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THE CONFLICT BETWEEN EDUCATION AND KNOWLEDGE.

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THE title of this subject may appear paradoxical and brings to mind the book, issued some years ago in the International Science Series, written by Dr. Draper, and called "The Conflict Between Religion and Science" This work was not viewed favorably by many persons who held that there is really no conflict between science and religion. It will be held at first sight that there can be no contest between education and knowledge, while to ordinary persons education and knowledge may be regarded as identical. It is a fact, nevertheless, that the terms are far from being synonymous, and that a recognition of the differences between the two would avoid numerous mistakes. Education, it has been held, is the preparation for complete living. Psychologists, in dealing with the mental nature of man, speak of the faculties of feeling, knowing and willing. They point out that in order to be educated the emotions and the will must receive due attention, as well as the intellect. The mistake made in our schools and Colleges during the latter part of the century is to attach too much importance to training in knowledge and too little

to the training of the emotions, and especially to the training of the will. The causes of this tendency are not far to seek.

(I) GROWTH OF KNOWLEDGE.

The nineteenth century has been especially marked by enormous additions to the sum total of human knowledge. Natural science in its many divisions and sub-divisions has brought within the range of the human mind vast fields of information, almost unknown one hundred years ago. The study of language has discovered mines of knowledge in the various departments of ancient and modern literature. History and politics, with their cognate subjects, have presented extensive departments of investigation pertaining to all that relates to man as a social being. The divisions and sub-divisions of labor have rendered necessary a minute acquaintance with a variety of callings and professions. It is the age of specialization, and specialists are all fighting for what they deem their right share in human economy. It is no wonder that the curriculum of school and College, which fifty years ago was given on one page, must now occupy a dozen pages. The result

is that the acquisition of knowledge comes to be regarded as the great end and aim of the student's life. The demand is for "facts, facts, facts," regardless of the cultivation of the emotions and equally regardless of the cultivation of the will.

(2) GROWTH OF DEMOCRACY.

The growth of democracy, as well as the increase of knowledge, has had much to do with the wrong views so often held regarding education. The democratic spirit of the age, though on the whole advantageous, is not without its dangers. Every avenue in life is presumed to be open to each one competent to enter. Ambition, if properly directed, is beneficial. As John S. Mill says: "Persons who never strive for the unattainable accomplish little." To say that those in the humbler walks of life should not have aspirations for positions of prominence is repugnant to Christian sentiment. At the same time, any striving after what is high, which unfits for what is low, is evil in educational methods. Unfortunately there has developed a tendency of having the early part of each boy's training shaped so that he may become a lawyer, a doctor, a teacher, etc.; and hence the adaptation of the school curriculum to suit the possible needs of the few rather than to suit the evident wants of the many.

(3) BAD EFFECTS OF EXAMINATIONS.

Besides the growth of knowledge and the growth of democracy, the examination system has also done much to foster a wrong idea of education. Examinations are not a necessary evil, as some contend, but a real advantage, provided they are of the proper kind, held at the proper time, and conducted as far as possible by the teachers them-

selves. When held by outside examiners no consideration can be given to the educational status of the candidate, except that evinced by his knowledge of the subjects on the programme. The system of examinations by outside persons is a modern development which has had its advantages, but its attending evils. So well are its dangers recognized that Universities are gradually turning to the former plan of having the members of the staff the examiners. The Normal Schools and the Normal College are saved from the possible injustice of outside examiners by giving virtually a controlling power to the staff in making its official reports. The greatest difficulties and the most serious cases of injustice have arisen in connection with the non-professional examinations for teachers and the examinations for matriculation. The introduction of the system of confidential reports from the staff is convincing evidence that teachers regard no board of examiners as infallible. Unfortunately character has no value in deciding whether or not a candidate is to receive a certificate. The boy who fails in algebra may be debarred from matriculation, even though his principles are good and his future bright. On the other hand, the boy who has not sufficient will power to abstain from the use of cigars may be admitted to a University by barely making one-third of the marks in each subject. Instances have arisen at Universities of students requiring to take a supplemental in their fourth year before obtaining their degree. There is no case on record, however, to show that a candidate was debarred from his degree on account of being drunk during the year, or on account of having failed during his four years' course to acquire those elements of success in life

which are just as valuable as knowledge of biology, Greek, or civil polity.

REMEDIES SUGGESTED.

Having pointed out a current misconception regarding what constitutes education, and having mentioned what I regard as its causes, it will be in order to suggest a remedy. To secure a complete remedy will be impossible in view of the imperfections of all human institutions. It is possible, however, to mitigate existing evils, although to remove them entirely is out of the question. I venture to suggest the two following :

(1) FEWER SUBJECTS.

The curriculum in the lower classes should not be loaded with so many subjects. The advocates of the various departments have reconciled their differences by endeavoring to give every subject a show on the course. The objections to this method of making peace between rival claimants are apparent. It has led to the introduction at too early an age in the student's course of subjects that have comparatively little value in the preparation for the ordinary purposes of life. The evils are not prevented by making some of these subjects optional only. It is assumed that parents and teachers have sufficient judgment and independence to give proper counsel. This is not the case. What course in life young children will follow cannot well be predicted ; but what they should learn will largely depend on the positions they are to occupy. The majority of pupils will, however, follow the humbler walks of life. Not in this country alone, but also in other countries under democratic institutions hundreds of pupils begin the preparation of the various subjects for ma-

trication who never enter a University. The plan of allowing, though not compelling, certain subjects to be taken up in the lower forms of High Schools does much harm. The statement that one subject is as good as another for purposes of training is untrue, though plausible. The kind of knowledge which is valuable to a person is that which will fit him best for the duties of after life. There are some kinds of knowledge which everyone should have, and knowledge of this kind should dominate the greater part of the High School course. It is a fact that many pupils who never complete Form III. of the High Schools fail to obtain sufficient knowledge of essential branches on account of giving too much attention to classics, modern languages, and certain portions of mathematics and natural science. Educationists are tolerably well agreed as to the subjects which all students should take up. Every person should be trained to have a love for good books, to understand natural phenomena, to be familiar with elementary arithmetic, to know something of the history and institutions of his country, to understand how to keep his accounts, and to know something of drawing, including some knowledge of manual training, either obtained on the farm, in the shop, or at school.

It is safe to say that for the ordinary pursuits of life, viz., those of the farmer, mechanic, merchant, etc., a knowledge of algebra and geometry, except of an elementary character, is not necessary. An acquaintance with Latin, Greek, French, German, etc., is not essential. Every teacher knows, however, that attention to the non-essential subjects lessens the amount of time that can be given to English literature, elementary science, drawing,

arithmetic, etc. If pupils have mastered important subjects before completing Form II., instruction in the non-essential subjects may be confined in Forms III. and IV. to the few who are to become teachers, or to take up some profession, or who desire for general purposes a better education. It will doubtless be said that success in language training demands the attention of the pupils while they are young. This is the traditional argument; but it is not held so strongly now as formerly. Many of the best classical scholars in our High Schools, and even in our Universities, did not begin Latin until they were almost young men. Professor Sweet, no mean authority, holds that pupils should not begin Latin until they reach sixteen years of age. Even admitting that the five per cent. of pupils who go to the University should begin the languages in Form I., will it be said that their interests should control the interests of the ninety-five per cent? Careful direction is undoubtedly needed on the part of teachers. It is not too much to say, however, that if only essential subjects were allowed until admission is gained to Form III. nine out of every ten pupils of our High Schools would be benefited. The prevailing practice guards the supposed claims of those who become lawyers, doctors, etc., while sacrificing the interests of the great majority of High School pupils.

(2) CHARACTER BUILDING.

Proper training is still more important than a suitable course of study. The highest motives should be used to direct students in their work. The best teacher is the one who is the best disciplinarian. Good training calls for the use of natural incentives. So far as possible all

artificial incentives should be abandoned. Prizes and scholarships awarded on the results of competitive examinations are a serious impediment to the attainment of the best educational ends. The example of our Universities has a powerful influence upon secondary and elementary schools. The wealthy man who offers scholarships or prizes, which are to be gained by competitive examinations, is not a benefactor. All rewards of this character turn the attention of the youth of our country to wrong educational ideals. No educationist of note regards as defensible on pedagogical grounds incentives of this nature. Fortunately, Canada has not yet been inflicted as much as England by the evils of competitive examinations. It is a fact, however, that even in this country bribes, in the shape of prizes or scholarships, induce students to attend institutions which otherwise would not be their choice. If the money given for prizes and scholarships were devoted to increasing the salaries of professors, or enlarging the staff, Universities would be benefited and the High School would be saved from a demoralizing influence.

To abandon competitive examinations is good so far as it goes, but it does not go far enough. There should be no written examinations conducted by outside examiners, except where necessary. If matriculation examinations are to continue, the opinion of the High School principal should become a more important factor than heretofore. The character and work of a student while attending a High School can be known only by the teachers. To make them count for nothing is to degrade the true office of the teacher, who should be regarded as an educator, and not as a mere instrument to fill the minds of students

with knowledge. No student should be permitted to attend a University if he has not shown during his three or four years' attendance at a High School the acquisition of certain powers of self-control. Why should not industry, neatness and courtesy be regarded as at least as important for a matriculant as a knowledge of chemistry or the binomial theorem? The fact that character in the student does not count is sufficient evidence that wrong ideals control educational systems. It will give the teacher great power in the matter of character building when his judgment will have more value than that of a board of examiners. If it is said that teachers cannot be trusted—a statement which I am not prepared to accept—the condition is the result of the development of a wrong view of education, and a consequent degradation of the teacher's true position. Give the teacher the power which he should have, and the responsibilities which he should be willing to undertake, and teachers of a nobler personality will be in demand.

Examinations for teachers' certificates are necessary. No plan is yet within sight by which the non professional tests conducted by outside examiners can be dispensed with. One examination, however, for Junior Leaving Standing, should be sufficient. The abolition of the examination of Form I. has been a relief to High School masters. The abolition of the examinations of Part I. for Junior Leaving Standing, it is hoped, may follow. The report of the

teachers should be sufficient for Form II., as well as for Form I. If High School pupils are freed from outside examinations until they have completed the course of Form III., it will give an impetus to a better kind of training. The freedom for three years from examinations will give desirable liberty to High School masters. Any outside examination that interferes with promotions and classifications should be dropped. Pupils should be advanced from one form to another only when they have earned such distinctions by industry, courtesy, self-control and all other features of good conduct. No student should be allowed to write, either for matriculation, or for a teacher's certificate, unless (with proper safeguards) his conduct is testified to by the principal of the school. The effect of provisions of this kind will undoubtedly be to raise the status of the profession. Higher qualifications will be needed by those who become teachers. Trustees will seek to employ men not only recognized for their scholarship but also for their force of character, their capacity for leadership in the community, and their power to develop true manhood. Increased responsibilities will be thrust upon inspectors, who will give valuable assistance to trustees in the selection of teachers, and whose duties will not be so much those of the detective, as those of the leader who will inspire both pupils and teachers with nobler aims at each official visit.

Be done with saying what you don't believe, and find somewhere or other the truest, divinest thing to your soul that you do believe to-day, and work that out: work it out in all the action and consecration of

the soul in the doing of your work. This I take to be the real freedom of Christian thought—when the man goes forward always into a fuller and fuller belief as he becomes obedient to that which he already holds.

IN WHAT SENSE OUGHT SCHOOLS TO PREPARE BOYS AND GIRLS FOR LIFE?

By MICHAEL E. SADLER, M.A.*

SOME questions are much more easily asked than answered, and it is safe to say that this is one of them. It is not because I am presumptuous enough to think that I know the right answer to the question that I have proposed it for consideration to-night, but because the issues which are raised by it are of great and growing urgency, and of direct and necessary concern to all citizens and especially to parents. All that in this short paper I can hope to do is to prepare the ground for discussion and to suggest a point of view from which to approach the debate. And I know full well how many there are present to-night who can bring to the elucidation of the subject of my essay an experience far longer and a judgment far riper than mine. My object will be fully served if this paper of mine succeeds in drawing from them expressions of opinion which will lead us to a right conclusion. And it is sometimes a gain to look a big question straight in the face, even if we are forced to admit that for the present no final answer is possible. Like life, education (which is an aspect of life) is full of open questions, and in educational discussions dogmatism (though not unknown) is sadly out of place.

