, these: First, there should be no sacrifice of thoroughness to expansion; second, the expansion should be in response to an actual, tangible demand; third, there should be sufficient financial support to make the development sound and real. There have been many instances where colleges have rushed into university work to the ruin of their legitimate and already existing courses. Paper universities are to be frowned on. Ability, not advertising, is the test of collegiate worth. Success to the college that can and does go on to true university development!

The great majority of our colleges, however, owing to their location and other limitations, must remain colleges, and colleges only. The danger to them in many cases is, lest they cater too freely to patronage, and fall back in the race for precedence into mere academies. The policy of success for the average college is to be a college and to concentrate all its strength on real collegiate work. In order to do this, a high, consistent, and yet reasonable entrance standard must be maintained. Mere technicality in examinations is a suicidal policy. Anything short of a real test of fitness for college work is equally bad. Where the line is to be drawn must depend on local conditions. A college cannot demand more than the schools which feed it can supply. A college can and must, on the other hand, demand the best its schools can give, and should hold up its feeders to their best work.

The college, in the second place, must supply such training as its patrons demand. It may secure the requisite variety by distinct courses, or by a broad elective system. The method is of minor importance if the end be attained.

The college, in the third place, must justify its existence by the results it attains. "By their fruits ye shall know them." The patron cares more for results than methods; the pedagogical value of methods must be seen in the graduates. Just here is where great injustice is often done colleges. Results are dependent on the materials employed. Some colleges have been peculiarly fortunate in the material they have had to work on. Most small colleges have less varied material than the larger colleges and usually produce more even results; and their work seems, therefore, less brilliant, but it is more satisfactory.

These results are dependent on the free use of all the proved essentials of educational work. These we may briefly summarize as first, sound, pedagogical principles. By whatever method, under the protection of whatever patron saint, mental discipline must be gained. The student must learn to think clearly and express himself cogently. In order to accomplish this, certain methods of work must be fully mastered. To the old methods of linguistic and mathematical science, the new methods of scientific experiment and research must be added. The student, in short, must not only learn to think for himself, but learn to investigate phenomena and provide himself with the true data for the mental processes which he is taught to pursue. Hence, the necessity of the laboratory—the laboratory not merely in chemistry, physics and biology, but in history, politics, sociology, etc., etc., etc.

Over and above these matters of discipline and method, the college owes it to itself to give its students a broad outlook on life. To secure this a firm hand on the system of studies is needed. It is necessary that some regulative force should hold in check erratic natures, stimulate the sluggish and correct the narrow vision of the premature specialist. In order to determine the golden mean between the dogmatism of authority and the anarchy of unrestrained choice, the mature judgment of those trained in the various ways now being tried will be needed. It seems probable that in such matters we are on the eve of a conservative reaction.

Whatever we may expect or hope for, the only sure reliance is a well regulated public opinion, which will only ask what is wise. For this the public must be educated. The colleges must not only teach under-graduates, they must form and inform public opinion. They can do this in many ways. Let us wisely and prudently consult how we can advance the efficiency of our colleges and bring the popular judgment into line with our sanest and calmest, but yet most vigorous, views.

EVERY-DAY USES OF HERBARTISM.

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Whatever our judgment may be of the Herbartian philosophy as a whole, or as to certain phases of it, we must acknowledge that it helpfully meets questions of administrative reform at several points, and that in its application to the work of the school-room it is eminently practical. The fact alone that it has been a source of inspiration to many of our best teachers, ought to entitle it to our respect, and to render it worthy of careful inquiry.

Its emphasis upon moral training as the chief end of education, has helped to check the utilitarian tendencies of the past, and has brought to the study of ethics contributions of the highest value, first, in exposing the fallacies and wrongs of artificial incentives, and, second, in showing the value of intellectual instruction as an essential means of a cultivation of the It is not uncommon to find individuals who regard moral training as the end of education, indeed we may believe that practically all teachers or educators will agree to that proposition, but here is a philosophy which is committed to it as a principle, and which develops a system of psychology, ethics and pedagogics pointing to it in all their details. No other philosophy or system of pedagogics, so far as I know, can make any such claim. The teachings of Herbart and his followers concerning interest seem to be at variance with our common notions and practice in placing it as an end and not merely as a means to an end. But, by a proper definition of terms, I believe there is a common ground upon which all may stand. For example, it is frequently said that interest in nature study must be awakened, not as an end but as a means to an end. Again it is said, that the animal or plant is to be studied not so much for the sake of information as for the awakening of a love of nature—and this, as I understand it, is precisely Herbart's idea. of one form of interest which should be awakened — the direct "Learning," he says, "shall pass away, but the interest shall remain throughout the whole of life." Inspiration may

be the better English word for the idea that Herbart has in mind. Inspiration in learning far transcends in importance the act of learning, but the act of learning is no less useful and necessary.

The average American is likely to look upon the teachings of Herbart concerning the historical-culture steps, or historical epochs, as the least practical part of his pedagogies. here, it must be confessed, are elements of wise suggestiveness. To the efforts of many disciples of Herbart along this line is due much of the practical work that has been done, and that is being done, in the unification and correlation of studies - a subject of vast importance in view of the rapidly increasing number of subjects required to be taught in the elementary schools, and of the extension of the departmental plan to the grammar and primary grades. Against the wholesale adoption of this plan comes with great force the arguments which Herbart uses in favor of the concentration of studies and of preserving the child's individuality. The study of the child should not be left to the psychologist alone, but it should be regarded as a paramount necessity for every teacher. The demand of Herbart, which is alike the demand of reason, that the teacher should "leave the individuality of the child untouched so far as possible," implies that that individuality must be known; and it is a question for educators to decide whether it can be known so well if the child's time is distributed among several teachers as if it were given to one teacher alone. Few pupils under a single teacher would seem to meet Herbart's demands on this point.

But the every-day uses of Herbartianism are most apparent in its teachings concerning the "formal steps of instruction," or methods of hearing the recitation. Every good teacher, whether he knows anything of the views of Herbart or not, on this point, follows, in a general way, his plan of procedure, first, in leading the pupils to disclose what they know of the subject to be taught, so as to prepare the way for the acquisition of new knowledge or the awakening of new ideas. This stage of instruction is called the stage of preparation. Here is emphasized the idea of review, extending the review so as to include all that the pupils know of a given subject, either from experience or previous instruction.

Then follows naturally the presentation of new facts of information or knowledge. This is done either by presenting the

object of thought, or by showing a representation of the object, or by making the child familiar with the new subject by talking about it.

The third stage consists of association and comparison of ideas, both new and old; and the fourth, if pupils are ready for it, the forming of general truths by abstraction. In these stages there are produced by apperception new ideas,—an interpretation and renewal of former perceptions. This idea of apperception, as presented by Herbart, may not be entirely new to all; and yet, his elaboration of the subject, in the light of other features of his philosophy, must, if understood, be productive of great good, first, in showing how new knowledge is acquired, and, second, in inducing teachers to adopt a good method of exciting interest and thought in their pupils.

The last and crowning feature of the recitation is the application of what has been learned in as practical a way as possible.

Thus is given, in four or five steps, a method of hearing the recitation which is full of suggestion to thoughtful teachers.

Having said so much of the every-day uses of Herbartianism, I desire to give, in conclusion, a word of warning and of criticism. The warning, which may apply to other theories than those of Herbart, is that of a too close adherence to prescribed rules. There is a cramping and deadening formalism which must inevitably follow a slavish obedience to the dogmatic utterances of a master. That the disciples of Herbart err no more in this direction than do those of any other master whose philosophy descends to details, is no reason why we should not hold up to them the warning, especially when it is done with a strong assurance and hope that they will continue to expose the weaknesses of the schools, and to show by their skill and devotion the stimulation of a philosophical method.

The criticism, too, that I have to offer, may apply to other systems of philosophy quite as well as to that which we are now considering. It can be no unwarrantable assumption of knowledge, either of philosophy or of future needs, to assert that no one philosophy, short of revealed truth itself, can meet the conditions of all time, and that, therefore, we should use our systems of psychology and methodology as enlighteners rather than as infallible guides; as lamps to show the ways, rather than as ways themselves.

Especially should they not close our eyes to the highest function of our calling. For one, I can but feel the lack of spirituality in this, and all other systems of philosophy which claim to be a guide of teaching, the lack of a recognition of causes and A system of mind knowledge or mind culture which does not recognize the divine element and power in the child, and which does not look forward to his final destiny as a human being, is incomplete, and, if followed closely, it must be mislead-That there are many men and women who, from a spirit of reverence and from a sacred regard for their high mission, do this, I believe to be true; which may lead us to wonder, after all, whether the personality of the teacher does not stand before any and all man-made philosophies. But we cannot afford to cast aside our educational guides altogether, imperfect though they They may, at least, help us to meet some of the present perplexities which confront us; but let them not so blind or bind us that we cannot deal with the child as a spiritual being, that we may not lead him to that "complete living" which stops not at natural-minded morality, but which extends even to the domains of heaven itself. Our highest work as teachers is inspiration—an inspiration which will not merely check all forms of outward evil but which will put into the heart a true love of the neighbor. Thus only shall we obey the command to bring forth "fruit that will remain."

A system of pedagogies with such an end in view will be hailed with joy by all Christian teachers, and its every-day uses will be surely felt even though they are not clearly seen — but such a system we are still hoping for and waiting for.

METHODS OF HISTORICAL STUDY.

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There is a widespread interest at the present day in the history of the United States. Only a few years ago it was studied in meagre outline in some of our public schools, and it was scarcely considered worthy of a place in a college course. Between 1870 and 1885, courses of study in history were established at Harvard, Yale, Columbia, Cornell, the University of Michigan, Syracuse University, the University of Pennsylvania and the University of Wisconsin. The subject was not made of sufficient importance to require the entire attention of a professor, except in the University of Pennsylvania, where the historian, John Bach McMaster, was made professor of American History in 1883. The lectures in the other universities were usually given by the professor of some other department.

Under favorable circumstances, a more important step was taken by the University of Pennsylvania, in 1891, when the School of American History and Institutions was opened to students with a fully-equipped faculty, offering courses leading to the usual collegiate degrees. What led to this movement in which the universities have taken up a subject once considered of so little value?

The Civil War transformed America into a new nation, and awoke the people of the world to a clearer definition of the position of our country among the governments of earth. The nation did not go off full-fledged with the Declaration of Independence and the Constitution. These documents only laid the foundations, and the conflict of the Confederate and the National principles first had to be waged before the prestige of the nation could be established. This struggle ended with the Civil War. In the language of Lincoln, the nation had a new birth of freedom, and this freedom was political, constitutional, social, industrial and literary. A new group of vital interests sprang into being. Questions arose which affect the whole country, and although local interests operate more directly upon us, yet the national sentiment is felt more strongly. The State is now

looked upon as a part of us, and we cannot separate ourselves from it. The existence of these facts has moved the universities to provide for a national education, by placing the history of our country in a prominent place in the college course.

This subject, which has for its central theme, Man, should demand a large share of attention in the public schools. Man in his relation to society and the State is a vital question, especially in our country, with its beautiful national history, a country which philosophers declare to be "the most magnificent dwelling-place prepared by God for man's abode." The social, political and religious step which man took in America was new to the world, and De Tocqueville says: "In this land the great experiment was to be made by civilized man of the attempt to construct society on a new basis; and it was here for the first time, that theories hitherto unknown, or deemed impracticable, were to exhibit a spectacle for which the world had not been prepared by the history of the past."

Our first impressions of history are that it is a multitude of different events, but it is not simply events. It is the logic of events, and we must see and know man in history. It is hard to define history at all. It has been called the science of man in his character as a political being; then any branch which deals with the affairs of mankind is useful to the historical student. As man is the central theme in history, the course of events largely depends upon the human will, and man's psychological nature, modified, of course, by geographical surroundings. History is not a long row of dates or a disconnected compilation of facts, done up in a volume neatly bound to attract the eye of man, but the internal feature should be the ultimate idea of all historical study. History is no longer classed with fiction, belles lettres and rhetoric, but with logic, philosophy and ethics. leading feature is not brilliancy, but productiveness. History does not consist in finely-rounded sentences that tend alone to please, but it is a study of principles as much as any other In contradiction to this, the student may say the science is. style of Gibbon and Macaulay is gorgeous. But we do not read Gibbon and Macaulay simply to admire, but to understand; and back of their brilliant pictures, there is a substance that has given their mighty works an abiding place in the realm of thought. Is there not a world of thought in Emerson's definition of history? He says: "History is the record of the work of the mind. All facts in history pre-exist in mind as laws. Epochs, camps, kingdoms, empires, republics, democracies are merely the application of this manifold spirit to the manifold world. Every revolution was first a thought in one man's mind, and when the same thought occurs to another man, it is the key to that era. Every reform was once a private opinion, and when it shall be a private opinion again, it will solve the problem of the age. The student is to read history actively, and to esteem his own life as the text."

Reviewing these definitions, we find that history is the object lesson of philosophy. Philosophy has to do with the universal truth and we should teach in this philosophical spirit. The time is now here when we should introduce the philosophical element into the history of our country. We have passed the milestone of the first century of our existence as a nation, and the principle of national self-consciousness is more prominent today than ever before. The student who has gone below the surface of mere superficial historical study, will find that the problem all along the line of our history has been the relation of man to the State.

Another very important subject has been generally ignored in the definition of history. That subject is physical geography. Some writers claim that a knowledge of the structure of the earth should precede our historical studies. If we study the historical movements of man without considering the earth upon which he moves, our ideas will be very indefinite, indeed. Freeman says that the physical construction of a country is the key to its political destiny. The history of man is, to a great extent, bound up with the history of man's dwelling place. Every teacher should have a perfect picture in his mind of the influence of physical geography in our country. The following facts will serve as passing illustrations. A peculiarity of the Atlantic rivers is that they all force their way through the mountains. The Alleghanies thus did not form an inaccessible barrier to the western movement of population, but the narrow river valleys through the mountains made gateways to the West. Our rivers thus became historical, and the tide of population moved in three distinct lines. The lower line always remained distinctly separated from the other two. Its isolation was never affected by immigration, and thus the Solid South became possible. Slavery did not make the South solid, but the circumstances of its isolation did. With pupils having no idea of the physical geography of our country, I have always found it difficult to lead them to understand how the French ever succeeded in exploring and uniting their great provinces of Canada and Louisiana, but when the pupils were shown that the Louisiana country and Canada are separated by only a slight watershed in Wisconsin and Illinois, the mystery was cleared away.

The geographical ideas of ages past have had so great an influence upon history that they should be given emphasis. of us, no doubt, teach that Columbus discovered America in 1492, and the little child thinks that then the work was done. Many people also think that Columbus received his inspiration all at once direct from heaven, and then set sail upon his course. But it required a thousand years to develop the idea that Columbus so warmly entertained; and after he had made his voyage of discovery, it required almost four hundred years more to complete the discovery of America. The discovery of America was a long and tedious process, and it involved ancient theories that the teacher must understand. It is not necessary to study the geographical ideas of all the Greek poets and philosophers, but two ideas prevailed in the second century that had a great influence upon the spirit of discovery. Ptolemy drew a map about this time, showing that it was impossible to reach the rich Indies by attempting a voyage around Africa, claiming that Africa extended indefinitely to the South, and that the Indian Ocean was a land-locked sea. This was the "continental theory." Mela presented the "oceanic theory," claiming that Africa could be circumnavigated. Mela's theory was held in Portugal, and as the pope had just granted to Prince Henry the heathen coasts of Africa, he now saw the opportunity of opening up a route to India and winning thousands of heathen to the fold. Thus Portugal was attracted to the East; and we see here the theories that led to the voyages of Diaz and De Gama. We must also study geographical ideas in order to understand the work of Columbus. He had always been a great student of geography, from his boyhood, and the subject largely shaped his His ideas were further developed from the accounts of views. Marco Polo of the vast extent of China to the East, and the

correspondence and map of Toscanelli satisfied his mind of the possibility of the western voyage. The fact that possibly had most to do in convincing Columbus was the idea then prevailing of the size of the earth. Toscanelli elongated China so far eastward, that he thought Japan could be reached by sailing 3000 miles to the west. Columbus accepted the theories of Toscanelli, but a statement in the fourth book of Esdras, that six parts of the earth are inhabited and only the seventh covered with water, changed his views somewhat, and he claimed that Japan was only 2500 miles from the Canaries. Had his sailors known that the real distance to the Indies was 12,000 miles, they would not have entered on the voyage; neither would the court of Spain have assisted him, because he asked for aid on the plea of a shorter route to India.

Geographical ignorance gave the name America to the New World; led to conflicts in colonial grants; and made it almost impossible to form a union of the States. The idea that the lands discovered were a New World was very slowly grasped. The discoveries of Columbus are pictured on maps of the time The teacher should realize that Columbus as islands near Asia. did not sail with the latest atlas. He died believing he had reached the best route to the Indies. Vespuccius was not an usurper, claiming the name "America" for himself. Anyone who understands the geographical ideas of the time will realize how and under what circumstances the name was first applied. In his voyage along the Brazilian coast, Vespuccius said he beheld things by the thousand unlike those of Asia. strange that he should call it a New World. In reporting it as a New World, he meant a land before unknown to geographers. It was only by successive steps that the southern continent received the name "America," and when it was found to be connected with the northern continent, the name became applied to The early theory, that what is now known as North America was only a group of islands near Asia, was supplanted by the view that it was a narrow strip of land, probably two hundred miles in width. The island theory long remained, however, and after Massachusetts was settled, the Governor received a letter from England directed to the island of New England.

Balboa crossed the isthmus now called Panama and found it to be a narrow strip of land, and from this fact arose the theory that all our northern continent was a narrow strip. This idea has had so much influence in our history, that from it I wish to show the importance of geography in teaching history. Influenced by the idea that North America was a narrow strip of land, the King of England gave charters to certain colonies by which the grants of land were to extend through from sea to sea. The Western Ocean was supposed to lie just beyond the mountains; but when the extent of our western lands became known, the colonies still demanded their sea to sea grants. The charter of 1609 to Virginia, provided that the colony should extend 200 miles north and south from Old Point Comfort, thence west and northwest from sea to sea. This latter phrase led to much difficulty, as Virginia claimed a northwest line, which took in western Pennsylvania, and conflicted with the sea to sea grants of other colonies. By this charter, Virginia claimed the southwestern part of Pennsylvania, and organized there Augusta County, changing the name of Fort Pitt to that of Fort Dunmore. The sea to sea grant of Connecticut also conflicted with the territory of Pennsylvania. She sent settlers into our state. and they located in the Wyoming Valley, organizing a Westmoreland County. In both of these cases, the Continental Congress had to interfere in order to restore the territory to our state. The claim to sea to sea grants almost prevented the adoption of the Articles of Confederation. The states having no western grants would not sign the Articles, claiming that the other states would have too much power. Thus, it required four years to secure the consent of all the states to the Articles of Confederation. I have referred at so great a length to the geographical part of history, from the fact that it has been so generally neglected. The sources of material along this line are available to every teacher. All that is required along the line of maps may be found in Winsor's Narrative and Critical History, Hart's Epoch Maps and Mact'oun's Historical Geography.

Instruction in history has followed the text book too closely. The text book should be the assistance rather than the means of support. Our histories are generally dry compilations, and are adhered to more closely than the best ones should be. Realizing

the miserable quality of ordinary histories, Macaulay said in 1849: "When I compare my own work with what I imagine history ought to be, I feel dejected and ashamed; but when I compare it with some histories which have a high repute, I feel reassured." In historical study, we should rely more upon original material. The text of a proclamation or a charter is of more interest than any man's account of it. At a very slight expense, all the necessary original material can be obtained. The Old South Leaflets are of great value, containing the charters, constitutions and proclamations of the past two centuries. The treaties and conventions between the United States and foreign powers are furnished free by the State Department. The library of every school can easily be supplied with sufficient original material to illustrate nearly every epoch of our history.

