

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.
- Additional comments:/
Commentaires supplémentaires:
- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Continuous pagination/
Pagination continue
- Includes index(es)/
Comprend un (des) index
- Title on header taken from:/
Le titre de l'en-tête provient:
- Title page of issue/
Page de titre de la livraison
- Caption of issue/
Titre de départ de la livraison
- Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

THE CANADA
EDUCATIONAL MONTHLY
AND SCHOOL MAGAZINE.

JUNE-JULY, 1896.

A PRACTICAL SUBJECT.

By PROF. J. F. McCURDY, PH.D., LL.D.

UNIVERSITY OF TORONTO

AMONG educationists and scholars generally the so-called "practical people" are often among the most unpractical of all men. Many startling anomalies in the educational systems of our time seem at least to confirm this assumption. Certain subjects of the very highest and most obvious educational value are excluded from the range of school studies apparently for no other reason than that they are not "practical" enough. Two subjects may be instanced—phonetics and descriptive astronomy. If the elements of phonetics were taught to the youth of English-speaking countries—and no science is more simple or more amenable to ready experiment—the vexed questions of modes of spelling and pronunciation would speedily settle themselves; reading and elocution would assume their rightful place in the daily programme; and the arbitrary tyranny of the dictionary would be overthrown. If our glorious northern heavens were mapped out and described to our school children—and nothing is more congenial to the youthful imagination and reflection—our cultured citizens would not go

through life with eyes closed to the majestic process of the suns, and with minds unenkindled by the greatest thoughts of God which science has ever revealed to men.

I may also illustrate my meaning by other sorts of broad examples. Take, for instance, the British nation as a whole. It is made up of eminently practical people, averse to theorizing, utilitarian in education, except in the provision that is made for the perpetuation of traditional studies and methods inherited from the university system of the Middle Ages. Observe the result. Sturdy British sense, commercial opportunity and enterprise, still keep Britain in the van of the nations. But its wisest statesmen and thinkers are concerned lest its lack of educational adaptedness and elasticity may seriously cripple it in the race for future supremacy. Mr. Goschen and Sir John Gorst tell the youth of the nation and their teachers that because of the more efficient training, in other words, the more practical education, enjoyed by the boys of Germany, the choice business positions even in England itself, are falling more and more into

the hands of young men of the latter nationality who have gone abroad to seek their fortunes.

Possibly a certain kind of parallel may be found nearer home. It is notorious that in the common schools of Ontario more stress is laid upon arithmetic than upon any other subject. Indeed, so much is it deferred to, that in the Toronto schools, at all events, the grading of the classes, though nominally determined by the order of the reading books, is virtually settled by proficiency in arithmetic. In some schools and forms the position of the pupils in class is determined not merely by an arithmetical standard, but actually by cleverness in the so-called time-tests alone. I am not just now criticizing the system, but only pointing out to what an extreme of specialization the arithmetical cult is carried. The results may be estimated by the admitted inefficiency in ordinary commercial arithmetic displayed by the great majority of applicants for positions in banks and other financial institutions. Here we have, perhaps, the most practical of all elementary educational subjects most assiduously cultivated, of course for practical ends, and yet failing to be utilized just where it is most in demand.

It sounds like paradox to suggest that the reason of the failure is that the subject is viewed, discussed, and taught in an unpractical fashion. Just because it is so practical its importance is wrongly emphasized. In the first place, it is drawn out of proportion in its relation to other studies; and, in the second place, it is treated as though familiarity with all its workable aspects and methods were a good thing for the pupil. It is thus made an end in itself, with the usual results of idolatry of forms and symbols. At least two evils are manifest. It is forgotten that while arithmetic has such very practical

uses, numbers, which are its material, are the most abstract of all things. When the pupil is made a calculating machine, as so often happens, he becomes in so far eminently unpractical. He is divorced from his natural intellectual environment, the region of human life, of history, of literature—in short, of concrete existence. Moreover, the best part of the working time of many pupils is taken up with the brain-racking process of trying to solve problems ingeniously contrived for the purpose of puzzling him as much as possible. This is supposed to be an eminently educative discipline, whereas, as a matter of fact, it is at best an elaborate device for killing time and dulling wit, except in the cases of the exceptional few who have a talent for solving that species of conundrum or rebus.

A little not very profound insight into the philosophy of numbers would convince our educationists of the fallacy and noxiousness of this whole arithmetical crusade against the innate needs of children, their mental well-being and peace of mind. It would soon become plain to them that these abstract numbers are in problems of practical utility merely employed as a species of counters or checks. To use them in this way and for this purpose is a wholesome and necessary business. But to take the average schoolboy beyond this region, and to train him, for example, to work out algebraic problems by arithmetical processes, is for the most part vanity and vexation of spirit. There is, to be sure, a benefit to be gained from dealing in a natural and simple fashion with numbers, when the mind does not become jaded and, so to speak, abraded, by being forced and dragged through a barren wilderness of figures. I refer to the strengthening of a "memory for numbers," one of the most useful of accomplishments. A habit of re-

membering dates should especially be encouraged, because the numbers so involved are not barren abstractions, but are associated with some living human interest, in the fortunes of contemporaries or of those who have made the world's history. But would it be believed that under this same educational system of ours, of which arithmetic is the chief corner-stone, the learning of dates in the history lessons is almost universally discouraged!

The historical explanation of the main phenomena above noticed seems to be that arithmetic has a prescriptive place in popular education, gained in a past age when there was little else to be taught; when the only culture supposed to be worth having was an acquaintance with classic authors, who, however, were only taught in the "grammar schools;" when domestic history was merely political or military; foreign history not worth learning as being the record of semi-barbarous peoples; and the world at large known to very few besides sailors, travellers, and commercial adventurers. Now that all this is changed, it must be manifest that educational subjects require a thorough readjustment; that in particular young people should be brought into contact with abstract matters just as much as is absolutely necessary for purposes of practical life and no more; that they should be made acquainted with the world in which they live in a large sympathetic way. When they are encouraged, or rather allowed, to develop in themselves a taste for the manifold intellectual treasures of the world, an interest in the achievements of invention and discovery, an enthusiasm for literature and a love of knowledge generally, there will be less time left to them for the mechanical processes of the brain, and exercises in mere mental gymnastics.

The results would not fail to justify the experiment, and approve the claims of a more rational and natural method of juvenile education. It would then be found that our children, instead of moving from point to point in empty space, unpeopled by real objects of interest and concern, would be carried onward along the path of actual life, growing continually in fitness for the duties and responsibilities of manhood and womanhood, of business and citizenship. When one considers how brief is the term of school life allotted to the average boy and girl, it becomes an issue of the highest importance whether this precious time should not be mainly occupied with the cultivation of the faculty of observation, of literary taste and judgment, of the imagination and human sympathy, of the practical reason, of the love of truth as truth is found in the spirit and life of man, rather than in the abstract relations of form and quantity. The writer would cheerfully acknowledge that the tendency of our educational methods and principles is in the direction of greater intellectual freedom and moral edification. But we are still encumbered with a few antiquated prejudices, and it is old errors that die the hardest.

It is man as religious, that is to rule the world. What changes of form religious thought may undergo, who can pretend to say? But that religion shall perish, none of us believes.

Any machinery of government which men have yet devised is too coarse and clumsy for so delicate a task as the inculcation and encouragement of faith.

Since you are always entering into some new life, . . . always hold the hand of God in grateful memory of past guidance and eager readiness for new—that is, in love and in faith.

THE CASE OF THE PUBLIC SCHOOLS.

I THE WITNESS OF THE TEACHER.

THE *Atlantic Monthly* recently circulated widely among superintendents and teachers of the public schools in every part of the country inquiries (1) as to the average number of pupils per teacher in the several grades of the public schools; (2) in what proportion the teachers have changed their profession during the last ten years; (3) in what proportion they are more than thirty-five years of age; (4) as to the freedom of teachers from political or other improper influences on their appointment or removal; (5) as to the salaries of teachers of the several grades, whether they have been increased within five or six years, whether they are regarded as sufficient, and whether higher salaries would attract to the profession men and women of greater ability and of more stable purpose; (6) as to the requirements for appointments, whether they are rigid and uniform, and whether a certificate is required from some normal or training school of higher grade; (7) as to the chances that teachers have for promotion from the lower grades, and whether it is the custom to fill the higher grades by promotion: whereto was added a request to give any further information in regard to the status of teachers which would naturally supplement these inquiries.

Accompanying this circular was the following letter:—

"The *Atlantic Monthly*, following its plan of paying especial attention to educational subjects, will take up for discussion the Status of the Teacher, and consider how the profession may be made a calling of greater dignity and of more suitable reward; for, clearly, teaching is not held in as high honour as it ought to

be. It is doubtful, indeed, if the public school system will reach its proper efficiency until in every community the teacher's status is as high as the status of any other profession. To lift the teacher into the highest esteem, two things are necessary:—

"(1.) To give efficient teachers security in their positions and freedom to do their best work.

"(2.) To pay them salaries large enough to make the profession attractive to the very ablest men and women, not as a makeshift, but as a life career.

"In discussing a subject of such importance, it is desirable to have as large a volume of facts at first-hand as possible. We therefore take the liberty to ask you to answer these questions concerning the teachers in the public schools in your community."

The replies, which have been both full and numerous, have been placed in my hand, together with a summary of their results, and are the basis of the following study. Their value was not expected to consist in accuracy, but rather in showing tendencies correctly. The statistical information that can be extracted from them is of less account than the fact that we have here fresh confessions and first-hand observations and experiences from men and women actually engaged in school work; those most competent to speak on these matters, but in the existing state of things least often heard from. There is every internal indication that the reports are absolutely frank and honest. They thus constitute a valuable protocol of data for points of view no less reliable than they are new, and which are, I think, certain to command the

attention of friends of education throughout the country. The investigation should prove as useful as it is opportune.

In all, 1,189 teachers and superintendents have answered these questions, and every State and Territory in the Union is represented except New Mexico and Oklahoma, and the replies are, on the whole, well distributed over the different parts of the Union, although they are less numerous from the Southern and the far Western States than from the middle Western and New England States.* In all sections the replies appear to be, with few exceptions, from the best teachers, and most of them are from men.

To begin with the first question, which asks the number of pupils per teacher: few returns specify grades, but, averaging these where they are given, and for each return and the returns for each State, we find that Maine reports fewest (35) and Montana most (58). Averaging States by sections, we find that the Middle and New England States have fewest pupils per teacher (41 each) and the far Western and Pacific States most (45). Rhode Island has most among the New England States (52). In the Middle States the extremes are Virginia and Delaware (39 each) and Pennsylvania (44). In the Southern States the extremes are Arkansas (51) and Florida (34). In the Western States the extremes are Kansas (50) and South Dakota (40); and in the far Western States, Montana (58) and Washington (34). Everywhere, of course, the number of pupils per teacher in city schools is greater than in country schools.

These numbers, despite occasional laws that permit even more, are far too large, it need not be said, for any teacher to do good work with. A crude young teacher is constrained, and embarrassed even, in the presence of so many pairs of eyes, and a large share of her energy goes to keep order. To watch the mischievous pupils during every recitation is a constant distraction from the subject in hand. The flitting of the attention from one pupil to another, even for a woman, the periphery of whose retina is more sensitive for the indirect field of vision than a man's, is a steady strain. Moreover, what knowledge can the average teacher of such a large number have of individual pupils? And how little can she do to bring out that individuality wherein lies the power of teaching, and the unfolding of which makes or mars the later career of the pupil! No wonder the complaint of machine methods in our schools is so often heard. Both attention and love were made to have an individual focus, while mass-education has limitations in exact proportion to the size of classes. Every step, therefore, toward reduction in numbers is a great gain.

Passing to the second question, as to the proportion of teachers who have changed their profession during the last ten years, it would appear that 30 per cent. of those in New England have left the profession within a decade. In the Middle States this average is 40 per cent., in the Southern States it is 50 per cent., in all the Western States it is 65 per cent., and in the far Western and Pacific States it is 60 per cent. While many women leave school to marry, the fact that Massachusetts, where the female teachers outnumber the male a little more than ten to one, shows the lowest average of change, and that Alabama, where 62 per cent. are males, reports 42 per cent. as

* Since these letters were placed in Dr. Hall's hands between three and four hundred more replies have been received, but they do not seriously affect the result of his analysis. — EDITOR.

having changed, indicates that where male teachers predominate they are responsible for most of the changes.