Is not education, in its highest sense, a much longer and more intricate business than can be carried on by the school or college alone? The best education is the outcome of many influences which happen to converge on the individual life and will. What Mr. Ruskin said of the best women is true of the best kinds of education—they are the most dif-

ficult to know; they are recognized much less by the publicity of their operations than by the nobleness of the characters they produce; "they are only to be divined, not discerned, by the stranger." You have to know a country very well before you can pretend to measure the force of its real education. How many elements there are which go toward it here in our own time! The love and example of fathers and mothers, the tradition and the moral atmosphere of home, the drift of its praise and blame, its avowed ambitions and expected rebuke, its faith or unfaith, its opinions implied rather than expressed—(dogmatically violent opinions often produce reaction in the young who are subjected to them. It is what Dr. Martineau calls the "suppressed premises" that seem to gain such strong and secret hold on growing minds). Then there is the penetrating influence of the newspaper press, ubiquitous, seductive, absorbent; the tone of your contemporaries at school or college—how self-contained that often is, the tired waves of the teachers' influence seeming sometimes to break against it in vain; all that is learnt in the discharge of the plain duties of life and from faithful bearing of drudgery; what is expected of you—not only by your employers but by your colleagues—in office or workshop; what is thought good form by those amongst whom you spend your leisure or find your recreation; the point of view taken at the church or chapel which you attend and in connection with which part of your work may lie; the things which

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your party believes or does not believe, or prefers not to talk about; the bias of your profession; the moral standard of your trade; the public opinion of your social circle; the range of your reading; the great changes which are going on in the philosophical and scientific thought of the time; the impression made on the imagination by realizing the ideas and possibilities of Empire; the suggestions, the criticisms, the impulses which come from abroad—all these are elements in the welter of influences which affect the will and the sympathies, and which, whether they issue in action or in hesitancy, in either case colour conduct.

"The great end of life," wrote William Law, "is not left to be discovered by fine reasoning and deep reflections—but is pressed upon us, in the plainest manner, by the experience of all our senses, by everything that we meet with in life,"—By that "wisdom . . . that standeth at all our doors, . . . teaching us in everything and everywhere, by all that we see and all that we hear, by births and burials, by sickness and health, by life and death, by pains and poverty, by misery and vanity, and by all the changes and chances of life." Nor is this clinging atmosphere of educational influence the same, at any given time, all over England. Manchester, Liverpool, Birmingham, Oxford, Bristol, Cambridge, Leeds—how different are all these to those who know each from the inside, and how different from all alike are various parts of London! Nor are the influences, at one moment, the same for all in one town—different ranges of influences operate on different types of mind, and on different stations in life, and on different generations even in one house. The deepest and saddest gulfs are often

those we speak least about. Nor are the influences which operate on us, and which in the aggregate make up education, of recent origin or contemporary with ourselves. Ancient influences retain unsuspected powers of attraction and linger on among the effective forces of the world centuries after their supposed disappearance. And this is especially true of a country which likes to keep its old furniture and values family associations, being exceptionally unwilling to break that continuous connection which links the present to the past.

If this tissue of subtle influences be rightly called education—and that word when used in its wider sense implies nothing less than this—then how small a part can the work of school or college play in the education which influences the whole of a man or of a woman's life. School or college plays a small part, it is true, yet often a determinatively important one. To some, though not to all, there is a short time in life when educational influences (except in holidays) seem almost co-extensive with the school. But that is true of boarding schools rather than of day schools; and only of some boarding schools; and of boarding schools in the old days, before cheap trains and penny postage and long and frequent holidays, rather than of most boarding schools to-day. Powerful for good as the day school may be (and here in Birmingham that fact will always be held in grateful remembrance), its influence is only a part of the educational power of the community, as George Dawson and Dr. Dale and others conceived it; and, behind and enveloping the influence of the community, lies the larger influence of the nation and the Empire; and, behind and beyond that, the influence of the spiritual, the scientific

and the economic movements of our time.

When, therefore, we ask in what sense *schools* should prepare boys and girls for life, it is with the conviction that schools can provide but a small part of the true education of a nation. We cannot rely on schools alone to train our young people for life. Yet, for all that, schools can do much to fit or unfit them to learn to make good use of life.

II.

But, first of all, we must decide what we mean by "life." When we speak of schools fitting boys or girls for life, do we mean by the word "life" their future trade or calling or profession? When we begin to look into the matter with care, I think that we all agree in meaning by "life" something larger and more many-sided than the actual means of gaining livelihood. Sometimes, it is true, we may be betrayed into using hasty expressions which imply a narrower outlook, but there are few, if any, among us who would deliberately regard school life as a time which ought to be exclusively devoted to sharpening the intellectual edge, or enhancing the technical aptitude, of a living tool. We are all parts of a great organization, and there is an upholding sense which comes to us from the knowledge of our being needed to bear part in a common task—a task that is wider and more far-reaching in its significance than we can ever know. But we can none of us surrender our sense of individual responsibility, and of individual relation to the Unseen—that conviction of personal identity which supports character and is the germ-truth behind all those historic claims of natural right which have been advanced from time to time on behalf of individuals

as against the community or the nation or the Empire or the cosmopolitan pressure of aggregate capital.

And, on a lower ground than that, how few professions or callings are there in which a man or woman does not need, as one condition for useful service, the power of seeing things from other people's standpoint; sympathy, tact, imagination. Hence it is that we need to prepare a boy or a girl, not simply for the actual practice of a chosen calling, but for the social conditions in which they are expected to have to work. A few days ago I heard read a letter from an English lady with much experience of life in Natal. She pleaded that there should be more opportunities provided in England for girls to learn, before going out to join their brothers in up-country districts in the colonies, more of the handy devices in house-keeping and cookery, which so greatly add to the comfort and lessen the expenses of living on small incomes under conditions so unlike those known to them at home. But there is need too for young people who do not expect to emigrate to be educated in view of their future responsibilities in England. We probably all know cases in which we have a shrewd suspicion that the person has been educated for a station in life which he has not the natural ability, or it may be the means, or it may be the social tastes and connections, comfortably to maintain. And there is always much besides actual schooling that goes to prepare boys and girls to adjust themselves to the conditions of life as lived in their own country in their own time. A child, brought up from infancy entirely among foreigners abroad, would find himself at a loss to understand much that goes without

saying in our national life. A social atmosphere is a very subtle thing and a system of education instinctively tries to adapt itself to it. In fact in most countries there are several social atmospheres, and more than one type of education accordingly.

But technical skill and sociability of temperament are not enough for life. We need principle also and the power of rising, when need be, above the preconceptions of the society in which we live; of discriminating between what is worthless and what is true; and force of character, when needful, to dissent or protest. Therefore the highest function of education, the necessary note of all education worthy of a free people, is the training of the judgment and the strengthening of the moral will. "See that your mind be free, universal, impartial," said a great writer. Great knowledge is of very little avail in itself. What matters most is faith, the power of self-surrender to great ideas and to great causes; supreme concentration of purpose in the light of the convergent rays of necessary knowledge; veracity of perception, of judgment and of speech; and the whole character harmonized and subdued by a continuous sense of the Presence of unseen Powers, and moved through all its parts in swift and cheerful obedience to the dictates of the moral will.

Thus, in all true education, there must be found together, in due proportion for the task in view, intellectual elements and ethical. The two are inseparable and we may think of them as Dr. Donne thought of himself and his wife.

- "If we be two? we are two so
As stiff twin compasses are two;
Thy soul, the fix'd foot, makes no show
To move, but does if th' other do.
"And though thine in the centre sit
Yet, when my other far does roam,

Thine leans and hearkens after it,
And grows erect as mine comes home.

- "Such will thou be to me who must,
Like the other foot, obliquely run:
Thy firmness makes my circle just,
And me to end where I begun."

Thus, the more we reflect over it, the clearer does it become that the "life" for which schools ought to prepare boys and girls is a complex thing; that self-ends in education are unworthy ends; that the aim of fitting children merely to win pecuniary profit for themselves or for other people is worse than incomplete; that during school days we learn more from our contemporaries than from our teachers, and more from the example and personality of our teachers than from their set lessons; that moral isolation is as perilous, as a sense of individual moral responsibility is indispensable, in all true education; and that it is not with the present only but with the heritage of the past that schools and teachers have to do. At all times of grave moral and intellectual transition in the world's history, it has been found to be one of the chief tasks of the higher schools to hold fast to what was good in the old, and slowly interweave with it what was of proved excellence in the new. And a necessary characteristic of any living and fruitful system of higher education is the combination of intellectual alertness and curiosity with reverence for tradition and tenacity of corporate life. Every good school has a personality of its own. It is not a book stall. And yet all its individual characteristics must be rooted in a deep sense of common service and fellowship.

In Mr. Henry Newbolt's noble words,

- "To set the cause above renown,
To love the game beyond the prize,
To honor while you strike him down,
The foe that comes with fearless eyes:

To count the life of battle good
 And dear the land that gave you birth,
 And dearer yet the brotherhood
 That binds the brave of all the earth.

" My son, the oath is yours : the end
 Is His, who built the world for strife,
 Who gave his children Pain for friend,
 And Death for surest hope of life,
 To-day and here the fight's begun,
 Of the great fellowship you're free :
 Henceforth the school and you are one,
 And what you are, the race shall be."

Nevertheless, all the world over there are signs of dissatisfaction, I think I may say of growing restlessness, at certain sides of education as generally known. It is well not to pay too much heed to casual complaints. Food and schools are staple subjects on which the conversationalist whets the edge of his knife. And whichever Government is in power there is bound to be an Opposition. Moreover, there are periods in history when, to use some words of Izaak Walton's, the world is sick of being well. And that shrewd observer might have called this, as he called his own, "an eloquent and captious age." But the symptoms of unrest are too general and too persistent for it to be prudent for us to ignore them. In America and in Germany, in Russia and in France, there have been within the last year or two significant outbursts of criticism against the schools as being too bookish, too remote from the concerns and problems of modern life. No grade of education has been exempt from this rather indefinite, and yet damaging, charge. In one country it is the University that becomes the target for criticism, as being too "donnish," too literary, too theoretical, too detached from the foothold of facts, as having become the nursing mother of an academic proletariat. In another country it is on the secondary schools that the jet of criticism is turned. They are accused

of being drowsy with routine, dusty with classic lore, or worshippers of that idol called "general culture," devotees of the theory that it is worth while to risk health, eyesight, variety of interest, athletic and æsthetic training and all "original brightness" of the unsullied and untried powers, in order to achieve a faultless measure of all-round culture by the age of 19 or 20, with the reward of a secure government appointment a few years afterwards. In a third country it may be the elementary schools that become the subject of criticism, and dissatisfaction is expressed with the curriculum of rural schools as doing too little to fit lads for agriculture or to attach them to the interests or pleasures of country life.

To some extent this is part of the world wide conviction that for every calling a specific technical preparation has become indispensable, owing to the development of science and its application to nearly all the departments of life. This almost universal belief in the necessity of some technical preparation for each and every calling has become a fixed point in our outlook on the future. As to details, we are far from clear. As to how far such preparation can be given in schools or institutions, and how far it must be imparted, under conditions more or less resembling an apprenticeship, in a workshop or office conducted under the rigorous conditions imposed by the necessity of making a profit, these are matters which, in some branches of the subject, are still *sub judice*. But, broadly speaking, everyone is agreed that, in some form or other, every man and every woman ought to have a general education, capped and pointed by some form of technical education, just as one's finger is sharpened and protected by the nail, and just as one's pencil has, for

practical use, to be sharpened to a point. And I would add that there is a strong undercurrent of opinion that technical education itself, while it cannot be too precisely adapted to the actual needs and practice of the life for which it prepares, ought nevertheless to be toned and tempered by other and more disinterested educational discipline, lest the student, at any period of his training, should be led to forget the fact that, in life, skill and conscience should never be far apart, and that private gain and individual energy enjoy opportunities which are strictly subordinate in the last resort to the moral claims of the commonwealth as a whole. The world's problem in technical, as in other, types of education, is to raise three things, viz., intellectual thoroughness, practical efficiency, and moral vigour, concurrently to a higher power.