I have said much of the teacher's equipment and preparation. Now, how can these ideas be applied in our schools? The trouble with us all is that we have been regarding history as an easy study. History is considered easy because it is without technical terms, while chemistry is full of them. A man may understand history as far as mere words go, for page after page is written without technical terms, but the principles of no science are so slowly comprehended as those of history. In our lower grades, the subject should be treated with the greatest care. Here the work begins, and upon its quality depend the results of later years. Knowledge in early life begins with individual notions. Later on, it is natural to pass to general notions and form laws. The drawing-out process in education simply means passing from particular to general truths. Socrates taught men, 2500 years ago, in the streets of Athens. He did not impart new knowledge. It was not the individual, but the universal, that claimed his attention. He was assisting man to express general When man is developed, it is easy to pass from general truths. to particular truths. The application of general truths has a great bearing in life. We are often called upon to decide cases involving general principles. These characteristics of the mind must be respected in historical study. Here, too, the child must first learn individual facts. We must proceed from the individual to the general, but before the knowledge of the individual is complete, we must know something of the general. We should begin with such individual facts as form strategic points in historical progress, and fix their general character upon the mind of the pupil. Then we are ready to study the relations of facts, and form general laws, after which we can make our deductions and study individual elements of life. The first facts of history should be told by the teacher in biographical form. A series of prominent men, such as Columbus, Cabot, Smith, Standish, Penn, Franklin, Washington, Clay and Lincoln may be selected. As the teacher tells the story of their lives, the pupils are also absorbing the historical facts of our country. Such a course may continue for a time, when the pupil is ready for a stronger diet. The teacher may take him over the same ground, but with a different object, that is, to form relations between events. When this proper age is reached, historical study and instruction should all be on the line of relations. What good are isolated facts to a pupil of this age? But in a series, he sees relations, and principles are developed that are true of all history. The transition from the individual to the general may be well illustrated by the causes which led to the Revolution. From some of our histories, we get the idea that the Declaration was a sudden outburst of American indignation, and that the nation arose full-fledged, as Minerva sprang from the brow of Jupiter; but independence was the outgrowth of repeated tyrannies of one hundred and sixteen years. Here, as well as anywhere else in American history, the student can find Beginning with the Navigation Acts, which were aimed against Holland, a long train of results followed which would naturally lead to the final result. Likewise, the development of the national government can be traced up in a series of relations. The colonies had a common language and nationality, yet there were many jealousies that prevented union. The union sentiment was present in 1643, in the New England Confederation, but it was a theological state, and union must be made on a broader basis. Penn's plan, of 1697, was liberal in its provisions, but he lived one hundred years before his time. Franklin's plan, of 1754, again showed the desirability of union; but king and colonies alike rejected it. The times were not yet ripe for such a scheme. It was not until the colonists, as outraged Englishmen, were compelled to a separation from the mother country that union was possible, and then only the greatest necessities impelled it. The confederation marks only the transition state to the "more perfect union;" and then, the debate of the senate hall for seventy years, and the violence of physical conflict, were required to establish national supremacy. It is my aim, in this paper, to show that history should be taught in the philosophical spirit. When it is thus treated, from the standpoint of psychology, it has a new value as a science, and becomes an inspiration to every student.

Above all, the teacher must be filled with the patriotic spirit. First, last and all the time, he must be for the Red, White and Blue. In some of our despairing moments, we often take a cynical view of our institutions. Even great scholars have not been free from this. John Lothrop Motley, while a member of the Massachusetts Legislature, one day turned to a fellow-member and said: "What can become of our country, with such fellows as these making the laws? No safe investments; your good name lied away any hour, and little worth keeping if it were not." Motley went to Europe, and spent four or five years, and returned cured of such ideas. He said: "America is a country worth dying for; better still, worth living and working for to make it all it can be."

THE CRITIC AT SEA. *

(A review of "The Public School System of the United States.")
BY THE AUTHOR OF "PRESTON PAPERS," NEW YORK CITY.

VIII. (Concluded.)

THE PUBLIC SCHOOLS OF CINCINNATI.

"There are but two classes of people in the world,—those who have done something and want their names kept out of the paper, and those who haven't done anything worth printing and want their names put in."

Atchison (Kan.) Globe.

Having said all that would be likely to be believed by the world at large, about the delinquencies of all who are in any way connected with American schools in general (except, perhaps, the janitors!) our so-called expert opens the chapter of his book which is supposed to illuminate the subject of "The Public Schools of Cincinnati," as follows:

"The schools of Cincinnati are, in my opinion, upon much the same level as those of Bultimore and Buffalo,† as little hav-

^{*} Copyright, 1894, by Kasson & Palmer.

[†]See December and January issues of Education, respectively, for these chapters.

ing been done here as in the other two cities toward substituting objective and experimental for abstract and mechanical methods of instruction. It is true that principals and teachers who endeavor to obtain results by more rational means may here and there be found, but this is no less true of Baltimore or Buffalo.

"To review, in detail, the methods of instruction followed in the schools of Cincinnati would be, therefore, but to repeat, in substance, much of what was mentioned while speaking of the schools of Baltimore and Buffalo. I have said all, generally speaking, when I remark that the schools of Cincinnati have, as yet, scarcely opened their doors to the new education." (Page 80.)

For the life of me, I can't see why—in the face of his acknowledged inability to do more than "repeat, in substance, much of what was mentioned while speaking of the schools of Baltimore and Buffalo"—he should insist upon so strangely afflicting his readers through the intricacies of twelve more pages, as he does. Why not have left them blank, for each reader to fill out to suit his own taste, and according to truth and justice as each apprehended it? The unusual amount of "fat" would have delighted the printer, would not have lessened the dazzling glitter which the imaginary laurel held in suspension before the doctor's eyes, and, perhaps, would have saved some powder for the next attack, from his somewhat feeble energies!

The last sentence of the second paragraph above quoted is a little—just a little—obscure. What is meant by "I have said all"? If he has "said all," why continue? (Why, anyway?) Cut bono? In this day and age, a "space" writer, on general subjects, is likely to be more or less ignored; but possibly a space writer on "scientific pedagogy" * may have a more enthusiastic and admiring circle to listen to his melodious voice while he rings the changes on set phrases!

Kindly enlighten us, doctor, as to just what you mean by "the schools of Cincinnati have, as yet, scarcely opened their doors to the new education." As its only representative, were you debarred entrance? On what grounds? Did you present a properly signed passport when you humbly knocked for admission, or did you go *en masque* to a side or back entrance?

^{*}See Education for November, 1894, page 156, "scientific pedagogy."

Surely, if you boldly announced yourself as the modern educational Hercules, sent by the proper authorities to clean the Augean stables of education in Cincinnati, no domestic tyrant of that ill-starred city would have been so rude as to slam the door in your face and tell you to "Paste that in your hat," handing you the time-honored legend, "M. Y. O. B." No, no! Cincinnati is hospitable almost to a fault; and I do not see why her schools "have as yet scarcely opened their doors to the new education."

Ah! that last phrase may hold the kernel of the nut I find so hard to crack. What is the "new education"? How does it differ from the old education? What are its ear-marks? Advantages? Pedigree? Uses—and abuses, if any? Who are its disciples? What have they done? Bring them forward, please,

"And prove their doctrines orthodox By apostolic blows and knocks,"

unless you are sure that opinion in suspense is sometimes safer than if expressed!

The next paragraph on the same page begins so dismally that it would seem as if the doctor should not allow himself to suffer from dyspepsia or melancholia, when "remedies" and prescriptions roll off the end of his pen so readily as to lead us to believe, at times, that he cannot have had time to diagnose the case according to the latest educational-expert fashion. It reads:

"But there are [sic] a number of things besides mechanical methods that serve to render miserable the lives of the children attending the Cincinnati public schools."

As a relic of old-time back-woods teaching, I would mildly suggest that possibly "expert" visitors may be one of this "number of things,"—coming, as they so often do, fresh from contact with nothing but books, where "concepts," "pedagogy," "apperception," "psychology," and other equally fine-sounding phrases have led them a sort of will-o'-the-wisp dance, away from the every-day needs of the every-day child in the every-day life of the every-day school—and beg him, in the name of real education (old or new, only so that it's education and not a thing of straw), to keep out of focus until he has at least studied child-hood in the brilliant light of plain, every-day common sense!

After enumerating various and sundry necessities for which he found little or no provision (light, ventilation, room, etc.), he says, on page 81:

"And, to cap the climax, corporal punishment is still used to a disgraceful extent in the schools of Cincinnati. In some of the schools there appear to be hundreds of regular cases a month. This does not include incidental punishments, such as pulling the hair or the ears of the pupils, or pinching their cheeks."

This is a pretty strong statement to come from a man who assumes to know whereof he speaks: but I shall feel inclined to accept it cum grano salis, until I know (as I mean to, soon), personally, that it is not an exaggeration, at least.

Judging from what follows, I am inclined to think that "In some schools there appear to be hundreds of regular cases a month," as well as what precedes and follows, is visionary, as some other statements (which I will specify later) have proved to be. Yes, this is putting it mildly; but until I have made personal investigation of the condition in the Queen City of the West, I am inclined to give the author the benefit of any doubt which may arise as to his ability to appreciate Ruskin's words:

"The greatest thing a human soul ever does in this world is to see something and tell what it saw in a plain way. Hundreds of people can talk for one who can think; but thousands can think for one who can see."

True, I have had "close communion" with some of the Cincinnati teachers for years, and have been a visitor in and out of some of the schools, without ever having dreamed of such an existing state of things; but I didn't go as an "expert," and so may have lost the superior advantages afforded for detecting the exact condition of affairs.

On the same page, the next sentences read: "And yet we hear the board sing its song of praise. We hear it congratulate itself upon its own magnificence, and the citizens of Cincinnati in securing a board so wonderful and teachers so fine",—and he quotes thoughtful, earnest words from the report of the President of the Board of Education, for the year ending August 3, 1891, which, by way of contrast with some of his own utterances, show a vastly more thorough understanding of educational needs and processes, and a deeper appreciation of the value of the teachers' work than his own pages exemplify, if I may judge. Allow me

to quote from his quotations from the above-mentioned documents (pp. 82, 83 of his book):

"None of these things stand as representative of the system of public instruction, but it is the result of the whole, and the one nearest that result is the one through whose direct efforts the result is reached; that one is the teacher. We point to the graduate from our high schools as the representative of our public school system. He is the presumed embodiment of all that goes to make us the name we have. He is the result of the teachers' work. It is the teachers' work which makes the record, which commands the praise, which earns and is entitled to the highest appreciation. It is that which will live and benefit coming generations. The education of youth is the end sought; that reached, crowns our success.

"And so here I give to the teachers, to the instructors, to the educators, the larger part of the praise for the magnificent results secured during the year. From the opening of the Normal School to the close of the school year, they have been earnest in their work, faithful and attentive to their duties."

To be sure, this language from the President of the Board of Education — evidently "accepted" without a dissenting voice—is in strong contrast with that of the author under discussion (who has not hesitated to score principals and teachers as densely ignorant, grossly negligent, thoroughly incompetent, etc.), * but similar things have been truthfully said of other teachers, by other school officers, at other times and in other places; and I doubt not they are true of the Cincinnati teachers as well as others!

Certainly the Board of Education, in any city, ought to be better qualified to sit in judgment upon its corps of teachers than a back-door visitor of a stray half hour; and if the members are wise enough—and kind enough—to make their adverse criticisms, when necessary at all, in the privacy of closed doors, instead of through the columns of their reports or the public pages of a magazine, it is one more argument in their favor, as it demonstrates their ability to deal with human nature from a Divine standpoint!

All honor to the Cincinnati Board, that thus publicly honors its teachers, instead of holding them up to public ridicule,

^{*}See Education for June and September.

contempt, sarcasm and criticism, as has been done by their visitor in the pages of the Forum and now in his book! Shall his word and version be taken in preference to that of the men who have guarded the trust confided to their care? Whose is the more worthy of confidence? Whose betrays the more sense, the more discrimination? "By their fruits shall ye know them;" and if any pessimistic theorist walks the earth, the proud owner of a 2x9 "pedagogical education," seeking whom he may devour with his all-absorbing theories, begging and pleading, with metaphorical tears in his eyes, to be heard on his favorite topic, it may be well to pause before swallowing all his theories in a lump, lest they produce mental indigestion.

A diet of rice alone will not, evidently, be found especially invigorating to teachers or superintendents in the public schools of the United States.

He continues: "I shall now relate a few of my class-room experiences in order to show why I cannot indorse the sentiments expressed by the president." (Idem.)

Well, it is just possible, barely possible, mayhap—yet still possible—that the sentiments expressed by the president will pass muster in the educational clearing-house, without the indorsement of the highly esteemed gentleman; but if not, and if it seems to be a case of life or death to the cause of education, that the haughty autocrat's indorsement be written upon the expression of such seemingly common sense thoughts, why, then, we'll see if, by proper subservience of all to his imperious will, it may not be obtained—or the cause of education be left to languish on its parent stem; and as in a choice between two necessary evils it seems the part of wisdom to choose the lesser, I shall vote for the—" Lady or the Tiger?"

He next amuses himself with the following somewhat juggled English, same page, next paragraph:

"The most striking peculiarity of the Cincinnati schools exists, in my opinion, in the fact [sic] that so much time is devoted to concert recitations,—a form of instruction than which there is none so preëminently fitted to deaden the soul and convert human beings into automatons. These recitations are heard, as a rule, as soon as a district (primary) school building is entered, and in tones so loud that the uninitiated might readily mistake them for signals of distress."

I leave this choice morsel without comment, as the readers of Education are sufficiently intelligent to comprehend it, and to supply the "setting" which it invites, notwithstanding the numerous slurs which have been east upon their education, intelligence and competence.

The next paragraph (p. 84) is equally brilliant. Listen, please:

"My experiences of this nature were frequent. [What "nature"? How many experiences are meant by "frequent"?] In one of the schools, I heard, on entering the building, sounds unusually shrill, coming from one of the class-rooms, and being prompted by my desire to know the true cause of so much commotion, I entered the room whence they came." (Idem.)

How is that for brief, pointed, direct rhetorie? "The mountain labored," etc.

"What did I see? Only this: A teacher and about a dozen pupils standing before a blackboard covered with lists of words, spelling the word 'quail' at the top of their voices and in melodious tones, thus:" (reproducing the word with a musical accompaniment, which method of illustration having been advantageously used in the pages of "The Heavenly Twins," is again adapted to his richly jocose descriptions, he having already used the same method in describing the Buffalo work on pages 71 and 73, and further succumbing to its fatal fascinations on pages 85, 86 and 88, while making the rounds—?—in Cincinnati, until we readily see that he parts from it at all with too evident regret, and only under compulsion. Why could not some kind friend have seen that his outfit contained something less strained and more becoming the dignity of an expert critic?)

Again, on the same page:

"When the teacher found occasion to take a moment's rest, she said to me:

'These are my poorest spellers; they always need an extra drilling. Quail appears to be a very difficult word for them to remember. I must give them a little more drill upon it.'"

Well, so far from condemning a teacher who recognized the divine right of backward children to "extra drilling," I should say to that teacher: "Good! you do not teach classes and masses, but individuals;" and if the learned pedagogue has nothing better than this with which to substantiate his claim to

Public Censor of Public School Work and Methods, I would gently advise that he climb down (by the back stairway!) from the pedestal where he has undertaken to perch.

After devoting nearly all of page 85 to a further would-be humorous description of the details with which this teacher drilled the backward spellers on this word, he concludes with this over-ripe paragraph:

"When the word 'quail' had been carnestly, thoroughly and conscientiously studied, the word 'market' was begun. Although the spelling of this word was carried on upon the same principles as those which governed the spelling of the word 'quail,' nevertheless the monotony was broken, for the reason that both the melody and the tempo were changed. While 'quail' was sung rapidly and with much spirit, 'market' was sung slowly and plaintively, thus:" (illustrating, as before, by means of the staff).

Well, if his chief desire in visiting the numerous schools of Cincinnati (there are several, and it is to be presumed, is it not, that he "visited" a majority of them?) was to air his musical knowledge and ability, and to demonstrate his familiarity with the phrases of time and tune, I should think he sought a somewhat expensive medium in the Forum, that is, expensive to someone; but I fail to recognize its practical value in the educational world, to anyone save himself.

I do not see how, even remotely, this detailed rehearsal—occupying nearly four pages of his valued book and exhausting his grey matter in such a large number of cells—furnishes any permanent benefit to the cause of education in general, nor to the dear children whose cause he pleads so pathetically—at intervals! It is lamentable that one who is so manifestly a gentleman (!) should have such strange tendencies toward the "ring" and other circus appurtenances.

His next description (of a lesson in reading) was given in the October No. of Education, page 97.

Another closed with the following "nusical" comparison, p. 88 of his book: "Taken all in all, this reading sounded like a piece of music consisting of a solo, an echo and a chorus. How interesting the story must have been to the children!"

Possibly the lesson developed as much interest to the children, as his recital has to the world at large. His double-distilled

pedagogics have not set the educational Thames on fire, as yet. He closes his highly-scientific "observations" of Cincinnati schools with some very juicy remarks, which easily denote the "stage" of his educational growth. I quote from page 89:

"It is teaching of this nature that the president of Cincinnati's Board of Education calls magnificent. But what this teaching shows, beyond the fact that the teachers are not illiterates, it is difficult to perceive."

That depends, doctor! You are using the wrong end of the telescope; and, however lightly you may be tainted with real education, it might pay you in your airy flittings to call a halt on your "scientific pedagogy" * and pause long enough to let your mental capacity enlarge sufficiently to grasp some stupendous facts with all their stupendous significance in connection with "this teaching"—even from your derisive descriptions some good points being plainly discernible to the "initiated."

First, is the fact above referred to, that at least one teacher taught individuals instead of classes. Does your "scientific pedagogy" absolutely ignore this necessity?

Second, that same teacher recognized the Solomon-old theory of "Line upon line," and drilled where difficulties made it desirable.

Third, even you concede the words to have been "earnestly, thoroughly and conscientiously studied" (see supra); and do these qualities count for nothing in the eyes of an educational expert? Men and women who do anything "earnestly, thoroughly and conscientiously," in this day and generation, are the ones who accomplish the world's work, and not those who inertly bask in the sunshine of inaction and supinely criticise the how and what is being done.

Give us plenty of earnestness, thoroughness and conscience, and we'll grant you a munificent monopoly of the psychology that produces nothing stronger, sweeter, or more useful than you have yet given us! We'll trade off whole market wagons full of merely theoretic "scientific pedagogy" for just one such teacher's work, and run the chances on the material for character-building which we can find in the rubbish of earnestness, thoroughness and conscience!

^{*} Page 156, EDUCATION.

1895.1

Fourth, the response of Lucy to the request of her teacher, that the child should read what was on her slate for the visiting "gentleman," (?), as given in the October number of Entera-TION, showed both promptness and abelience, two essential elements of good citizenship, which have been developed and fostered by "teaching of this nature." Have you anything in your "pack" that you'd like to barter for these homely but useful characteristics? We are not willing to be parted from them — but our public schools are full of these blessed qualities. in different stages of progress, and such teachers as those you have caricatured are leading lives of use and beauty in inculcuting these principles. We do not need to seek them in foreign uniresities, as they are home-grown and quite common!