It is well known that many young men teach as a makeshift for a few years, with no thought of making teaching a life-work. They do so to pay college debts or get money to study further, or to acquire the means for entering one of the other professions. Other statistics have shown that nearly one-third of the teachers in many sections of the country change their vocation every year. The fact that so small a fraction of the teachers in the public schools have had any normal or professional training shows, also, how few regard it as a life-work. Of the \$95,000,000 paid for salaries of teachers for 15,000,000 children of this country, a large proportion is thus spent upon untrained and unskilled teachers who have little interest in making their work professional. No business could ever succeed or was ever conducted on such principles, and when we reflect that the "prentice hand" is here tried upon human flesh, blood, and souls the waste in all these respects is appalling. Those who claim that teaching can be learned only by experience are in part right, but even the school of experience is wretchedly inadequate in this country. Moreover, on the whole, it is the best teachers who leave. Here we are far behind other countries. It is only when a teacher has mastered the details of government and method that good work can be done.

When we come to the answers to the question, What proportion of teachers are over thirty-five years of age? the average, estimate of the Middle States, 27 per cent., is the highest, and the average of the Western States, 17 per cent., is the lowest; while the far Western States average 18 per cent., and New England and the South 21 per cent. It would be

an interesting question to ask how many of this large per cent. of teachers more than thirty-five years of age have remained in the vocation because they succeeded as teachers, and how many are there because they could do no better in other callings. The fact that financial depression increases the average age of teachers as well as the number of male teachers, while good times decrease both, is significant. The social position of teachers is higher in the Western than in the Middle States, so their social position cannot account for these extremes. We have been told that the young make the best teachers for children; but if so, why not reinstate the monitorial system of pupil teachers? Again, we are sometimes told that older teachers are unprogressive; but this is not true of the best, who are also often needed as a conservative element against rash innovations. Nothing is more demanded in our teaching force at present (which, as has recently been pointed out, is nine times as large as our standing army) than leadership of maturity and ability. Those who have shaped the thinking and the reading of our young teachers have been, on the whole, incompetent for this highest and most responsible function in our national life. Until very recent years we had few teachers who had personally inspected foreign systems, could read other languages than English, and were acquainted with all grades of education from kindergarten to university work. In these respects, happily, the prospects are now brightening.

Very striking are the answers to the questions touching teachers' tenure of their positions and security from improper influences. In New England, percentages reporting improper influence are as follows by States: Maine 33 per cent., New Hampshire 9 per cent., Vermont 8 per cent., Massa-

chusetts 17 per cent., Rhode Island none, and Connecticut 40 per cent. This evil is potent, however, for appointments rather than for removals. These bad influences are prominent in the following order: church, politics, personal favour, and whims of citizens and committees. The master of a grammar school writes strongly against the policy of placing schools in the hands of division committees. Their chairman, he says, is virtually the committee, and almost always lives in the district. The rules forbid the employment of non-resident teachers at anything but the minimum salary. He favours a wider range of choice, and thinks appointments should be made by a general committee advised by supervisor and principal. The system of annual elections is often commented on adversely.

In the Middle States, 9 per cent. in New Jersey, 33 per cent. in New York, 40 per cent. in Delaware, and 50 per cent. in Pennsylvania report improper influences. Some sad revelations appear in these returns. One teacher tells of an applicant who was "asked, not as to his qualifications, but of the number of voters in his family." Another writes that the friends of a schoolbook publishing house would "drive out any teacher who would not favour their books." The civil service regulations in New York have bettered the conditions; and a teacher who has had experience in Ohio, Pennsylvania, New Jersey, and New York says that, on the whole, New York teachers are far above the average in intelligence and professional spirit.

In some of the Southern States very evil influences are reported. In small towns in Alabama teachers are said to be both removed and appointed by favour; positions in some places are rarely held more than two terms, and some teachers take three

different schools during the year. Lessons are short. "In some counties the teachers are said to pay each member of the school board from \$2.50 to \$5 to keep their positions," and 6 per cent. report improper influence, as do 30 per cent. in Georgia, 70 per cent. in Kentucky, 25 per cent. in Maryland, 40 per cent. in Mississippi, 50 per cent. in South Carolina and Tennessee, 45 per cent. in Texas, 20 per cent. in Virginia, and 60 per cent. in West Virginia. In Kentucky, where teachers are commonly elected annually, "when boards change politically, sweeping changes of teachers often follow." In Mississippi teachers are said rarely to remain in positions more than one year. In Texas one teacher reports: "If your school board are Democratic, the teachers are Democratic; if Baptists, they must be Baptists." In West Virginia it is said that requirements are neither rigid nor uniform. "Politics is the bane of the school system; then comes personal favoritism. Colored teachers are special sufferers from politics."

For the far Western States the report of improper influence is as follows: California 60 per cent., Colorado 60 per cent., North Dakota 100 per cent. (only four reports), Oregon 40 per cent., Utah 60 per cent., Washington 60 per cent. In California the state law gives the teacher life tenure of office, but this law is said to be "always evaded by politicians." Good state laws are overcome by corrupt school boards. Teachers are said to be "pliant, timid, and servile," and political "pulls" are potent. One report says that teachers' boarding-places affect their security; another calls them "cranks" and "cowards." Requirements are said to be "wholly unpedagogical, absurd, and criminally careless." In Colorado it is the same old story of

the political "pull." Large cities seem freer from political influence than small towns. Local teachers are preferred to outsiders, which is a bad sign. In Idaho the condition looks bad, and personal favoritism is said to keep teachers in office. In Oregon, where tenure is uncertain and teachers are often elected annually, the main difficulty seems to be in security of tenure. In Utah one report says that positions in some places are solely dependent on political influence. In Washington a city superintendent says: "We have practically no protection from political demagogues; this unfortunate condition is appalling in our Western country." He says further that tenure of position is affected by "personal friends and their influence, and by the lack of them." "We must trade with the merchants, bank with the bankers, take treatment of the doctors, consult the lawyers, connive with the politicians, and even go to school elections and work for the successful candidate."

For the Western States, the report of improper influences by percentages is as follows: Illinois 44 per cent., Indiana 33 per cent., Iowa 40 per cent., Kansas 80 per cent., Michigan 50 per cent., Minnesota 33 per cent., Mississippi 40 per cent., Missouri 50 per cent., Nebraska 65 per cent., Nevada 100 per cent., Ohio 40 per cent., Wisconsin 40 per cent. In Illinois many complain of church influence as a growing evil, and of local preference, always a sign of politics. Tenure is said to be affected by the evil doings of book publishers and agents. Chicago, however, is "a striking instance of a large city that has succeeded in putting its public schools on a fairly sound basis. The main difficulty is getting rid of poor teachers, although the rank and file seem more cultivated than the supervisors." In Iowa standards are low,

home teachers are preferred, and few teachers remain more than a year in a place. In Michigan tenure of office is becoming more secure and legislation better, and smaller towns seem more free from political influence than large cities. It is reported from one of the large central Western cities that a member of the school board could not read or write. In Nebraska church relations are said to affect tenure more than politics. In Minnesota the religious "pull" is reported more potent than the political, and preference for local teachers appears. In Ohio it is said that, owing to constant change in the teaching force, the teacher is "not recognized as a factor in social or political life. He is deprived of the privilege of free speech on all subjects, but especially on the one subject that concerns him most, namely, reforms in teaching. The people who should be the leaders in educational thought do not call their souls their own. They catch their breath in quick starts when they see a power over them wielding the club of dismissal." From Wisconsin it is reported, as one reason why teachers are not highly esteemed, that they "are often too much interested in commercial transactions of publishing houses." Another report says that the greatest drawback to teaching in the West is the impossibility of becoming an integral part of the community in which one lives. "Unless the teacher is a flatterer and keeps quiet on all political questions, he loses his position." "In some communities the teachers are hired by the day or week."

From such answers it is impossible to resist the conclusion that civil service reform is greatly needed for teachers. As long as merit does not win there is little encouragement for teachers to make any kind of special preparation, or for communities to support normal and training schools,

A teacher, however well fitted for the work, is hampered if there is any anxiety concerning his tenure of position, and any system in which merit does not lead to both permanence and promotion is bad, and certain to grow worse. Tenure by personal favor is even more corrupting than tenure by political or religious influences. Teachers ought to be, both by ability and by position, moral forces in the community, and their opinion ought to be best and final concerning textbooks and school supplies; and yet, touching the latter, not only teachers, but superintendents evade their responsibilities. For myself, I wish to say that, after many years of acquaintance with school work in this country, I consider the present modes of introducing textbooks and other supplies as among the most degrading influences in the work of American public schools. Under existing conditions, vast as is the difference between good and poor books, the former would have exceeding small chance of success if not pushed by unworthy and now very expensive methods which are paid for by enhanced prices for books.

The answers relating to salaries show a great preponderance of opinion that these are insufficient. Sometimes exception is made in the case of poor teachers or of certain grades, but in most cases the opinion and even the language is emphatic that an increase in salaries would help the service. A Maine report says: "The great trouble is that our best teachers leave for better salaries almost as soon as they have learned their work." A Vermont teacher fears that any increase would bring a reaction against the schools on the ground of over-taxation, and so cripple them. Another adds that "higher salaries must go hand in hand with higher professional requirements; otherwise an increase of salaries would attract a

large number of persons of inferior qualifications."

In Massachusetts only 9 per cent. consider higher salaries inadvisable. One woman touchingly thinks a real lover of the work will be uninfluenced by such considerations. A Boston principal says: "Most masters take a pride in their profession, and I know a few instances of their refusing higher salaries in different businesses." An academy teacher says: "Higher salaries will make it possible to get men where women now hold, and to secure better men as superintendents and principals of the high school. Women are better than men, except in these two places." One man says: "Salaries ought not to be uniform. Every teacher ought to be paid what he is worth. This is possible only when the pay-roll is not made public. This is done in a few cities; Hartford, Connecticut, for example."

In all parts of the country the vote is overwhelmingly in favor of more pay. This opinion is most nearly unanimous in the Southern States, where salaries are lowest, but it is also strong where salaries are highest. A Pennsylvania teacher says: "There is small pay and there is little gratitude for public school teachers. In an adjoining town one of the occupants of the poorhouse is a man who had devoted a long life to teaching in the public schools of that county. Now old and infirm, he finds himself, through no fault of his, an object of charity." Poor pay is both a cause and a result of lack of appreciation. In many localities salaries have been reduced. In most places and in most grades they are reported as stationary, while Wisconsin and New Jersey are the only States in which a general increase is reported. On the whole, I am impressed with the opinion of a Massachusetts teacher, who says: "Better schoolhouses, better equip-

ments, better superintendents, and more general freedom and responsibility have done more than an increase of salary to improve the schools."

Mr. Hewes* has shown that the average salary of the American teacher, counting fifty-two weeks to the year, is \$5.67 per week for such male teachers as remain in the ranks, and \$4.67 for female teachers. "As a partial index of the disposition of our population to our public school system" this is not reassuring. The highest average salary, according to the Report of the Commissioner of Education, is \$1,181 per year in Massachusetts, and the lowest \$213 per year in North Carolina. "The average pay of teachers in our public schools furnishes them with the sum of \$5 a week for all their expenses." In 1885 salaries were higher than they are now, but in 1889 the average salaries of American teachers were lower, so that, on the whole, we are just now improving. The \$95,000,000 spent in this country for teachers in the public schools every year must

* In a series of papers on the Public Schools which appeared recently in Harper's Weekly.

be divided among 368,000 teachers, more than twice as many as in any other country of the world.

Although these figures take no account of the fact that many rural teachers are engaged in other vocations a large part of the year, they are appalling enough. And the reason for the displacement of male by female teachers, until in many parts of the country the former seem doomed to extinction, is apparent. At present, the American school system as a whole owes its high quality in no small measure to the noble character, enthusiasm, and devotion of women who make teaching not only a means of livelihood, but in addition thereto a mission service of love for their work and for children. To increase this love is to increase the best part of their services, and to diminish it is to degrade it to mere drudgery and routine. As the culture of women gradually rises, it becomes more and more evident how unjust have been the discriminations against them in this field, where in higher and higher grades of school work their services are becoming no less valuable than men's.

(To be continued.)

HOW TO READ.

ARNOLD HAULTAIN.

THE question, What to read? I do not intend to ask or to attempt to answer here. If we are wise, perhaps we shall follow our own inclinations. And in so doing we shall be following no less an authority than Dr. Samuel Johnson. "A man ought to read," said Johnson, "just as inclination leads him; for what he reads as a task will do him

little good." But if we are to look to inclination as a safe guide, inclination should previously be educated up to the highest point attainable by each of us by a thorough course of classical authors; only then can we follow our inclinations unfettered, because only then can we rely upon the purity of our taste in literature.