But this feeling of unrest, to which I have invited your attention as one of the most significant symptoms in the state of opinion in regard to educational matters in all progressive countries at the present time, is not solely an outcome of the movement for technical education. It proceeds from other causes as well. It indicates a desire to change in some respects the *subject matter of liberal education*. There is a feeling that, however good are the results of our best education, the *process* is often an unnecessarily wasteful one. Why, it is asked, use, as the instruments of your intellectual gymnastic, studies so remote from modern practical life? With your leave, I will examine this question a little more closely.

Before doing so, however, let me make a number of concessions. It is quite true that the argument which I have tried to state, the plea, that is, for making more practically useful studies the subject matter of

higher liberal education, is often urged by persons who are ignorant of the real bearings of the question. It looks much easier than it actually is to contrive that one subject should do double duty in education, *i.e.*, that it should provide severe but disinterested intellectual gymnastic and at the same time yield, during the process, an amount of knowledge which will in itself be immediately marketable in practical life. The real difference between technical and liberal education is a difference of *motive*; and in education as in other things it is not easy to serve two masters at the same time. Educational short cuts are often a long way round.

Further, I would concede that the demand for more practical subject matter in liberal education is sometimes based on an undue appreciation of the value of a disinterested intellectual training as a preliminary to specialized technical education, and that it is sometimes urged in ignorance of the positive value in life of having a wide basis of general knowledge.

But there is something in the new movement behind all these errors, and it is at this that I want to get. First, ought we not to pay careful regard to the fact that nearly, if not quite, all the studies, which seem most remote from much of our modern life but which are retained in our curricula for their proved educational value, were at the time of their introduction taught because they were practically useful in themselves? It looks as if dead kinds of technical or professional training were gradually polished up into instruments of liberal education, just as the tusks of dead elephants provide the ivory handles for the instruments of a civilization not contemplated by their original possessors.

Next, though the distinction be-

tween "words" and "things" is often pressed to the point of fallacy (just as there has been economists who have exaggerated the separateness of material from other forms of wealth), nevertheless it must be admitted that literary people are sometimes tempted to overvalue the arts of verbal or literary expression. There are many other kinds of expression which ought not to be neglected. And action is often nearer to truth than any form of words attempting to formulate the truth. Be the cause what it may—traditional prestige or human vanity or what not—it is always necessary in a literary occupation to guard against the insidious temptation to regard literary skill and knowledge of books as on a higher plane than other kinds of skill and other kinds of knowledge. Montaigne draws attention to another danger of the same kind. "Some there are," he says, "who are so foolish that they will go a quarter of a mile out of the way to hunt after a quaint new word if they once get in chase; and who are allured by the grace of some pleasing word to write something they intended not to write." I would not say one word to disparage the austere discipline of humane letters. It remains, for many minds, the noblest and surest of all education though I do not go so far as to say of it that "the gleanings of the grapes of Ephraim is better than the vintage of Abiezer." Different minds need different disciplines, and no liberal education is complete in which physical science and humane letters have not each a place. But against the baseless claims of second-rate bookishness there is a vigorous and healthy reaction. At the same time I would venture to add that literary knowledge is not the only kind of knowledge that puffeth up—and things may right themselves

after a time. In the meanwhile, however, there is a drift in the direction of things which seems more practical. And no one who has closely watched the skilful training of little children at the present time can doubt for a moment that manual exercises—(modelling, painting, carpentry, knitting, netting, basket work) may all, in wise hands and in wise measure, be made not only delightful in themselves, but really helpful in intellectual and moral development. Furthermore, many kinds of business are becoming more intellectual—less mechanical—than they were. And we want our young people to be so trained at school as to enter from the first into an intellectual interest in their practical calling. It is a pity when there is an impassable gulf between the intellectual interests gained (or suggested) at school, and the intellectual interest in the profession or trade. Is it impossible that the one should shade off into the other, without prejudice to the claims of disinterested preliminary education? The disinterested part of the education must in no way be compromised or impaired. We need it more and more. Modern business may be an intellectual thing but it will be perilous to civilization if it does not remain a moral thing too.

III.

There are, however, great and serious difficulties in the way of any rapid change.

In a book on education, recently issued, there occur the following words. "Education is not mere development—it is training; and training implies an end clearly conceived by the trainer, and means carefully organized to attain that end. . . The kind of aim and walk in life of the pupils of each school must be recognized by that school."

This looks fairly simple on paper. But think of it from the point of view of practical organization. In a large school for boys, how many different kinds of life-aim are there not intermixed? Then in the case of girls, what a clash of ideals there is in many parents' minds as to their daughters' future and training, a clash between what I may call the ideal of domestication and the ideal of economic or professional independence. Then, in all day schools, and to some extent in boarding schools, there is the conflict of claims of home and school, the difficulty of the double focus, the dislocation, of interest, the tension, caused by the double claim not always harmonized or in full sympathy the one with the other. Again, what demands you already make on the teachers—what further do you not contemplate making if you expect them to be ready to effect the transition between school studies and the later interests of every different type of practical life? How can we so organize school work as to attain an end which often the parents themselves cannot foresee for their children? And how early in life will it be necessary to fix on the child's career—at how tender an age must this technical tinge in education appear—and, in the case of the children of poor parents, what bearing would such a scheme, logically carried out, have on the transference of promising but poor children from one type of school to another?

Nor must we forget that we are living in a difficult period of social transition of which we cannot yet foresee the issue. Extreme and far-seeing precision in practical aim could only be required of all schools under far more fixed or stable social conditions than are those under which we Western people find it our lot to live.

And, as Mr. Ruskin and William Morris faithfully warned their generation, we live in a time of economic transition, too. Do those who would commercialize liberal education regard the existing economic order as ideal or permanent? I can conceive heated controversy arising as to the ethical aims to be inculcated, directly or indirectly, in a course of commercial education. At present, such commercial education as we have in England is overshadowed by kinds of training which have been founded on quite other than commercial ideals of life. Suppose, however, the position reversed. Suppose that the most influential part of our national education were to pass under the control of persons to whom, as to *Negotius* in the *Serious Call*, "the general good of trade seems to be the general good of life," and who, like him, admire, commend or condemn everybody and everything with some regard to trade. Under such control our higher schools would, sooner or later, necessarily tend to encourage, by hint, precept or example, those qualities of character which are found most generally to command commercial success. Are we certain that we desire to see those qualities held up to the picked youth of the nation as the chief ideals of manly effort? How long would it be before the supremacy of the commercial ideal provoked deep and deadly resentment, and so endangered the orderly development of what is good in modern trade and industry? "Away from the market happeneth everything that is great," wrote Nietzsche, in bitter rage against some of the idols of modern life. Ought we not to discourage in education these false extremes which end only in the rebound from Mr. Gradgrind to Zarathustra, and back again?

Again, in the sphere of rural edu-

cation we must pay special regard to the difficulties inseparable from the social and economic changes which are profoundly affecting agricultural occupations, and consequently many other forms of country life. No mere mechanical remedy is adequate to the troubles caused by so complex a change. Let us remember that schools of the same grade, though to an outside observer they may look very like one another, do as a matter of fact differ widely in point of intellectual and ethical influence. In all education, and certainly not least in rural elementary education, very much depends on the teacher's attitude of mind towards life and nature. A love for nature and an interest in country life are infectious things. Much more turns on the teachers, and on the atmosphere in which they have been trained for their duties, than on the actual subjects put down in the school time table. And have any other children a stronger claim than country children on the consideration of those who are charged with the responsible task of guiding the studies of our elementary schools? It would be inconsistent with Christian principles, and, in my judgment, with the true welfare of the state, to attempt, by means of the curriculum of village schools, to stunt or to warp the life aims of the country children in the supposed interest of this or that section of the community. But similarly it would be a cruel wrong to deprive young children of that keen and observant interest in country life and country duties which well-directed and intelligent school teaching can stimulate and train.

IV.

At the outcome of these considerations I would venture to indicate

the following answer to the question proposed for our discussion to-day :

The matter is a very serious and complicated one. We cannot hope, at this time of transition, to reach a final or satisfactory settlement of it. But the whole question calls for temperate and dispassionate inquiry and for skilfully-ordered and closely-watched experiments. It is an economic and social problem, not only a pedagogical one. Above all, let us hold fast to what is of known excellence in our education. And let us not, in building up great plans, forget to consider what our plans will require of the teachers. It looks as if future educational progress would necessarily involve much smaller classes, knit together in schools of sufficient size to secure *esprit de corps*. And much, very much, will depend on our securing for all teachers, men and women (and not least for assistant master and mistress in our secondary schools) those financial and other conditions of work which permit the highest efficiency alike in their preparation for their profession and in the discharge of their professional duties. We shall need to keep all schools in closer touch with life. And, as we profoundly differ from one another in our ideals of life, this will surely mean variety of types of schools and real freedom for different kinds of educational development even in directions which may be at the time unpopular. Englishmen will never brook a new Act of Uniformity under the guise of some administrative monopoly. But, in the case of all schools, there must be access for all, however humbly born, who can fully profit by the training which the school can give. And personally, I believe that all true education involves sacrifice, and is the better for sacrifice. It is a cruel

kindness to make the higher grades of education too easy of access for the intellectually unfit. Gradually we shall feel our way to wise reforms in methods and in subject-matter, but let us not recklessly cast aside anything which we know to be valuable. Shorter hours and intenser work are likely to prevail in schools and in workshops. In order to keep the schools in touch with life and with new needs, our teachers must have leisure and means for further study, for wider travel, and for social intercourse. Over-driven and worried teachers cannot be expected to welcome, or to work out, new ideas. And the doctors and the parents will have much to say both on methods of instruction and on the standard of intellectual requirements. Let us also cherish the hope that the future may see some limits set to the idolatrous worship of certificates, and to the tyranny of examinations. The real test of the value of any education is to be found not in examinations but in life. He was a wise man and a great teacher who said that "there is no excellence in any knowledge in us, till we exercise our judgment, and judge well of the value and worth of things."

In fact, may it not be said that one chief cause of the present unrest is that the importance of education is being more and more realized, and that people of all kinds are beginning to look into educational questions for themselves. Every year the schools are being less left to go their own way. People are becoming more interested in them, and, because they are interested, they talk—not always wisely perhaps—but the growth of public and parental interest is an

immense gain and full of promise for the future.

And when the earlier stages of the new movement are over I expect that we shall anchor ourselves more firmly than ever on some of the old principles. English education at its best stands for the training and discipline of the moral will, but the play of the will must be informed by necessary knowledge or strength of will becomes perilous obstinacy. The problem is how to select the right kind of knowledge and to prevent mere intellectual attainment from encroaching unduly on the duties, the leisure and the recreations necessary for the true discipline of the will. No purely intellectual test is a just criterion of educational excellence. The highest intellectual outcome of educational discipline must have a moral side as well. Take Sir Henry Wotton's description of his learned friend Dr. Sanderson. "There was in him no sourness, no distraction of thoughts, but a quiet mind, a patient care, free access, mild and moderate answers." "To this," he says, "I must add a solid judgment, a sober plainness, and a most indubitable character of fidelity in his very face."

And if we aim at producing in our boys and girls, as the outcome of their schooling, veracity of judgment, does not this too imply, as a condition of its highest excellence, that they should possess the sweetness of temper and good manners of the mind and heart which alone enable men and women to speak the truth in love, that love which abounds in deeper knowledge and in sensitive perception of truth?

In every service.....a man must qualify himself by striving early and late, and by working heart and soul, might and main.

SCHOOLS FOR GIRLS IN CANADA.

BY ANNIE MARION MACLEAN, M.A., PH.D.

A SUBJECT of absorbing interest to those who have to do with the higher instruction of young women is the nature of their preparatory tuition. Even to those whose work is wholly within the secondary schools themselves, the question is of absorbing interest. When one feels, as every teacher must, that the training is for life, and not for a limited term, the matter assumes a serious aspect, the importance of which cannot be overestimated. In what way the most desirable mental development is to be attained is a grave problem. The vexed question, as to the respective merits of written and oral examinations, or a judicious combination of the two, may be overlooked for the present while we consider one particular class of schools, and the work such schools perform.