I refrain from reiterating the modest (?) phrases by which unaided - the learned layman lays down "the causes of the evils in the Cincinnati public schools" and complacently points out the fact that "the corps of teachers, on the whole, is still so obviously lacking in professional qualification," and will only give the closing words of this wonderful chapter of wonderful brilliance from such a wonderful mind:

"As the most flagrant evils found in the schools of Cincinnati are due to the professional incompetency [sic] of the teachers. the chief remedy for Cincinnati's school evils lies in rendering the teachers competent by giving them a professional education. To educate them thoroughly, Cincinnati, as Buffalo, would require a supervisory staff of five or six educational experts." Note the tautology herein, and weep!

I will only add that he seems to advertise superficiality in attempting to spread his wonderfully limited conceptions and experience over the vast territory of this almost limitless subject. He evidently thinks, as so wittily expressed by Butler, that

> "All men live and judge amiss, Whose talents jump not just with his"

but there's no statute law which forbids a delicate dissent from this innocent prattle.

EARLY SCHOOLMASTERS OF NEW YORK.

HYLAND C. KIRK, PHELPS, N. Y.

Says that eminent historian, Diedrich Knickerbocker, "There is something exceedingly delusive in thus looking back, through the long vista of departed years, and catching a glimpse of the fairy realms of antiquity. Like a landscape melting into distance, they receive a thousand charms from their very obscurity, and fancy delights to fill up their outlines with graces and excellences of its own creation." Thus loom on my imagination those happier days of our city, when as yet New Amsterdam was a mere pastoral town, shrouded in groves of sycamores and willows and surrounded by trackless forests and widespreading waters that seemed to shut out all the cares and vanities of a wicked world.

It was a pleasing sight, in those times, to behold the honest burgher, like a patriarch of yore, seated on the bench at the door of his whitewashed house, under the shade of some gigantic sycamore or overhanging willow. Here would he smoke his pipe of a sultry afternoon, enjoying the soft southern breeze and listening with silent gratulation to the clucking of his hens, the cackling of his geese and the sonorous grunting of his swine,—that combination of farmyard melody which may truly be said to have a silver sound, inasmuch as it conveys a certain assurance of profitable marketing.

One needs to be suitably impressed with the conditions here suggested, remembering that the delusions of distance are wholly with himself, in order to get anything like an accurate concept of the truth. One needs to consider not only the freshness of the scenery and the dreamy wildness of its pictures, not only the sluggish movements and general laziness of the honest burgher, but also the shrewd and avaricious spirit of the first Dutch settlers on these shores, in order to understand a part of the difficulties under which the early schoolmasters of New York had to labor.

It was, undoubtedly, in one of these whitewashed houses that the first school* on this continent was founded, though the name of the teacher and the exact date of its establishment are not known. In accord with the educational policy of the Hollanders, prior to the settlement of New Netherlands, a school must have been organized almost contemporaneously with their landing in America. The settlers themselves grew up under a system which provided for the education of children at the public expense, and the Dutch West India Company were actually required by their charter to maintain schoolmasters, as they also were preachers and krank-besoeckers, i. c., comforters of the sick.

These three offices appear to have been combined at first in the same individual, a practice which was continued with more or less latitude for a considerable period. Carel de Beauvois, the first schoolmaster of Breuckelen (Brooklyn), was commissioned "to serve summons, to conduct the service of the church and to sing on Sundays; to take charge of the school, dig graves, etc., ring the bell and perform whatever else may be required." (Annals of Education, by D. J. Pratt.) If this indicates a very funny state of things, it is, nevertheless, a key to the difficulties forced upon these early schoolmasters.

Adam Roelandsen, or Roelansten, has the honor of being called the first schoolmaster of New Amsterdam, though he is really the first who did not combine the function of teacher with the profession of preacher. In the governorship of Wouter Von Twiller, Dominic Bogardus was the officiating minister, and Roelandsen rejoiced in the separate vocation of schoolmaster. Following is a list of the earlier teachers:

| Adam Roclandsen | | | | 1633 - 1639. |
|---------------------|--------|---|--|--------------|
| Jan Cornelissen | | | | 1640 - 1650. |
| William Verstius | | | | 1650 - 1655. |
| Johannes de la Mon | | | | 1652 - 1663, |
| Harmen Van Hoboo | | | | 1655 - 1664. |
| Evert Pietersen | | | | |
| Alexander Carolus (| Curtin | 3 | | 1659 - 1662. |
| Aegidius Luyck | | | | |

Little is known of the quality of the service these teachers performed, but it is a matter of record that nearly all of them

^{*} This claim is hardly established to the satisfaction of many of the best students of early Colonial history, but is to say the least a debatable question.—[Rim. Ristration.

were subjected to legal difficulties. Roelandsen had no less than fifteen suits at law. Cornelissen also had to maintain lawsuits. Verstius, after much delay, an increase of salary having been denied him, was granted permission to return to Holland. Little is known of Montague. Hoboocken's school-house was burned, and his request to use the side chamber of the city hall denied. On account of his ill health, he was superseded by Pietersen, who seems to have met with better treatment. Curtius, the first Latin schoolmaster, a special importation from Holland, encountered unusual difficulties. The magistrates opposed him, and "the parents complained of the want of proper discipline among the pupils, 'who beat each other and tore the clothes from each others backs.' He retorted by saying 'his hands were tied, as some of the parents forbade him punishing their children." (Annals of Education.) He closed his official career, as Roelandsen had previously done, with a lawsuit about hogs!

The influence of Stuyvesant seems to have been entirely favorable to school interests, and by his approval, Rev. Aegidius Luyck, who had come to New Amsterdam for the purpose of instructing Stuyvesant's sons, became the second Latin schoolmaster. He gained a reputation which brought him pupils from Fort Orange, the Delaware, and even from the Virginia colony. It was Luyck who, on the occasion of his marriage with Miss Judith Van Isendooren, became the subject of two alleged poems, written by Domine Selyns. The happy event occurred on "The second day of Christmas," 1663, when the reverend gentleman delivered himself of the two rhythmical effusions. The following extract from one of these, "The Bridal Torch," shows how Cupid, the wily elf, transfixed the lovers in the fort of New Amsterdam:

"While Judith stands beneath, Luyck looks from the embrasure, And ere they see or think, he shoots Luyck in the breast. Nor does one shaft suffice his covenant-making pleasure. 'Where did he shoot?' 'Where was't he shot?' inquire the folks. Luyck speaks not, for he feels something his heart is boring. As all look up at Luyck, so Judith upward looks. He shoots a second time and pierces Isendooren."

The other production, "The Nuptual Song," the whole of which may be found in Murphy's Anthology, seems to have had

more reference to the day and its suggestions. Here is the tifth stanza:

"And as they bring this child before them, Luyck comes and marries Isondooren, Standing before this Christ-like crib; And finds, when his consent is shewn, Flesh of his flesh, bone of his bone, For Judith is his second rib."

There were a number of private schoolmasters in New Amsterdam. The first of whom reference is made is Adrisen Jansen Van Ilpendam, 1645-1660, whose rate of tuition was two beavers per annum. Another private tencher, Jan Juriaense Baker, licensed August 16, 1660, was clerk of a church, read the sermons on Sunday; also kept a tavern and was at one time convicted of selling liquor to Indians, for which offense he was fined five hundred dollars.

After the capture of New Amsterdam by the English, in 1664, attempts were made, it would appear by direct authority of the government, to break up the Dutch schools. Luyck's Latin school was continued, however, for some eight years after the English came into power. In a "History of the School of the Reformed Protestant Dutch Church," by H. W. Dunshee, it is claimed that this school, which is still sustained in New York City, is the same as the first public school established by the Dutch. It is certain that they vigorously opposed the efforts to suppress their language, and to offset the corrupting influences upon their children of English, Irish, Welsh and Scotch, all of which were spoken on the streets, they sent to Holland as late as 1755 and imported a genuine Dutch schoolmaster, John Nicholas Whelp.

So great was the tide of British immigration and the influence of the new tongue, that English appears to have been introduced into Whelp's school. Whelp received a salary of two hundred dollars a year, and the use of a house and garden up to the year 1773, when his death occurred.

John Shutte, the first English schoolmaster in the country, was licensed to teach at Albany by Governor Nicolls, October 12, 1665, "upon condition that the said John Shutte shall not demand any more wages from each scholar than is given by the Dutch to their Dutch schoolmasters."

It may also be of interest to add that the first school *mistress* in the province was probably "a travelling woman who came out of ye Jerseys, who kept school at several places in Rye Parish." This was in 1716; her name is not given.

THE DUTY OF YOUNG PEOPLE TO OBTAIN THE BEST EDUCATION POSSIBLE.

MARY A. WHEDON, DEVIL'S LAKE, NORTH DAKOTA.

"Chisel in hand stood a sculptor boy,
With his marble block before him;
And his face lit up with a smile of joy,
As an angel dream passed o'er him.
He carved that dream in the yielding stone,
With many a sharp incision;
In heaven's own light the sculptor shone,
He had caught that angel vision."

Education, as defined by Webster, is "instruction; the cultivating of the moral, intellectual and physical powers." Let us consider the subject of education not only from a scholastic point of view, but from the more including plane of current topics of the day,—the subjects which are awakening dormant energies, hidden interests and latent powers of able men and women, who, having vital views borne in upon them, rise and say: "Here I stand; I cannot otherwise." And thus goes on the multiplication of fields, the lengthening and strengthening of lines, by which we are creeping to higher and nobler planes of living. The question of education is coming to be - what is the most useful, the most strengthening, the most uplifting? The solution of it is the development and culture of the reasoning faculties; not merely the highest forms,-inductive and deductive reasoning—but analyzation, comparison, abstraction, judgment, conception, generalization, or truth-discerning.

In ancient times, the Romans considered the highest kind of education to mean physical development and strength, and to combat with brutes and even with human life, in the coliseums and arenas, was the plane aspired to, sought after and followed up. And to what purpose was this course, do we ask? Just a glance at the results will answer the question. From it all grew a lack of mental calibre upon which to build government,

education, religion and science,—the vertebra of a nation—and hence the final overthrow of the nation. Even to-day, we see the results amongst the Romans, where well built hodies are in excess of well built minds; where chivalry is lacking almost to a degree of degeneracy.

In mediaval ages, and in many countries even now, education was and is a cultivation of the memory, principally. In some parts of South America, at the present time, strong mentality is bounded and undeveloped because of education being pursued along the one line only of memory. The results show in the government and in the religion. Look at China, composed of a nationality over-developed for ages past in the one ability to memorize, to the sacrifice of the reasoning faculties and the whole power of judgment, both of which are dwarfed to pigmy life; tenacious of ancient customs and beliefs to a degree of crudity; lacking in every advance in the professions, practice, business, government and education.

Higher education and broader development of our mental natures is not only for our own satisfaction, our own advantage and our own glory. Education, considered from the standpoint of duty, has, already, through the natural course of events and force of circumstances, formed itself into three distinct divisions for us, viz: I. As a duty we owe ourselves; II. As a duty we owe the state; and III. As a duty we owe God.

As a duty we owe ourselves.

Education, with each individual, should be, and is coming to be, the equal development of the mental, moral and physical natures. If the development of one of these natures is sacrificed for that of another, there is a failure. If one's component natures are not in harmony with each other, the instrument of life can produce nothing but discords. Joseph Cook says, "Only whole wheels roll. Whenever we leave out an are in our culture, there is likely, as the wheel rolls, to be a halt some day." Above, beneath, beside, and hand in hand with every successful success, is health. It is the keynote to which our whole lives are tuned. It is the lever which is to open every door we are to enter.

The glittering polish and the dazzling brilliancy is not that which is to be sought. To make existence worth preserving and life worth living, the noblest elements of morality and mentality

must be woven and interwoven into our very nature and being. The patterns of faith, hope and charity must be so harmonious, like the flowers of the royal tapestry weaver, and so solidly backgrounded with truth, love and consecration, as to make our lives one indissoluble work of humanity-art.

These lives of ours are individually to live; at the end of which we shall confront the question, not how have others lived, but, how have I lived my life? If, in answer to that question, we would have the recording angel read us an acceptable answer, we must live, not only up to our highest light, but up to the highest light available. Madame Willard said it seemed a wonderful thing to have in one's own hand one's own life to mold. Carlisle said that "the end of man is not a thought, but an act." Hence comes the question, I hold my life; how best mold it for that act? How, but by education?

Education develops and broadens the mental vision; it enables one to cope with the emergencies of life; it gives one strength of decision and despatch of execution; hand in hand with it grows self-possession, and with that comes calmness in excitement, quickness of decision, strength in action, heroism in danger and deeper insight into cause and effect; -bulwarks of individual life which tend to lessen the wear and tear of the mental and physical organisms, and hence lead to longer life. It is a long-proven fact that educated people live longest. They know the steps to avoid, which, if followed unwittingly, would but foil their noblest efforts. Educated people can do better for themselves; more good to others; see the divine hand in nature at every point of development; can take more comfort because they see more. In all, they have a well-developed life that fits better into the foundation of efficiency that is to bear up the structure of life's completeness. Higher education eradicates self-conceit and bigotry, — the very dynamite which often blows up one's own solid foundation.

If we would make armed advancement against every door closed to an onward march, and enter every similar open door, we must educate ourselves in preparation for it. If once the simple act of existing satisfied the loftiest ideals of people, it is not so now. To-day we are standing on a higher plane, for to-day the vital subject of living is actual life along and in the drifting current of humanity. And how best prepare ourselves to live instead of merely exist? How, but by education?

Since "a chain is no stronger than its weakest link," can any persons each one of whom is a component part of humanity as a whole, face the subject of Higher Education indifferently? "No man can rise above his own best intentions." How are we to form our best intentions? Not by harboring an undeveloped brain, an empty heart and listless hands. "Press toward the mark for the prize of the high calling." So fill the heart and mind with noble thoughts and pure aspirations as to crowd out ignoble filling. Good and bad cannot both reign supreme. Unbolt the doors of the heart and mind, and swing them open, if you would have anything enter. Heaven's falling rain can never fill a covered bucket. "God lights no man's house who shuts up all the windows." Education is a tool,—a wedge, as it were, to pry into eternity. "Have thy tools ready: God will give thee work."

II. As a duty we owe the state.

Yesterday our ancestors were molding the world for us. To-day we are taking it as they made it and are molding it for the coming generation, either demoralizing or immortalizing itsince there can be no neutral ground, no stationary living - and they, in turn, will go on with the process. As a ripple from a stone thrown in a lake spreads and moves onward till its influence is felt in the extremist part of the boundless waters, so human influence moves, unseen and unheard, yet all the humanity of the world is molded by this silent, forceful power. What shall our influence be? That of a darkened, narrowminded bigot, leading us and humanity on and on in an endless treadmill of mere existence, or shall we grasp the highest advantages, honeycomb our dormant, lethargic content and absorb the purity, brightness and depth of the atmosphere formed by our noble pioneers, and broaden the path straight through to eternity's unfading eternity that some of our predecessors have made and that our successors should follow, remembering that the future is a world of our own pattern? The Church and the State of to-morrow will be just what the young people of to-day make themselves.

Spencer says the great thing which education has to teach us is "how to use all our faculties to the greatest advantage to ourselves and others." Many lives, otherwise noble, are become ignoble because of having left off the last two words in learning

from the school of experience the lessons of wisdom. The one final word "others" contains the essence of the art of living.

Governments realize that good citizenship and free governments are necessarily founded on good education; and from this realization is growing the noblest law of the land,—that of compulsory education. With an educated class of citizens, good government is not only possible, but demanded; and education makes a republican form of government desirable and possible, which could not be attained with ignorant masses, as in Russia, where we have a vivid example of the degeneracy of ignorance. People are coming to know that it is for their interest to be good citizens. Educated people live most contentedly under God's free government and so are better citizens of the heavenly kingdom. God's plan of government lets us do as we please, but we must take the consequences. Education helps one to foresee the evil result and work for good.

When the masses, as well as the classes, of the future, shall be united in one common band of brotherhood and sisterhood, working for the uplifting of humanity as a whole, the foundation for pure political principles will have been laid; and then shall it be said of their past law makers: "They builded better than they knew." Educating poor boys and girls, and co-education of the sexes, is quite a modern idea. To-day it is planting its foot on terra firma. Along the line of this increasing education of the masses is one of the direct routes to the dissolution of The line drawn by money cannot long withstand the line drawn by brain. Ignorance in this day is at a greater discount than ever before. The cry of the world on all lines is for abler men. To leave a boy ignorant is to leave him helpless. Universities, colleges, normals, academies, high schools, postgraduate courses, university extensions, Chautauqua courses, Bible courses, are all open—if not equally to the sexes, it is but a question of time when they will be-some of which are available to each one. Indifference is the only excuse to be offered to-day for lack of education. Schools and school books alone are but a component part of education. Look at our workers along divers lines, and trace to the source their power. As the clarion tones of St. Peter's chimes toll off the hours of the day, so have the educated brains pealed forth for humanity through time immemorial. The ministry, law, medicine and every profession and avocation, need higher educated men and women to do more good; to cope with vexed questions and theories opening on all sides; to overcome obstacles and break down barriers;—education that develops brain and mind; creates strength and begets character; education that will clarify the moral vision and illumine the mind.

But a few years ago the education of woman was an experiment; to-day, it is a foregone conclusion, as a simple glance at but a few of the foremost will prove. Just let me here quote from Frances E. Willard, one of the stars in womanhood's zenith. In the Arena of May, 1892, she says: "All men are sons of women; all women are daughters of men. They have between them but one great river of blood; one great battery of brain. They can have no seperate history. They have no seperate destiny, for the degradation of one has evermore dragged down the other, and in raising one we lift the other." When separated, they are both degraded and weakened. One sex unconsciously educates the other. Look at Miss Willard's own work in behalf of higher education, especially of women. Look at the work of Catherine Beecher, of Mrs. Emma Willard, and many others. The pioneer work of these women to our present system of education, resembles the underground tunnelling to the Rocky Mountain gold mines. These pioneers blusted the rocks of prejudice, levelled the mountains of public sentiment, filled the valleys of reticence and checked the streams of forced inequality; and to-day we are reaping what they have sown, and are walking on comparative plateaus, high in elevation, and open to God's purest atmosphere and brightest sunshine. To-day, in the colleges of our country, are over four thousand women! So much for the encouragement of young women, every one of whom has a part to act in this great play of living.

"Every one to their talent,-Hence every line shown forth."

In the university extension classes are about as many more, and in the Chautauqua courses a greater number yet. These and similar courses are within the reach of those whose daily lives are spent in the earnest toil for honest bread,—those whom we want to reach and encourage; those who cannot have the time nor secure the wherewithal to indulge in a course of thorough

training and education. These very ones, imbued with ambition and persistence, with purpose and determination, are the ones to whom we want to extend this helping hand and admonish them to more devotion to this aim of higher education. Surely we should educate ourselves, "so little we know what teaches us and what we teach, as we wend our way along life's crowded streets."

"No life can be pure in its purpose and strong in its strife, And all life not be purer and stronger thereby."

III. As a duty we owe God.

It is a duty we owe our God—who "all things created that are in heaven, and that are in the earth, visible and invisible, whether they be thrones, or principalities, or powers, all things were created by him and for him"—to so educate our mental and moral natures as to comprehend Him as Maker and Saviour. The world needs more intellect of course, but it needs more higher moral culture. The ethical instinct, or moral nature, can be educated and made to be more receptive of divine influences coming by that "still, small voice." It can be made to hear God's voice better. We have for examples Moses, Paul, Luke, Wesley and Luther, very learned and useful men. God's will is more visible and more comprehensive to a cultured, educated man.