Emerson's rules for reading should

be known by all: "First, never read any book that is not a year old. Second, never any but famed books. Third, never any but what you like. Here is a great man taking it for granted that what we like is sure to be not only famous but old,—rather an unwarrantable assumption in these days when most people like only the newest and the most infamous. Emerson very evidently lets such people alone. But his rules are sensible indeed. They will at all events rescue us from that most pernicious vice of trying to read too much—a deadly habit, the ultimate outcome of which is an inability really to read anything at all. It is hardly necessary to insist upon the absolute necessity of reading some books, or at least some portions of some books, absolutely accurately and minutely, weighing carefully every word and syllable and letter. Neither need we discuss the importance of reading all round a good book, as it were, of gaining some estimate of the character and temper of its author, of understanding something of the age in which he lived and of his relation to that age.

After all is said and done, the one and only secret of successful reading lies contained in one simple sentence, *Make what you read your own.* Not until what we read has become a part of our mental equipment, until it has been literally assimilated by the mind, made an integral and indivisible portion of our sum of knowledge and wisdom, is what we read of any practicable avail. Too much system is like too elaborate fishing-tackle; it is all very well for the experienced angler, but it seems useless and an affectation in the amateur. First prove your skill and keenness, then elaborate your means at will. However, for a certain sort and a certain amount of system there is this much to be said—namely, that it is an ex-

cellent antidote to that insinuating and enervating habit of wholly desultory reading. "Wholly," because, as Lord Iddesleigh has shown us, there is a desultory reading which is very profitable and not one whit pernicious.

Then again, that assertion of Bacon remains forever true, "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested." Of books to be chewed and digested there should be at least three readings: the first to get a general bird's-eye view of the author's field of thought and the method in which he traverses it; the second to survey carefully all the ground he covers, examining all the nooks and crannies omitted in the first survey; the third to fix in the memory, with the help of transcriptions and tabulated statements if necessary, all his details, and to criticise the conclusions at which he arrives. To master a book, perhaps the best possible way is to write an essay in refutation of it. One may be bound few things will escape us then. The next best way may perhaps be to edit and annotate it for students. The worst way, I should think, would be to review it for a newspaper.

Eschew commentators till you have first read your text; or, better still, be your own commentator. When we have read "Hamlet," we can take up Furness. Different readings and emendations may reveal the skill of the author; but first admire the painting, then look for the marks of the brush. The thoughtful book is not for the thoughtless mind. Is a Thomas Carlyle to wrestle five years at lonely Fraigenputtock with the problems of life and being that "Sartor Resartus" may be skimmed in five hours? 'Tis not every one can chew, nor every one that can digest, the tough tit-bits of Teufelsdröckh. Books there are

that require a liberal education to know and love, and which to know and love are themselves, like Stella, a liberal education.

However, two or three common-sensible rules as to how to read may help us. And first, I would say, never read a book without pencil in hand, if only to jot down the pages to be re-read. Coleridge, as Charles Lamb tells us, annotated nearly every book that came into his hands, his annotations "in *matter* oftentimes, and almost in *quantity* not unfrequently, vieing with the originals." Second, the careful transcription of striking, beautiful, or important passages is a tremendous aid to the memory. A manuscript volume of such passages, well indexed, will become in time one of the most valuable books in one's library. Archbishop Whately recommends "writing an analysis, table of contents, index, or notes." One man I know keeps a separate little notebook for each work he reads. Third, do not read merely for reading's sake, and thus be classified with those persons whom Mr. Balfour calls "unfortunate," and who, he says, "apparently read a book principally with the object of getting to the end of it." As a corollary to this, too, it is well

to remember that there are multitudes of books unworthy of careful and entire perusal which yet contain much important matter. For these take Mr. Balfour's advice and learn the "accomplishments of skipping and skimming." Fourth, suit the book to the mood of the mind.

Fifth, remember there are some books that cannot be read too much, others that cannot be read too little. But, above all, one of the best habits to form in order to read more successfully and with profit is so to read as that, while the mind is grasping the meaning of the proposition then before the eyes, it is at the same time calling up, rapidly and diligently, as many as possible of the propositions, cognate, similar, or contradictory, which lie embedded in the memory, themselves the results of past research and reading. And I do not think we shall go very far wrong in saying that he will be the most intelligent reader who is able to recall the greatest number of such underlying strata. Lastly, let us ever keep in mind Bacon's most admirable advice: "Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider."—*Blackwood's*.

LANDMARKS IN THE HISTORY OF EDUCATION.

A TRAINING TEACHER.

TIME would fail to follow each step in the rise of Christian influence in education; and much as we might delight to stray in fields so little known and so neglected, our survey must be most cursory, and consist in a glance at a few names standing as beacon lights along the way.

Among the devoted mothers and teachers were Monica, Anthusa, and Nonna; and their children and pupils Chrysostom, Gregory, and Augustine. Whoever turns aside from the page of modern research, to the biographies of these worthy mothers and their noble sons, will find a rich reward.

No romance reads so fascinatingly

as the life of Anthusa and her son, who, through his mother's love and devotion, became the musical-voiced doctor, bishop, and saint (Chrysostom), flexible in genius, consummate in oratory, and eloquent in rebuking sin. He has been compared to Fenelon, Melancthon, and Taylor, of modern times; but to those who truly appreciate his power, he stands unique.

Gentle Monica was the mother of Augustine, in whose interests her efforts were untiring. Nine long years she wept and prayed for the misguided son, who, at last, became the purest, wisest, and holiest of men; mild and firm, prudent and fearless, he was at once student and ruler, philosopher and mystic, a friend of man and a lover of God. He was born in Africa, the son of a pagan father, but early left to the tender care, magical influence, and sweet teaching of a Christian mother. Not less interesting are the names of Clement, Origen, Pantænus, and Tertullian; all memorials of the early church. Of their mothers even the pagans exclaimed, "What manner of women are these Christians!"

What the cause of education owes to these names, bigotry, or indifference to sources, has never allowed to become prominent in evidence; and the rushing of the modern torrent of progress thrusts them aside. The handmaid of the church, for such the school was most truly, in the dark and deplorable early centuries, found her asylum in the monastery and the convent. The monasteries were as truly schools as Christian retreats. Had not Christian learning been permitted to hide its defenceless head within the dark recesses of the cloister, the teachings that we to-day hold most sacred would be without a witness.

By the side of the school at Alexandria, which admitted Pagan, Jew,

and Christian, arose the catechetical school of Pantænus with a course of study embracing mathematics, logic, rhetoric, physics, metaphysics, ethics, and theology. Its most eminent master was Origen, exiled in the third century, only to open a similar school elsewhere, and to educate a St. Basil.

In this benighted period learning had little encouragement. Books were unknown and manuscript was multiplied only by the slow process of copying. The language was Latin, unintelligible to the masses, and many of the Christian priests were grossly ignorant.

The conception of education was narrow. The culture of the whole man was neglected, the sole purpose being the salvation of the soul. Education took on a form of "other worldliness," which proved to be death to true progress, the free growth of reason, and which separated the life of this world from life in another. Boys were taught to read, merely that they might study the Bible and understand the service; to write that they might multiply copies of the sacred books; to understand music that they might give effect to the Ambrosian chants. A little arithmetic was given that they might be able to calculate the feasts, fasts, and other church festivals, yet the rules which in that age imposed the duty of teaching anything to the boys from the age of seven to fourteen, and of transcribing manuscripts, placed the modern world under inestimable obligations.

In the beginning of the sixth century, while almost the whole of Europe was desolated by war, Ireland, then peaceful, offered to the lovers of culture and piety a welcome asylum. Its monasteries sent forth the founders and bearers of learning to England, Scotland, France, and Germany.

In the two succeeding centuries, largely through Irish and English influence, female education received its first decided impulse. Convents were increased in England and on the continent. Even where the convent and the monastery in true educational lines made little progress, it was as a light in a dark place. Studious, orderly, industrious life, in the midst of a people semi-barbarous, was an education in itself.

As we near the eighth century, culture quickens in the revival of learning in Spain. The Moslem influence springs into prominence and spreads itself into Africa, creeps along the whole northern coast, and finds its way across the Mediterranean to Spain, taking a permanent hold upon (V)Andalusia. Here it flourished until Ferdinand and Isabella, among their other colossal movements, drove it from its stronghold.

Moslem Spain established for itself so great a reputation that ambitious youth flocked to its schools from all the known world. The elements of education reached every household, as an elementary school was attached to every mosque; and a native of Andalusia was known from a Castilian by his greater learning. While a Spaniard of Castile could not read, write, or sign his name, schools founded by Moslem Caliphs were producing poets, artists, and sculptors.

Cordova, under the Moors, became the nurse of the sciences, the cradle of the arts, the Athens of the west. Libraries were established, one of which contained 400,000 volumes.

In contrast to the low value put upon Greek learning by Christian schools, the Moslem early learned its value, and began translating Greek classics into Arabic. The followers of Mohammed were not creative, but knew the value of Greek learning;

and by borrowing mathematics, medicine, and philosophy, established a line of flourishing schools from Bagdad to Cordova, where was the most flourishing of their seventeen universities.

And now we turn reluctantly from the dark night of the past into the dawn of the coming day. The colossal form of Charles the Great rises in outline against the horizon of the dim future, and we stand at the beginning of the first renaissance. As Emperor of the West and of Rome, he early saw that without a more thorough education of the priesthood, reform could never become permanent. At his court in Aix, he held what might be called an educational convention of the ninth century. Alcuin of York was his chief counsellor, and became the first Superintendent of Public Instruction.

Under Charlemagne and by Alcuin was established the Palace Schools for members of the court and their children, but open to all who desired instruction. It was openly understood that all who distinguished themselves as scholars would receive promotion in the state, however humble their origin. Charlemagne held that right doing should be accompanied by right speaking; that the unlettered tongue of the pious church father should not offer prayer in uncouth language. He wished the soldiers of the Church to be not only religious in heart but learned in discourse; pure in heart and eloquent in speech; of such life as to edify others while beholding; of such speech as to instruct others while listening.

In 794, Charles, through his superintendent, issued his most important order—the institution of schools in burghs and villages for *gratuitous elementary instruction*. Music in schools was promoted, and the Gregorian chants introduced.

Previous to this time only those had sought education who desired to prepare themselves for ecclesiastical life.

By way of summary, then, we may note that up to 1100 education was confined principally to schools in the monasteries, cathedrals, and palaces. Instruction began about the age of seven. The alphabet, written on tables or leaves, was learned by heart, then syllables and words. The first reading book was the Latin Psalter, and this was read again and again until it could be said verbatim, *without any knowledge of its meaning*. Failure on the part of the choir boys to recite or sing accurately was punished.

Reading was followed by writing, of which there were two stages. The boys were taught to write with a style on wax-covered tablets, imitating copies set by masters. Next they learned to write with pen and ink on parchment, a rare accomplishment when books were multiplied by hand-copying. Charlemagne himself learned to write on parchment after he came to the throne.

Singing of the church service and enough arithmetic to calculate church days and festivals formed an important feature of the educational work. Latin declensions and conjugations were learned, and in the very best schools, the *internes*, or those living in the school, spoke Latin in common conversation. Latin conversation books, having reference to the common affairs of everyday life, after (or before) the pattern of the "Parley vous" books of the Franco-American tourist, were learned by heart.

The higher instruction aimed at giving a knowledge of the seven liberal arts—the *trivium* and the *quadrium* of the Roman-Hellenic schools. Compendiums, dry and brief, were committed to memory.

Grammar was regarded as the basis of all other studies. To this

ancient weakness we may refer the still to be heard echo, "noun, common, third person, neuter gender," worshipped to-day in certain enlightened centres, and insisted upon by intelligent people in connection with so grammarless a language as English.

What follows? The little eleven-year-old of the nineteenth century stands and grinds out, "To be is an infinitive, *indicative mode*, present tense," etc., without the slightest idea of the incongruity, neither knowing nor feeling the force of *infinite* and *indicate*.

Why? Because his ancestor did, at a time when only an *inflected* language was known.

What is the harm? A child permitted, trained, to do thought work of one kind automatically will form the habit of doing all possible thought work automatically.

As well might we resurrect that much-admired painting exhibited at the court of Charlemagne. It represented the seven liberal arts, with grammar as queen, sitting under the tree of knowledge, with a crown on her head, a knife in her right hand, with which to cut out errors, and a thong in her left hand, with which to scourge the erring.—*Primary Education*.

TRAVELING.—Here is the latest story of the Turkish Custom House. A richly-bound copy of "Herodotus" was found in the trunk of a Greek traveller. "Who is the author of this book?" said an official. "Herodotus." "What subjects does he deal with?" "Kings and international conflicts." "Does he allude to Eastern affairs?" "He treats of nothing else." Whereupon the book was incontinently confiscated.—*The School Guardian*.

A GRAND SERMON.

BY EDWARD EVERETT HALE.

"Let us make man."—Genesis i: 26.