One involuntarily compares students who have been trained in private schools with those who come from the Public Schools. Comparisons of this kind may be odious, but they are irresistible among people interested in the broad question of general education. Each has its warm friends and strong supporters. And in addition it seems a little absurd to consider the two as in any sense rivals, especially in a country like Canada; the latter surely appeal to the democratic spirit in a people, while the former may pander more or less to the aristocratic notions of some persons, although this interpretation of their function might be far from the original intention or motive of the founder or founders. But whatever else may be said, it certainly seems true that the girl educated in the Public Schools is freer from petty frivolities

and the desire to maintain foolish class distinctions than her sister who has been carefully trained in a girls' school of a more or less exclusive type. I do not say that such is the natural outcome of the two systems, but the suggestion is interesting. The question as to the social value of private schools may be raised for the present, in order to see at first the purely pedagogical side.

In this sparsely-peopled country, where many of the private schools for girls are barely subsisting, one may be led to wonder whether they are really filling an educational need, or if they are are simply numerically weakening the Public Schools, which attempt practically the same work with the exception, perhaps, of music, painting and manners. This is an interesting question. Of course the numbers kept away from the Public Schools by unsuccessful private institutions are hardly worth considering. On the other hand, it may be urged by the promoters of the institutions under discussion that their constituencies are formed of girls who would not in any case attend the Public Schools beyond a certain period, and that thus the cause of education is served by providing training for those who, for various reasons, would not avail themselves of the advantages offered by the common school. The question in hand thus presents itself in these two phases. It is not so much the desire here to try to discuss the merits of the respective systems as to present the facts relative to girls' schools in this country, and to show, to some extent at least, the place they are filling in our educational scheme. The

presentation may be suggestive and conducive of helpful discussion. The education of the young is always a live topic, and all are ready to acknowledge that there is room for improvement in methods, whether in schools under state control or in those responsible to private parties.

It is somewhat difficult to obtain accurate and full statistics relative to private schools in this country, so this paper does not profess to treat the matter exhaustively. It is hard to know the fortunes of the various small private schools, for in many cases their rise, decline and fall follow each other in such quick succession that what was yesterday a school may to-morrow be a boarding house. And there is no central bureau of education whose business it is to gather and disseminate full information concerning such matters.

According to the census of 1891 there were in Canada 318 boarding schools for girls with 15,302 inmates. This was an increase of 44 schools and 2,238 residents since 1881. Allowing for a more rapid rate of increase of population the number ought to be considerably greater than this when the census of 1901 shall have been taken. In addition to the above there are of course a good many students who attend the private schools while living in their own houses, and their names are not included in the above figures. Compared with the number of girls who attend the Public Schools these figures seem ridiculously small. Taking one province as illustrative of the others in this respect we find that in Nova Scotia during the year 1899 there were enrolled in the Public Schools 100,617 pupils, of whom 49,284 were girls. The same year there were in attendance at the various private schools for girls, ex-

clusive of Colleges, but 262 girls, and this includes one or two private Kindergartens. From these figures it does not appear that the private schools are in any immediate danger of encroaching upon the legitimate sphere of the Public School. One may wonder why these two or three hundred girls should be thus educated, while about fifty thousand others, rich and poor alike, are attending institutions founded by the people, and for the people, and maintained by popular assessment; yet we cannot say that it is without reason. Without specifying figures in regard to the other provinces, it may be assumed that the proportions are essentially the same, and that the competition is not felt even by the High Schools and Academies. Thus with the element of competition wholly eliminated from the discussion there only remains to be seen the function performed by the private schools as an educational factor in society. It does exist, and is an institution of some power in the land. Why does it enjoy this prestige? It cannot be denied that many of these schools do admirable work in fitting girls for college as well as in giving a broad outlook to those who do not intend to enter upon a collegiate course. They frequently have well-equipped teachers and facilities for work not found in Public Schools in small towns or villages. They aim to keep in touch with the Colleges and improved methods of work generally. Many such institutions, too, affiliate themselves with the Universities so far as the taking of their Entrance Examinations is concerned; this is most desirable as it tends toward a much-needed uniformity of grade standards.

It would be an excellent thing if all private schools of whatever grade should be required to submit

a report to be incorporated in the annual one of the provincial superintendent of education. This is done in one or more of the provinces in such a way that private or denominational schools are easily recognized as such. It is folly to try to estimate educational forces of the country while omitting these. New Brunswick reports six such schools in 1899 with about five hundred pupils. The effort made by two of the Maritime Provinces to obtain such information has been purely a labor of love and so was not in all cases appreciated by the schools from which reports were sought, and some failed to respond. There is need for agitation upon this point; private schools form part of the educational system of the provinces and should be so regarded. Moreover, they should be compelled to keep up to a certain recognized standard or cease operating. This could be done and still the greatest possible play for individuality be allowed. If once private schools could be placed on such a basis, one of the gravest charges against their pedagogical value—that of superficiality could

be removed. As things are now, the quality of work done depends upon the education or conscience of those in charge. It may be good; it may be worse than none. If, then, the private school could offer just as good instruction as the Public School, and produce some guarantee of such intention, there seems to be no good reason to pray for its extinction. But while such schools may be started without formality and operated simply for the funds accruing therefrom, they must always be more or less of a menace to sound education.

From the social point of view, they have many things to be said in their favor, but these need not be considered to any extent here. A new outlook is often gained by association with others in the home life of a private school, and the shy, country girl may develop into a charming woman after several years of such life, but if with it all a false idea of education is engendered, then the institution needs investigation. And it would be well for educators to consider the matter carefully, rather than consider it beneath their notice.

THE BRITISH ARMY AND THE BRITISH SCHOOLBOY.*

By J. J. FINDLAY, HEAD MASTER CARDIFF GRAMMAR SCHOOL.

IT is only to be expected that the present time should direct public attention to education as well as to military concerns, for it is a truism to observe that the soldier is a boy at school before he takes service under the Queen. Hence there can be little question that, although for the moment the attention of Government will be withdrawn from education, there will presently be a still stronger reaction in favor of the teacher's cause. Our

difficulties will lead the people to take to heart the famous saying of Von Moltke after the Franco-German war: "Der Schulmeister hat unsere Schlachten gewonnen." We shall realize that the fruits of sound education, in intelligence, in noble sentiment, in active moral impulse, must be looked for in the conduct of a war as much as in the business of trade or manufacture.

But we must not be content with this general dictum. We live in an

* A paper read at a meeting of the Cardiff Branch of the Teachers' Guild.

age when the school is expected to do something more than lay a foundation of sound character and trained intelligence; we are required wherever possible to consider the special equipment demanded for the various pursuits of life, and to do what in us lies to prepare our pupils to meet these specific demands. If the future man is to be a physician, then he must know his Latin and his chemistry; if he is to be an engineer, he must, even at school, pay special heed to mathematics. All are to become citizens and patriots; hence all should know something of the nation's history and the nation's laws. At times this plea is carried to ridiculous excesses. Thus Mr. Chaplin, in the House of Commons Petroleum Committee, gravely suggested that lessons should be imparted in the management of oil lamps, in order to reduce the number of accidents! Hence we teachers have had at times to protest against this demand for "equipment," and plead, in the name of the child, the claims of liberal education.

But the demand, so far as it goes, is sound, and even the most reactionary teachers admit its validity to some extent. Let us, then, consider whether the calling of the soldier may be at all assisted by any special training or teaching of boys during the years of school.

We notice at once that there may be some difference of opinion as to what constitutes the military calling. In this country we have grown up, during three generations, to regard soldiering as a distinct profession, quite apart from civil life; it is true we pay for it, and our statesmen (save the mark!) control it; but we have looked upon the soldier's life as something quite remote from the duty of the common citizen. Nay, further, some earnest Christ-

ians regard the idea of military service with detestation; they consider that the life is only fit for men of low type, who are unworthy of pursuing peaceful avocations. And yet we all pay taxes to equip the soldier; we are citizens of a free country and must share the guilt, if guilt it be, of every shot and every shell that is fired from a British gun.

Among other lessons from the Transvaal, we are surely learning not only a better sentiment of respect and sympathy for the military life, but we are learning something more than this, something which may vitally affect the future of millions of English youth—we realize that the whole nation capable of bearing arms may be called upon to serve the Sovereign in the field. Let us, in this point at least, pay a generous tribute to our Boer enemy. Their attack, we believe, is unjustified; their enmity and quarrel due to ignorance and the ambition of their leaders; but who can fail to be impressed by the spectacle of a nation of farmers, fighting, young and old, to the last man? And who can fail to point the moral to our own case, and ask how long it may be before we also may be required to offer our tens of thousands of civilians for the rescue of an empire in peril? Among free nations, soldiering never has been, and never can be for very long, merely the pursuit of a separate profession. It becomes, in the last resort, a duty, an office to be fulfilled, if need be, by every citizen, as much as the duty of voting and of paying taxes. Hence the problem before us is a double one. We have to inquire (i.) what the school can do by way of preparation for the soldier's career, regarded as a calling in life for the officers and men of our permanent army; (ii.) whether the school can do aught

to prepare the future citizen for the duty which may fall to his lot, of assisting his country in the hour of peril by giving himself to her service. We shall only discuss the first of these problems incidentally, dwelling mainly on the second.

1. Let us first see what has been done so far in earlier times of peace.

a. Cadet Corps—Cadet corps were first set on foot forty years ago, and great hopes were entertained that they would prove the commencement of a splendid Volunteer force. Companies of boys were organized in most English towns, with real enthusiasm and energy; but most of them were soon disbanded, because there was no steady controlling discipline to keep the boys at it. Hence the only places where cadet corps have flourished have been the secondary schools, and, chiefly, the Public Schools. And, further, it is only in the boarding schools, where the boys have no home ties, and where they want occupation for leisure hours, that the cadet corps has flourished; I know of no school which is purely a day school where the cadet corps plan has taken root. And, again, most of these boarding schools are those called "Public Schools" where there is also an Army class, preparing boys for Sandhurst and Woolwich, and where many of the boys are related to officers of the Army or of Volunteer battalions. The moral of this story is clear. Cadet corps started with enthusiasm at a crisis of excitement will soon die out unless (i) they are associated with the permanent discipline and corporate life of a school, (ii.) the parents and friends of the cadets are interested in military concerns. And the corps is likely to do far better if the cadets themselves see that the work has a distinct relation to their future duties in life. A cadet who has

learnt his drills is helped materially when he gets admitted to Sandhurst or Woolwich.

b. These same Public Schools educate nearly all the boys who take up arms as a profession. I doubt whether there is an Army class in any of the great secondary day schools of our large towns, such as King Edward's High School in Birmingham or the Bradford, Leeds, and Manchester grammar schools. All the training in intelligence and industry, in mathematics, geography, science, which our officers secure up to the age of eighteen is got at these fifty odd schools, or at the cramming establishments to which some boys are sent when the Public School fails to bring a candidate up to the mark.

This is a very serious topic to handle at the present moment, for every one has come to recognize the necessity for highly trained intelligence in the leadership of soldiers; and we may hope that our new Board of Education will be permitted to assist the War Office in considering this department of national defence.

c. Almost every secondary school conducts some kind of exercise in military drill.* Boys are very commonly taught to march in step, to form fours, etc.; here and there—as notably under Mr. Gull at the Grocers' Company's School—the work is well done, and the boys become proud of their drill; but commonly the reverse is the case. For in most schools there is no final end to be achieved; marching and

*Some schools—such as the Cowper Street School in London—achieve better results, by adopting an "intensive" plan; each company (comprising three or four forms) takes drills daily for three weeks once a year. During this time improvement is witnessed daily, just as with recruits when first taken to barracks, and the drills are dropped before the boys have lost their interest.

wheeling are not in themselves very cheerful occupation and, unless the work is done with great skill, and done with a distinct, well understood purpose, it usually fails; neither boys nor masters like the task.

On the whole, the "drill" which is adopted in so many endowed schools, in compliance with the Commissioners' Schemes, has failed in its object, and has done little or nothing to aid in the equipment of soldiers, or to interest young men in military affairs.

The same may surely be said of drill lessons in the primary schools. There are conducted efficiently, for the teachers have almost always been members of training college Volunteer corps; but, in the opinion of the present writer, the boys are not of the right age for military drill and the little that they learn can be of very small service to those who in later years "take the Queen's shilling" or join the police force.