Moses, familiar with the learning of Egypt and Arabia, was chosen by God as a means of communication to his people, and as their leader. Paul knew the learning of the Jews, Greeks and Romans, otherwise we should never have heard of him. So we find our great religious leaders to have been educated; they persevered with a purpose and obtained education as a possession; as a tool with which to work; as a lever to pry open the future from the past. Intellectual culture is an acquisition of great A good man can do more good if educated. From the Reformation till now has sounded the watchword "Onward, Christian Soldiers!" And who first pitched the tune and gave the signal? Who, but Luther, a poor miner's son, struggling against poverty; subjecting himself to the most rigid discipline to gain an education which enabled to rise from the masses one of the greatest reformers the world has ever known; one who kindled the fire that heated the anvil, and who, while the iron was hot, struck the blow that rifted the rock of Popery, driving the wedge of Protestantism which will go down to endless Eternity. The foundation of it all was the education he had so persistently striven for against all discouragements.

In proportion to one's education do opportunities for usefulness and for going about doing good increase. The restful conscience does not come from the fact that we are teaching or influencing no harm; it comes from the fact that we are leading others on to some good; that we are really guiding them into higher channels of thought and habits. To do this,—to lead people up and on solely for the elevating of humanity and not for any earthly reward—needs strength of mind, force of character, quickness of decision, despatch in execution and, above all, that acuteness of moral vision that enables one to look right into the soul of another and there read the very core of tendency of nature, thought and action-a power which comes through the developing process of higher education. We build as we live. If we would help others we must have the power within us, we cannot impart to them what we ourselves have not. Let us each build our mental and moral natures so as to enable us to comprehend and appreciate the wonderful works of God in nature that never die; the universe moves on, each part in its place, each path undeviated and the one central sun lighting and heating each in its turn and place, now near, now distant, inter-moving within hair's breadth, so destined and so continued through untold limits of time, and yet, on, on, on, through endless time, with systematic routine moves God's wonderful creations; the greatest to him as a grain of mustard, the least as a mighty world. Take his word and watch its sacred preservation through fortunes and misfortunes of civilization and heathenism: take the characters of Moses, Joshua, David, Solomon, the prophets Elijah, Elisha, Isaiah, the divine Christ, and His disciples; and before you are living examples not suppressible and not extinguishable. They have lived. They still They will always live. Take the beauty of the Bible for a study,—follow Abraham as he receives God's instructions and promises while he moves and trusts accordingly. Take the journey of the Israelites and trace the wealth of God's mercy and loving kindness, "I am the Lord, and I will bring you out from under the burden of of the Egyptians, and I will rid you out of their bondage, and I will redeem you with a stretched out arm.

* * And I will take you to me for a people and I will be to you a God." Take the prayers of the Psalmist David,—prayers of praise, devotion and of thanksgiving—and there find an expression of spirit never surpassed by human efforts. Take the parables, miracles and prayers of Christ, and there we find a never dying inspiration. The anguish, the sorrow, the trust condensed into the one prayer as His spirit was soaring Godward,—"Father, forgive them for they know not what they do!"

God gives us mind and soul and heart, but it is through our own mental hands that we absorb the education He gives along with those talents. "My head, what shall I put in it?" is too often made a useless puzzle. "God reaches us good things by our own hand." It is a glorious thought that God chooses to use us in all this work of His which he is so amply able to do alone. How best can we appreciate this honor? By preparing and educating ourselves for His bidding. "It is not the number of times you go through the Bible, but the number of times the Bible goes through you," says Talmage, and so it is with education; it is not the amount you go through, but the amount that goes through you.

Education is the chisel with which each man can carve his own life.

"Sculptors of life, are we as we stand With our lives uncarved before us, Waiting the hour, when at God's command, Our life's dream passes o'er us.

Let us carve it then, on the yielding stone, With many a sharp incision;—
Its heavenly beauty shall be our own,
Our lives that angel vision.

LANGUAGE IN ELEMENTARY SCHOOLS.

JOHN OGDEN, EX-STATE SUPT. PUBLIC INSTRUCTION, NORTH DAKOTA.

A full discussion of this topic would demand:

FIRST.

A philosophical inquiry into the nature and history of language in its largest sense, something in the following manner:

- I. Language as a necessary condition of things.
- H. Language as an agency for communication.
- III. Language as a merely human invention.
- IV. Language as a process of evolution.
- V. Language as the product of environment.
- VI. Language as the index of the soul's culture.

SECOND.

An outline covering the entire scope of the above topics, giving special directions in a series of lessons adapted to the advancement of the pupils, by

- Impressions through the senses.
- II. Thinking or thought evolution.
- III. Expression or practice.

But time and space will not permit this latter. The discussion in this paper will be confined to the first six topics above, with such directions as may come within the compass of the time allotted.

FIRST.

WHAT IS LANGUAGE IN ITS MOST GENERAL SENSE?

I. As a necessary condition of things, both as to their elements and relations.

The clements of language, not as a tongue or speech but as mere conditions, exist in every department of nature. They are the necessary relations of things. They are not only impressed upon every object of nature, but exist as a necessary part of every object. This condition or relation is the subtle tie that unites all inanimate and all animate objects. It is declared in the properties of matter and of mind. The former proclaims it

in color, form, extension, inertia, gravitation, cohesion, expansion; in texture, temperature and the like. Also in proportion, number, movement, purpose, growth and decay. Every change is indicative of cause, purpose or design, and these are recorded in the history of things.

The crystals and rocks of the mineral world proclaim the existence of these language elements, in the fixed laws of the one and in the structure and location of the other. The vegetable world reveals these language elements in the germination and growth of plants, and in the mysterious propagation of species. While the animal world declares, with myriad tongues, both the existence and utility of these laws of relation and dependence; and one can scarcely conceive the existence of intelligence, or a realm of mind or spirit, without a language, both of relation and communication, running through and connecting every department and every individual thereof.

Language, therefore, in this largest sense is not confined to speech, as the derivation of the term implies, but it becomes a universal law of relation and expression; a link in the great chain of sequence and consequence; a bond of the universe; a hymn of creation; the song of the morning stars and the angels of God; the strength of the bands of Orion; and it binds the sweet influences of the Pleiades. It is seen in the majestic sweep of the river; in the threatening of the storm cloud; in the flash of the lightning; in the mad rush of the tornado; in the bending grain, the quivering leaf, the budding flower. It is heard in the ominous tread of the earthquake, the peals of thunder, the roaring cataract, the rippling brook, the sighing breeze; — not a motion or a sound but speaks, and every stone has a tongue, and every plant a prophecy. All proclaim themselves in a language peculiar to themselves, which man readily translates. It is the universal hymn of nature, lifted anon from creation to the Creator. All objects and movements and sounds and sights and forces are but the reflex energy of the mighty power that is impressed upon all substance. It is the force that

"Warms in the sun, refreshes in the breeze; Glows in the stars, and blossoms in the trees: Lives in all life, extends through all extent; Spread undivided, and operates unspent."

This view of the subject is not merely poetic or theoretic. It is the most practical view one can take of the real subject, for it

is with these very hidden language elements,—thought elements—thus impressed upon all forms of matter; upon all substance, material and immaterial, with which we must first deal, both as we find them in nature and in their counterpart, early child-hood, for here they must meet and mingle into intelligent expression or forever remain hidden to the higher vision of thought. All true language lessons must be based on this primal thought or failure is inevitable.

These language elements must be developed, harmonized, utilized, infused and transfused in and through the child thought, as food elements for thought and expression. This is what they are for, and we make a mistake in looking beyond them, or neglecting their impressive force in early childhood. Hence the barrenness both of thought and language when taught as a mere matter of words to which ideas must be attached afterwards.

Language is an affair of the soul; of thought, emotion, will; and the universe is replete with these thought elements, whose special mission and purpose are to appeal to and to unfold both the thought and the most forceful expression of it. Neglecting these, we offend the most promising period of childhood. Language learned in mere lessons on language is, at best, but a feeble fabrication that falls to pieces when severely tested, and comes far short of real language culture. But when it is sought by the child as a medium of expression of thought engendered in the soul, it then becomes vital, energizing, forceful. It should grow with the growth of thought, fed and nourished by the language elements distributed throughout the entire world of condition and relation.

II. As a general agency for communication among all animated creatures. Language may be defined: "Any means by which animals of the same, or even different species, may communicate their thoughts, feelings and purposes to one another." This recognizes language proper as a purely psychical product, fed from without by natural and necessary elements and restricted to animate nature, constituting a medium of communication between man and man of the same and different nationalities; between brute and brute of the same or different species; and then there is a general tie linking man and the brute creation together. It is no difficult matter for a close observer to understand and interpret the language of birds and domestic animals;

and they, in their turn, understand us. The same is true of insects, reptiles and even fishes. So that "the whole round world" and all the things therein are bound together by one universal tie,—a language by which and through which they express their common relations, their properties, and their higher relations of thought, emotion and purpose; and these, in their turn, are interpreted by all. It is the interpreter of the soul of the universe.

III. In a still more restricted sense, or as a merely human invention, language employs the higher artificial medium of spoken and written words, strengthened and embellished by gesticulation and facial expression, sometimes seen in an exaggerated form in extreme pain, or in extravagant pleasure, as in the cry or the laugh. And it is a curious physiological fact that both these emotions are expressed from the same point in the organs of speech, viz.,—the glottis, the great regulator or keyboard of all vocal utterances of emotion, as in anger, rage, sorrow, grief and despair, as well as in the more tender emotions, as pity, compassion, love, etc.

Here we have both the natural and the artificial elements, or notation of language to deal with; and we must go to the bottom in this matter if we would develop the best language in childhood. The natural elements, as they exist in childhood, are the ones upon which the artificial are founded, and when properly treated constitute the surest guide in the development of forceful and refined speech. But the artificial in language is that which we most desire to cultivate, since true art excels mere rugged nature as the civilized excels the savage; and since the dramatic, or the emotional in language, contains by no means the most refined and elegant or even the most desirable elements of expression. But it is the every-day language, so to speak, that we most desire to elevate, and I am not sure but it contains the finest touches of true art. The dramatic is the poppy style - so to speak — the sunflower, the roseblush, compared with the modest and refined beauty of the violet and the delicate fragrance of the heliotrope.

IV. Language as a process of evolution. Language is the efflorescence of thought, the flowering forth of those delicate conceptions of the human mind, begotten and born through the contingent and consentaneous action of perception and reason.

And as the flower in the process of blooming reveals its inner truth to the world, in color, form and fragrance, so the expression of thought in human language reveals the inner truth and beauty of the soul. For when these delicate fibres of the soul are breathed upon by impressions from without, and impelled by that natural impulse for expression from within, they unfold their petals of truth and beauty to the world through language that sheds its benign influence upon all objects of environment. And as the richer the soil and the more perfect the flower, the more beautiful and brilliant and varied the colors and exquisite its form and fragrance, so, in the evolution of the language of childhood and youth, the more perfect the organism, and forceful the impressions, and thorough the culture, and active the processes of evolution or thinking, the more powerful, perfect and beautiful will the language or expression become.

Other things being equal, the purity and perfection of the language or expression depend more upon the impression than upon any other one thing. This is the planting period of the soul, and what we plant we reap .-- if tares, tares; if wheat, wheat; if weakness, weakness; if strength, strength; etc. This I conceive to be the one important feature in the formation and the cultivation of the language of the young. Not the set forms of expression,—the manipulated words, phrases and clauses that abound in many of our primary language books - but in the deepening, purifying and perfecting truthful impressions in the minds of young children through the medium of the eye, the ear and the hand; the three great impressible organs of the child; the avenues through which he receives more than nine-tenths of all his elements of thought; his daily supplies of early impressions which are soon transmuted into early concepts and ideas ready for early expression. that these senses do not receive more intelligent attention in these early periods. The culture the child needs here is not the plucking of the brain for the prematurely ripened fruit, even before it has time to fairly blossom; nor yet to torture it with words before the things they signify are learned; nor with the unmeaning forms and puzzling expressions before the thoughts they are intended to express are ripened for expression. But to stir the virgin soil of the mind in its yet unmeasured depths, with thought born of impressions from the beauty about it; to fertilize the conceptions with observations of colors, forms and

movements; and to enrich the understanding by experiment and thought till the soul is full to overflowing and all aglow with a desire to express,—to speak; then the expression becomes a necessity and it must break forth; then, but not till then, give it tongue and the language is alive; it is clear, strong, forceful. But Oh, the dull perception, the feeble concepts, the starved imagination, the weak understanding, the perverted judgment, the stupid reasoning, the blurred intellect of pupils fed on milk and water of many of our modern methods in language! It is the original thought born of close observation and careful study, not mere memorizing, that possesses the necessary stimulus and vigor to beget life and growth in the child. Language then becomes even more than a medium of thought. It is a thought fertilizer. It springs spontaneous from the glowing intellect and illumines and warms all the chambers of the soul.

Language, therefore, as a medium and spur to thought, feeling and purpose or will, is the product of three well defined, distinct though related processes, viz.:

- 1. Impressions for planting the thought germs,—the percepts; the elements generating concepts in the mind.
- 2. Evolution,— or thinking; thought forming; thought adorning; thought completing.
 - 3. Expression,— or giving utterance to thought.

All these processes must be recognized in due form, measure and order, so that the language of childhood and youth may become strong, truthful, pure. There is no fitting substitute for these, nor for the order in which they are here presented. It is the law of nature, the law of growth; and it brooks no interference from men or methods.

[CONCLUDED NEXT MONTH.]

EDITORIAL.

THE National Educational Association will meet in Denver next July,—from the 5th to the 12th. The railroad lines beyond Chicago will give round trip rates of one fare plus two dollars. It will be a most enjoyable trip, and a profitable meeting to all who can attend. Chairman Gove is just the man to make a notable success of this meeting, and he is determined to do so. It will make every weary educator long to be there when he reads such words as these from Mr. Gove: "Such measures will be taken by Denver and Colorado as will insure a hearty welcome to the greatest educational assembly in the world. The excursions to the surrounding mountains and mountain parks; the comfort of the mountain hotels; the attractions and the exhibaration of life at from one to three miles above the sea; the facilities for establishing study-camps and colonies in mountain resorts, will all be tendered at such reasonable prices as will enable teachers and their friends to spend their entire vacation among the mountains."

Our genial contemporary, the veteran journalist, J. B. Merwin of St. Louis, who for twenty-five years has ably edited the American Journal of Education, writes us as follows concerning the live subject treated by Dr. Wm. A. Mowry in the last issue of EDUCATION:

"Prof. Wm. A. Mowry points out clearly the defects of the Tenure of Office for Superintendents in his most excellent article in Education for January. What we need is this draft of a form of law to cover this defect—who more competent to draft such a law than the author of the article. He would be a continent-wide benefictor if he would do this and so add largely to his already beneficent and effective work in the cause of public education."

We should be glad to hear from others on this subject. Is it not time to push for such a law? What say our readers who are vitally interested in this subject?

THE state of Mississippi, in its new constitution, provides that the knowledge of reading and writing, or an intelligent understanding of the general principles of constitutional government, shall be henceforth a qualification for the suffrage in that state. This is the same provision made by Massachusetts, and, we think, at least one other New England state; with the addition of the "intelligent understanding" aforesaid. The latter provision would seem to be

not unjust in any southern state where considerable numbers of white citizens have never enjoyed opportunities for schooling, while, by the training of long citizenship, they have obtained not only a deep interest in politics, but a fair acquaintance with the principles of constitutional government. Of course, the provision was adopted as the only practical way out of the chronic peril of a state the majority of whose voting population consists of emancipated and illiterate negroes, who, by the Massachusetts law, could not be We are aware that this constitutional proviso has been denounced as a mere subterfuge for retaining the votes of the illiterate white and rejecting those of the illiterate colored people. be denied that a perversion of the legal intent of this arrangement, every way as scandalous as the revelations of such abuses in the great cities of New York and other states on a pretext less excusable, is possible, and might, under strong temptation, become a fact. But the leading colored men of Mississippi have taken a practical view of the matter and have just formed, in one of its leading towns, "The Loyal League of Qualified Electors." This association, composed of men whose right to the suffrage and jury service is unquestioned, petition the state to extend the term of the free schools to eight months and employ only competent teachers. They also urge the colored people to unite in the effort to prepare themselves for good citizenship by meeting the full and reasonable requirements of the constitution. This movement may easily become one of the most important in the south, and of the most far-reaching consequences. No American state will permenantly deny the full rights of American citizenship to any class of its citizens as well qualified as an increasing number of the colored people have already become, and the entire body of school children of this race can become, by a generation of the thorough administration of the common school.

In this connection it is pleasant to announce the fact that no southern state today, all conditions taken into account, seems to be making greater headway in popular education than Mississippi. It has long been known that this state had the least percentage of white illiteracy of any of the southern states; probably owing to the fact that it was originally settled by the more intelligent class of planters from the Atlantic seaboard, with a large sprinkling of good northeastern emigrants, and has no great mountain or unmanageable sea coast region where the lower class of southern white people have been so largely developed. Within the past twelve years the expenditure for common schools has risen from \$830,000 to nearly \$1,200,000. The colored pupils in the schools have increased four-fold and the

white nearly three-fold. Last year, nearly 6,000 public schools employed 18,000 teachers; and 335,000 children out of a school population of 516,000 were in school, with an average term of four months Mississippi supports, also, a state university for white and colored pupils, both co-educational; one of the best agricultural colleges, for white boys, in the south, and was the first state to establish the Free Normal and Industrial College for white girls, already copied in Georgia and South Carolina; - one of the best features of the new southern educational movement. It has, moreover, in Honorable J. R. Preston, a most enthusiastic and efficient state superintendent, by whose tireless energy, during the heats of a south-western summer in a sparsely populated state, a thorough system of normal institutes was organized, of four weeks for the whites and five for the colored teachers, attended by nearly 2,000 of the instructors. A preliminary normal was held at the state university, with a two weeks course of instruction for the conductors of county institutes, under the direction of Superintendent J. H. Phillips of Birmingham, Alabama, and Dr. Joseph Baldwin, of the University of Texas, two of the most competent school-men of the country. At the state Teachers' Association a uniform course of high-school work was arranged for the state. At the present rate of progress Mississippi bids fair not only to make her way out of the jungle of the "race question," but also to become a leader in the educational life of the southwest.

700D school-men of every political pursuasion, in all sections of I the Union, will welcome the advent of the coming congress with a "lively hope" that the latter-day stinginess of that body in its provisions for the National Bureau of Education and the Public Schools of Washington may become a humiliation of the past. A cry comes up from the school authorities of the national metropolis that the congress of the United States, in proud imitation of the Tammany Hall government of New York, has stinted the Washington school authorities so that several thousand children are already seeking entrance in vain to its crowded school rooms. The shelves of the National Bureau of Education are crowded with valuable matter. already prepared and paid for, which cannot be published, because of the almost incredible meanness of the congressional majority in reducing the small appropriation for printing and the library of the Bureau one half. Just now, it would seem as if we might postpone the great meetings of the influential teachers and educators from model school cities like Cleveland and Denver, "which need no repentance," to Washington, to labor with the obdurate crowd of Conscript Fathers who seem to be still under the bondage of the ancient backwoods notion of statesmanship, knocking out the brains of the country to save money.