IN any board of education I should be told that the great object of education is to carry out this purpose of the good God. In any adequate treatise on government I should be told the same thing. And certainly if I turned to the directors of the various churches, to the people who say they are the church, and that other people must obey and follow them, they would say that this is what churches are for—to make men. And probably they would add what this noble legend of Genesis adds: "We want to make men in God's image, after His likeness."

Is it not, then, rather pathetic, that, with all their endeavors, the people whose business it is to make men turn out so few specimens of successful manufacture?

Why are there so few men? And when one changes the sex, and for the work of women makes the same inquiry, the women come out no better. You find a plenty of people fussing over detail, who, as somebody says, cannot tell a small thing from a great one. But you ask eagerly and nobody tells you, where are the women? Where is our steady supply, not exceptional, not a miracle, which shall give "a perfect woman nobly planned?" It is worth while to ask what our five hundred colleges propose to themselves. What do they say is their best achievement? At their annual commencements, from Labrador to San Diego, they say, "We present to you these youths who have acquired skill in Greek or Latin or mathematics, or in the study of nature, or in the study of history." Possibly they will say, "We present

to you this or that hero who has successfully led his crew in a boat race or in a ball match." But there will not be one of them from one end of the country to another which will say, "We present to you this youth who can control his appetites and can govern his mind." That is to say, there is not one of them which will venture to say on commencement day, "We present to you a man." All that my own college says in presenting the bachelor's degree is this:

"We present to you these youths whom we know to be fit for speaking in public as often as anybody shall call them to that duty."

This is the best that has been achieved in a course of study covering four years and prepared for in many more.

A man is not a finely-formed or well-trained physical machine. Physical strength and health come from manhood, but they are not manhood. A man is not a well-adjusted, well-trained—shall I say well-oiled?—intellectual machine. Reasoning, imagination, memory are good tools of manhood, but no one of these, nor all of them, can make a man.

A man is a child of God. No language is fine enough to make the full statement, but this is the best that has been tried. He is gone from God and he goes back to God. "Spark from the divine fire," the poets are fond of saying. "Light from the divine light," that is one of the Bible expressions. "Dewdrop from the divine ocean," that is an image hinted at in the Bible. Man is a living scul. Perhaps I shall not do better than to take this phrase. This living soul has the business of controlling this body, making it strong and quick, active and

pure. This living soul has also the business of controlling this mind, making that to be strong and quick, active and pure. And it is only as this living soul asserts itself, will not be swayed by the body or by the mind—it is only thus that you have a man; only thus that you have a woman.

Those who have to do with machinery know instances upon instances where, in familiar language, the machine "runs away." The locomotive runs so fast on a down grade that for a moment it escapes from the hand of the driver. The steam which is called the power is not the power; for it is crowded back on itself by the impetuous force which the downward grade has given. Precisely in the same way one sees intellectual action, where the vigor of a man's habit of reasoning or where the distinctness of his memory gets the control of his conscience, gets the control of his will, and conscience and will are ridden over by the mere force of the intellectual machine. And in every day, in every hour of the day, you see some poor wretch who has let a bodily appetite so overmaster him that, as Paul says, he does the thing that he does not want to do. He does what he knows he ought not to do.

The body has become too strong for the soul, as on that downward grade the weight of the engine was too much for the steam. With perfect correctness we then call him a "poor devil." All these are instances where in the man the divine power has been lost. It is fair to say that the man has ceased to be a man, in the true interpretation of manhood. For the man appears only where the soul masters the mind and the body. The man appears where the true will achieves its real purpose. The man appears where the purpose of God is carried out. As Paul says, in that noblest epigram of the New Testa-

ment, to will and to do God's good pleasure, here is the sign of the present God.

One hears a great deal in our time of better education of hand and eye. All right! But I wish we could always manage, in this mere sharpening the edge of the tool—for it is nothing more—to give boy or girl a deeper sense of who it is who is to use the tool; how great, how unmeasured is the power of the boy or the girl! If we could lead along a boy or a girl from day to day in this sense of possible mastery, if we could really make them believe that in the temptations which are likely to befall them they can really tread on serpents and scorpions, and that nothing shall by any means hurt them, we should not so much mind if the edge of the tool were not of the very sharpest.

When Daniel Boone made his forest home he owed more to the strength of the blow by which he drove his ax, he owed more to the precision with which the ax alighted in its preordained place, than he owed to the sharpness of the tool. And these boys and girls of ours are to succeed or are to fail according as it is the infinite power of the child of God which undertakes the duties of manhood or womanhood.

This is the true lesson when a great man dies, or a great woman. Little people ask in a little way, "How could she do what she did, or he?" The great teachers answer, "She did it. Because she was a child of God; she could do what she set out to do." Sons of God do not stop or turn backward from the plough. And any boy or girl who will try the great experiment has this victory open. "I control my body; it shall do what I command. I control my mind; it shall think things which are pure, which are lovely, which are of good report; it shall not think things which are base or mean and in any shape wrong.

The boy who makes that determination of a son of God, and determines, puts an end to all other notion, in that moment becomes a man. The girl who thus determines becomes a

woman. Such are accomplishing what the good God set himself to accomplish when he said, "Let us make man in our image."—*Providence Journal.*

HIGH SCHOOL DISCIPLINE.

CHAS. L. BIEDENBACH.

THE word discipline in connection with high school is apt to provoke a feeling of hostility. One naturally associates with the word a set of arbitrary rules backed by severe penalties rigidly enforced. The picture of a training school or a military barracks presents itself, and the mind revolts against dreaded barriers to free development of individual characteristics. The feeling is, however, without warrant. The enforcement of good discipline is necessary in every school, and chiefly in the high school, not only because it secures the proper conditions for work, but because in itself it is of transcendent value.

No person in charge of a school-room is a good teacher without being a good ruler. This means securing from the pupil implicit confidence and an earnest desire to accept instruction. The less the effort required to obtain this the better the teacher. That charm of manner produced by a loving, sincere heart and an unselfish devotion to the best interests of the pupil is a chain that holds willing captive many a naturally restive soul. If all teachers possessed this power the question of discipline would never need discussion. But the general lack of it, and the necessity for securing good order nevertheless, demand some rules and their proper enforcement.

Order must be maintained to facilitate study and recitation, to save time and prevent waste of energy. Even

if every pupil were anxious to learn, more progress can be made where the hours for study, recitation and play are systematically arranged and carefully observed. Everything that tends to detract from the business of teaching and from the acquirement of knowledge must be eliminated, then the double work can go on smoothly.

But the securing of this important result fades into insignificance when compared with the higher and the truer object of school discipline. The pupil's moral training is its object, and nowhere can more lasting impressions be made than in the high school. Here boys and girls are in the vital period of life, the transition from childhood to manhood and womanhood. The individual has progressed from a mere curiosity-ruled creature, through the acquisition of memory and imagination and the growth of intellect and will, to the dignity bestowed by the power to form independent judgments.

It is now that his character, determined by his ability to conceive right judgments and to render voluntary obedience, is being definitely shaped. Is this not forgotten when Latin, Greek, English, history, mathematics and sciences are poured into him as though they were the indispensable things of life, and he is governed in his conduct merely so as to render easy this saturation? Their importance is not diminished when

we make these pursuits, instead of mere ends, instruments to broaden minds and develop souls.

A high school should not be judged by the intellectual prodigies it turns out, but by the high-mindedness of the young men and women that step forth from its portals. Does a community get better citizens, better fathers and mothers, because of its high school? Are the graduates becoming men to whom a vote is a sacred thing, and women whose ideal it is not to be playthings of society but the equals of men as wielders of power and sharers of burdens?

All this depends upon the discipline of the school—the moral atmosphere that permeates it. In the academic air must be an excess of the divine ether that inspires a voluntary allegiance to higher things.

No conduct is good that is assumed for special occasions. So rules must not only secure order in school, but should induce the habit of good conduct. A strong sense of duty is to be cultivated. The practice of faithfulness in little things, the soul foundation of fidelity in larger, must become an integral part of the personal organism.

No one rule or one teacher can bring this. The trend of the whole school must be in that direction. A knowledge of what is right is imparted by its constant presentation and wise elucidation. The young mind has become skeptical, no longer believes merely because told, and the hardest lesson to learn is to love right for its own sake. This difficulty frequently leads to the pernicious practice of holding up worldly success as a sufficient reward for right conduct and intellectual acquirement. Obtaining temporary good by false pretences is always a dangerous expedient.

The child acts from desire, therefore the heart must be reached.

Purify that by persuasion and the desires springing into life therein will have no taint. It always avails to make this appeal, for within every being exists some of the essence of the Most High. When once the mainspring has been reached the chief work is done, for the will to do right can be nourished by abundant opportunity to act, and its practice will ultimately result in habit. The teacher must be a stimulator and use force only when other means fail. This background authority must exist, and should be a ready and sure resort in time of need; but the real power will always be in his persuasion, good temper, patience, justice and decision.

It is the habit of good conduct that makes good citizens. Our present citizenship may be good, yet it is woefully poor when compared with the ideal that we are justified in forming from observance of its best examples. What exists in the few can be approximated in the mass, and the high school especially must be its birthplace.

The greatest fault of our American people is lack of reverence for properly constituted authority. With our universal system of popular education it ought to be the least. If the tendency of general education is to make a people feel its individual importance so unduly that each is continually striving to prevent any other man being higher than himself, instead of laboring to secure his own elevation by self-improvement, it fosters a spirit of anarchy and had better be suppressed. Little indeed would be the danger of this, did teachers take to heart Abraham Lincoln's philosophy, and towards its accomplishment direct every energy:

"Let reverence of law be breathed by every mother to the lisping babe that prattles in her lap; let it be taught in the schools, seminaries and colleges; let it be written in primers,

spelling-books and almanacs ; let it be preached from pulpits and proclaimed in legislative halls, and enforced in courts of justice ; in short, let it become the religion of the nations."

These are not the words of an idealist, and the attempt of the teacher to carry out his part would not be vain. What high responsibility they put upon him, and how immeasurably they ennoble a calling whose routine and petty detail often beget despondency ! This purpose encourages ever more faithful work at

the humbler tasks, but demands that they be made primarily the means for securing the nobler ends. Teach history, mathematics, sciences and languages, but make them help inspire that true liberty which consists in willing obedience to authority, and opens the way to the larger life of devotion to duty.

Experience joined with common sense,

To mortals is a providence.

—*Green.*

THE SCANDINAVIANS IN AMERICAN LIFE.

KENDRIC CHARLES BABCOCK

OF the 11,500,000 direct living descendants of the Vikings, 2,500,000, more than one-fifth, reside in the United States,—born of Scandinavian parents, either in Europe or in America. Few provinces of Denmark, Sweden, or Norway contain so many Scandinavians as the 375,000 who make up one-fourth of the population of Minnesota. Wisconsin and Illinois have each 200,000. Iowa, Nebraska, and the two Dakotas have the larger part of the remainder. It is a suggestive fact that so large a proportion of the Scandinavians are settled in the distinctively agricultural States. The most reliable figures obtainable indicate that, of the Scandinavians, one out of four engages in agriculture ; of the Germans, one out of seven ; of the Irish, only one out of twelve. The immigrants have come from all grades of society and from all parts of the three countries.

The term "Scandinavian" is convenient, but at best only broadly generic. We all know that there is no Scandinavian language, no Scandinavian nation, but we do not so

well realize that Sweden and Denmark have different languages, governments, and traditions. The typical Swede is aristocratic, assertive, fond of dignities ; he is polite, vivacious, bound to have a good time, without any far look into the future. Yet he is persistent, and capable of great energy and endurance. The typical Norwegian is, above all, democratic. He is simple, severe, intense, often radical and visionary. There lies an unknown quantity of passion in him, a capacity for high, even turbulent endeavor, but rarely the qualities of a great leader. The Dane is the Southerner of the Scandinavians, though still a conservative ; gay, but not to excess. He is preëminently a small farmer or a trader, ready and easy-going, not given to great risks, but quick to see a bargain, and shrewd in making it. Judged by American standards, these northern folk are slow, often immoderately slow. All three peoples, down to the stolidest laborer, mountaineer, or fisherman, are industrious and frugal.

The Scandinavian countries belong to a group of five or six European states which are set down, in ordinary statistical works, as practically without illiteracy; that is, with less than one per cent. of persons unable to read and write. Austro-Hungary shows 30 per cent of illiteracy, Italy 41, Russia nearly 80. In the matter of religion, all Scandinavians are most uncompromising Protestants. The distrust of the Irish, which sometimes takes active form, is at bottom religious, and not racial. Few of them come here without some political knowledge and experience. Freedom, republican institutions, constitutional government, and elections are no novelties. There have been none of the excesses characteristic of the use of a new-found liberty.