2. *Foreign Countries.* — Just a glance, before we proceed, at the systems of foreign countries, to see whether they offer any useful analogies. We should naturally have expected Germany to show us the lead in this matter, for she has been a pioneer in army reform as well as in education; but here, as in many other matters, Germany in military affairs is a despotism—it is an armed camp, a nation standing at attention, ready to defend alike its eastern and its western flanks against foes which are a permanent menace. France is in the same condition. In spite of its republican government, it is still controlled in its military ideas by the traditions of Napoleon. It is only a country like Switzerland, really democratic in its sympathies and ideals, which can offer us useful comparison. When we find that the War Department in Switzerland

has a close connection with the schools, controlling the gymnastic exercises of 90 per cent. of the school-children, and organizing some five thousand* boys of the higher schools into cadet corps year by year, we might be tempted to argue that the evil spirit of "militarism" had infected Swiss education. On the contrary, no nation is more peaceful in its policy; in no part of Europe has the unholy ambition for military glory less influence. And the reason is evident; this system brings military affairs in a familiar fashion before the nation at large, and prevents the establishment of a separate military caste. It is the social cleavage created by an isolated military clique or society which now, as always, threatens the peace of nations; but if you acquaint your ordinary civil middle-class population with the use of arms, you serve to protect your country without fostering the military spirit. This has surely been the experience of nations in the past. Rome and Italy were free so long as the Roman was at the same time a citizen and a soldier; Athens was free until the Athenians forsook the practice of arms for the babble of the assembly; and English freedom will expire if English citizens are content only to vote and pay taxes, leaving the defence of our Empire to Goorkhas and Soudanese. I venture, then, to urge for comparison the methods of a peaceful nation like the Swiss, who are as democratic as ourselves, but who recognize better than we have done the obligations of the citizen to serve his country with his person as well as with his vote and his money.

3. We now come to close quarters with the problem of the moment. The nation is really in earn-

*A similar organization in England would give us over half-a-million efficient cadets.

est just now about national defence; can we take advantage of this awakened zeal to devise a plan which will not only succeed for a year or two while this fit of enthusiasm lasts, but which will abide as a permanent measure of defence?

Let us first inquire as to the age at which a boy should begin military exercises. I answer the question from my own experience quite emphatically, and say that the beginning of the period of puberty (fourteen to sixteen) is the earliest age at which to introduce the boy to these pursuits. During these years he begins to take a real interest in his own future career, his imagination and interests widen rapidly, and can be stirred to a genuine sentiment of patriotism—not a sentiment which he will talk about, but which he will feel all the more because he keeps it to himself. Again, his body and mind will both need and respond to vigorous mechanical discipline, such as you have no right to exercise at a younger age. This period of adolescence is the only time in life when a boy can fully learn those habits of corporate action, of obedience along with his comrades, and of authority over his comrades. All the world over you find that the spirit of disciplined enthusiastic comradeship springs most vigorously from young men at schools and Universities before they have completed this period of life, before they have settled down to the steady humdrum life of the fully-developed adult. It is in these years—between fifteen and twenty-one—that you have the finest opportunity for sowing the seed of new movements. Preachers know this, and they seek their mission converts at this period. Revolutionaries like Garibaldi knew it too.

It is for this reason that I regard

military training as a matter of special interest to our secondary schools. Roughly speaking, the primary and higher grade schools take charge of children whose school life ends before the fifteenth birthday, while the secondary school cares for those who remain at school up to the age of sixteen, eighteen, or nineteen. While, therefore, I should urge that the primary schools can do much to aid in national defence by caring for physical exercise, for gymnastics, swimming, and school games, they cannot well go further. If the boys of the elementary schools are to be taken in hand, they must be secured after they have left school, and must be trained in their leisure time when they are set free from manual labor, from the warehouse, and the shop.

Many schoolmasters will not be prepared to agree with this opinion off hand. A great deal of square drill is done with younger boys, and some will be found to argue that the boys like it and that they profit by having a continuous course year after year. If then while very young they can learn the elements of drill, they will be ready when fifteen years of age to advance more rapidly to rifle practice, to fatigue marches and the rest. Without carrying the controversy further, I will leave the question to be determined by the experience of others, merely pointing out that I have tried experiments in this matter since 1885, and I find that the plans of the Swiss schools confirm the opinion here offered. Let it be borne in mind that drill when done properly is a severe restraint, and a trial to young boys; I do not, of course, refer to what is called "musical drill"—this is very different from proper military exercise, and is more allied to dancing and calisthenics than to military exercise, it is an amusement which

pleases little boys and girls if it is not carried too far, and it gives even more pleasure to beholders when the performance is exhibited in public; but it has nothing in common with the serious business which military men will require from us.

Further reasons for seeking a recruiting ground in the secondary school are (i.) the older boys of a good school are already bound together by those ties of good comradeship which are as essential in a Volunteer company as in any other corporate society. And after they have left school these ties may, and should be maintained—witness the formation of two companies of old boys at the Grocers' Company's School recently. (ii.) The school is a place of discipline, and (assuming of course, that one or more masters will take a share as honorary officers) effective results are easily secured. We noted above that the early efforts to form cadet corps in town failed precisely because of the lack of discipline.*

4. Let us then turn our attention solely to the situation in secondary schools, and, in order to be very practical, let us consider the special situation in that large class of day schools called in Wales "intermediate" or "country" schools, and in England "grammar" or "high" schools. We have in England and Wales more than fifty-five thousand boys over fourteen years of age, and of these half may be credited to the above schools. All these schools are under some kind of public authority, and, if required, their

* I may here mention a point in school organization which arises out of the fact that younger boys cannot be effectively introduced to military drill. I have found it convenient to divide my school into two groups, one for military drill, the other for singing. When a boy's voice breaks, he ought not to be allowed to sing for three or four years; so he leaves the singing classes and joins the drill class.

operations in this, as in other matters, can now, thanks to recent legislation be directed on some systematic plan.

We may assume that on the average these thousands of boys will be available for at least two years, and that nearly all the boys of proper age will be permitted by their parents to join a cadet corps, if the cost is not excessive. There are, of course, a few parents who conscientiously object to military pursuits, and will refuse to allow their sons to wear a uniform. Some would probably refuse even if Government made the matter compulsory; and I am sure we ought to respect these conscientious objections. But these would only be in a small minority, and, if to these we add a few whose physique does not allow them to hold a rifle, we shall have some 90 per cent. of the older pupils in secondary schools who may be regarded as possible material for cadet training; and if the total for any one year be considered small, it must be remembered that every year new members will be enrolled in large numbers, and the older members will, if wise organization be adopted, remain enrolled as "old boys," and continue their training in the art of war.

We have now to consider four points—*a* What time during these two years can be allotted to the work? *b*. What money is needed, and from what sources can it be obtained? *c*. What branches of military exercise can be most appropriately selected? *d*. What form of corporate organization is best adapted to secure permanence and enthusiasm?

a. As to the time to be given up to these pursuits, let me make one remark—We must not rob Peter to pay Paul. Our boys are not over-educated; they have little time

enough as it is to learn all that they are required to learn, either for culture or for their future career in life. Most of the time which we take from them for this purpose must be self-sacrifice on their part: it must involve the giving up of some leisure time, either in the holidays or out of lesson-hours.

Most schools arrange already for one or two lessons in drill week by week; if to these you add an afternoon every week for practice at the butts or for riding, and crown it all with a week or ten days in camp, you have an allotment of time which, I venture to think, would be sufficient to produce a respectable result after two years. The camp is an essential feature of the scheme, and days for camping must come out of the long summer holiday, which is already, in the opinion of many parents, longer than it should be. This sacrifice of holiday time will press more hardly upon the masters who act as captains than upon the boys, but they will be content to find their reward in the results which they achieve.

b. The schools can thus be expected to provide the time required; but with the money it is different. I know no school, rich or poor, in England or Wales, that would be justified in taking a penny of its funds away from the proper purposes of education in order to provide for national defence.

In all the schools where cadet corps flourish at present the expense is largely borne by the parents; the Government provide carbines, ammunition and various camp-fittings, but other expenses are met by subscriptions. And it must be borne in mind that many parents subscribe because their sons are intended for the army, and practice in the cadet corps saves them trouble when they enter Sandhurst or Woolwich later on.

Now the schools which we are considering belong to a different category—if you like, a different social category. It is not our business in schools to consider social distinctions at all: our secondary schools are, in the best sense of the word, "public"; in grammar schools we have boys whose parents can only just manage to pay the fees, and some who cannot pay at all—the boys attend because they hold valuable scholarships; we have others who could, no doubt, pay the fee ten times over and never miss it; the school as such recognizes no such differences. But, on the average, we cannot expect the parents of a grammar or intermediate school to subscribe in the way that is common in the large boarding schools.

Hence we must look for aid mainly to two other sources—either to public subscriptions in the locality or to Government. I am inclined to think that a public subscription could very properly be solicited in order to cover the initial expenses, but I am sure that it would not do to continue sending the hat round year by year. The large expenses must be borne by Government, and, if these are supplemented by an average subscription from the parents amounting to 5s. or 10s. per annum, that is all which we can fairly expect. We ought also to hope, I think, that the necessary expenditure, especially on uniforms, may be reduced from that which is usual in the great Public Schools.

c. Assuming that the time and the money are forthcoming, what branch of military service should be selected as most suitable? A little inquiry will make it clear that it is impossible to produce any satisfactory result either as engineers or as artillery; indeed, I am told that some authorities are sceptical as to the possibility of any volunteer force becoming really effective in

these difficult branches of the service, for they seem to require complete and life long devotion both to the science and to the art of warfare in order to achieve success.

But, however this may be, we have to regard the cadet corps simply as a foundation for more advanced training in later years; and, from this point of view, ought we not rather to aim at introducing the cadet to several branches of military duty, especially to those which make a demand upon his intelligence as well as upon his power of mechanical obedience?

A schoolboy of good education cannot be trained exactly like a recruit for the army, and it is surely possible to modify his course of training so as to give play to his intellectual powers. For example, I notice that an artillery officer at Southampton has recently been working with a body of teachers* in military "reconnaissance," and, from the printed record of their proceedings, I should infer that this work—based partly on mathematics, partly on geography—would be a most admirable occupation for schoolboys, and might be taken as an excellent substitute for the futile studies which we sometimes undertake, under the name of geography, for public examinations. Now, if some interest of this kind be added on to (i.) elementary drill, (ii.) trench work with the spade, (iii.) rifle practice (particularly, by-the-bye, in the hope of discovering and noting those who are really good shots), you have made a fair start.

In some schools I think it might be possible to add another accomplishment—the art of riding. Some twenty or thirty lessons would be sufficient to enable a boy to keep his seat on a horse, and, like swimming

* "The Southampton Geographical Society Report" for 1899.

and skating, it is an art that is never forgotten when once it has been properly learnt. No doubt, if a boy in later life needed to serve in the Yeomanry or Mounted Infantry, he would need to become far more proficient in horsemanship, but with boys a start and a new interest are much; we can certainly prophesy that a cadet corps would be much more popular with the cadets if every boy in his turn were given a chance of going out to a country farm to learn how to sit on horseback. It may well be that I am suggesting far more than can be attempted in the time, but I am assuming that it will pay better to give the boys an introduction to several forms of exercise than to aim at special proficiency in only one or two; and I am taking it for granted that the work done at school is only a foundation for more advanced efforts during the succeeding years when the cadet has become a Volunteer. In these matters I have compared the methods described in the regulations for cadets in the Swiss schools,—thanks to papers supplied by the courtesy of the Director of Inquiries and Reports (Education Department),—and I have asked the opinion of gentlemen connected with the Volunteer movement. It is, of course, a matter for Army experts to decide what it will be most useful, from the military standpoint, for boys to learn; but it is for us, speaking from our knowledge of boys' powers and ways, to point out the directions in which success is most likely to be attained.

Before leaving this topic, might I urge in all seriousness, that the pursuit of these military subjects should be recognized by examining boards who issue leaving certificates to our pupils? These boards recognize arts like music, drawing and carpentry; why should they not give

similar credit for elementary proficiency in military arts? This procedure would tend to give more definiteness to the inspection, and would help to incorporate the work more fully in the whole programme of the school. A boy whose leaving certificate is endorsed with a high mark for shooting, for drill, or for "reconnaissance," will be much more likely to do himself credit in various careers in life than a boy who has failed to gain such a certificate.