IT is a significant testimony to the estimate of high educational service in the upper story of the national life still prevailing, that, among all the testimonials in the press and even the historical associations, state and national, there have not been half a dozen pages containing an intelligent estimate of the great service of educational statesmanship rendered by the late Robert C. Winthrop, as President of the Board of Trustees of the Peabody Education Fund, during the last twenty-eight years of his crowded and distinguished career. Indeed, it would seem as if, even among his own associates, this, the most unique and, in many ways, one of the most influential and useful agencies in building the common school through half the Union, had already been forgotten or ignored. When the history of this great beneficiary organization is finally written, it will be understood that its work, in leading the great movement for popular education in the south, has been by no means the most and in some respects the least valuable feature in its administration of nearly thirty years. The great original gift to education by George Peabody, of which this fund was the largest item, amounted to nearly \$10,000,-000, and was not only, a generation ago, the greatest individual benefaction on record for such a purpose, but has stimulated contributions at home and abroad many times in excess of itself. Board of Trustees, originally consisting of sixteen and, including by reason of substitutes for members deceased and resigned, twenty-seven members, properly including also the two general agents and two distinguished presidents of the Peabody Normal College, was such a School Committee of thirty-one as, for large ability, distinguished public services and eminent professional character, has never been called and held together for a generation to consider and administer on the subject of the schooling of the whole American people. It is the one Board of Common School Trustees that has never made a notable mistake, and whose sayings and doings, as recorded in the four stout volumes of its records, are the best guide in this difficult and complex realm of national life. At the head of this body Mr. Winthrop presided from the first, in no sense a mere figure-head, but with true statesmanlike wisdom and comprehensive patriotism, the right man in the right place, and that place not inferior in dignity and usefulness to any in American public life. Happily, his name and fame can be safely left in charge of the people he served so grandly, and in due time, his illustrious service of educational statesmanship will receive its fit appreciation and ample commemoration.

Even teachers have some rights in this land of the free — and rights which others are bound to respect.

DEPARTMENT OF PROFESSIONAL STUDY.

THE TEACHERS' INTERNATIONAL READING CIRCLE. FIFTH MONTHLY SYLLABUS FOR THE THIRD YEAR.

PREPARED BY DR. CHAS. J. MAJORY, NEWTON, N. J., SECRETARY, FOR THE USE OF CORRESPONDENCE MEMBERS.

The progress of the public school system of to-day is a necessary result of the persistent effort that has been made to advance the professional spirit and rank of the great body of public school teachers. In reciprocal action this advance demands a body of teachers still further imbued with professional spirit. At no time less than at present will it be necessary that the teacher, by carefully selected reading, shall keep in touch with the most advanced educational thought. More and more will it be necessary that the progressive journals and the books recording ripe thought and successful experience shall be studied. The teachers who fail to meet this requirement cannot but retard the progress that should be made, and will, when too late for remedy, find that they have been left behind by their more earnest co-laborers. The sole purpose of professional reading is to enlighten and stimulate progressive school room practice.

I. ROUSSEAU'S EMILE, PAGES 131-160.

- 38. Is the normal boy, at the age of twelve to fifteen, possessed of physical and mental strength relatively greater than his desires?
- 39. Is Rousseau right in ascribing the exception to such rule to faults in educational training?
- 40. In what sense is it true that it is only necessary to know that which is useful?
- 41. What are the necessary objections to the doctrine that the child "is not to learn science, but to discover it?"
- 42. Can the child who does not read think more clearly than the child who reads?
- 43. How may Rousseau's doctrine concerning the sign and the thing be best observed in modern school work?
- 44. What prevalent error violates his "fundamental principle" concerning the teaching of sciences?
- 45. What are the advantages in using simple and "home-made" apparatus rather than that which is more elaborate?

II. HERBART'S PSYCHOLOGY, PAGES 74-96.

- 31. Upon what distinctions are the three kinds of feelings classified?
- 32. What examples may be cited of feelings which arise wholly from the nature of that which is felt?
- 33. With respect to the relation of desire to the feeling, as cause or effect, how does the second class of feelings compare with the first class?
 - 34. Upon what characteristics is the third class of feelings based?
 - 35. In what essential do the emotions differ from the feelings?
- 36. What phases of mental condition or action must be included under the faculty of desire?
- 37. What forms constitute the lower and what the higher faculties of desire?
- 38. What psychological explanation is presented of "freedom of will?"
- 39. How are the senses and the powers of reproduction related with reference to the mental life?
- 40. How are the inner sense and outer action related with respect to the formation and retention of habits and the acquirement and maintenance of accomplishments.
- 41. In what two views should the practical teacher observe the series of concepts in teaching and training his pupils.

III. ADLER'S MORAL INSTRUCTION, PAGES 80-105.

- 36. What condition of society must be regarded as giving rise to the tales commonly known as the Fables of Æsop?
 - 37. What spirit do they generally tend to foster?
- 38. In what two classes of fables is non-resistance to oppression and to hurtful influences especially illustrated?
 - 39. What class of the fables illustrate the insecurity of tyrants?
- 40. What class tend to ridicule certain types of character likely to appear under despotic class rule?
- 41. Why should fables of these four classes not be made use of in our schools?
- 42. What two classes may be properly used in the moral instruction of children?
 - 43. How do the fables differ in use from the fairy tales?
- 44. What general method should be followed in the use of the fables?

IV. FROEBEL'S EDUCATION OF MAN. PAGES 140-187.

37. Religion defined in respect to three distinct and harmonious phases.

- 38. Religious instruction must assume the pre-existence of some degree of religion as its basis of reception and influence.
- 39. The unity of God and man is illustrated and demonstrated in the observation and experience of man in his personal relations.
- 40. Only so far as we comprehend the spiritual in human relations, and live in accord therewith, can we attain to full conception of the relations between God and man.
- 41. The purpose of all existence in the world of nature is the revelation of God.
- 42. In the development of the inner life of the individual man, the history of the spiritual development of the race is repeated.
- 43. Parents and teachers should lead children into familiarity with nature and into recognition of God in nature.
- 44. Active force is the ultimate cause of every phenomenon in nature.
- 45. Matter and force mutually condition each other so that it is impossible to think of one without the other.
- 46. The sphere is the outward manifestation of unimpeded force, diffusing itself freely and equally in all directions.
- 47. The crystal represents the action of force unequally or in different directions.
- 48. The various crystalline forms may be traced in necessary order of development from the simplest to the most complex.

V. PICKARD'S SCHOOL SUPERVISION. PAGES 68-91.

- 49. There is analogy between the organization of a railroad system and that of a school.
- 50. This analogy has resulted in harmful influences, since the school system needs to be more flexible.
- 51. In arranging the initial work of a course of study, due consideration should be given to the facts of early home training.
- 52. The kindergarten is the best starting-point of the school system and should be maintained by the state.
- 53. The weakness of the present school systems is in the middle grades, and here the best work of the superintendent is demanded.
- 54. The "graded course" should make due provision for the large majority of pupils who will drop out before its completion.
- 55. The school should not attempt what does not properly belong in its domain, but should assume the co-operation of the home, the school and the church.
- 56. Manual training should be duly provided for, while recognizing the open question as to the relative value of book-work in elementary and in advanced schools.

57. The "high school" must be recognized as embodying no innovation or addition upon the proper public school system.

VI. LAURIE'S RISE OF UNIVERSITIES. PAGES 172-194.

- 50. The term "schola publica" implied the two ideas of an arts school and of a school open to all, laymen as well as ecclesiastics.
- 51. The term "universitas" implied no more than a community of students; and by official use gradually acquired the signification of incorporated community.
- 52. The early organizations were after the type of the voluntary trade-guilds.
- 53. Corporate rights were not formally granted, but were first assumed by the universitas, and in course of time recognized by pope or civil ruler.
- 54. The universities were essentially self-constituted lay committees not in antagonism and not in direct subjection to the pope.
- 55. The Scottish universities are especially like the early universities in form of government.

VII. PREYER'S DEVELOPMENT OF INTELLECT. PAGES 113-152.

- 32. At the beginning of the second year, the child is still wholly unable to reproduce articulate words.
- 33. The expression mama, at first meaningless, is referred to the mother because she expresses pleasure at its utterance.
- 34. The ability to learn arises with the understanding of spoken words early in the second year.
- 35. The early accomplishments attained by regular training do not afford evidence of an understanding of what is commanded.
- 36. During the first half of the second year there is little progress in acquirement of articulate utterance for expression of thought, but marked progress in repetition of given sounds, and in the understanding of spoken words.
- 37. Moods of feeling are expressed at this time by modulation of voice without relation to articulate sounds.
- 38. Near the end of the second year, a word is used for the complete expression of a judgment, the same word having been used imitatively during several previous months.
- 39. Voluntary sound-imitations increase in frequency and accuracy when the efforts of the parent to induce imitation are withheld.
- 40. The conscious application of the same word to express different meanings is notable in the child's use of acquired words.
- 41. By the close of the second year, the greatest progress is indicated by the combination of two words into a sentence.

FOREIGN NOTES.

ONFORD UNIVERSITY, SCHOOL OF ENGLISH.

The Board of Studies for the recently established school of English language and literature at Oxford have issued regulations for 1896-97. The subjects of examinations are outlined as follows:

- 1. Portions of English Authors.
- 2. The History of the English Language.
- 3. The History of English Literature.
- (In the case of those candidates who aim at a place in the first or second class) a Special Subject of Language or Literature.

The texts assigned under the first head include specified portions of Beowulf; Chaucer's Canterbury Pales: Piers' Plowman; Shakespeare (selected plays); Bacon's Essays: Milton: Dryden's Essay on Epic; Pope's Satires and Epistles: Johnson's Lives of the Poets: Goldsmith's Citizen of the World: Burke's Thoughts on the Present Discontents: Lyrical Ballads, Wordsworth and Coleridge: Shelley's Adonais.

These texts are to be studied (1) with reference to the forms of the language; (2) as examples of literature (3) in their relation to the history and thought of the period to which they belong. The remaining topics are similarly developed. The whole scheme is suggestive, especially to teachers of English who sometimes seem to imagine that a high school course should be on the plane of a university graduate course.

EDUCATION OF WOMEN IN GERMANY.

Interest in the higher education of women in Germany has been greatly increased by the regulations of May last, as considered in the October issue of Education. The society for promoting the higher education of women has officially expressed its approval of the regulations as a whole. With respect to the uniform scheme of study for the higher schools for girls, the society expresses the belief that the course should be ten instead of nine years; and that a tenth year of elective studies is not an equivalent for the additional year in regular courses. It should be borne in mind, in this connection, that the term higher has reference rather to the social class from which the pupils are drawn than to scholastic grade. The course is assumed to begin at the sixth year. Secondary courses of instruction for girls

have been opened in some centres. The latest is at Leipsic, where the programme corresponds very nearly to that of the gymnasia for boys, and prepares for an examination equivalent to the Abiturientenexamen. The course covers a period of four years, with twenty-four lessons a week. Candidates for admission must have completed their sixteenth year and must pass a preliminary examination. The studies of the course are Latin, Greek, mathematics, German, English, French, history and natural sciences. The fees for the full course are 120 marks (\$28.50) each term.

Statistics published by the German Union of teachers relative to women securing positions through its agency in the year ending May 1, 1894, indicate a low average of attainments on the part of these women, and a still lower grade of salaries. The average obtained by them was \$135 a year, with board and lodging, or \$250 without.

DEVELOPMENT OF MEDICAL COURSES.

Attention has been called in recent numbers of EDUCATION to the measures adopted in France during the past year for insuring a better scientific preparation on the part of students entering the medical faculty, and improving and extending the medical course itself. Great Britain, also, measures have been taken within a few years past to raise the standard of medical instruction. Since January 1, 1892, every student who applies to be registered by the "General Medical Council" must pass a preliminary examination in the "subjects of general education, including mathematics, English, Latin, and one additional language or logic." After registration, the student must pursue a five years professional course, in place of four years as formerly. Measures have been taken in Great Britian, as in France, to make the professional training more technical than heretofore, and to bring the technical part into closer relation with the theoretical. Persons particularly interested in this department of professional study will find very complete information on the subject in the students number of the Lancet (London), of date September 1, 1894.

EDUCATION AND CRIME.

The current discussions of the value and interpretation of the statistics of education and crime indicate clearly the difficulties that beset the comparison of statistics. The discussion was prompted by the address of Sir John Lubbock before the International Institute of Statistics that convened in Paris in October. The statements particularly questioned are those relating to the effect of popular education upon crime. Mr. Lubbock notes that since the passage of the elementary school act of 1870, the number of school children in English schools has increased from 1,500,000 to 5,000,000; and the

number of persons in prison has fullen from 12,000 to 5,000. yearly average of persons sentenced to penal servitude for the worst crimes has decreased from 3,000 to 800, while juvenile delinquents and offenders have declined from 14,000 to 5,000. A similar remarkable falling off was cited in the case of purpers, the decrease being from 47 to 22 in the 1,000; or over 50 per cent. His conclusion, that general education is the explanation of this marked decline of criminality in England is vigorously disputed. The Paris Temps declare that the reverse is true in France; that the opening of the schools has filled the prisons; that crime has greatly increased with the extension of education. The subject is an interesting one and evidently, so far as statistical proof is concerned, requires a careful sifting of data. Meanwhile the general conviction that education tends to diminish criminal propensities is probably correct. The kind of education, however, must be taken into account.

HERE AND THERE.

Nature (issues of December 13 and 20) republishes an address on "Endowment for Scientific Research and Publication," delivered by Mr. Addison Brown before the "Scientific Alliance" of New York.

The address, which traces the development of a movement started by the liberal spirit of Prof. Tyndall twenty years ago, was published originally in the Smithsonian report for 1892.

The economic Journal (London), in the issue for March, 1894, contains a suggestive study into "educational finance," by Dr. Sophie Bryant. The data with which the writer deals pertaining wholly to England need not be cited here, but there are certain constant relations brought to light which are probably true also for the United States, and certain conclusions reached that deserve thoughtful consideration everywhere. Mrs. Bryant's tables make it evident that in private schools the highest average salaries are paid where there is the smallest number of pupils to a teacher, and where, consequently, each pupil gets the largest proportion of attention. These conditions are not reached as a rule in the smaller schools, but in the larger. The conclusion which Mrs. Bryant draws is obvious: salaries are too low, either more should be spent on teaching or less teaching should be given." Her closing observations sound a true note in political economy. "It is not easy," she says, "to overrate the importance of building up a custom of fair wayes in some field of work. In education, we have a large and typical professional occupation for women, and one so controlled as to facilitate the adoption of a rate of remuneration governed by the principle of the standard And obviously, if we can raise woman's wages in one great

occupation, the operation of the laws of supply will tend to make other occupations for women participate in the rise. Get some field in which women are paid as well as men for the same work, and the impulse of that advantage will be felt throughout their labor-world. Moreover, in this, as in every other occupation, if women continue to be paid less for the same work than men, they will eventually, in the public eagerness for cheap education, be called in to undersell the men in certain branches. The economic consequences to the stronger sex are obvious. They are the more deserving of prudential reflection in England because some of them are already happening in the public schools of the United States."

M. Victor Duruy, whose death occurred in November, was Minister of Education from 1863-1869. He was the author of many notable measures affecting the French system of education. He established the agrégation (special professorship) in philosophy, unified the regular course of the lycées, created in them the special or modern course, and the normal school of Cluny for professors of the same, and established public secondary courses for girls; above all, he founded the École pratique des hautes études. In the world of letters he is known chiefly by his histories of Rome and Greece. former covered the whole field from the foundation of Rome to the time of the late empire. According to the Oxford Magazine: "In its larger and illustrated form it has been the pioneer in the modern method of bringing the treasures of museums and the surveys of archæologists to assist popular study." The death of M. James Durmsteter, professor at the Collège de France, is another serious loss to education and science in France. He is most widely known by his Oriental studies, but perhaps is most interesting to English speaking peoples for his essays on Shakespeare and Shakespeare's plays.

The government of Portugal manifests its newly awakened interest in popular education by a recent decree removing the control of primary schools from the communal authorities to the central government. The action has been caused by the poverty of resources and the want of interest in a large proportion of the Communes. In Italy, on the contrary, reform projects seem to look toward decentralization. M. Cavallotti, leader of the extreme left, has developed a plan which calls for the division of the kingdom into fourteen autonomous districts of administration. The control and direction of public education in all its branches is to be committed to the authorities of these districts. Following this idea the number of universities would be reduced also to fourteen. The plan excites much interest.

AMONG THE BOOKS.

To accommodate readers who may wish it, the publishers of Enucation will send, post paid on the receipt of price, almost any book reviewed in these columns,

Studies in Oriental. Social Life, by the well-known author of Kadesh-Barnea and incisive editor of the Sanday School Times, H. Clay Trumbull, D. D., is a very interesting book. We were sure that any volume from the hand of Dr. Trumbull would be well worth reading, but we are surprised to find how much there is here to throw light on partially obscure passages of Scripture. An exceedingly instructive chapter is that on "Betrothals and Weddings in the East." Others of great interest are on such subjects as Hospitality, Funerals and Mourning, Prayers and Praying, the Oriental idea of "Father," Food in the Desert, Lessons of the Wilderness. Those who begin this captivating book will not like to lay it down until the 408 large pages are ended. It is very handsomely illustrated and the illustrations are remarkably good. It will be an admirable book to give a friend, especially a minister or Sunday school teacher. Philadelphia: John D. Wattles & Co. Price, \$2,50.

A Geographical Reader, compiled and arranged by William W. Rupert, superintendent of schools, Pottstown, Pa., contains upwards of one hundred choice selections in prose relating to geography. These selections are from recent writers and all contain reliable as well as interesting facts about the lands, people, productions, etc., of the earth. Superintendent Rupert has the instincts of an editor and has shown rare judgment in his selections. Nearly forty full page illustrations embellish the book. It is handy in form, excellent in type and binding, and a capital book for the geography lesson. Boston: Leach, Shewell and Sanborn.

The College Woman, by C. F. Thwing, I.L. D., is a little book full of the soundest advice and philosophy on the subject which it treats. The topics discussed are: Some Problems Respecting Her; The Principles, Context and Proportion of Her Studies; Her Environment; Her Health; Methods in Her Education; Demands Made by the Community Upon Her; and After Her Graduation. The discussion is candid, healthy and carnest, and we commend the book to every student in women's colleges and to all parents that have daughters preparing for college. New York: Baker and Taylor Co.

L. Prang & Co. deserve the constant gratitude of the American public for their beautiful holiday publications. Their Christmas and New Year cards and booklets are choice specimens of original artistic work, and are very popular with all classes of people. They have quite a variety of lovely calendars for the new year. One, a crysanthenum calendar, is very warm and delightful to look at. The booklets, with pictures of roses, violets, lilacs and other flowers, and suitable poems, are a delightful feature. The cards are very sweet and of bewildering variety. How much these gracious presentations of flowers and sweet child faces brighten our Christmas and New Year season and fill our hearts with thankfulness and love towards God and our fellowmen. We wish some of these pretty things could find their way into every home in the land this winter.

THE CENTURY MAGAZINE, Vol. xlviii, May to October, 1894, bound in gilt cloth, sustains the remarkable standard reached in previous issues of this work. It is more than a magazine for mere popular reading. Thoughtful studies of a literary and scientific tone alternate with fiction and sketches of travel, while the artistic features are unsurpassed. For preservation these volumes are a library in themselves and mirror the times in which we live. New York: The Century Company.

From the same source we have the bound volumes, two in number, of St. Nicholas. Having absorbed nearly all its rivals, St. Nicholas virtually has the field to itself as a richly bound and illustrated magazine for boys and girls. No expense is spared in its making and it delights hosts of young and older readers.