Down to about 1878 the great majority came from the country parishes, where the dearest ambition was to own land, the more the better. No other class of immigrants, and few Americans, have been so ready to undergo the hardship, privation, and isolation of the frontier for the sake of a far-distant competence. It is simply because the Scandinavian puts a higher value upon land-owning than any other immigrant, and has generally preferred to settle upon cheap wild land instead of purchasing at a higher price land already cultivated, or settling down in town, that millions of dollars have been so rapidly added to the valuation of the Northwestern States, like Minnesota and Iowa. Organized emigration has been quite unknown among them. They have come as individuals, as families, or as voluntary companies, and they have settled in the same fashion. The proletariat is not largely recruited from them. Secret societies and intrigues are not their specialties. The anarchist does not look to them for allies or supplies.

The political influence of the

Scandinavians has been second to the economic. The Norwegian in particular seems to have a *penchant* for politics. An ingrained antipathy to slavery was undoubtedly the most powerful impulse which before the war carried the Scandinavians into the Republican party. The example of the earlier immigrants, the anti-slavery tradition, and the prestige of the party after the war predisposed the new-comers in favor of the Republicans. It was a perfectly natural choice, and indicates nothing more than a conservative mind. They have filled various state offices in Wisconsin and Minnesota since 1869, when a Swede was first elected secretary of state for Minnesota. In 1892, and again in 1894, a Norwegian was elected governor of Minnesota, and that State is at present represented in the United States Senate by a Norwegian. In general, the allegiance to party has been stronger than any race feeling. Toward the close of the decade 1880-90 the allegiance of the Scandinavians to the Republican party was gradually shaken. The original anti-slavery impulse had completely died out; the agrarian discontent affected those who were farmers, as it did Americans of that class, causing them to look to political forces to relieve them; the increased percentage of immigrants who went to the towns furnished material for labor agitators. Finally, the tariff reform sentiment had gained a great hold upon them. Altogether, the division of the Scandinavians, politically, is going on more and more along the same lines as among the Americans. The Populist party has gained the most in the readjustment of party affiliations. A fair index of the loosening of party ties among them is found in the changed politics of their press. All told, they have about 130 newspapers. In 1885, probably three-fourths of those

who had any political bias were Republican. At present less than one-half of them can be so classed, the remainder being chiefly independent or democratic. A few are Prohibitionist, while others are Populist. The change of politics has not usually been due to a transfer of ownership.

With rare exceptions, the Scandinavians have not attempted to maintain separate church schools for elementary instruction. Where other than public schools are opened, it is in the summer vacation, and for the purpose of teaching the church catechism and the mother tongue. The maintenance of these summer schools is by no means general. The influence of the younger people is often against it, for they look upon it as an un-American custom, an attempt to perpetuate a language and distinction which are destined to disappear among them. The statistics of intemperance and illegitimacy, which are some times so alarming in parts

of the Scandinavian countries, do not appear to find a parallel among the Scandinavians in America. But all such statistics are unsatisfactory, and frequently untrustworthy. Generalization is, therefore, unsafe. Of the pauper and criminal classes the Scandinavians have a smaller proportion than any other alien element except the British. The Danes, Norwegians and Swedes are particularly free from other than traditional ties binding them to the mother countries. No dramatic outburst of national sentiment on the other side rekindle the old enthusiasms here. As Swedes, Norwegians, and Danes they fast disappear; merging, not into Scandinavians, but into Americans. As Americans, they will be builders, not destroyers; safe, not brilliant. Best of all, their greatest service will be as a mighty steady influence, reinforcing those high qualities which we sometimes call Puritan, sometimes American.—*Atlantic Monthly.*

HEART AND BRAIN.

BY N. O. McANDREW.

ONE of the chief reasons why we are weak in professional skill and knowledge is because we fail to realize the difference between special and general knowledge. We try to persuade ourselves that travel or the theatre or literature, or rest in the country, or some other beneficial thing will best fit us for good work. We fail to realize that these are no more than any cultivated person would want, irrespective of his profession. A teacher is more than a man of culture. He is a person with a decided love for youth, and with a special intelligence to guide that love.

A shipbuilder might be a member of the Royal Geographical Society, and thus know a great deal about a ship and about the sea; but you want more than that in the man that sails your vessel; you want an expert navigator. For a teacher of your children, you want a well cultivated man, of course, but you want him truly and purely to love your children and to have especial skill in teaching them.

Another reason why teachers do not perfect their professional skill is because they do not intend to make teaching a profession. They drift in

and would like to be in something else. At every possible opportunity they banish their business from their minds. They wince when a new acquaintance asks them their employment. In summer they desire to pose as persons of elegant leisure. They are school men not because they want to be, but because they happen to be. I don't know any cure for this complaint except death or another calling. If the man does not love his work and cannot bring himself to love it he is hopeless; he mars more than he makes.

The commonest reason of all why teachers do not grow more skilful, is because they do not feel like any more intellectual labor. Appearances often indicate that this may be a valid excuse. The typical teacher looks tired, he is "busy and bothered," his nervous force seems almost exhausted. It is often said that no other calling exhausts the worker so quickly. The inevitable recurrence of classes, whether one feels like meeting them or not; the necessity of strict attention; the drain made by the maintenance of enthusiasm, require a great deal of vitality. A merchant may go to an evening party and if not feeling wide awake the next day may defer certain tasks to a more opportune time. Not so the teacher. As regularly as the clock strikes, will appear the score of uneasy pupils, often indifferent, sometimes covertly or openly rebellious; always independent intelligences requiring mastery by the teacher's will. This is exhausting; this seems to sap the vitality so effectually that by three o'clock the teacher is ready to drop to the floor in a limp condition. No ardent desire for study is possible under such conditions. One might in the weariness of the moment feel justified in saying that an overworked profession like this could not undertake to do another thing.

Could we call to the stand representatives of certain other professions we might have much the same story. A lawyer must be ready for his case at the day and hour appointed, and he must be keyed to the pitch where his best powers of shrewdness, persuasion, and self-possession are involved. This costs nervous force. A lawyer has as hard a position as a teacher. A clergyman's Sunday services and week-night meetings come with unfailling regularity. He cannot escape them. A church full of independent beings whose minds he must guide, costs the minister a drain of nervous force. Visitations of the sick, funerals, weddings, etc., always something more to be done, make the pastor's lot fully as hard as the schoolmaster's. So is it with an editor, so is it with a broker, so is it with a physician. Success costs a precious sum of blood and nerve and brain.

The answer to this objection is in the one word *systematize*. Every professional man is forced into system. System is nothing but planning. Planning is nothing but making the calm thought of leisure do service in the bustle of action. System is a device for crystallizing the best way to do a thing with a formula, before one has forgotten the way. System is an invention to prevent thinking out or discovering the same good thing more than once. System is the operation of pushing into the back of the brain operations consisting largely of repetition, and leaving the front of the brain free for higher thought. Intellectual work yields to crowding and improves by it. Lessons should be prepared watch in hand. Records should be posted regularly and quickly.

Above all, when a thing can be done at once it should never be set aside for something more congenial. *Do it now* is the motto that explains many a man's noted capacity for work. Purchase filing devices, take

memoranda in a book instead of on loose paper, and in every way try to see to it that repeated and detail work is done by your mind acting as a machine, and you will find yourself fresher for study than ever before. You have the most abundant time of all the professions except, perhaps, some of the ministry. The most of a teacher's working time he is able to adjust when he pleases and where he pleases. The average amount of fixed service for teachers is about four and a half hours a day for 105 days out of the 365. All the rest of the time he may manage as he wishes, selecting his working hours and places so as to save himself from interruption. A great part of the breakdown of teachers comes from their own unintelligent lack of self-management. We do not inform ourselves as to our duties, we never know what constitutes a full day's work, or a full week's work. We have no power of deciding on what is an immediate, and what a more remote requirement. We are in a profession requiring system, and either we are all system or help-

lessly erratic. Business men laugh at us. Bankers know us by the helplessness of our manner at the cashier's window; and public-spirited citizens address our conventions with a beneficent air of condescension, or of fulsome eulogy, so that we have come to regard ourselves as a devoted band that have renounced the pleasures of this world for a life of sacrifice. This seems to me a very third-rate position to occupy. Instead of all this pity for what we endure, it strikes me we should be in a better place if we should merit praise for what we do. This state of affairs will come about, I venture to predict, when we learn that we must love our calling so well as to keep ourselves constantly alive to perfecting ourselves in it. It is time for us to find out what the brightest minds have contributed to the basic science of our art; time to stop putting an interrogation point at the end of every topic we discuss at teachers' meetings; time to stop whining; time to read, and to study, and to grow.—*School Journal.*

THE SCOPE AND IMPORTANCE OF SCIENTIFIC FORESTRY.

THE question is often asked us what the word forestry, which appears now so frequently in American periodicals and newspapers, signifies in its technical acceptance. Forestry is the art of maintaining and perpetuating forests. It is successful in proportion as the forest yields the largest annual income in perpetuity. Forestry is not the planting of trees in parks or in the streets of cities. A man who sets a wind-break on the Western prairies is not a forester, although it has become the fashion in this country to call him so, just as the

man who lays out the flower-beds in one of our cities bears the official title of city forester. A knowledge of trees does not make a man a forester any more than a knowledge of grasses makes a man a good wheat farmer. A landscape-gardener may know trees perfectly, from his point of view, but his point of view is not that of the forester, the one planting for beauty, the other for profit of a more tangible character.

Forestry as a branch of scientific agriculture is less than three centuries old, although in Japan silviculture in

a restricted sense has been practised for more than a thousand years. Its importance, however, to the welfare of the community is considered so great by the most enlightend nations that men of first-rate ability have found reward in bringing this art in a comparatively short time to its present standing of almost an exact science. In this country we have wasted in less than a century enough forest to have supplied for all time a considerable part of the world with lumber, just as we have robbed through ignorance much of our best arable land of its fertility. When we come to realize that forestry is just as important a part of the economy of the nation as wheat-growing is, and understand what forestry really means, we shall certainly attempt to take advantage of the experience of other countries and adopt those general principles of forest management which they have found successful. To give some idea of the importance of this science to the people at large we now quote some passages from an address delivered by Dr. Franz Baur, in November last, on the occasion of his inauguration as rector of the Ludwig-Maximilian University in Munich. This address was a discussion of the peculiar place held by the forest in natural life, or, as Dr. Baur expressed it, "in the housekeeping of a nation." In the course of it he showed that forest preservation has not only a strictly economical, but also a social-political and ethical side. Said he:

"At the time of the despotic rule of Napoleon I, near the beginning of this century, Germany lay economically exhausted, and through the pressure of necessity the axe was used more vigorously against German forests than in normal times. It was then that E. M. Arndt, who loved his fatherland above all else, exclaimed, 'Now, in many lands, the axe which is laid against the tree is laid against

the people itself.' Evidently, in using these words, he thought less of a decrease in the revenues from the forests than of a lasting injury to the character of the German people through persistent forest destruction. And, in a similar spirit, W. von Riehl wrote these significant words: 'Hew down the forests and you will ruin our historic burgher society. By destroying the contrast between field and forest you will take from the German people its principle of life. Man does not live by bread alone. Even if we should need wood no more, we should need the woods. Even if we should no longer require the dried products of the forest to warm our bodies, we should still require the living forest to warm our souls.' The truth of these words grows ever clearer with the rapid development of our industrial life. Already in our great factory towns there live millions of people who exhaust themselves during the week in crowded, and often unwholesome workrooms, and on Sundays and holidays seek indispensable recuperation for mind and body in the fresh green forest."

This, according to Dr. Baur, is one peculiarity of the forest among the economical treasures of a nation—the fact that it has a spiritual, and ethical, as well as a purely economical, importance. And from this he deduces the truth that the management of public forests should not be regarded in a narrowly business-like way, as a mere matter of present capital and present interest. The forests of a nation should be looked upon as a great national trust. They should be so controlled that, while the present generation is enabled to draw from them as large a revenue as possible, at least as large and varied a revenue should be secured to future generations. Of the United States he said:

"Even in the primeval forests of North America, once believed to be

inexhaustible, irreparable damage has already been wrought. Eager for quick profits, the great lumber syndicates of that continent still continue the work of destruction; yet, even there, the necessity for some thought for the future has been recognized, and millions of acres have been set apart as forest reservations—that is, even in this comparatively new country, it has come to be a recognized fact, as it is in the Old World, that if the wounds inflicted on the forest through lack of forethought are to be healed, the cure must be worked by the state rather than by rich private landholders.”