Finally, we have to inquire as to the best form of organization for companies created in secondary day schools. I wish to offer a strong opinion that some further provision is necessary, beyond the present regulations for cadet corps issued by the War Office, if these schools are to be used as nurseries for national defence.

Let us notice that at the present moment large classes of society of this country have very little representation either in the Army or in the Volunteers. However unpleasant it is for us to discuss social distinctions, we cannot ignore them when dealing with a matter which is essentially connected with social good-fellowship. Suppose a bank clerk, or a young medical man, or a warehouse manager, on a small income, wishes to join a Volunteer regiment, how is he to fit in? He has not the means to become an officer, and he cannot join the privates. He has not the tastes and habits of a manual laborer, and, if he sought to join their company, both he and they would be uncomfortable.

This accounts, surely, for the fact that no cadet corps are to be found in our large English grammar schools; for it is useless to found a cadet corps unless its members can look forward to continuing their training either in the Army or in the

Volunteers. Now the Army is, on the whole, closed to poor men. I do not say this by way of complaint, but simply as stating a fact which must be taken into account in any proposals affecting the future of our boys. If, then, the Volunteer force is so organized as to allow no place socially for the educated men of small means, it is clear that there will be little use in organizing cadet corps in schools.

Hence, I venture to urge that some Volunteer organization needs to be created into which any old boys of our secondary day schools, not only those of large means, but those of straitened means, can be drafted as soon as they leave school, consisting of companies or battalions in which the privates and some of the officers are also old boys of these schools, in which the *esprit de corps* of school life will continue to play an active part, and which will involve a far less expenditure of private income than is—very properly, no doubt—involved on becoming an officer in most Volunteer regiments. Such an organization would include many of the most energetic students in our University Colleges, and it would meet the needs of many young professional men, as well as young men in business, who at present, as I have pointed out, are left out from causes for which no one is to blame, and which cannot be remedied by declaring that all men are equal.

Now, it is not for me to judge how far it is possible, or advisable, to devise such an organization, but there are some precedents to guide us. The Volunteer corps in the Oxford and Cambridge Universities have been created from a body of young men endued with a common corporate spirit, and it is possible to become a private in such a corps without any great demand upon the

purse. It is the same, I suppose, with some of the Volunteer corps at the Inns of Court and elsewhere in London; and, presumably, it is the same with the Yeomanry in country districts. It might, surely, be feasible to create some similar organization in towns where there are good secondary schools to supply a nucleus.

In Wales this may, perhaps, be feasible sooner than in England, for

the educational movement has linked itself most happily with national aspirations, and the completeness of our system of Colleges filled with hopeful young men, backed up with cadets in the eighty county and intermediate schools, ought, surely, to afford us material for a small, but really useful and effective, addition to the Volunteer forces of the nation.—*The Journal of Education.*

RELATION OF THE PHYSICIAN TO THE PUBLIC SCHOOLS.*

BY KATHARINE MILLER, A.M., M.D., LINCOLN, ILL.

WHILE it is old-fashioned to style our Public Schools "the palladium of our liberty", no thoughtful person fails to realize that the old idea has not vanished but grown more prominent and important as the relaxation of so-called "puritanical" discipline in the home and the incoming of an immense body of uneducated foreigners from the lower classes of southern Europe have made the Public Schools the only place where this mass of lawless and unassimilated material may be transformed into a good American citizenry. It is perhaps aside from my topic to wonder that our statesmen do not perceive the danger involved in submitting this work to the hands of a class largely disfranchised and with a patriotism all untrained in the daily drudgery of civil affairs. However important, that subject, as Kipling says, is "another story."

Our profession represents to a degree, the broadest intelligence of our State, those among secular professionals who are most accustomed to look at every subject from a stand point remote from personal interest. We may well inquire, then,

whether we have any special relation to the Public School and to the problems of popular education. Responsibility increases with opportunity and ability; and that we have an especial relation to these questions is indicated by the fact that nearly one-half the communities of our state electing Boards of Education (aside from the country districts) include M.D.'s among the members. Recent correspondence with a number of these ladies and gentlemen has brought me some interesting suggestions and has emphasized the thought that in many places both physicians and people feel that we have especial qualifications for this work by virtue of our knowledge of the sanitary principles involved in school hygiene, and of the relation existing between good physical conditions on the part of pupils and teacher and the amount and quality of work accomplished. To us the educator turns more and more for help as he recognizes the practical questions involved and to be met by him in securing the advancement of his pupils. He realizes, perforce, that a pupil with continual headache cannot easily learn, that pupils anes-

*Read before the Illinois State Medical Society, May 17, 1900.

thetized by foul air are not alert to catch ideas. He finds that all his modern methods of presentation do not lead his flock to more rapid acquisition of knowledge than was found in the old log school-house, and he asks: Why? The medical man of to-day stands ready to answer him. The pure air of the old log house with its clay chinked walls was a perfect offset to all the new methods of instruction given in well-built but unventilated houses.

If any of you have never visited the schools of your community, let me urge you to do so; not the High School which is less apt to be overcrowded, but, by preference, a room where the children average 10 to 12 years of age. Go on a chilly morning, preferably a damp day and not before eleven o'clock, and question of your nose what are the conditions under which study is done, and query whether you have not some special relation to the school by virtue of your knowledge of the evils you perceive and of the means for their relief.

There are three lines along which our professional training may be helpful—the sanitary, which deals with the school buildings and their equipment of desks, etc; the matter of personal hygiene, which includes the prevention of the spread of contagious diseases and the investigation of physical defects such as poor sight or hearing, to the child's school work; and the psychological which considers the relation of the teacher to the child so far as methods of instruction or discipline affect its health, as by the imposition of unreasonable tasks or the infliction of unreasonable and extreme punishments.

The two former of these have already interested many of our number. The last has only begun to attract the attention of those com-

petent to discuss it, though we less frequently hear the statement that the evil results of school life are due to overwork and oftener find an appreciation of the fact that truly hygienic surroundings would generally enable the child to do the work required without harm even though handicapped by a poor physique, in fact, that bad air, bad light and bad seating are more often the cause of that failure of nerve power which has been attributed, without investigation, to the assignment of extreme tasks. We are beginning to realize that one great reason for the need of home study by most of the pupils below the grammar grade is that the schoolroom conditions are so unhygienic that the children cannot do the amount of work they might during school hours. It becomes the duty of the physician, then, to educate the community to demand the proper conditions in school life and then to select carefully and advise as to the very few pupils who will be found so defective in stamina that they cannot do full work even under favoring conditions.

It is true we have many teachers entirely untrained in psychology who need to be shown how their methods transgress every law of mind. Many will prove unteachable and we may help (in a most thankless way, perhaps,) to benefit the coming generations by acquainting parents with the lack and by assisting in the development of a sentiment which will demand the employment of teachers who have studied how to teach.

For the present, however, we can make more apparent progress along the other lines of work, where we are already acknowledged by many communities to have special and valuable knowledge. It is possible in most places where new school

buildings are in prospect for the well-informed physician to do a lasting favor to his neighborhood by interesting himself in the sanitary features of the structure. Even though he be not a member of the Board of Education he will certainly have friends among the members through whom he may influence the architecture. He may through the local press interest others of intelligence and make such building the occasion for extending knowledge of the principles of ventilation and lighting and of the harm to the health and education of the children due to such defects. In the remodeling of old buildings and the adjustment of all possible means to minimize their defect by introducing devices for aiding ventilation and through the arrangement of shades, awnings, etc., to regulate the lighting much may also be accomplished. Most of my correspondents regard this as a fertile field for professional endeavor still too little cultivated.

A department of work most readily conceded to us by the people and in a few of our larger cities already established in official station is that dealing with contagious diseases. The reports of work in Boston and other cities are very interesting from the professional side and not less profitable from the citizen's standpoint. The great increase of such diseases on the opening of schools in the fall and their rapid decrease on closing schools in the spring show their dependence upon the intimate relations of school life for their extension. Often 40 to 80 children are huddled together in a room, generally with lack of ventilation, compelling them to breathe disease-contaminated air again and again, and favoring the concentration of disease emanations till contagion is render-

ed almost a certainty. Edward Bok, of the *Ladies' Home Journal*, is correct when he says: "A national crime lies at the feet of American parents;" but he has, in my opinion, mistaken the character of the crime. It consists, not in the curriculum of the schools, but in their unsanitary conditions which are the product of combined ignorance and parsimony. The ignorance can only be eradicated by the efforts of our profession and when it is gone the parsimony will vanish.

The rapid decrease of contagious diseases, especially of diphtheria and scarlet fever, which follows where there is daily medical inspection of those pupils found by the teachers not to be in good health, shows how valuable a service physicians may render in this way. Of course in small communities it might not be possible to arrange for a system of inspection at the school houses, but much might be done if teachers were required or expected to send all ailing children to their family physician for inspection and a report as to their fitness to continue in school. We should find the work very slightly burdensome, even if we did it gratis, and it would often enable us to detect the early symptoms of serious disease among the children of our clientele, thus preventing much suffering and anxiety.

During the past winter several cases of diphtheria occurred in one quarter of our town, and we found great advantage with but slight inconvenience and marked relief from the "scare" among the people, in a rule that all teachers should inspect their pupils' throats each morning by inquiry as to soreness, and in the smaller ones by external examination for enlarged glands. All cases showing any signs of trouble were required to bring a physician's certificate that they had no contagious

disease before continuing in school. As I was a member of the committee having the matter in charge, many of the teachers sent most of such cases to me. It took but a moment to determine whether there was a condition requiring treatment. If the enlargement was the result of old tonsilitis, and without acute symptoms, I gave a certificate. If acute inflammation existed, I sent the children to their family physician, or to their parents with directions to consult a doctor, and gave prompt treatment to those of my own clientele. The disease was quickly under control, and not a single case developed while the child was actually in school; what extension occurred from the first cases being apparently due to imperfect quarantine, and the mingling on the street of children from affected families with others. This inspection, simple as it was, made parents more watchful, and children with comparatively mild sore throats were often detained from school and sent to a physician who would otherwise have become much more ill before receiving attention.

In the examination of the sight and hearing of school children, Minneapolis, Baltimore and a few other cities have led the way, and many a child is now studying in comfort whose progress had been greatly handicapped and health impaired by the nerve strain due to defective vision or deafness.

Much credit should be given Drs. Wood, Harlan and others in the East, and Dr. Frank Allport, of Chicago, who planned and began this work. The results of these investigations made almost altogether by those unskilled in such matters, and hence apt to overlook slight errors, show an appalling amount of visual error among our young people, largely caused by the unhygienic

conditions of our schools. These results set before every intelligent physician an opportunity for usefulness on the one hand, in establishing such tests in his own community, and, on the other, in removing from the schools those factors which have been shown to be active in producing or aggravating such defects.

So we are led again to the point from which we started, the value of our professional knowledge to the schools, and our consequent responsibility to use it for their good in advising as to questions of sanitation, the location and drainage of school grounds, the proper arrangement of foundations, the proportion of height of ceiling to floor-space so as to insure good ventilation with easy heating, *i.e.*, as easy as the welfare of the pupils will permit; the arrangement of windows, the blackboards, the desks and seats, the books in their typographical make-up, the positions and exercises of the children during school hours, and the study hours out of school; all these questions, with their tremendous bearing on the welfare of the individual pupil and the results in his life, and the consequent relation to the prosperity of the State, are subjects for whose consideration our medical training has made us competent beyond the average citizen.

That we are awaking to our possibilities of usefulness in this relation is evidenced by the increasing number of articles on these topics read at medical meetings and published in medical journals. It will be conceded that our profession has never shirked any duty presented to it (except that of uniting for efficient legislation against the scoundrels who are the camp followers of our beneficent army). It needs no prophet, then, to predict that within the next generation we shall see a

large number of the best trained physicians giving a portion of their time and influence to improve the conditions of school life, and that the results will be evident in stronger bodies and better trained minds than are turned out as the finished products of our schools to-day.—
The Woman's Medical Journal.