THE FIRST LATIN BOOK, by William C. Collar and M. Grant Daniell, is arranged on lines that must meet the approval of every teacher of Latin. There is made a book which contains no unnecessary word and omits no needed word or help. The author has met the demand for a common-sense text book in Latin for beginners and has met it well. Boston: Ginn & Co.

ELEMENTARY LESSONS IN ALGEBRA, by Stewart B. Sabin and Charles D. Lowry, is designed for use in grammar schools. It is very easy, very simple, very elementary—and thus meets the objections made against many of the new algebras. It must find favor among grammar school teachers. New York: American Book Co.

ROBINSON'S NEW INTELLECTUAL ARITHMETIC contains a great number of excellently-graded problems designed to be worked mentally by the pupils. The problems for the most part are new and will do much, if the book is properly used, to develop the art of rapid and accurate computing. New York: American Book Co. Price, 35 cents.

ELEMENTS OF PHYSICS, for use in secondary schools, by S. P. Meads, is an elementary text-book by which the pupil may learn the rudiments of physics and become thoroughly familiar with the laws of nature before taking up the more advanced treatises on the subject. The language is simple and easily comprehended, and the book will fill its place well in courses of study in the schools and by private teachers. Boston: Silver, Burdett & Company. Introductory price 72 cents. By the same publishers, we have Waymarks for Teachers, by Miss Sarah L. Arnold, a very bright and helpful book, with chapters on such subjects as Nature Study, Language Lessons from pictures and poems, Moods and Manners, Monday Mornings, the Schoolroom Atmosphere, etc. The author has given her readers her best thoughts in noble English, and every teacher will teach better throughout the week for reading this volume. Price \$1.25.

The interest in sociological problems has steadily increased in the past few years until it has become of an almost absorbing nature to those engaged in this study. Therefore a thorough book on the subject, like An Introduction to the Study of Society, by Albion W. Small, Ph. D., and George E. Vincent, will be welcomed by a large number of people. A syllabus of sociological method was printed in 1889 by one of the authors for the use of his students and was mentioned in a widely circulated article by President E. B. Andrews upon the literature of sociology. This led to an extensive demand for the article and to correspondence with those interested, which suggested the compilation of this larger work. There is now, in all probability, no fuller manual on the subject before the public, and none more worthy of careful study by specialists and by the general reader. New York: American Book Company, \$1.80.

A HISTORY OF THE UNITED STATES, by John Fiske, Litt. D., LL. D., hardly needs review, the reputation of its distinguished author being a sufficient guarantee of its merit. This is undoubtedly the best history of our country for school use that is now before the public. Its great merit is, that it stimulates the interest and awakens the intellectual life of the pupil, and so is far more than a dry recital of the facts of history. A copyist can make a book of the latter description; only a genius can make one of the former. This work is the production of genius of the first order. Boston: Houghton, Mifflin & Company, \$1.00.

STORIES OF OLD GREECE, by Emma M. Firth, is a small volume of simply told Grecian Myths adapted to the comprehension of little children. The work is well done and the book will be useful in stimulating the healthy expansion of the imagination of its little readers. Boston: D. C. Heath & Company, 30 cents.

PLANT PHYSIOLOGY, by Dr. Walter Oels, translated and edited by D. T. MacDougal of the University of Minnesota. The work is a convenient laboratory guide to a series of experiments illustrative of the more important factors in plant life, and is designed for use in summer schools, university extension, etc. It is a work of great value and its translation will place it in convenient form for students. The editor has made a number of changes and emendations greatly enhancing the value of the book. It contains 77 illustrations. Minneapolis, Minn.: Morris & Wilson.

LITTLE NATURE STUDIES for little people is an admirably adapted book for its purpose which is to serve as an introduction to the study of science and nature. The fact that the subject matter is from the essays of John Burroughs and that it is edited by Mary E. Burt is sufficient evidence of a book suitable for primary grades intended to promote a love for woods and fields, for animals and plants and all living things. It is a pretty book and nicely illustrated. Boston: Ginn & Co.

In Distance and in Dream is the mystic title of a strongly original study of the future life, by M. F. Sweetser. The suggestions of the book are poetic and spiritual while quite out of the ordinary lines of thought about the other world. Those who have recently lost friends by death will find comfort in this little volume. Boston: Joseph Knight Company. 50 cents.

THE SEARCH FOR ANDREW FIELD, by Everett T. Tomlinson, is a story of the war of 1812. The object of the author is to give the younger people an insight into the conditions of the times, a history of the war and a glimpse of the results. Andrew Field and his friends are manly and patriotic American boys, and the story of their adventures is told in a bright way that will make this a favorite book with many young readers. Boston: Lee & Shepard, \$1.50.

PRIMARY GEOGRAPHY, by Alex Everett Frye, published by tilnn & Company, gives a scientific treatment of its subject, fully and attractively illustrated for its young readers. The teacher using this text-book will find abundant material out of which to make the study fascinating to the pupils.

LATIN AT SIGHT, by Edwin Post, is an excellent book of its kind. It contains many selections for practice in sight reading of Latin, admirably selected, arranged and annotated. The author has given to teachers in his introduction some valuable suggestions to aid them in using the book which in many respects is one of the best of its kind. Boston: Ginn & Co.

THE HISTORY OF GREECE, from its commencement to the close of the independence of the Greek nation, by Adolph Holm, is a work that has enjoyed a large reputation among scholars, and its translation into English makes it accessible to all American students. The history is to be in four volumes, the first of which we have received. This volume takes the reader up to the end of the sixth century B. C. Prof. Holm is an erudite scholar, and is possessed of a catholic taste, and his history is one that the student can use with entire confidence in its reliability. The style is graphic, and the reader is carried perforce from chapter to chapter by its grace and charm. If the subsequent volumes equal the first in power, the work will be a standard one in America. New York: Macmillan & Co.

"SIRS, ONLY SEVENTEEN!" by Virginia F. Townsend, is a quiet, domestic story that will hold the reader to the last page. The plot is not an intricate one and there is no exposition of some sociological theory hanging to it, but it is the story of love, of trials, of compensation and of rest. It will repay buying and reading for the rest it brings to the reader. Boston: Lee & Shepard.

BACK COUNTRY POEMS, by Sam Walter Foss, brings cheer and homely philosophy in every line. Mr. Foss is essentially the poet of rural life, and New England ways, philosophy and dialect have never had a better or a more faithful historian. He has a delicious sense of humor and "cracks off" the country Sir Oracle with a happy knack. His versification is excellent, and his poems set themselves to music as one reads them. The collection in this volume ought to have an extensive sale and a wide reading. Boston: Lee & Shepard.

A SCIENTIFIC FRENCH READER, edited with introduction, notes and vocabulary, by Alexander W. Herdler, Princeton University, contains nearly fifty short articles on scientific subjects, adapted for use in schools. The editor has taken great pains to be accurate and his selections are admirable and up to date. The book is illustrated with excellent cuts and drawings. Boston: Ginn & Co.

[&]quot;The President's Currency Plan" is ably criticised in the February Arena, by Hon. Wm. J. Bryan, the leading congressman from Nebraska. Many other public questions are interestingly discussed in this bright, independent magazine, each number of which is always thoroughly upto date,-The North American Review for February opens with three timely and important articles on "The Financial Muddle," written respectively by the Hon J. Sterling Morton, secretary of agriculture, Representative William M. Springer, chairman of the house committee on banking and currency, and Henry W. Cannon, president of the Chase National Bank of New York, and formerly comptroller of the currency. --- The January Review of Reviews, in its "Progress of the World" department, discusses some leading questions concerning the public health in an interesting way, and the entire contents presents the life of the age in a form adapted to the comprehension of busy men. -- Hurper's Magazine for February has a fine article on "Music in America," with a portrait of the author, by Antonin Dvorak. --- Gudey's Magazine for February, offers much good matter at the low price of ten ceuts. --- Mr. Wm. C. Cornwell, president of the New York State Bankers' Association, has an article in the February Forum entitled "Should the Government Retire from the Banking Business?" - A rich variety of good things is offered in the Atlantic Monthly for February, including "Physical Training in Our Public Schools," by M. V. O'Shea; "The Present Status of Civil Service Reform," by Theodore Roosevelt; "Celia Thaxter," by Annie Fields; etc .- McClure's Magazine for February is largely given to tributes of various kinds to the memory of Robert Louis Stevenson. The McClure Napoleon series deals in this number with the most splendid epoch in the great commander's career, when he was fighting the battles of Austerlitz, Jena and Friedland,

EDUCATION

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION.

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METHODS IN GERMAN SECONDARY SCHOOLS.

EDWARD P. DREW, SMITH ACADEMY, ST. LOUIS

The custom of educating boys and girls in separate schools, a custom which exists in our country in the best private schools only, is common throughout all Germany. The Germans, it is true, have free secondary schools, corresponding to our public schools, but in the larger cities the best preparatory schools ask a tuition fee, although these schools and the free schools are under the same general management. The existence of these public tuition schools is doubtless due to the fact that the old caste system demands that boys of the better families shall not mingle with the boys of the lower classes; and it is for this reason that such schools are unknown in our country. In our large cities the private tuition schools whose curriculum corresponds almost exactly to that of the public high schools, may perhaps form a close parallel to these schools for the children of the higher classes in Germany.

The Gymnasium in Germany is the boys' fitting school for the University. The name *tiyunasium* is applicable only to schools for boys; the corresponding school for girls does not yet generally exist. The boys must be fitted for the University; the girls need no such preparation, since their school education commonly ends at the age of fifteen. It is indeed remarkable that the Germans, who are so progressive in methods and equipments in educational work, and as a nation so scholarly, are still uninfluenced by nineteenth century ideas of higher education for women. A native German lady, in undertaking a thorough

course in advanced studies would at once be branded as a bas-blen. No wonder, then, that the professor of Sanscrit in the University at Jena, who chanced to have in his Seminar a young American lady, was astounded beyond all measure, for he was obliged to confess that she had a far better knowledge of the subject than any of the German students. An attempt, due to the perseverance of a few scholarly women, is now being made in Berlin to establish a Gymnasium for girls: the success of this undertaking is by no means yet assured. It is, however, an indication that the Germans are awakening to the importance of higher education for women.

The Luisen-Schule in Berlin, which is one of the best of the Höhere Töchterschulen, offers a course of nine years. The girls of the first year class, whose ages range from six to eight, study Bible history, writing, reading, arithmetic; they are required to take gymnastic exercises and are taught needlework. These same studies are continued during the first three years, with the addition of geography and drawing. During the last four years, studies in German, French and English literature, together with history, natural history, physics, chemistry and singing, are required. This course, therefore, in general, corresponds to the Modern Language courses in our secondary schools, reaching about the same degree of advancement. If the young lady in Germany wishes to make further progress in her studies, she must put herself under the guidance of a private tutor; as a rule, she does not continue in the line of work already begun, but, if the family fund will permit, joins some school of painting or music, or the like.

The Gymnasium, on the other hand, corresponds in no way to the Höhere Töchterschule. Its aim, and therefore its curriculum, is entirely different. The Gymnasium is a preparatory school, i. e., for the University. The girls, on the other hand, are to be prepared for no higher institution. The Universities are for men only; in very few cases are women ever admitted to its courses. In order to understand the scope of the Gymnasium, it is at first necessary to understand the University. The University may be described as a group of professional schools in theology, law, medicine and philosophy, with courses of three years each. The University never includes what in this country is called the Undergraduate Department, i. e., the four years' course leading

to the degree A. B. When, therefore, the boy leaves the Gymnasium he is supposed to be a young man equipped to enter upon professional studies. The Gymnasium proper undertakes, by a nine years' course, to prepare boys, who generally enter at the age of eight or nine, for the University.

Since the University is a group of professional schools only, young men who enter upon their work must have had about the same amount of preparatory training as young men in our country who begin their studies in some school of law, medicine or theology. It is generally a surprising revelation to Americans when they discover that the preparation for professional study in the German institutions is not so elaborate as the preparation in the best American institutions.

The writer of this paper had the pleasure of making the acquaintance of the director of one of the best Gymnasiums of Berlin, and was able to become thoroughly acquainted with both the methods employed and the amount of work covered in the various courses. It may, in general, be said, that at the end of the nine years' course in the Gymnasium, the amount of work completed corresponds almost exactly to the work completed at the end of the sophomore year in our American colleges, i. c., the more familiar works of Greek and Latin authors have been read, the higher mathematics, including spherical trigonometry and analytical geometry, have been studied, and introductory work of the literature of the modern languages has been commenced; in short, the main work of the student is confined, during his years of study in the Gymnasium, largely to Latin, Greek and mathematics; he has opportunity, however, in common with the student in our corresponding institutions, of making slight acquaintance with such subjects as modern languages, mediaval and modern history, physics and chemistry. After having reached this point, two more years of work, largely elective, must be accomplished by students in our colleges before they can receive the degree B. A. and be admitted to the best three-year professional schools. When, on the other hand, the German student has reached this point, he is expected to enter the professional school, i. e., the University. The purpose of the elective system in the Junior and Senior years of our colleges is to allow the student the privilege of choosing such subjects as will aid him in the preparation for the vocation which he intends to follow. And his professional studies may cover a period of not only three but five years. A definite idea of the point reached in the higher education by the German Gymnasium may be obtained from the following table, in which comparison is made with the curriculum of the Freshman and Sophomore years of one of the best of our New England colleges:

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UNTER-PRIMA.
                                                FRESHMAN YEAR.
Griechisch -
                                        GREEK -
 Homer, Ilias VIII - XVIII.
Demosthenes, Philipp I.
                                          Homer's Iliad XVIII, XXII, XXIV.
Philippics of Demosthenes.
                                           Apology of Plato.
  Platon, Apologie.
  Sophokles, Antigone.
                                        LATIN -
Lateinisch
                                           Livy XXI, XXII.
  Livius, XXIII, XXIV.
                                          Cicero de Amicitia and de Senectute.
  Ausgewählte Briefe Ciceros.
                                          Satires of Horace.
 Tacit., Hist., 11, L.
                                           Prose composition.
  Horat., Carm., III, IV.
                                           History of the Roman Republic.
                                        FRENCH OR GERMAN -
  Ausgewählte Satiren.
  Uebersetzungen aus dem Deutchen.
                                          Elementary courses in French.
Französisch -
                                           Advanced courses in French.
  Lektüre und Litteratur.
                                        MATHEMATICS .
MATHEMATIK -
                                          Solid geometry.
  Planimetrie.
                                          Plane trigonometry.
                                          Mechanics.
  Combinationen.
  Wahrscheinlichkeitsrechnung.
                                        English Literature.
  Binomischer Satz für ganze positive
                                               SOPHOMORE YEAR.
    Exponenten.
                                        GREEK -
 Stereometrie.
                                          Plays of Aeschylus, Sophocles, Eu-
  Trigonometrie.
                                            ripides, Aristophones.
  Mechanik.
                                           Lectures on the Greek drama.
DEUTSCHE LITTERATUR.
                                          Apology of Plato.
          OBER - PRIMA.
                                        LATIN-
GRIECHISCH
                                          Odes and Epodes of Horace.
  Thukydides IV
                                           Agricola and Germania of Tacitus.
  Homer, Ilias IX, XVII.
                                          Plays of Plautus.
  Tragöden von Sophokles.
                                          Sight reading.
 Platon, Euthyphron.
                                        FRENCH OR GERMAN -
Lateinisch -
                                           Advanced literature.
  Tact., Ann., I & II.
                                        MATHEMATICS -
 Cicero, Ausgewählte Briefe.
Livius XXX, XXXI.
                                          Spherical trigonometry.
The geometrical interpretation of
  Horat., Carm., I, II; Ausgewählte
                                             the theory of equations, imagina-
    Episteln.
Französisch -
                                          Plane and solid analytical geometry.
  Lektüre, Litteratur, Uebungen.
                                          Map projection.
MATHEMATIK -
                                        ENGLISH LITERATURE.
  Anwendung von Koordinaten.
                                        Physics.
  Systemen bei der Behandlung von
    Kurven.
  Binomischer Satz für beliebige Ex-
   ponenten.
  Komflexe Zahlen als Schlusserfin-
    dung für das System der Arith-
    metik und ihre Auwendung.
DEUTSCHE LITTERATUR.
Paysik.
GESCHICHTE -
  Neuere Geschichte von 1648 bis
    zum Tode Kaiser Wilhelms I.
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In the large cities of Germany, the question of light, heat and general arrangement of the halls and recitation rooms, has been solved and practically answered in a very satisfactory manner. The recitation rooms do not face the noisy street, but the quiet inner court; the rooms are cut off from the noise of the street by the intervening hallway. Such care is taken about the manner of admitting light into a study, or recitation room, as an artist would exercise in admitting light into his studio. The attention of the overseers of the schools was recently called to the fact that a large number of the boys were obliged to wear glasses; the matter was carefully studied and the result is apparent in the perfectly lighted rooms.

The impression which an American visitor receives upon first entering one of these schools is, indeed, a very favorable one. The spirit of the school seems to be that of boys earnestly bent upon the tasks assigned them. The boys come to school to recite the lessons with very much the same earnestness in their faces as one would expect to find in young men of twice their years. One misses that side of the boy's nature which prompts him to take advantage of the absence of a school officer, and is forced to concede at once that the Germans have solved some of the most difficult problems of school discipline.

On passing into the recitation room, this spirit on the part of the boys shows itself to even a greater advantage. The question of order does not seem to exist. The energies of the teachers are not required in that direction at all. It is an understood fact, that the boys, on entering the school building, are to conduct themselves in precisely the same manner as if they were entering the private house of their instructor.

The boy who is called upon to recite would no more think of being present in the recitation without having his lessons well prepared, than he would think of coming privately to his teacher without having accomplished the work assigned him. One cannot help feeling what a delightful experience it must be on the part of the teacher, to feel assured that he could very seldom call upon a boy who had not conscientiously prepared his lesson. It is, indeed, a pleasure to witness such a recitation.

It was very agreeable, to the writer of this paper, to notice the outward forms of respect shown to the principal; upon his entering a class-room, all the students respectfully rose to greet him

and awaited his word to be seated. It would be difficult to think of these tokens of esteem as anything but sincere. One cause for this spirit manifested by the boys lies in the instructors themselves. It is natural for children of the school age in Germany, to form as their idea of a teacher, not that of a young man or woman just out of the teens, with an elementary course of education barely finished, but of a mature man who has passed not only his state examination at the University, but the special examination for teachers which all such men as purpose to teach in the better Gynnasiums must undergo. When, therefore, the school boy stands before a teacher so well equipped and so full of experience in matters of education, he understands from the outset that he shall have no reason to doubt the ability of his teacher.

The number of teachers in proportion to available positions is very large, consequently the schools have the advantage of being able to select from a large number. Not even after his appointment to a position does the German teacher draw a salary, until his second or third year. In our country of material progress, the teacher in the secondary schools is regarded by the average class of people as a sort of public servant, whose duty it is to see that the children are kept moderately busy at their books and out of mischief during five or six hours of the day; but in Germany, the teacher is, in almost all cases, a man of the highest education, and not only a teacher but a man of independent thought, who has already established for himself a record as a scholar, and therefore belongs to that enviable class of men whose charge it is to further intellectual advancement,—the pride of Germany.