Dr. Baur adds, that in addition to lumber, fuel, and other staple products, the forests produce vast quantities of berries, fruits, flowers, mushrooms, mosses, basket-material, and materials for decoration, the value of which cannot be accurately computed, although it certainly amounts to millions of marks annually, and hundreds of poor families in Germany, who would otherwise be destitute, depend upon these products for a livelihood. No government, says Dr. Baur, in conclusion, can administer a forest as it may administer a factory, where it writes over the door, “No admittance except upon business.” To do this would be to destroy the value of the forests as a possession of the people. And in this country one needs to add, the public at large as well as the government must be taught to realize that, while the forests should be utilized by all they should be injured by none, for they are the property, not of this generation only, but of generations yet to be born.

But a practical example is always more effective than any amount of preaching, and therefore we have already taken occasion to commend the experiment now in progress in Biltmore, the estate of George W. Vanderbilt, in North Carolina, as one

which must prove of undoubted value to the future of this country. The Biltmore Forest proper embraces some 5,000 acres of woodland, and the primary object of the management here is to improve the conditions of a forest lying on ridges and slopes which have been grazed and fired. A large part of it, when the operations began, was in as wretched and unpromising a condition as neglect and bad management could make it. The attempt to make it pay has therefore been made subordinate to the idea of improvement; that is, the scheme of work was devised in the first place for increasing the value and prosperity of the forest itself, and, therefore, in many cases the operations may not return more than the expenditure involved, and in some instances the returns may even fall short of that amount. Nevertheless, the expectation is that the work will be profitable, and if this is accomplished its value as an object-lesson will be greatly enhanced.

Two years ago Gifford Pinchot, the forester in charge, gave an account of his treatment of this forest, and the results of the first year's work. We understand that since that time he has encountered no unforeseen discouragements, and his faith in the outcome is strengthened. Perhaps the most important result gained so far has been the demonstration that the expense of protecting the young growth in woodland operations is not as serious as Americans generally suppose. It makes a great difference where a tract of woodland has been cut over whether a desolation or a thrifty forest of young trees is left behind; and Mr. Pinchot estimates that he can secure this vigorous young forest at an expense of not more than two or three per cent. of the total cost of removing the old timber. It seems to be entirely a question of training the woodchoppers, and, if this is true, the fact ought to be more widely known.

Pisgah Forest, a second part of the general experiment, is nearly contiguous to the Biltmore Forest, and comprises about 92,000 acres, or nearly 150 square miles of land, the greater proportion of which now bears virgin timber. In a general way it may be stated that here, where there is already a stand of matured timber, the economic side of forest management will be illustrated on a large scale. Extensive operations in lumbering are being carried on, and it is expected to prove on a commercial scale that lumbering will pay under systematic forest management, while at the same time the forest will steadily increase in value. A third feature of Biltmore is the arboretum, which is expected to contain a collection of the trees and shrubs hardy in Biltmore, gathered from all over the world. Such a collection, even if it is not arranged or managed in the most rigidly scientific way, will be of great importance to all planters who can here see individuals and groups of trees and shrubs which are available for use in the north-eastern

United States. The usefulness of the arboretum will be greatly aided by the Forest Acres, a tract of some 300 acres of land on which something like 100 of the most valuable forest species which are hardy at Biltmore will be planted in forest form, so as to furnish information about the silvicultural character and needs, and, in the more important instances, it will show their quality in mixture with other trees. The arboretum as a whole will cover some 800 acres, and the collection proper will be distributed along both sides of a road 12 miles in length.

Taken altogether, this work at Biltmore is an unprecedented attempt, in this country at least, to gather information which will be of use in forestry and illustrate its practical operation. There is no other place in the United States at present where practical forest management can be studied, and we are glad to know that Dr. Schenck, the resident forester, is already collecting around him a small body of American forest students.—*Garden and Forest, New York.*

NOTES FOR TEACHERS.

STORY-TELLING BY TEACHERS AND PARENTS.—How does story-telling help the teacher? It broadens the information and necessitates the old being made new, by review. It makes the reading more systematic and the imaginary pictures more vivid and real, because the work is done with a definite object in view. It helps to keep out of ruts. Discipline is made easy by bringing pupils and teacher in closer relation to each other. The work in language, history, science, reading and literature is made stronger, more interesting, and more satisfactory by helpful stories, well told.

Of what benefit to pupils is story-telling? It gives information, creates a desire for good reading, cultivates the imagination, reasoning, and memory. It gives respect for the teacher, confidence in his ability, and added interest in all lines of work.

What are the essentials of good stories? They must be interesting, instructive, related to the daily work, and those which cultivate a taste for the best literature. (First year pupils are as much, or more, interested in Snow Bound and Hiawatha as in fairy tales.) Give stories relating to character, morals, history, biography, description and travels. The field from

which to choose is unlimited. It includes both prose and poetry; but each teacher must be sure to select the things which appeal to him personally, because he can make those real and to no others can he do justice. If the breath of life has been breathed into a story before it is told, it means something to the pupils and is of real value; but if given as a lifeless fact it makes no impression on the mind and is soon forgotten. If the battle of Gettysburg is described—be in Gettysburg, see Gettysburg, locate the troops, see the waving wheat fields, the color of the sky, the distant mountain, know the generals, hear the roar of the cannons, and feel the rifle shots whizz past your ear. To mean anything, the battle is now, not years ago. "If all teachers understood the power which lies in the ability to tell a good story skilfully they would not be slow in taking steps toward the cultivation of the art."

How may teachers become good story-tellers?

By thorough preparation of material, by using a logical plan of work, by practice, and by intelligent criticism. The following plan has helped many teachers to become quite proficient in the art and given them conscious strength:

PLAN FOR THE STORY OF THE RIDE OF PAUL REVERE.

First Step.—Collect the material. This includes the poem, a description of the country through which he passed, facts including time, cause of the ride, object of the ride, result of the ride, the kind of people warned, their homes, dress, customs, and employment. A description of the early life of Paul Revere. Pictures and sand.

Second Step.—Study the material and make a logical and definite plan for taking up the points. Consider their dependence upon each other and their relation to the story. Place

drawings upon the blackboard to illustrate interesting points.

Third Step.—With plan in hand, to be consulted as often as necessary, tell the story *aloud* to yourself. Tell it over and over until it is clear in every part and the mental pictures are as vivid as real ones. They cannot be clear or beautiful to pupils until they are to the teacher.

Fourth Step.—Tell the story to some person, asking the same questions you expect to ask the pupils. Each time the story is told try to improve some particular point. In this way it can be made almost perfect and the thorough preparation of one story makes the work with all others simple.

Fifth Step.—Tell the story to the pupils. The teacher leads telling much of the story; but by reasoning, imagination, and previous knowledge, the pupils help at every possible point. The more skilful the teacher becomes, the more talking is done by the children.

Sixth Step.—Read the poem to the pupils.

Seventh Step.—Children use the sand to illustrate ideas gained.

Eighth Step.—Children draw pictures to illustrate ideas gained. Oral work.

Ninth Step.—Written reproductions.

Tenth Step.—Commit the poem to memory.—*M. Adelaide Holton in the School Journal, New York.*

EXAMINATION.—An examination of the school as a whole ought not to take place very often. In a great many schools I think it would be quite sufficient if it took place triennially. A school will not get very bad in three years, or even in five years, but I certainly do not think that for first-grade schools, at any rate, it is necessary to have an examination of every school every year. The less frequent we make these examinations the bet-

ter—in this respect, that an examination is very expensive. If any one will consider what an efficient system of annual examinations for all the schools in Great Britain would cost, and consider, on the other hand, what good educational work—actual teaching work—might be done by spending the same amount of money on more teachers and more apparatus, I think they will be disposed to agree that it is desirable to be as economical as can be in the matter of examinations, provided, of course, we do not pass that point which is necessary for proper efficiency. — *Mrs. Bryant, D.Sc.*

THE BIBLE.—“Heaven and earth shall pass away, but My words shall not pass away.” As they have lived and wrought, so they will live and work. From the teacher’s chair and from the pastor’s pulpit: in the humblest hymn that ever mounted to the ear of God from beneath a cottage roof, and in the rich melodious choir of the noblest cathedral, “their sound is gone out into all lands and their words unto the end of the earth.” Nor here alone, but in a thousand silent and unsuspected forms will they unweariedly prosecute their holy office. Who doubts that times after number, particular portions of Scripture find their way to the human soul as if embassies from on high, each with its own commission of comfort, of guidance, or of warning? What crisis, what trouble, what perplexity of life, has failed, or can fail, to draw from this inexhaustible treasure-house its proper supply? What profession, what position is not daily and hourly enriched by these words, which repetitions never weaken, which carry with them now, as in the days of their first utterance, the freshness of youth and immortality? When the solitary student opens all his heart to drink them in, they will reward his toil. And in forms yet

more hidden and withdrawn, in the retirement of the chamber, in the stillness of the night season, upon the bed of sickness, and in the face of death, the Bible will be there, its several words how often winged with their several and special messages, to uplift and uphold, to invigorate and stir. Nay, more, perhaps, than this; amid the crowds of court, or in the forum, or in the street, or the market-place, when every thought of every soul seems to bent on the excitements of ambition, or of business, or of pleasure, there, too, even there, “the still small voice” of the Bible will be heard, and the soul, aided by some blessed word, may find wings like a dove, may flee away and be at rest.—*W. E. Gladstone.*

At the last Edinburgh graduation, Professor Prothero made an excellent speech on the character and value of a liberal education. He pointed out that professional education generally ceased to be liberal in proportion as it became practical. “The special instruction which fitted a student for the Church, the Bar, Medicine, and Education, in so far as it was limited or specialized in its aim—in so far as it conduced to success and distinction in a certain walk of life—was not liberal. He did not say that professional education was better or worse than liberal, but it was not the same.” The distinction is often lost sight of in this exceptionally practical age. If it were not for the rapid development of our Universities, side by side with the exclusively technical and scientific institutions, we might well despond over the future of liberal education and the decay of the humanities. Not that the scientific and the technical are of necessity divorced from liberal culture, for, as Mr. Prothero says, the mind that has habitually fed upon what is worthiest in science and literature acquires a combined firmness and sensitiveness,

a grasp and subtlety, a decision and a delicacy of touch, which are the mental equivalents of vigorous bodily health. "The furniture of the cultivated mind was not facts, not what we called learning, but rather the ideas which were the deposit of facts well pondered; its peculiar characteristic was that mental courtesy and polish which sprang from intimacy

with the great works of the intellect in all time. This was the ripest fruit of a liberal education; a University was the garden where it ought most easily to grow." The humanity born of facts may be riper and more wholesome than the humanity born of imagination; but the first kind is not born at all until the facts have crystallized into ideas.

PUBLIC OPINION.

OCCUPATION.—What is an "occupation"? We had thought that we could answer this question without reference to a dictionary, but we now find that not even with a dictionary could we explain the term in such a way as to satisfy the Department. An admirable circular recently issued to Her Majesty's Inspectors tells us that an occupation ought to be educative and likely to stimulate independent effort and inventiveness; that it should admit of being dealt with in a progressive course and be attractive to children; that it should not involve the use of needlessly expensive materials, and be capable of being practised in an ordinary school-room without risk of harm; that it must be so simple as not to require an undue amount of individual attention; and that it should avoid a long series of preparatory exercises apart from finished results. The manual occupations satisfying these conditions are modelling in clay or paper, cutting out in paper or other material, drawing and colouring designs (some original), and brush-drawing from the object and from recent impressions.
—*The School Guardian.*

WHAT TRAINING WILL DO.—Do not let us have exaggerated expectations as to what training will do, or as to what diplomas or certificates of

competency will do. After all, an examination cannot test the whole of a person's qualification. Training cannot give the whole of the attributes that you want. You can only communicate what is communicable, and you can only examine what is examinable, and the best and highest qualities of a good teacher who consecrates his life to his work, and who feels that it is one of the noblest works in the world, are just those qualities which no examination can test and no certificate can verify. We want in a teacher something more than knowledge and technical qualification. We want in him a real love for his work; an insight into child-nature; a faith in the boundless possibilities that there are for good even in the most uninteresting scholar; the power also to recognize that good, and to work upon it. Every teacher ought to feel bound to add something to the store of knowledge and experience by which our educational system can be expanded and improved. And mere technical training, however good, can never be substituted for personal enthusiasm and strong interest in the work itself.—*J. G. Fitch.*

How little do they see what is, who
frame
Their hasty judgment upon that which
seems.

—*Southey.*

GEOGRAPHY.