EDITORIAL NOTES.

Deliver not the tasks of might
To weakness, neither hide the ray
From those, not blind, who wait for day,
Though sitting girt with doubtful light.

“ That from Discussion's lips may fall
With Life, that working strongly, binds—
Set in all lights by many minds,
So close the interests of all.”

To our readers we commend the thoughtful and timely address delivered by the Deputy Minister of Education, Ontario, at the recent opening of the Normal School, Toronto. Every teacher who has given any attention to the subjects dealt with by Mr. Millar knows that serious mistakes (not to use any harsher word) have been made in the past in connection with courses of studies and examinations. To correct the evils which are still in existence caused by these mistakes is largely the duty of those in power. The address is a hopeful ray of light to THE CANADA EDUCATIONAL MONTHLY.

The recent jubilee of the Ottawa Normal School furnishes us with an opportunity to pay a deserved tribute to its Principal. Twenty five years of continuous service in such a responsible position tell their own story, and are the strongest possible testimony to the sterling worth of Dr. MacCabe.

The school has done a grand work for education in Canada, and especially for Eastern Ontario. Hundreds of schools in the eastern rural districts, as well as in the towns, have, by its proximity, been supplied with trained teachers.

The Ottawa Normal School was opened in September, 1875, by the Hon. D. A. McDonald, Lieutenant-

Governor of Ontario. Dr. Ryerson, Hon. Adam Crooks and other prominent men were present and gave addresses.

From 1875 to 1878 the school did academic as well as professional work. In 1878 the Department of Public Instruction decided that owing to the increased facilities for academic work in High Schools and Collegiate Institutes the Normal Schools should confine their course to purely professional training.

Successive additions have been made to the Ottawa School, and today it embraces Normal, Model and Kindergarten departments, all well equipped.

Principal MacCabe was born in County Cavan, Ireland, in 1842, and was educated in the Irish National Schools, Dublin Training School and the Catholic University of Dublin. In 1869 he came to Canada to take charge of mathematics in the Provincial Normal School at Truro, Nova Scotia. When the Ottawa School was opened in 1875 he was chosen as its first Principal by Dr. Ryerson. Dr. MacCabe was graduated M.A from Ottawa University in 1877, and in 1887 the same University conferred on him the degree of LL.D. He was also elected a fellow of the Royal Society of Canada in 1894.

The subject of our sketch would

be the first man to assign to his staff a large share of the credit of training the thousands of graduates of the Ottawa School, but impartial observers, and especially those who have come in close contact with these graduates, know that to the Principal himself is due much of the fame of the school. Not only has he rare tact and good executive ability, but his warm heart and sympathetic manner are strong factors in winning and retaining the affection of students. Every graduate of the Ottawa School can bear testimony to the dignified, courteous bearing of its head. He will also acknowledge that high ideals of conduct and a lofty conception of the teacher's work are the corner-stones of the Principal's philosophy.

The jubilee of September 14, attended by over 500 old graduates, must have cheered the Principal, who has labored for twenty-five years to advance professional training in Ontario. We wish to add our good wishes with the hope that the genial Doctor may long preside over the Ottawa School.

Ontario is increasing in population, in wealth, in extent of country. On all sides Canada is being recognized as a country of great possibilities, and each province advances in power as the Dominion advances.

We need not enter into figures to prove these statements. We have done that more than once or twice already.

It is being now generally acknowledged throughout Europe and beyond that Canada is a land inviting the hopeful workers from all other lands, be they rich or poor. A land of self-government, of freedom well ordered, of the enjoyment of liberty safe guarded by the "flag" which is the symbol of equal justice,

equal opportunity to every subject whatever his condition may be.

These are human privileges of the highest order. To Canada they have come as an inheritance, the birth-right of every British subject, without respect to race or color. From one point of view—not the highest nor the truest—these good things may be regarded as material, pertaining to this life only.

Good things are easily spoiled or lost.

Are we Canadians, say in Ontario, taking proper precautions to preserve and pass on to the generation following these precious rights and privileges undimmed?

This wide question, important as it is wide, has given the writer much concern

The education of the people in its various parts is the sphere of exertion in our life, where preparation can be made and precautions adopted to preserve, and if possible to enlarge, these privileges for the enrichment of our children's children.

Meeting the other day one who is and has been for years in touch with the fruit of our educational system in its most vital part, the writer availed himself of the opportunity of getting his opinion on the question: Whether he thought our students, say for example those students who apply for positions as teachers, are now better educated than they were five and twenty years ago?

His answer was a clear unhesitating: No.

This is the judgment of a man who has had wide experience and who is very competent to pass judgment on the point at issue; and we take it to be in reality a close approximation to the truth.

The ratepayers in Ontario contribute their millions annually; the

number of Normal Schools is increased; the artificial machinery of the educational office is enlarged and yet the opinion of a friendly critic is unfavorable to the character of the harvest of the educational field.

What does this mean?

Does it show that the same grade of intellectual power does not now, as in years past, seek admission to the profession of teaching, or does this fact reveal to us, that in intelligence only have we retrograded?

The explanation may be found in the combination of these two.

It is plain and has been for years, that on account of the great increase in the number of those holding academic certificates of qualifications for teaching in our Public Schools and in our High Schools and the consequent lowering of salaries that the community would not have the benefit of our best talent, especially of men for teaching. The salary is such a poor pittance that men of light and leading are compelled to turn elsewhere, to other professions or to business. Their inspiration in the most vital work for the country's welfare is lost—a loss which money cannot replace.

The remedy for this loss to the country lies with the Education Department and we believe it may be easily applied.

Whatever the explanation may be we feel quite certain (it may be a comfort to know that we are not singular in this opinion) that our people do not have so acute a sense of responsibility for the true welfare of their children as was felt and cherished twenty-five or fifty years ago. The theory of "get on" honorably if you can, but "get on" in any wise has got hold of our people to an unhealthy degree.

All grades of schools are dominated by the ideal of examinations

("get on"). The care is not to be well versed in your studies and the examination only an index, more or less correct, of your mastery of these studies, but the consuming aim of both teacher and pupil is to take a passing percentage of marks, though the knowledge of the subject be as the morning cloud or the early dew. The most serious part of the matter is, that apparently our people wish to have it so. The perpetuation of this ill-directed instruction is a source of gain to a certain class of persons.

This aspect of the question brings to mind the Ephesian city and the spirit which animated the ancient craftsmen.

For this serious state of matters where lies the responsibility? Without doubt with the family. If all our families attended to their duty in this regard in the right spirit, Ontario would not be facing to-day such a grave problem. And the remedy is with our families. If our families appreciated the gravity of the situation at its true value and accordingly would bestir themselves, the evils so generally complained of would in time disappear.

The families of Ontario elect the men to represent them in Parliament; they support the clergy of all the churches in Ontario; like people like minister, is just as true in this province and at this day, as the converse; all teachers are controlled by them; therefore, the families with whom ultimately the power is, must arise and steadfastly insist on the adoption of proper measures to remove the evils which are manifest to every one.

"The tendency of modern ideas has been to abolish any real discipline in family life, because discipline depends on the principle of headship in the father, whereas, at the present time, the mother is often the real head of the family. A father teaches

children to obey as a duty, while a mother coaxes them to do what is required by giving them presents. The rule of the father develops respect for law and order, while the mother depends entirely on the persuasion of love. It is true that the mother's influence develops sympathies which are the source of all that is most beautiful and attractive in human nature, but unless these sympathies are properly controlled and directed, they may lead to disaster. The father's rule is that of the head, or judgment, the other's influence is that of the heart or sympathy. If a wife will not support her husband's rule as head of the family, she is not likely to acquire the power to make the children obey her. So that if the mother's influence predominates over the father's rule, the children will grow up to do only what they find most agreeable, instead of making obedience to duty the rule of their life." In this work the twain must become one.

THE TEEING GROUND.

The golf ground is on the broad Gulf of St. Lawrence. Northward there is no land till you reach the Magdalen Islands, eighty miles away. The east wind, the north wind and the north-west wind drive the waves tumbling on the loud resounding shore: you hear the sigh of it inland day or night. At other times the sea is placid, the water blue, reflecting the sky above and the passing clouds. Clouds are abundant and such beauties. Ozone is present. The shore a far-reaching sand beach, free for promenade for three miles in an unbroken line, enticing even the unwary to the healthful exercise of walking.

Here you can have bathing of the most varied description; in still

water, in rolling surf; a fine sand bottom; temperature July and August from 66° to 70°. Wearied workers of all kinds, those seeking recuperation, resort to the shores of Prince Edward Island, and see for yourselves what riches of river, lake, shore and sea Canada has to offer her sons and daughters, and to the stranger, also before hurrying off to foreign and more distant lands.

A few rods from the margin of the sea were the "golf links." The golf links to the experience of an amateur player are unique. The ground is all sand; one day, the wind drives the sand in one direction, frequently filling the holes and perhaps the following day the fickle wind shifts and drives the dry shifting sand in a different direction. To add to the joys of the player, in many parts of the "links," the ground is covered with small red sandstones. Your ball of course strikes one of these same red stones, and the ball, as in duty bound, leaps to right or left or straight upwards; or being highly displeased at your awkward play it may come straight back to you. Another characteristic of these golf links on the north shore of Prince Edward Island, kept fresh by the rolling billows of the Gulf, is this, that they are well covered with dunes. For the sake of the uninitiated we quote, "dune, a low hill of drifting sand usually formed on the coast." In this case the dunes are pretty well clothed with tough salt grass. Therefore these links test the patience, endurance and skill of the players.

A LOST BALL.

Near the end of our holiday, an afternoon in August, we went to play over the "golf links."

Driving from the second tee, the ball in its swift flight went wide, but a glimpse was caught of it, as

it swept over the top of a dune near by. Search was made for it, a careful search, more than once repeated, but no ball could be found; over dunes, into hollows between dunes, through salt grass, green and tough, all in vain. Depressed, for I hate to lose a ball, play was resumed, finished, and a good score made.

Reluctantly I returned to the house—it was getting late—without my ball.

Through the evening, the night, and the following morning that ball reflected light upon me from its lonely bed by the sea-shore; it appealed to me to come and find it. Something whispered to me every now and again, "You have lost a ball; Find it." Before the sun passed the meridian next day, the "golf grounds," by the sea, saw me at the second "tee," and taking a line from the "tee" to the point where the ball passed in flight over the top of the dune, I walked straight on, and lo! in a few minutes found the lost ball at the bottom of the hollow between two dunes. Why did I not find that ball yesterday? I was in a hurry, did not think; did not go to the teeing point.

TO COMPARE SMALL WITH GREAT.

A teacher has a scholar, who, do for him what he can, does not do good work, fair work even. The scholar is careless, inattentive, disturbs the class. The teacher adopts various expedients, carries the case on his mind for days, feels that the scholar is slipping from him. What shall I do, says the puzzled teacher to himself. The writer of this short note advises: go to the parents, if not both, be sure to see the mother. Do not patronize, go as a friend. Make plain that you wish to co-operate with the heads of the family. Do not put the "cart before the horse" by making them

understand that the parents are to co-operate with you. That may come naturally of its own accord, afterwards; but you make the point clear that your work is to aid in securing good results for them. Let the teacher see at least for himself the surroundings of his intractable scholar.

It is possible to find out why the living school does not get hold of the inattentive scholar. This is simply going to the "teeing" ground in order to find a line of action for your future dealings with your scholar.

This mode may fail you in your effort to hold your scholar, but it will give you some light, and, very often, quite clear light. Sometimes, after visiting more than once, after anxious thought and wise dealing the scholar slips from your influence, and he is lost to you. I will not attempt to reveal or depict the thoughts of the conscientious teacher in such a case, only for encouragement this much: Recollect always in your musings that the best Teacher, and with a small class, too, had one who would not yield to the Master's influence and become a true man. Think of the Master's passion in such a case. The glorious joy, the unfailing joy of recovering a lost piece, a lost sheep, of seeing afar the returning son!

The great majority of teachers are to have small salaries; the great majority of their pupils are inevitably to fill lowly places; but that need not hinder them from comprehending the situation. To be able to labor in the lowly place with honor and with submission to Him who marks even the fall of a sparrow is the effect of self-comprehension as far as is possible, and of faith where eyesight is not adequate. Education in its best sense is self-comprehension and world-comprehension. By it man is put on an

eminence O, teacher, do not make a mistake in this matter; "getting on is one thing; getting up another."