The teacher, however, is not entirely responsible for this spirit shown by the boys; another cause is to be sought in the spirit of the nation itself. This cause, however, unlike the one just considered, is not altogether creditable to Germany. A generation of people which has grown up under the strict military laws of the German Empire, and whose fathers and forefathers have known of no other form of government in the essentials (unless even sterner forms) must necessarily find that the spirit of the government is the predominating spirit in their homes. As the parents must conform to the severe laws of the government, so the children in the household must render obedience as a matter

of unquestionable duty, whether this obedience be prompted by love or not. The fundamental principle in the relation of children to their parents seems to be the irrevocable law, that the child must as surely render perfect obedience to his parents as the parents to the sovereign. It is difficult for citizens of free America to realize the full meaning of this spirit, and how it shows itself in almost every phase of society. One reason for the existence of these family relations, so different from those in our country, is, that while in our country it is quite an easy matter for a son, or even a daughter, under the age of twenty, to leave the family circle and earn an honorable living in various ways, in Germany, on the other hand, partly because employments which in this country are honorable are there beneath the rank of the better families, and partly because in so densely populated a country such employment is not easily found, the children, especially the daughters, must from necessity remain at home, and, naturally, are expected to show as much obedience at twenty-five as at ten. These two factors, therefore, the age and education of the teachers,—the age which commands parental obedience and the education which demands due respect-and the national spirit of obedience in which the boy is fostered at home, may be regarded as two important factors which underlie the attitude of the boys toward the school and toward the instructors.

The most successful schools in our country are conducted on an entirely different principle. The most successful teachers are those who make the class room work as attractive as possible; the goal toward which he aims is the combination of real pleasure and thorough work on the part of the student. He is often obliged to deal with a class of students whose first interest is not in books, and who wish to use the secondary schools which they attend as a stepping-stone, not to further literary activities, but to better business opportunities than he might otherwise obtain. The American boy will not, as a rule, render submissive obedience to school regulations simply because they are regulations, his gentlemanly instincts must be appealed to; nor will be master the daily tasks assigned him simply because these are his duties, his enthusiasm must be awakened by the rewards which directly or indirectly are the results of close and accurate study. His attention must be directed not to the fearful consequences of

deficient scholarship or lack of obedience, but to the great advantage which both professional and business men have to-day, if they can point to some well-known college or university as their alma mater. It is easy, therefore, to see that the same method cannot be used in both this country and in Germany. The American method used in Germany would produce laxity, and very soon bring the standard to a much lower level; with some ambitious boys the system would be perfectly practicable, but not with the majority. The German system used in this country, while it would be tolerated by some who have naturally a deep interest in study, would to the majority be so pedantic and distasteful that many would be discouraged from continuing their studies beyond the demands of the law; in fact, the German system would be entirely foreign to our institutions.

The question of the relative progress in educational work in the two countries does not depend for its answer upon the method employed, and upon that alone, but upon the method best adapted to the national institutions. The best method for Germany is an enlightened modern method, not too far in advance of the old dominant German spirit. The best method for this country is a method in harmony with our free institutions, and liberal only so far as is consistent with sound and accurate scholarship. As the educational institutions in any country are the guides toward a higher civilization, so the methods employed in these institutions should be not exactly in accordance with the spirit of the age, but somewhat advanced in the direction which public thought should take. Judging from the results shown by Germany, the land of scholars and of leaders in all departments of science, are we to infer that she has best answered the question of what methods are best suitable to her institutions? It would be unjust to make any such comparison at present with this country. Our country has thus far been a country of material progress, whose greatest men have not been great in letters, but great in the development of the resources of this new country. Public opinion is not yet on the side of high scholarship. The young student who proposes to devote his life to a special line of studies, must work against the The tendency is, that before he is very far advanced, he will be diverted from his original purpose. The Germans, therefore, have the advantage of a public opinion which strongly

favors literary life. Whenever such an opinion may prevail in this country, we may look for results which, under our school systems, shall equal and even surpass the products of that land of scholars. We are, as yet, poor in teachers of the first quality; and teachers of an inferior grade are too often pressed into service. But when a more favorable public sentiment shall hold sway, we may expect to find an abundant supply of teachers of the first quality and highest equipment, and the consequent improvement in the schools themselves.

A STUDY OF IMAGINARY COMPANIONS.

CLARA VOSTROVSKY, LELAND STANFORD JR. UNIVERSITY.

Watch that little girl of ten for a moment, as she sits close up to the window, and watches the night outside. She would like to tell what she sees and thinks, but no one notices her. The great lamp on the centre table has been lit, but the shadows it throws without do not interest those who are busy with their work, as they interest the little maiden. In this shadow-land lives a family, of five members like her own. But they are very different from her relatives. They are shadowy and indistinct and mysterious to her, and through some association of ideas, she calls them the Looking glasses. She does not know, but she thinks she believes they are real, and when the day comes she often searches their nightly home, but in vain. They come and go with the evening.

How she watches them as they live their life, and she hears them speak; sometimes they crowd quite close up to the window to talk to her; sometimes she slips out to play with them. And when the night settles down and they slowly fade away, she gazes into the dark until all are gone. She forgets them as she plays in the next day's sun, but when the evening approaches once more, we find her again at her post, and the story of the imaginary family grows. We would like, but we cannot imagine it with her. The shadows are only shadows to us. She is happy in her dreams, with nothing else to do; yet if we dared, we would take her away from them, and let her talk and play with us. We fear the shadows and the shadow people. We fear she may dream too long.

If you have never had imaginary companions who entered and became a part of your life, you have undoubtedly had many others, more simple and variable,—you have played school quite alone, it would seem, and yet before you have sat the pupils of your fancy, studious or mischievous as the case might be; or you have played house and entertained neighborly but invisible callers; or ball, or numble-to-peg, with some dear friend who tried hard to "beat" you. Naturally, these simple and common forms do not interest us so much as those more complex and mysterious, where one or more of these creations, with its adventures and experiences of divers kinds, becomes a part of the environment of the child for a greater length of time — sometimes for years.

It is difficult to get material on this subject. Children are apt to be more or less secretive in regard to these fancies, while older persons who have had them feel, often, a strange reluctance about bringing them to light. On account of this scarcity of material, I have collated all accessible, whether it was the person's own account, the observations of others, or second-hand material, the result of others' inquiries. This difference in material makes some of it, as might be supposed, brief and scrappy, while some, again, is as full as can be desired. The best papers I have had in my hands are, certainly, those written by the persons themselves, between the ages of thirteen and seventeen, when their companions still have some hold on them, so that they can describe them vividly and accurately, and yet not enough hold to prevent them from speaking freely of them to one who understands. Among all of these descriptions, twentyseven are the person's own experience, sixteen are observations, and five, experiences told to others and through the latter reaching me, a total of forty-six,—too small a number from which to draw any but suggestive and provisional conclusions. Nineteen of these accounts are comparatively simple, while twenty-seven are more complex. Boys seem much less susceptible to these fancies than girls—at least they outgrow them sooner—perhaps because of their more active life; thus we have thirty-nine papers of or by girls, and only seven of or by boys.

For convenience, I have divided my topic, somewhat arbitrarily, under three heads: 1st, The imaginary companions themselves; 2nd, the child having the companions; and 3rd,

the educational problem and conclusions reached regarding them. In regard to the companions themselves, the first interesting question that arises is, What is most often taken for them? Of the forty-six papers, forty describe people and but five animals,—as mice, dogs, elephants—and one, both animals and people. Children of the same sex seem to be preferred: of the forty-one papers, twenty-five having had companions of the same sex, only three of the other sex and thirteen of both sexes. Thirteen of all these are older persons, while twice that number,—twenty-six—are children: three include both older persons and children. The number having but one companion is smaller than that of those having more than one, the proportion standing nineteen to twenty-seven.

Thirty of the papers give definite names to the companions. This number would undoubtedly be even greater if the fifteen papers not mentioning any names were not so largely made up of very superficial observations. Here, as in some of our other studies, we see the importance names play in child life. To have a thing clear to the child's mind, or rather to satisfy him in regard to what he does not know concerning it, it must be named, and the child has often named his companions already at the age of three and four. The names given are either common every-day names, as "Jack," or "Alice Davids," or strange ones invented by the child, the former occurring almost three times as often as the latter. Ten of both of these are full names, nineteen the first name only. Some of the invented names are very amusing, thus we have "Boggy and Soggy," "Martha Pink and Anna Blue," "Mrs. Rice-bone," "Alice Ribbons," "Mabel Grass-bone," and even "Maganeezia Shippity-I."

These acquaintances of the fancy are generally supposed to live somewhere near their little friend, either at the child's home or in some place connected with it, as the wood-shed, this number being over twice as great as the number of those living further away, as on some indefinite ranche, or in Heaven. The character of the companions is suggestive: many are great, beautiful and rich; some peculiar, as the companion of a little boy that was "only about three feet tall," and who seemed to him "as if he could not speak nor hear;" others are helpful and kind, to whom all troubles are confided; while still others are those to be helped in some way. Then again, many are only children, good

playfellows, and a few go in pairs, rich and poor, or sympathetic and annoying. Many unusual things are connected with these people, thus we find imaginary birds and dead people talking, trips to the moon, and wonderful rides in sleighs drawn by hundreds of snow-white dogs. In one case, an imaginary elephant is reported to draw "all the funeral trains in the world." These things are of too many and too varied a kind to be classified yet in any way.

Now turning to what concerns more nearly the child having the companions, we find a child of a nervous temperament, who is thrown largely on his own resources, most susceptible to them; sixteen out of the twenty-five whose temperaments are given, being described under the head of nervous, and twenty-one out of thirty-one, as having played mostly alone. The age at which these invisible beings first arise varies, any time from the first to the thirteenth year of a child's life. The children in the papers I have had gave them entirely up from the seventh to the seventeenth year. Sometimes the same ones remain for many years; sometimes they last only a day, especially in the simpler forms of imaginary companionship. Where they are kept up for some length of time, almost as many change at certain periods as do not.

In the reasons children give for dropping them, light is sometimes thrown on how they arose. Thus, a girl of fifteen says, "I dropped them suddenly, as we moved into the town and many of my playmates came to see me and I went to see them." Several speak of having outgrown them, or having become too old for them; while in two cases they were dropped because they "died," as the authors naively report. The reasons, when stated, are always definite. The greater number arose, it seems, through a desire for company; some were suggested by what was heard, others by what was seen or read in picture books. But this query in regard to the origin generally remains unanswered; one forgets in their development that they ever had an origin. As one little girl said, "They come to me just naturally."

One of the most interesting and suggestive things in this little study is the light that is thrown on the needs and desires of child life. In three-fourths of the material, three things play a remarkably prominent part: First, the desire for self-aggrandizement, analogous to that found in barbarians, which is generally

shown either by imagining oneself and one's imaginary friend attired in silks and jewels and wonderfully brilliant, or in the opportunity given for patronizing others; second, and quite different from the first, is the desire for company, for sympathy, for being understood; and third, the desire of making use, by helping others, of what one has already acquired.

There can be little doubt, in the mind of anyone who studies this subject, of the reality of these creations to the child. shown in their very manner of speaking of them, and often, too, by the accompanying emotion. Besides this, out of thirty-seven papers we have, thirty - a very large proportion - speak definitely, in some way, of the reality of these companions to them. The line between the real and the imaginary is very indefinite He does not realize he can think of what is in a child's mind. Thus, a little boy friend of mine, two or three years old, startled his mother by asking her, "Where is that duck?" "Why," said his mother, "there has been no duck here." "Yes," he insisted, "it was right here on the floor;" and nothing could persuade him it was not. This shows the difficulty an older person experiences in trying to understand children sympathetically. The first person to whom the children naturally confide is their mother; they are willing to share their secret with others, too, near relatives and friends, until they find themselves misunderstood, or laughed at, after which they lose faith in those older, and keep their fancies to themselves - a dangerous thing.

The great problem we have to meet is how we are to regard this phase of the imagination. Is it, or is it not, to be encouraged? Most of us do not realize how common it is, and how large a part it can play, for evil as well as good, in a child's life. That the companions are not the result of a "defective organization," is shown in their being found in active, healthy children, when thrown much alone. To a certain extent, certainly, they are good, since they take the place of real companions, and call into play the inventive faculty of the child. "Kill that," says George Macdonald, "whence spring the crude fancies and wild day-dreams of the young, and you will never lead them beyond dull facts." On the other hand, children should early be helped to distinguish between what they imagine and what really is, or there is danger of their becoming dreamers, and living more in

the realm of fancy than truth, as "Pomona" did in "Rudder Grange" in her earlier days. Let the child fancy, but see that his fancy is healthy. To do this, meet his confidence sympathetically. Do not rudely forbid his imagination play, but bring him more into contact, without his suspecting the reason, with the real companions and the healthy out-door play he needs.

Note.—Some two years ago, I prepared an article on Children's Imaginary Companions which appeared in several educational periodicals. Miss Vostrovsky has added a good deal of new material to my collection and has worked it up from new and independent points of view. I shall be greatly obliged to anyone who will send us any data bearing on the subject.

EARL BARNES,

Stanford University.

MILITARY EDUCATION IN COLLEGES.

LIEUT, JOHN K. CREE, U. S. ARMY, WASHINGTON, D. C.

In ancient times, all the men of a nation were trained for battle; and in case of war all able-bodied men took the field, leaving the women and the aged to care for their homes and to till the fields. When the war was over, all laid aside their weapons and returned to their peaceful occupations. The armies of nations were composed of the entire male population. The weapons used were those of the chase; all men were accustomed to their use, and battles were hand to hand conflicts with little occasion for the use of tactics or strategy.

As nations became more civilized, war ceased to be their normal condition; the occupations of men became more diversified. Men were not all skilled in the use of the weapons of war, and these weapons themselves became more complicated. Tactics were developed, and the principles of strategy were used in war. It gradually became necessary for men to have special training to fit them for the military service. All the men of a nation could not be spared from their occupations, and thus, in the course of time, it became necessary to have some men in every nation who were specially trained and kept ready for military service. The standing armies of to-day are the result of this necessity.

It has never been the policy of the United States to maintain a large standing army. There seems to be a sort of inherited fear of a large standing army. The history of republics will show that standing armies have often been the means by which unscrupulous leaders have forced themselves into power, and the republics into monarchies. The United States is comparatively isolated. No powerful and aggressive nations are our neighbors, and a large standing army would be expensive and unnecessary. In time of war, the nation would put her dependence on the general body of her citizens, who would have to be trained for the occasion.

The standing, or Regular Army of the United States, is composed of 25,000 enlisted men and about 2,000 officers, that is, about one soldier to every 2,500 inhabitants. It is under the direct control of the President, who is by the Constitution made the Commander-in-Chief of the Army and Navy.

The regular army has been busy for years on the out-skirts of civilization, or beyond them, in the West: preserving order and rendering possible the settlement of the western states. Its duty in that regard is almost completed. A few tribes of Indians will require watching for some time to come, but the main necessity for the regular army in the future will be to act as a sort of training school; to preserve military knowledge and customs; to invent and perfect military weapons and equipments, and to keep abreast of the times in this regard; to care for the fortifications for the protection of our sen-coast cities, which would be the first point of attack by a foreign enemy; and to keep continually in training, that there may be, at all times, at least a small force which would be available at once in case of a sudden war with a foreign country; and to suppress insurrection or rebellion at home. It is thought by many that some increase should be made in the size of the regular army. The recent riots in Chicago and elsewhere, and the necessity for federal troops in their suppression—the failure of the Governor of Illinois to use the state troops promptly,—the refusal of the National Guard of California to do its duty when ordered — have been used as recent arguments in favor of an increase. While the United States has been growing rapidly in population, and the value of property to be protected has rapidly increased, the size of the regular army has for years remained the same. But Congress is very conservative in the matter. Motives of economy will probably prevent an increase of any considerable amount in the near future, although a small increase is considered a necessity by those best fitted to know.

In addition to the regular army is the National Guard, or state militia of the several states, which is under the control of the governors of the respective states. It amounts to about 112,000 men, in a more or less effective state of discipline. The National Guard is not subject to the orders of the President until it shall have been duly mustered into the service of the United States.

By existing laws of the United States*, all able-bodied men. between the ages of eighteen and forty-five years, are liable for -military service, and must serve if called upon. This class may be rightly called the "militia." It numbers about 8,500,000, of which but a few individuals have any military training whatever, and in case of war would be extremely raw material. Men without military training and discipline, no matter how well armed, are only an unmanageable mob, and experience has shown again and again that they cannot stand against a fraction of their number of disciplined troops.

^{*}The militia law of the Unifed States is very old but is still in force. An attempt - has been recently made to have it re-enacted to conform to modern weapons, etc. It comprises Sec. 1625-1628 of the Revised Statutes; enacted May 8, 1792, and March 2, 1808; "Every able-bodied male citizen of the respective states, resident therein, who is of the age of eighteen years and under the age of forty-five years, shall be enrolled in the

[&]quot;It shall be the duty of every captain or commanding officer of a company to enroll every such citizen residing within the bounds of his company, and all those who may from time to time arrive at the age of eighteen years, or who, being of the age of eighteen years and under the age of forty-live years, come to reside within his bounds.

[&]quot;Each captain or commanding officer shall, without delay, notify every such citizen of his enrollment by a proper non-commissioned officer of his company, who may prove the notice. And any notice or warning to a citizen enrolled, to attend a company, battalion or regimental muster, which is according to the laws of the state in which it is given for that purpose, shall be doesned a legal notice of his enrollment.

[&]quot;Every citizen shall, after notice of his enrollment, he constantly provided with a good musket or fire-lock of a bore sufficient for balls of the eighteenth part of a pound, a sufficient bayonet and belt, two spare flints, and a knapsack, a pouch with a box therein to contain not less than twenty-four cartridges, suited to the bore of his musket or firelock, each cartridge to contain a proper quantity of powder and ball; or with a good rifte, knapsack, shot-pouch and powder-horn, twenty balls suited to the bore of his rifle, and a quarter of a pound of powder; and shall appear so armed, accountered and provided when called out to exercise, or into service, except that when called out on company days, to exercise only, he may appear without a knapsack. And all arms, ammunition and accouterments so provided and required shall be held exempted from all suits, distresses, executions or sales for debt, or for the payment of taxes. Each commissioned officer shall be armed with a sword or hanger and spontoon."

[[]Then follow certain exemptions from service.]
"Whenever the United States are invaded or are in imminent danger of invasion from any foreign nation or Indian tribe, or of rebellion against the authority of the government of the United States, it shall be lawful for the President to call forth such number of the militia of the state or states most convenient to the place of danger, or scene of action, as he may deem necessary to repel such invasion or to suppress such rebellion, and to issue his orders for that purpose to such officers of the militia as he may think proper."

It is impossible that all this body of men should have military training. Our fathers or grandfathers tell us of the old "training days," when the "militia" of that day met annually for muster and drill. However seriously this may have been undertaken, it seems now to have been a mere farce, - a sort of annual picnic for all concerned. Its utility seems extremely doubtful. The military systems of France and Germany are regarded as models of their kind, since they undertake to give military instruction to a large proportion of the male population. With certain exemptions, all young men, upon arriving at twenty years of age, are liable to service, and are drawn by lot. Those to whom the lot falls are required to serve a certain number of years. Upon the completion of this service, each soldier is returned to civil life, and becomes a member of the "reserve," and is liable to service only in time of war. His place in the army is taken by another young man, and in this way military instruction is widely disseminated. Two or three years' service is sufficient to make good soldiers. By this method almost the entire nation is made into an army. Alexander Hamilton, in one of the numbers of the Federalist, says: "The highest number to which, according to the best computation, a standing army can be carried in any country, does not exceed onehundredth part of the whole number of souls; or one twenty-fifth of the number able to bear arms." If the United States army was in accordance with it, it would amount to over 650,000 men.