WHY BIRDS GO TO THE ARCTIC REGIONS:—The number of birds which go to the Arctic regions to breed is "vast beyond conception." They go not by thousands, but by millions, to rear their young on the tundra. The cause which attracts them is because nowhere in the world does Nature provide, at the same time and in the same place, "such a lavish prodigality of food." That the barren swamp of the tundra should yield a food supply so great as to tempt birds to make journeys of thousands of miles to rear their young in a land of plenty only to be found beyond the Arctic Circle seems incredible. The vegetation largely consists of cranberry, cloudberry, and crowberry bushes. Forced by the perpetual sunshine of the Arctic summer, these bear enormous crops of fruit. But the crop is not ripe until the middle and end of the Arctic summer, and if the fruit-eating birds had to wait until it was ripe they would starve, for they arrive on the very day of the melting of the snow. But each year the snow descends on this immense crop of ripe fruit before the birds have time to gather it. It is then preserved beneath the snow, perfectly fresh and pure, and the melting of the snow discloses the bushes with the unconsumed last year's crop hanging on them, or lying, ready to be eaten, on the ground. The frozen meal stretches across the breadth of Asia. It never decays, and is accessible the moment the snow melts. Ages have taught the birds that they have only to fly to the Arctic Circle to find such a store of "crystallized fruits" as will last them till the bushes are once more forced into bearing by the perpetual sunlight. The same heats which free the fruits bring into being the most prolific in-

sect life in the world; the mosquito swarms on the tundra. No European can live there without a veil after the snow melts, the gun barrels are black with them, and the cloud often obscures the sight. Thus the insect-eating birds have only to open their mouths to fill them with mosquitoes, and the presence of swarms of tender little warblers, cliffs, pipits, and wag-tails in this Arctic region is accounted for.—*Spectator*.

A MOVING MOUNTAIN.—The object of greatest interest in continental Europe at this minute is a walking mountain in Gard, France, which is moving toward the river of the same name at the rate of fifteen feet a day. The advance has destroyed the machinery in the pits of the Grand Combe colliery and nearly a mile of the Alais railway. The great thing now is to prepare new channels for the Gard and Gardon rivers, which are sure, when the landslide comes, to be completely choked up. Six hundred persons have been obliged to leave their homes. The lower strata of the mountain, which rises sheer from the valley, are grit and green marl. Both have given way owing to filtration of rain. Recently 5,000 persons went from Nîmes to see the moving mountain. The noise it makes is frightful and there are wide cracks in all directions. Nobody is allowed to go on the mountain or into the valley on which it advances.—*School Journal*

DEATH OF NIAGARA FALLS.—Fifteen hundred years ago the terrestrial movements raised the Johnson barrier to the Erie basin so high that the waters of that lake reached not merely the level of Lake Michigan, but the point of turning all the water of the upper lakes into the Mississ-

ippi drainage by way of Chicago. But the falls were then cutting through the ridge, and when this was accomplished, before the change of drainage was completed, the surface of Lake Erie was suddenly lowered by many feet, and thus the falls were re-established for some time longer.

Slowly, year by year, one sees the cataract wearing back and suggesting the time when the river will be turned into a series of rapids; but another silent cause is at work, and one not easily seen—namely, the effects of the changing of level of the earth's crust. From the computations already referred to it was found that for the first twenty-four thousand years of the life of the river only the Erie

waters flowed by way of the Niagara River, and for only eight thousand years have all the waters of the upper lakes been feeding the falls. If the terrestrial movements continue as at present, and there appears no reason to doubt it, for the continent was formerly vastly higher than now, then in about five thousand years the rim of the Erie basin promises to be raised so high that all the waters of the upper lakes will flow out by way of the Chicago Canal. Thus the duration of Niagara Falls will have continued about thirty-seven thousand years. But the lakes will endure beyond the calculations of the boldest horologist.—*Popular Science Monthly Magazine.*

EDITORIAL NOTES.

THE MEDITATION OF THE OLD FISHERMAN.

WILLIAM BUTLER YEATS.

You waves though you dance at my feet like children at play,
 Though you glow and you glance and you purr and you dart;
 In the Junes that were warmer than these are, the waves were more gay,
 When I was a boy with never a crack in my heart.

The herring are not in the tides as they were of old;
 My sorrow! For many a creak gave the creel in the cart
 That carried the take to Sligo town to be sold,
 When I was a boy with never a crack in my heart.

And ah, you proud maiden, you are not so fair when his oar
 Is heard on the water, as they were, the proud and apart,
 Who paced in the eve by the nets on the pebbly shore,
 When I was a boy with never a crack in my heart.

PUBLIC SCHOOL MORALS.

THE Hon. Mr. Justice Street recently, in replying to the presentment of the grand jury at the assizes, made some suggestive remarks, which will no doubt be read with interest by the friends of education in this Province. The grand jury referred to the number of serious crimes, committed by youths, which had come before them, and while commending the establishment of industrial schools for the reformation of erring youths, expressed in their views the desirability of such legislation as would prevent the further importation of the class of children now being brought out from the "slums" of the European cities.

His Lordship said:—"I am glad you have called attention to the prevalence of crime among the youths in Hamilton, and that you have taken so much interest in suggesting something you think may be a remedy for it. I have been looking into the history of the young men convicted of some of these serious crimes at the present assizes, and I find that it is not imported criminals at all, as a rule, that, in fact, with one exception, they were all young fellows who had been brought up in the city of Hamilton, and who have been educated at the Public schools; so that, if these are a fair specimen of the criminals who were causing the outburst of crime in Hamilton, the remedy you suggest of prohibiting the importation of people from other countries is not going to help it. It is necessary to look nearer home, and consider whether the system under which these children are brought up is the system that is most likely to make good citizens of them. I am very much afraid I have a strong conviction myself that it is not. These young fellows were sent to the Public schools where they are never taught,

as far as I understand, any principles of morality at all. They were simply taught reading, writing, arithmetic, and a smattering of other things, but they are not taught the difference between right and wrong. My impression of the way in which a great many children are brought up in the schools of this country is; that they grow up without any idea that a thing is right or wrong, and if they are found out in the commission of an offence they are very sorry they did it. Of course it is hard to suggest a proper remedy, but still we have four or five boys who have been brought up at your Public schools, which have been so highly commended, and here they are convicted of these abominable crimes. I am very much afraid that your suggestions are not going to help as long as we do not take better care in teaching our own children the difference between right and wrong."
—*Mail and Empire.*

We publish the above extract to call attention again to the strong feeling there is among our public men, especially our judges, respecting the proved inadequacy of the instruction given in our public schools in morals. Upon this question, judges have spoken frequently. We have no doubt but that the country will accept their testimony as that of competent and faithful witnesses. "On reading the remarks of Mr. Justice Street, we were surprised and disappointed; "We have four or five boys who have been brought up at your public schools, which have been so highly commended, and here they are convicted of these abominable crimes." The public schools in Hamilton have been deservedly held in high repute for their efficiency.

The work in them is thoroughly and systematically done from the in-

tellectual view-point, as shown by the high percentages taken at examinations for promotion, etc., etc. But these remarks of the honorable, Mr. Justice Street, bring to public attention another aspect, and a most important one, of the education of our children. The Judge asks emphatically of all parents, teachers, and the Minister of Education, "Are you teaching the children of our country the difference between *right* and *wrong*?" His own answer is "No." He impeaches the quality of our school instruction. Shall we hear from the teachers of Hamilton on

this question for the city of Hamilton? Shall we have the answer from the Minister of Education for the Province of Ontario on this vital question? Both should give an answer. We cannot afford to be poor in character building.

Be content with simple pleasures. Abide by simple joys, try to feel the power that is in familiar things, the charm of the wayside flower, the gleam of heaven, the ripple of the stream. These, because they are simple, you will find to be lasting.—
Prof. Veitch.

SCHOOL WORK.

ENGLISH GRAMMAR.

ANSWERS, NOTES AND QUESTIONS.

H. I. STRANG, B A., COLLEGIATE INSTITUTE, GODERICH.

1. Is it allowable for candidates to use contractions in parsing? Certainly, and, provided that they are properly made and marked, not merely allowable but advisable. Their use saves time and space, and makes the examiner's work easier. Such, at least, is my opinion and that of every examiner with whom I have worked. Of course a teacher should satisfy himself that his candidates can spell properly all the words which they abbreviate.

2. How do you parse infinitives? As an infinitive has a two-fold nature it is better to classify it first as a verb form, then to give its grammatical value (noun, adjective, or adverb) and relation, or that of the phrase of which it forms part, thus: (a) You ought not *to have spoken*. It is time for us *to start*. It is not pleasant *to be suspected*.

(b) I had no chance *to see* the paper. I have no wish *to know*.

(c) We rose *to leave*. I am very sorry *to have missed* the chance *to have spoken*: verb intr. old conj. (speak, spoke, spoken), perf. inf. having the value of a noun obj. of *ought*. *to start*: verb intr. new conj. pres. inf. forming part of a noun phrase obj. of prep. for and having *us* for its subj.

to be suspected: verb tran. new conj. pres. inf. pass. having the value of a noun nom. in app. to *it*.

to see: verb tran. old conj. (see, saw, seen) pres. inf. act. forming part of adj. phrase qual. *chance*.

to know: verb intr. old conj. (know, knew, known) pres. inf. having value of an adj. qual. *wish*.

to leave: verb intr. new conj. pres. inf. having the value of an adv. mod. *rose*.

to have missed: verb tran. new conj. perf. inf. act. forming part of an adv. phrase mod. *sorry*.

3. Candidates require to have their attention repeatedly drawn to the fact that the classification of verbs as

transitive or intransitive is, generally speaking, a temporary one, that the majority of verbs may be used either way without much difficulty. It may be well to notice, however, that there are three ways in particular in which verbs, usually intransitive, become transitive.

(1) By using a cognate object after them, *i.e.*, (a) an object of kindred origin, as "to die a death," "to live a life," "to smile a smile," (b) an object of kindred meaning, as "to look daggers at him," "to fight a battle," "to hit a blow."

(2) By using the verb in a causative sense, as "to march his men," "to trot his horse," "to laugh him out of it," "to stare her out of countenance."

(3) By combining a preposition with it, as "to out live her," "to over come them," "to undergo an operation," "to think of a plan," "to laugh at them," "to look for such a result."

On the other hand verbs ordinarily transitive become intransitive.

1. By leaving the object unexpressed, as "Open (your books) at page 53." "Try to study (your lessons more quietly)." "Divide (the number) by 9."

2. By using the verb in a reflexive sense, with the pronominal object unexpressed, as "He turned (himself) to speak to me." "The door opened (itself)." "The cattle gathered (themselves) behind the barn." Some verbs are transitive in one sense and intransitive in another, as, He returned the book," "He returned to school," "I succeeded him in this school," "I succeeded in opening it."

Verbs can hardly be considered true transitive verbs unless they can be used in the passive voice. Hence in sentences like the following: "He strongly resembles her," "That coat does not become him," "An accident befell me yesterday," it is better to

regard the verb as intransitive and the objective as an indirect object.

4. Candidates require similar cautioning in regard to the classification of verbs as verbs of complete predication and works of incomplete predication, thus:

"The tree grew and bore fruit,"—complete.

"The weather grew cold and stormy,"—incomplete.

5. Classify the italicized verbs as verbs of complete or incomplete predication.

"He *seemed* anxious to hear the news," "When all that *seems* shall suffer shock." "He *turned* round to speak to me." "He *turned* pale when he heard that." "It *turned out* a fine day." "They *turned out* some fine work." "She nearly *went* crazy with the pain." "She *went* to the doctor," "He looked carefully over the list." "She *looks* quite pretty."

6. Parse the infinitives in the following:

His whole aim is to make money. I have several letters to write before I begin to pack up. To do that I shall require a large table. He wanted us to wait for him. It isn't safe for him to be left alone. Next day they parted, never to meet again. To tell the truth I forgot it. I'll depend on you to notify them. He is too lazy to try that. He wasn't able to solve it. He has accepted my offer to take a third of it.

SCIENCE.

EDITOR.—J. B. TURNER, B.A.

I.

QUESTIONS IN ZOOLOGY.

1. What is metamorphosis? Give examples of it among insects and the vertebrates.

2. Describe a typical segment and its appendages in the crayfish. Point

out how this typical segment and its appendages is modified for different purposes.

Describe the respiratory system of the grasshopper and compare it with that of the spider.

4. Explain the difference between the vertebrates and invertebrates.

5. Describe the typical anterior limb of a vertebrate and show how it is modified in different animals.

6. Describe the structure of the heart in a fish and point out how its structure increases in complexity in the different divisions of the vertebrates.

7. Describe the brain of a frog and compare its structure with that of the brain of man.

8. Describe the vertebrate eye and show by a diagram how an image of an object is thrown on the retina.

9. Point out the structural peculiarities of birds which adapt them to their method of locomotion.

10. Outline a classification of the fishes and assign to their proper places in it the perch, pike, pickerel, brook trout, lake salmon, sturgeon; garpike, black bass, sunfish, eel, sucker and whitefish

II.

ODD BOTANICAL SPECIMENS.