CURRENT EVENTS.

Canada has been awarded the "grand prize" in secondary education at the Paris Exhibition.

The Rev. J. T. L. Maggs has been appointed Principal of the Wesleyan Theological College, Montreal.

The report is that the number of teachers attending the Model Schools for training is less than last year.

The Rev James P. Whitney, a graduate of Cambridge, has been appointed Principal of Bishop's College, Lennoxville.

Prof. J. G. McGregor, of Dalhousie University, Halifax, N. S., has been appointed Professor of Physics in the University of Liverpool, in succession to Prof. Lodge.

The annual Convention of the Provincial Association of Protestant Teachers of Quebec will be held in the High School, Montreal, on the 18th, 19th, and 20th of October next.

Mr. R. Meek wants the Scriptures read daily in every school in the city of Kingston. At the Board of Education meeting he said if it were necessary to cut anything short in the daily school work, he hoped the Scripture reading would in no way be interfered with.

The Oxford University Press, which is exhibiting in three different groups at the Paris Exhibition, has gained the unique distinction of

being awarded three Grands Prix—one each for Higher Education, Book-binding and Oxford India Paper.

An extract from the New Code of the Board of National Education states that permission is given in Ireland to teachers who have Irish-speaking pupils and who themselves know Irish, to use Irish in teaching English, and to inspectors to use Irish in their examinations.

An expert from the United States of America, in comparing the elementary schools of Great Britain and those of the United States, says that the British schools are more thorough than the American, that the teachers in the British schools work harder, talk more. He thinks too much talk and too much help is given to the pupils. He found a keener desire for learning in the Highlands than in any other part of the United Kingdom or in the United States.

The Minister of Education for Ontario has issued a circular to Inspectors of Public and Separate Schools to the effect that, as English is becoming so important from a commercial and national point of view, and as French-Canadian parents, recognizing this, are desirous of having their children taught the English language, commencing with September next persons desirous of becoming teachers of bi-lingual schools shall take a non-professional course corresponding to the Public School Leaving junior course, and subsequently a professional course

at Ottawa. Certificates obtained on this basis will be valid for any school in the province where a French bi-lingual teacher is needed.

Sir Joshua Fitch gives expression to the following statements in regard to the relation of the Government towards schools: "It is not the business of the Government to impose this or that theory of teaching. All originality, all independence and all enthusiasm will be very seriously interfered with if it were supposed to be the business of the Government to impose its own syllabus and its own codes upon every school; but there are certain general lines which, by universal consent, must be followed in all good schools. The object should be to find out what the schools profess to teach, and then to discover whether that profession is easily carried out, but not to impose upon them a scheme of instruction which they themselves may disapprove."

The following is a vehement protest made by Thring against examinations. "If education and training are the true aims of mankind, and power in a man's self the prize of life, then no superstition ever ate into a healthy national organism more fatal than the cult of the examiner. A system of examination and inspection, in proportion to its power, is death to all original teaching; to all progress arising from new methods, and even to all improvement which is at all out of the routine track. There is no dead hand so dead as living power thrust in on work from the outside. It is the doctor putting his fingers on the heart when he ought to feel the pulse. Where examinations reign, every novelty in training, every new method of dealing with mind, becomes impossible. It is outside

the prescribed area, and does not pay."

At the Conference of Teachers, held at the (London) Imperial Institute, on Saturday, January 6, Mr. H. L. Withers read a very instructive paper on "Examination Tests, Oral and Written." Speaking of the outside examiner, he points out that, though he is, in a manner, essentially suggesting, as he may, new and wider fields of thought to the teacher, in practice, however, he is found to work disastrously. First, an outside examiner implies an outside syllabus not quite in conformity with the particular school he is invited to examine. Second, it is of no great concern to him how his questions affect the teaching and instruction of the school. Thirdly, the examiner is invariably tempted to put questions testing information rather than power, as the former are easily made up. This has led to "Text-books" and "Commentaries," to cram and memorizing, and has made examinations to mean, as a French philosopher puts it, "permission to forget."

On August 14 there was a discussion (Cambridge) on "The Teaching of the Mother Tongue and National Literature in Schools and Universities." Prof. Sir Richard Jebb, M.P., who presided, said that our schools were rather behind the best schools of other countries in this respect. "Complaints were made that in the teaching of the mother tongue in our schools too much stress was laid on the teaching of English grammar and grammatical analysis, and too little on the work of developing ease and accuracy of expression. The result, no doubt, was that very often English boys and girls of sixteen and seventeen were singularly deficient in putting sentences toge-

ther. That difficulty, of course, accompanied them into later life, to their great disadvantage." Our national character, he thought, had something to do with it. "The reserve and slowness of speech which characterized not a few English people were qualities which were received with great tolerance in our school system of education. Be that as it may, there could be no doubt that there were other countries

which taught their mother tongue very much better than we did our own. He understood that in France, in Germany, in Holland, and in the United States the habit of oral recapitulation was more used in teaching than it was in England, the result being that the people acquired a habit of prompt and coherent statement, as well as the power of logical narrative."

CORRESPONDENCE.

To the Editor of the Educational Times.

SIR,—The Canadian Government is very desirous of encouraging the study of the history, geography and resources of Canada in the schools of the United Kingdom; and, with this object in view, has had prepared two books for use in schools—one an atlas, and the other a reader about Canada. Copies are enclosed herewith.

The books will be supplied in sufficient numbers to schools prepared to take the matter up after the summer holidays. The offer will be confined, in the first place, to schools in the rural districts and in the smaller towns and villages—the centres of agricultural neighborhoods.

It is intended to present a bronze medal for competition in each school. The medal will be given to the boy or girl who proves to be the most proficient in the subjects when the schools close for the Christmas holidays. An examination should be held about the time specified, and the best two papers in each school forwarded to me, when I shall decide, as soon as possible after they are received, to which of the papers the medal is to be awarded.

The adoption of the proposal can-

not fail to be of advantage from an Imperial as well as from a Canadian point of view, and nothing but good results can follow a better knowledge of Canada among the rising generation. Both directly and indirectly it ought to be beneficial in a commercial sense in making the products of Canada better known than at present; and, again, the more the rising generation know about Canada and the colonies the more likely are those of them who may decide upon emigration in the future to remain within the limits of the Empire.

I shall be glad to hear from schoolmasters who view the suggestion favorably, and will furnish them with atlases and readers on learning the numbers required and the date on which they will be needed. The applications will be recorded in order of priority, and will be dealt with on the lines mentioned until the available supply of the books is exhausted.—I am, Sir, your obedient servant,

STRATHCONA.

Office of the High Commissioner for Canada, 17 Victoria street, London, S.W.

BOOKS AND MAGAZINES.

The first number of *The Monthly Review*, John Murray, has been well received by its English contemporaries. The editor, Mr. Henry Newbolt, contributes an ode on The Nile. The two serials by the Amir of Afghanistan and Anthony Hope open well.

Scribner's Magazine for September contains an article on British Columbia, entitled "The Gameland Our Fathers Lost." The author, Mr. Frederick Ireland, is to be congratulated on a taking title, but it assumes a good deal in a quiet way. One might remind Mr. Ireland that by this time in the world's history that which belongs to one country is not entirely useless to another. But at the same time a thing must have been possessed before it can be lost. Mr. W. D. Howells contributes to the same number "A Personal Retrospect of James Russell Lowell." The paper is both interesting and charming in its own way, but Mr. Howells does rub a little of the bloom off other people's imagination when he records his memories. He is so careful not to leave out the wrinkles that they become over-important. But at the same time his writing gains from the presence of a personality more considerable than almost any other American author of the present day.

The September number of the *Cosmopolitan* contains an article on "The African Boer," by Olive Schreiner. There is also a paper by the Editor on "China and the Powers," supplemented by "What China Really Is," by John Brewster Dane. The prize article on the care of the eye is published in this number. The successful competitor is Dr. H. O. Reik, of Johns Hopkins University. "The Work of a Great

Cartoonist," is an account of the work of F. G. Attwood, who died in April, 1900, and whose drawings frequently appeared in the *Cosmopolitan*.

The *Living Age* has of late contained many articles on China. One of the most striking of these is by Cæsare Lombroso, "Diplomatic Ineptitude and the Chinese War," translated from the *Nuova Antologia*.

One of the most attractive articles that has appeared in the *Ladies' Home Journal* for a long time is to be found in the September number. It is entitled "The Anecdotal Side of Phillips Brooks," and, unlike many articles of the class to which it belongs, it succeeds in capturing some of the greatness and beauty of the character which it is intended to portray. There are a number of other contributions, but, as this is the special autumn fashion number, these are overshadowed by the descriptions of gowns and hats.

"Plane Trigonometry," with five-place computation tables by Elmer A. Lyman and Edwin C. Goddard. Allyn & Bacon, Boston, New York, Chicago.

In writing this book the aim has been to present a rigid and general, and at the same time simple, treatment of the principles of the subject, and to illustrate and impress their use by a copious list of problems, especially in that portion of the work dealing with the analytical relations of the trigonometric functions.

"A Manual of Personal Hygiene," by American authors. Edited by Walter L. Pyle, M.D. Philadelphia: W. B. Saunders & Co. Canadian agents: J. A. Carveth & Co., Toronto. \$1.50.

A number of excellent works on hygiene, of which this is one, have recently been issued from the press, and it is one of the best signs of the increase of general intelligence that public attention is being directed to saving life and health by united effort in hygienic matters.

This manual, as is the case in many of the best American text books of medicine, is the work of several authors, each being a specialist in the subject on which he writes. Thus the section devoted to exercise, is the work of Dr. Stewart, of Cleveland, that devoted to the Ear is by Prof. Randall, of the University of Pennsylvania, and that on the eye is by the editor, Dr. Pyle. We have pleasure in commending this work to the teaching profession. If the ideas here contained on the care of the eyes, the selection of spectacles, school-room hygiene, transmissible diseases, bathing, cooking and many other subjects were taught in our schools, and applied in the daily life of our citizens, the result would be of incalculable benefit to the community.

The following publications have been received :

Houghton, Mifflin & Company, Boston :

The First Book of Birds, by Olive Thorn Miller.

Plutarch's Alexander the Great, translated by Sir Thomas North.

Ruskin's Sesame and Lilies.

A History of England, by J. N. Larned, with notes, etc., by H. P. Lewis.

The American Book Company, New York :—

Anatomy, Physiology, and Hygiene for High Schools, by H. F. Reeves.

The Spanish Verb, by Lieut. P. E. Tranb.

A Brief Course in General Physics, Experimental and Applied by G. A. Hoadley.

Der Assistent, by Frida Schanz, edited by A. Beinhorn.

The Mother Tongue, Books I. and II., by Sarah Louise Arnold, by George Lyman Kittredge.

Oriole Stories for Beginners, by M. A. L. Lane.

At the *University Press*, Cambridge: Geometrical Drawing, Part II, by W. H. Blythe.

Scott's Old Mortality, with notes by J. A. Nicklin.

The Education of the Young in the Republic of Plato, translated by Bernard Bosanquet.

The Making of Character, by John MacCunn.

Ginn & Co., Boston :—

Elements of Algebra, by W. W. Bernan and D. E. Smith.

George Bell & Son, London :—

Xenophon's Anabasis, Book I., edited by E. C. Marchant.

The Antigone of Sophocles, edited by G. H. Wells.

Cæsar, Book i., edited by A. C. Liddell.

Cæsar, Book v., edited by A. Reynolds.

Selections from Ovid's Metamorphoses, edited by J. W. E. Pearce.

Ovid's Tristia, Book iii., edited by H. R. Woolrych.

Ivanhoe, by Sir Walter Scott, abridged for use in schools.

Longmans, Green & Co., London :

Histoires D'Animaux, selected from A. Dumas, edited by T. H. Bertenshaw.

Elementary French Unseens, edited by T. H. Bertenshaw.

Warwick Bros. & Rutter, Toronto :—

Canada, a descriptive text-book, by E. R. Peacock, with an introduction, by G. M. Grant.