The War of the Rebellion was greatly lengthened by the lack of preparation and ignorance of military matters on the part of the North. In thousands or instances, men were made commissioned officers without the slightest military knowledge, and it took time to educate them. Before the war there were many schools through the South where military instruction was given, while in the North there were but few. As a consequence, the

| * | Population. | Strength of Standing Army. | | Army Estimate. |
|---------------|-------------------|----------------------------|---------|-------------------------------|
| England | 1 | (1893) | 154,442 | 0 000,000,88 \$ |
| Germany | (1800) 49,428,000 | (1894) | 486,983 | \$115,700,000 |
| France | (1891) 38,343,000 | (1894) | 564,603 | \$116,800,000 |
| Russia | | (1802) | 781,518 | \$176,100 000 |
| United States | 65,000,000 | **** | 27,000 | \$25,000,000 |

southern armies were at a decided advantage in the matter of training and discipline at the beginning of the war. It was possibly a consequence of this condition that, on July 2, 1862, Congress passed an act donating public lands to such of the states as would accept the conditions of the act.* With the money derived from sale of this land they were to endow colleges where "military tacties" was to be one of the branches taught. This provision was made more effective by the act of July 28, 1868, which provided competent instructors. This act allowed the detail of twenty army officers to act as "Professors of Military Science and Tactics." It provides as follows: "That, for the purpose of promoting knowledge of military science among the young men of the United States, the President may, upon the application of an established college or university within the limits of the United States, with sufficient capacity to educate at one time not less than one hundred and fifty male students, detail an officer of the army to act as president, superintendent or professor of such college or university; that the number of officers so detailed shall not exceed twenty at any time, and shall be apportioned throughout the United States as nearly as practicable according to population, and shall be governed by the general rules to be prescribed from time to time by the President."

The number of officers detailed under this act has been increased from time to time until it is now fixed at 100, and its usefulness has been increased by the issue of the necessary infantry accounterments and cadet rifles for the cadets, and two

*The wording of this act of July 2, 1862, is as follows: "Be it enacted, etc., That there be granted to the several states, for the purposes hereinafter mentioned, an amount of public land, to be apportioned to each state a quantity equal to thirty thousand acres for each senator and representative in congress to which the states are respectively entitled by the apportionment under the census of 1862; provided that no mineral lands shall be selected or purchased under the provisions of this act.

"Sgc. 4. And he it further enacted that all the moneys derived from the sale of the lands aforesaid, by the states to which the lands are apportioned * * shall be invested * * and that the moneys so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished * * and the interest of which shall be inviolably appropriated by each state which may take and claim the benefit of this act, to the endowment, support and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

[Then follow certain conditions which the states must comply with to make the grant effective.]

field guns with equipments, and an annual allowance of ammunition. For the security of the government, the college authorities are required to keep the stores insured from fire, and to give bonds to the amount of twice their value, which is usually from \$3,000 to \$5,000, according to the number of equipments issued.

The detail of an officer and the issue of the stores are made without expense to the college, except the cost of freight upon shipping the stores to the college. The government pays the officer's salary, and when the arms become worn, through the regular wear and tear of the service, they are replaced upon proper application. The ammunition is provided each year without expense, save for freight.

It is expected, however, that the college will provide a suitable storehouse for the property, and a drill-hall for the use of the cadets; though many colleges having details at the present time are not provided with the latter.

The choice of the college to which a detail is made is usually a matter of political "influence." It is to be regretted that the details are not always decided by the fitness of the college for it. The authorities of many colleges do not take a proper interest in the military department, and the government does not then get a suitable return for its outlay. The detail of an officer to a college should always be preceded by an inspection of the college and its condition, and its general fitness for the detail, which should not be made unless the authorities are willing to properly uphold the military department, enforce military discipline and render the instruction effective. It is my belief that this cannot be done without requiring all male students to take military instruction during their entire course, and it can best be done by having the entire character of the college military. To have military instruction an elective, which the student may drop at any time, is destructive of discipline. It imparts entirely mistaken ideas of a military system; and, to be taught incorrectly is to be worse than ignorant.

Officers on duty at colleges are governed by the following rules, adopted Feb. 12, 1890, and prescribed by the president:

"I. DETAIL AND DUTIES OF OFFICERS.

As a rule, captains of companies, regimental staff officers, or officers who have served less than three years with their

regiments, or who have recently completed a tour of detached service, will not be eligible; and no details will be made that will leave a battery, troop or company without two officers for duty with it. Whenever practicable, preference for such detail will be given to officers who have been graduated from either the Artillery School, the Infantry and Cavalry School, or the Engineer School.

"The period of the detail will be three years [now four years]. The professor of military science and tactics shall reside at or near the institution to which assigned, and when in the performance of his military duties shall appear in proper uniform. Officers so detailed shall, in their relations to the institutions, observe the general usages and regulations therein established affecting the duties and obligations of other members of the faculty. For the benefit of the officer and the military service, he may perform other duties at the college in addition to those pertaining to military science and tactics, and may receive such compensation therefor as may be agreed upon.

II. ORGANIZATION AND DISCIPLINE.

- 1. All rules and orders relating to the organization and government of the military students, the appointment, promotion and change of officers, and all other orders affecting the military department, except those relating to routine duty, shall be made and promulgated by the professor of military science and tactics, after being approved by the president or other administrative officer of the institution.
- 2. It is the duty of the professor of military science and tactics to enforce proper military discipline at all times when students are under military instruction, and in cases of serious breaches of discipline, or misconduct, to report the same to the proper authorities of the institution, according to its established methods. Upon occasions of military ceremony, in the execution of drills, guard duty, and when students are receiving any other practical military instruction, he shall see that they appear in the uniform prescribed by the institution.

III. COURSE OF INSTRUCTION.

1. The course of instruction shall be both practical and theoretical, and shall be so arranged as to occupy at least one hour

per week for theoretical instruction, and at least two hours per week for practical instruction.

- 2. The practical course in infantry shall embrace small-arm target practice, and, as far as possible, all the movements prescribed by the drill regulations of the United States army applicable to a battalion. Instruction in artillery shall embrace, as far as practicable, such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvres, aiming drill, saber exercise and target practice. Instruction should also include the duty of sentinels, and, where practicable, castrametation. Such instruction shall be given by the professor of military science and tactics personally, or under his immediate supervision.
- 3. Theoretical instruction shall be by recitations and lectures personally conducted and given by the professor of military science and tactics, and shall include, as far as practicable, a systematic and progressive course in the following subjects: The drill regulations of the United States army, the preparation of the usual reports and returns pertaining to a company, the organization and administration of the United States army, and the elementary principles governing in the art of war.

IV. REPORTS.

He shall render a quarterly report to the Adjutant General of the Army of the whole number of undergraduate students in the institution capable of performing military duty, the number required by the institution to be enrolled as military students, the average attendance at drills, the number absent, the number and kind of drills, recitations and lectures, or other instruction had during the quarter, and the number of students reported for discipline. Copies of all reports and correspondence will be retained by the professor of military science and tactics and transferred by him to the officer who may succeed him, or forwarded to the Adjutant General's office should the detail expire. On the graduation of every class he shall report to the Adjutant General of the army the names of such students as have shown special aptitude for military service, and furnish a copy thereof to the Adjutant General of the state for his informa-The names of the three most distinguished students in military science and tactics at each college shall, when graduated,

be inserted on the United States Army Register and published in general orders.

V. INSPECTIONS.

The military department shall be subject to inspection under the authority of the President of the United States; such inspections to be made, when practicable, near the close of the college year. The inspecting officer shall, upon his arrival at the institution, report to the president or other administrative officer, in order to obtain from him the necessary facilities for the performance of his duty. A copy of the report of inspection will be furnished the president of the institution by the War Department."

Young men taking military instruction assume no obligation to the government in reference to future service or anything whatever. In some of the states, laws have been passed giving graduates of these military colleges certain advantages in regard to the state national guard. For instance, in the state of Pennsylvania graduates of colleges at which an army officer is detailed, who have served four years and who have held the rank of captain for at least six months and who are residents of the state will, upon proper application, made within one year after graduation, be appointed brevet second lieutenants in the National Guard of Pennsylvania. This law acts as an incentive to a good and faithful performance of duty, and it would be well if a similar or better law were in force in all the states.

In the college year ending 1893 there were over 15,000 college students under military instruction at the different colleges to which officers are detailed. Who can estimate the effect upon the country of the fraining and discipline which these young men have received?

[CONCLUDED NEXT MONTH.]

NATURE STUDIES.
REV. WM. M. THAYER, FRANKLIN, MASS.

What educators call "nature studies" receive more than their just share of attention. We do not believe that they are entitled to so much time and study as are accorded to them now in the curriculum of our public schools. They seem to have been taken up, in the first place, because certain great men and women—poets, authors and scholars—caught the inspiration for their life-work from their environment. They were born and reared where grand scenery awakened admiration and wonder, enthusing them with higher and nobler thoughts and aspirations than otherwise would have been possible. Because this was true of a few geniuses, it is, unfortunately, concluded that all young people may become similarly inspired by the study of Nature. In consequence, time that is indispensable for the fundamental branches, without which neither boy nor girl can be fitted for the practical duties of life, is devoted to "nature studies."

When Chief Justice Marshall was a young man, he made a journey through that part of Virginia in which Patrick Henry was born. Deeply impressed by the mountain scenery, he exclaimed, "What a grand sight! How soul-inspiring and thought-producing! No wonder Patrick Henry was an orator; no wonder he was eloquent; how could be have been otherwise, reared amidst such sublime scenes as these!" An old farmer, standing by, said, "Young man, those mountains have been there ever since Patrick Henry was born, and there has been no orator like him since."

The farmer was a philosopher. He saw that the whole population of that region, for several generations, had been "reared amidst such sublime scenes" without waxing eloquent at all, and, therefore, young Marshall's remark was pointless to him. If that wonderful scenery could grow orators, a crop of only one needed explanation. He believed that Henry was a born orator, and his environment might have helped to develop his gift; and that the reason no more orators appeared on the scene was because they were not born.

This is a very instructive fact. Those "sublime scenes" might have inspired Henry to nobler deeds, and they might not. It is quite certain that the exciting and stormy events of his youth, culminating in the struggle for American independence, brought him to the front as a patriot, statesman and orator, as the late civil war made General Grant out of the unknown leather-merchant of Galena. The call "to arms" aroused the genius that was in Grant. The "battle cry of freedom" fired the soul of Henry, and his eloquence gushed out.

Evidently Patrick Henry did not take much stock in the idea that "sublime scenes" made him what he was. For, he said to a young man, seeking his advice about the study of law, "Study men, not books." He was himself a student of human nature, and not of dame Nature. Herein lay his power as pleader and public speaker. He did not mean to say that books are of no account. His pleas and speeches are positive proof that he was a careful reader of history, biography, science and literature. At least, he never dreamed that mountain scenery inspired his eloquence. He must have known more about it than anyone else.

There is more theory than fact in the present view of the value of "nature studies." Here and there a poetic and aspiring soul is lifted into a grander career by the beautiful and sublime in Nature, while the great majority of dwellers amidst the same environment plod on, living in the common-place way! Genius is easily inspired to noble action; but the vast multitude of men do not possess genius. Great souls may receive a mighty impulse from a hint of Nature; but the rank and file of human souls are not great, and it is well they are not. The falling apple was both a revelation and inspiration to the genius of Sir Isaac Newton, but it meant nothing to the thousands who beheld its fall. He discovered the law of gravitation in it; all other people discovered nothing. Tempests had burst upon the world with lurid lightnings from the days of Adam down to Franklin, who, of all the population, in all the generations, saw that lightning and the electric fluid were identical. The eye of Franklin's genius was sharp and piercing, while the mass of people had no genius to be sharp.

"Woodman, Spare That Tree," is a fine poem; Morris never wrote a better one. He told the history of it as follows:

"Riding out of town a few days ago, in company with a friend, an old gentleman, he invited me to turn down a little romantic woodland pass not far from Bloomingdale. Your object?' I inquired. 'Merely to look once more at an old tree planted by my grandfather, long before I was born, under which I used to play when a boy, and where my sisters played with me. There I often listened to the good advice of my parents. Father, mother, sisters, all are gone; nothing but the old tree remains." And a paleness overspread his time countenance, while tears came to his eyes. After a moment's pause he added, 'Don't think me foolish. I don't know how it is: I never ride out but I turn down this lane to look at that old tree. I have a thousand recollections about it, and I always greet it as a familiar and well-remembered friend.' These words were scarcely uttered when the old gentleman cried out, 'There it is!' Near the tree stood a man with his coat off, sharpening an axe. 'You are not going to cut that tree down, surely?" "Yes, but I am. though,' said the woodman. 'What for?' inquired the old gentleman, with choking emotion. 'What for?' I like that. Well, I will tell you: I want that tree for firewood?' ... What is the tree worth to you for firewood?" . Why, when down, about ten dollars.' 'Suppose I should give you that sum,' said the old gentleman, 'would you let it stand?' 'Yes.' 'You are sure of that?' 'Positive.' 'Then give me a bond to that effect.' We went into the little cottage in which my companion was born, but which is now occupied by the woodman. I drew up the bond. It was signed, and the money paid over. As we left, the young girl, daughter of the woodman, assured us that while she lived the tree should not be cut down. These circumstances made a strong impression upon my mind, and furnished me with the materials for the song I send you."

That old gentleman was one of a thousand - a sort of domestic genius among men. While many men are drawn to the old homestead by precious memories, he is the only one among them, of whom I ever heard or read, paying ten dollars for the life of a tree. And only a genius, like Morris, could ever have been inspired by the scene to do something immortal.

It is not wise to formulate a system of culture for the many that is based on a class of facts pertaining only to the few. The "old education," that drilled pupils in the three R's, referring those who sought a higher culture to private institutions, was far more reasonable than that of the "new education," which requires the boy and girl, who must quit school with the high grammar grade, to pursue the same course of study as those who are going to college. Far, far better to furnish their minds thoroughly with that common-place knowledge for which they will find daily use on the farm, in the shop, and in every other pursuit for a livelihood. It is a bread-and-butter question with the masses; and this compels limited schooling and a busy life. Equip them well with that knowledge and discipline that will fit them to earn an honest living, intelligently and cheerfully, rather than give them a smattering of this, that and the other, that will be of no practical use at all to them.

It is not denied that there is a degree of good in "nature studies" for the class named; but it is so small in comparison with the equipment of thorough drill in the fundamental branches, that it is not entitled to consideration, especially when we regard the fact that their very limited school-days are scarcely sufficient for the mastery of the common branches. Professor Felix Adler said before the School of Applied Ethics at Plymouth last summer, "Concentration is salvation. Dissipation is destruction." Exactly, Concentrate the young mind upon the fundamental branches and thoroughly ground it therein; and then, if the pupil advances to the academy and college, he is altogether better qualified to do good work, and if he quits study at the high grammar grade, he goes out into the world better fitted for his life-work. Do not confuse him and distract his mind with a half-score of studies, when he may concentrate his attention upon the essential few to greater advantage.

ONE METHOD OF TEACHING PATRIOTISM.

MRS. H. E. MONROE, PHILADELPHIA, PA.

A few years ago, I went into my father's country congregation in western Pennsylvania, at the end of his summer vacation, and found the Sunday school, as it is apt to be in most churches about the first of September, somewhat diminished in numbers and with a waning interest in the lesson. My father belonged to the old conservative Lutheran church, and when I suggested that I would like to hold a Sunday school institute for ten evenings and take up the subject of Christ as revealed in the Old Testament, he rather demurred, and said that his people were not used to women occupying church places and very much feared it could not be arranged. After obtaining his consent, however, with the promise that I was to manage the church vestry as best I could, the matter was left.

On the following Sunday I persuaded him to announce a meeting of the vestry immediately after service, and I presented the subject to them. To my surprise, they accepted my services with thanks, and in the evening it was announced that a Sunday school institute would be held for the young people for the following ten evenings.

Monday evening proved rainy, but there were about one hundred and fifty people present. I used blackboards and maps, and conducted the exercises precisely as I would a teachers' institute under a line of study.

Every night, my class prepared the lesson for the following day, and the older people of the congregation took the side seats, and the church was full so that the tenth evening there was scarcely standing-room for the audience.

On the tenth evening, I handed to all members of my class slips of paper containing one hundred questions on Bible history, none of them conundrums and yet all of them involving some research and Bible knowledge, and announced that now we would by ballot elect ten young ladies versus ten young gentlemen, to answer the questions therein contained, in one week from that night.

The election was very spirited, the ladies selecting their best and the gentlemen putting forward their leading champions. The questions were then left in the hands of the competitors, and with the same questions scattered all through the audience, so that every one who chose could hunt out the answers and be prepared to judge whether the answers given were correct or not.

The object of this was to set every person to reading the Bible. It had the desired effect. Never in the history of the community had seven evenings of closer study been spent in that line by the families of the congregation. Just as soon as the work of the day was done, father and mother and children gathered about the table, and the answers to the questions were hunted out and the best answers possible agreed upon. The appointed evening at length came round, and the church was so crowded that it was with difficulty I made my way to the altar.

I then called the members of the vestry to act as judges. The windows were filled with people, and carriages and wagons were drawn under the windows, and people stood up, so that it was all the house could hold in every direction. Then the ten ladies and gentlemen took places in either aisle, after the manner of the old-fashioned spelling school, and the one hundred questions were answered. It is probable that if I had taken any one of those young people into a room by himself or herself, none of them would have failed to answer every question, but the excitement caused by the crowd present occasioned a few questions to be wrongly or indefinitely answered, and the ladies won by a single question.

The object aimed at, that of creating an interest in Bible study, was fully attained, the Sunday school built up, and an enthusiastic love of the Bible, which will probably last through life, was created in the minds of at least twenty young people.

Now it has occurred to me that the Constitution of the United States, taught in every country school, and in all schools where students are over twelve years of age, in something of the same way, would produce a similar beneficial effect.

In the first place, for schools that do not regularly teach the Constitution of the United States, give a half hour or an hour every Friday afternoon to the study of the Constitution, fully impressing, by patriotic incidents related by members of the school and by the teacher, the chief points under discussion.

At the end of two or three months, as the case may be, issue a leaflet containing one hundred questions pertaining to the Constitution of the United States. These are to be taken to the homes and the examination on them not to be given for at least eight weeks, although incidents are daily to be told or written by different members of the school, so as to keep up the interest.

I believe the good effect of this would be much as it was with my Bible class,—carrying the interest into the homes and having father and mother and older brothers and sisters help study out the answers—then hold a public competitive examination, giving a medal or book as may be deemed advisable. This method has been tried by a number of town and country schools in Pennsylvania and New Jersey, at my suggestion, and found to be a beautiful way of carrying into the homes an interest in the subject of the Constitution.

If it could then be carried farther and the successful champion of each school be brought to the county court house and there hold another competitive examination, including the champions of eight to ten counties, a public interest much more general than now exists would be created on the subject of the Constitution of the United States.

GREGORY'S SEVEN LAWS OF TEACHING.

JOHN M. RICHARDSON, DAINGERFIELD, TRYAS.

"Seven is a mystic number,
Well beloved of God and men;
On the seventh day God rested,
And ordained the Sabbath then."

If seven is not, in its very nature, a remarkable number, it certainly occupies a very notable place in history, in science and in religion. Witness the seven days of the week; the seven sages; the seven wonders of the world; the seven ages of man; the seven years' war; the seven days' war; the seven hills of Rome; the seven bodies in alchemy; the seven senses of man (animation and speech having been originally included in the number); the seven champions of Christendom; the seven sleepers; the seven sisters; the seven wise masters or teachers; seven years' leases; the seven churches of Asia; the seven golden candlesticks; the seven