The writer recently had a peculiar specimen of a trillium grandiflorum brought to his attention. The specimen was devoid of the whorl of cauline leaves so characteristic of the genus, and the outer set of leaves of the perianth was much larger than is usual in such plants. The inner set of leaves of the perianth was green except for a few white spots around the margin. The androecium was composed of nine stamens of which the inner circle was made up of larger stamens than those of the two outer circles. As far as could be ascertained the plant was without a pistil,

but it is quite possible that this last observation is incorrect as the specimen was not in good condition for an accurate examination. Another monstrosity to which the attention of the writer was recently directed was a specimen of the Indian turnip. The peculiarity in this case consisted of a double spathe. The inner spathe was the same as that ordinarily found on this plant, the other was similar as far as color is concerned, but differed considerably in form, being more of the form of a foliage leaf and thinner than the spathe usually is. It was situated at the same height on the stem as the spathe and on the opposite side. It was not bent in the manner peculiar to the spathe of this plant.

EXAMINATION PAPERS IN WENTWORTH PUBLIC SCHOOLS, APRIL 1896.

ENTRANCE TO JUNIOR FOURTH CLASS.

COMPOSITION.

1. Write a letter to a friend in Hamilton describing a ramble through the woods in spring time, telling what you saw, what you heard, and any incidents of the trip. (20)

2. Combine the following into (1) a simple sentence, (2) a complex sentence:

(a) The boy fell. The boy was little. It was a ditch he fell into. The ditch was dry. It was this morning that he fell in.

(b) King Midas had grown quite an old man. King Midas used to take Marygold's children on his knee. King Midas was fond of telling them this marvelous story. He told this story pretty much as I have told it to you. (20)

3. Change the following compound sentences into (1) simple sentences, (2) complex sentences:

(a) The sea spent its fury, and then it became calm.

(b) The battle had been concluded, and then the commander began to estimate his losses. (20)

4. Change the words in italics into (1) phrases, (2) clauses.

Wise men think rightly. He acts *wisely*. He speaks *rapidly*. Take her up *tenderly*. (20)

5. Divide the following into sentences and supply the necessary punctuation marks and capitals:

the golden touch exclaimed he you certainly deserve credit friend midas for striking out so brilliant a fancy but are you quite sure that this will satisfy you how could it fail said midas and will you never regret the possession of it what could induce me asked midas. (20)

HISTORY.

1. Who were the United Empire Loyalists? When and where were the first settlements made in Upper Canada? (10)

2. Name the Provinces that now form the Dominion of Canada. Which were the first to enter? Under what authority were they united? Name the Provinces that have since been added, and give dates of such admission. (12)

3. Who is the present Governor-General? Who is the present Lieutenant-Governor of Ontario? By whom are they appointed? (10)

4. Write short sketches of the lives of any three of the following persons: Governor Simcoe, Sir Isaac Brock, General Wolfe, Champlain, Jacques Cartier, Lord Dufferin. (12)

5. Tell what you know of the war of 1812-14, mentioning any incidents

that happened in the county of Wentworth. (10)

6. Tell what you know of the Constitutional Act of 1791. (10)

7. Write brief notes on: (a) Our Educational System; (b) Our Municipal System; (c) How townships are governed; (d) How, and by whom, taxes are levied and collected. (12)

8. Write a short account of the discovery of America. (10)

80 marks a full paper.

ARITHMETIC.

1. Find cost of digging a cellar 48 ft. long, 30 ft. wide, and 6 ft. deep, at 20 cents per cubic yard, and flooring it with Portland cement at 10c. per square yard. (10)

2. Farmer B sold to a merchant the following articles to apply on an overdue account of \$54 45:—

1680 lbs of hay @ \$15 per ton.

$3\frac{3}{4}$ cords of wood @ \$4.80 per cord.

4 bbls. of apples @ \$2.75 per bbl.

350 lbs. of flour @ \$2 50 per cwt.

30 lbs., 10 oz. butter @ 16c. per lb.

Make out the account neatly, showing the balance and to whom due. (10)

3. Find the value of $1\frac{7}{8} + 5\frac{2}{3} + 3\frac{10}{7} + 4^2$. (10)

4. Multiply $33\frac{3}{4}$ by 25, and divide the product by $16\frac{2}{3}$. (10)

5. How many feet of lumber in a plank 12 inches wide, 3 inches thick, and 18 feet long. (10)

6. What must be the width of a box 6 ft. long, 4 ft. high, to contain a cord of wood? (10)

7. From a lot 80 rods square I sold 80 square rods. What is the value of the remainder at \$80 per acre? (10)

8. If 11 men build a wall in 18 days, how many men will it take to build a wall three times as long in half the time. (10)

9. If a train moves 48 feet in a second, what is its rate in miles per hour? (10)

10. If a field 50 rods long contains 10 acres, how wide is the field? (10)

LITERATURE.

1. Books open. Third Reader. Page 149. Zoblane. (a) Explain fully the meaning of the following words and phrases: "Swayeth," "stalwart grain," "serried Zulu shields," "Wild Zoblane," "twice need of life." Why? "Unrecking harm," "black crescent," "whirr of bullets," "glare of shields," "reeled," "shoulder to shoulder," "met their doom like men." (24)

(b) "But one there was whose heart was torn,

In a more awful strife."

Tell, in your own words, the story of this soldier and his strife. (12)

2. Page 162, Elihu. Tell, in your own words, the story of this sailor and his mother, and how he made himself known. (12)

3. Page 173, The Monster of the Nile. What and where is the Nile? (6)

What is meant by each of the following words and phrases: "Sly and wary," "dense flocks," "throng," "perfectly aware," "quietly and innocently," "surface," "quite by an accident," "exposed to their view," "beguiled," "deceiver," "flock to the bush," "thirsty beaks." (24)

Page 175 Explain fully how Sir Samuel Baker killed a large crocodile, and how he secured its body. (10)

4. Page 188, Age of Trees. What trees are spoken of as being very old? Tell, in your own words, the story of any three of these wonderful trees. (12)

5. Page 249. Short extract from Sir Walter Scott. Expand the thoughts in this extract into a paragraph of about 100 words. (12)
100 marks a full paper.

CONTEMPORARY LITERATURE.

It would be hard to surpass the June number of the *Scribner's Magazine*. Not only is each part in itself delightful but each part seems to add something in interest to the effect of the others. Opening with Henry Norman's paper on the Balkans in which he presents with pictorial effect the situation in the east and culminating in Vailema Table-Talk there is not a line which one desires to pass over. The death of H. C. Bunner will be remembered with regret by those who read his Letter to Town. The second part of Hamilton Busbey's Evolution of the Trotting Horse appears in this issue. The President of Bowdoin College depicts graphically the course of a young man's development in a series of letters supposed to be written by a student, entitled His College Life. It is pleas-

ing to reflect that Sentimental Tommy is to be continued through the year.

"From Clue to Climax" is the title of the complete novel in the June *Lippincott*. The author is Will N. Harben and it is an exciting detective story. "The Washingtons in Official Life," by Anne Hollingsworth is an interesting account of the family, which is fully illustrated with reproductions of portraits. This is followed by a sprightly and well-told short story by Edith Browner called "A Fellow Feeling" which abounds in humour and is neither falsely realistic nor "unbounded in imagination. The poetry of the number is by Grace F. Pennypaker, Charles G. D. Roberts, and Carlotta Perry.

A readable historical article in the *Littell's Living Age* for May 23rd, is "A Heroine of the Renaissance," by

Helen Zimmerm. It was originally published in *Blackwood's Magazine*.

The *Ladies' Home Journal* for June contains the conclusion of Julia Magruder's story "The Violet," which, although interesting and pure, must, to some extent, give young ladies at least an extravagant idea of what they may expect in life. That is, however, one of the few things which can be said in criticism. Besides it there is an abundance of charming, useful and excellent material provided in the number which opens with one of Whitcomb Riley's poems, "Cassander," illustrated by a drawing from the skilful hand of A. B. Frost. Jerome K. Jerome contributes "A Story of the Town," and Lilian Bell gives "Woman's Rights in Love" from her clear sighted and humorous standpoint. "The Pardoning Power and Impeachment is explained by ex-President Harrison in his series of articles this month. Ruth Ashmore speaks of "The Critical Girl."

"Our Common Speech." By Gilbert M. Tucker. New York: Dodd, Mead & Co. A collection of six papers on topics connected with the proper use of the English language. The first essays are especially interesting, dealing as they do in an original and clear way with the use of words and the changes that have been made both in meaning and use since the English language has possessed a widely-read literature. Towards the latter half of the book the author more particularly examines the language as used by the English and by the American peoples. Here, unfortunately, the matter seems to become personal, and one might almost suppose that the use of English words occasioned more than a little bitter feeling between the two countries. It would be more profitable to consider it from the standpoint of a philologist. Mr. Tucker has, however, put together much that will be

of pleasure, not merely to the student of language, but to any reader of intelligence.

"Mechanics for Beginners," by W. Gallatly, Macmillan & Co., London, through their Toronto Agent, Copp, Clark & Co. Special prominence has been given by the author to the treatment of work, power and energy, and bearing on these and kindred subjects will be found a large number of useful examples. In the division Dynamics special attention is paid to the explanation of acceleration and of Newton's Laws.

From William Tyrrell & Co., King St., Toronto, we have received "Cleg Kelly," the latest work of S. R. Crockett, which has been issued in Macmillan's Colonial Library. Those who have read "The Stickit Minister" will remember that some five or six of its most enjoyable sketches were devoted to the characteristics of the Edinburgh small boy in the person of Cleg Kelly. The present story is a continuation of his history. Saying so much will be sufficient inducement to those who have already made his acquaintance to seek it further, but for the information of those who have not it may be said that here again Mr. Crockett manifests the tenderness of insight into the mind of all young things which has made everything he has written of children a success. It is a thoroughly good and bonny story which we have pleasure in recommending to our readers.

"The Universities of Aberdeen, a History," by R. S. Rait, published by James Gordon Bisset. Many graduates of a university might find it an agreeable task to compile the history of their Alma Mater; but few would bring to it, along with affection and reverence, the ardor and patience in research, compilation and judgment which is necessary in carrying any history to a successful issue. All this has been

admirably fulfilled by the present narrator who doubtless has experienced sufficient recompense in so associating his name with his university. One who was not acquainted with the locality might at times think that the compiler was a trifle over conscientious in reporting on the documents at his disposal, but that is easily forgotten in the interest of such chapters as the College Buildings at Old Aberdeen.

The cover of the Memorial Day number of the *Youth's Companion* is one of great beauty, the face of a young soldier in a medallion surrounded by apple blossoms. Within will be found a pretty story concerning patriotism. Sir Edwin Arnold contributes the first part of a paper on the subject "Are Animals Moral?" There is the usual number of short stories, incidents and items of information, admirably selected, which make the *Youth's Companion* the best paper of its kind.

In Kellogg's Pedagogical Library we have received "The Common School System of Germany," by Levi Sceley, Ph.D. When, every year, a larger number of our young university graduates are going to profit by a further course of study in Germany every educationist will be interested in a description of how elementary training is there conducted. The author has qualified himself by observation and investigation to report on this subject, and in the course of the volume makes many valuable suggestions as to adaptations which might be made of the German system to the one in use in the United States which would in many instances apply to Canadian schools as well. In religious instruction especially Germany is far in advance of Canada.

From Ginn & Co., Boston, we have received "Les Miserables," abridged, by Prof. Sumi hrast. In this form Hugo's masterpiece is practically the story of Jean Valjean. Naturally, in

order to present it in a form which could be used in a school room, great excisions have been necessary, but brief explanations of the course of the story have been given when they were required. In this way a most pleasing book has been prepared.

From the same publishers we have received Macauley's essay on Milton and Southey's "Life of Nelson," for use in schools, the latter in the classics for children series. Also an elementary German reader with notes and vocabulary, by O. B. Super. The effort has been successfully made to furnish a text book of an extremely easy character for the primary student of German.

The American Book Company have recently issued a vertical edition of their Spencerian Penmanship copy books.

"School Recreations and Amusements." By Charles W. Mann. The American Book Co. This book is intended as a companion volume to "School Interests and Duties," and is, like it, prepared for teacher's reading circles. The greater number of subjects that may be used in any way to give variety to the work of the school, is considered by the author, and valuable suggestions made concerning them. Suitable extracts are given for morning exercises; games and recitations are supplied for the younger pupils and other plans for imparting knowledge in an amusing and easy way.

"Psychology and Physic Culture." By R. P. Halleck. New York: The American Book Co. After a lengthy and careful treatment of the nervous mechanism at the disposal of the mind, the author proceeds to investigate and instruct in the various processes of the mind in a manner which will at once gain the attention of the student. The style of the writer is interesting, and anecdotes are frequently employed in illustration of the points under inquiry.