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THE CANADA

EDUCATIONAL MONTHLY

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OCTOBER, 1888.

THE FORMATION OF OPINION.

BY PROFESSOR WILLIAM CLARK, M.A., LL D., TRINITY COLLEGE, TORONTO.

(Continued from page 253.)

WE may not be able to investigate all the grounds of unbelief, but we may easily test it by practical experience. We have *reason*, we have *conscience* and we have the evidence of its *effects* in human society. We may refuse, for example, to receive as part of Divine Revelation that which is self-contradictory, that which contradicts the fundamental truths of reason. We may refuse to accept as true anything which is repugnant to those moral instincts which God has implanted within us; and we may refuse to believe that a religion which blights instead of blessing the people among whom it is held can represent the unadulterated truth of God.

But in the case of many of our fellow-creatures, we may go further and say that they may quite reasonably act upon opinions which they have the means of testing only by their own life, and by the experience of the narrow circle in which they move. For example, a man may say:

“The religious opinions which I hold are the doctrines and principles which I was taught in my youth. I received them as true, and I have no sufficient means of determining the possibility of defending them on the grounds of reason and history. But one thing I know, that these principles have formed beautiful human characters and lives, lives full of truth and righteousness and goodness and love and devotion. I feel that they strengthen all that is good in me, and keep down everything which is low and base and ignoble, and I, therefore, cling to them as the noblest possession, as the greatest blessing of life.”

Let us be quite clear on this point. There is nothing irrational or unworthy in a man's taking such a view of the principles in which he has been brought up. It may be that such an one has little right to be a controversialist, and it would be well for such if they avoided the thorny paths of religious polemics; but they may

live a true, a brave and a noble life, which shall be full of inward satisfaction, peace and hope to themselves, and attended with richest blessing for others.

3. It was necessary to point out that we may call these limitations by which we are contained in the formation of opinion. On the other hand, however, we must regard the possession of right opinions as, in our own case, a possibility. In other words, we must believe that God has given us reason, rational power, powers of thinking, and of thinking aright.

It is certainly a mistake to say that religion disparages reason. Religion says that reason could not discover certain truths unless they were revealed, and this is no more than to say that our eyes could not see certain objects unless they were set before them, or, that they could not see them in the dark. But this is not to disparage our eyes. When we say that a mill cannot produce flour unless corn is cast into it, we are not denying the goodness of the mill—its province is not to create but to grind. And the mind of man is the mill that grinds—the eye that sees.

It is the abuse of reason that the Bible condemns. The use of reason it everywhere acknowledges or takes for granted. It appeals to the reason and conscience of man on every side. Lacordaire remarks that "God has given reason to me to show us that he has no fear of reason;" and Vinet observes, with equal truth, that "if reason can do nothing, it cannot even prove that it cannot do nothing. If it proves that it can do nothing, then it has the power to prove something." And the same writer remarks: "Reason is not the efficient cause of the sentiments that are begotten within us; it can only bring us face to face with the facts, and enable them to speak to us."

A man is not a better Christian, or

a better anything, because he acts without reflection. The most thoughtful man is the best man, the most competent man. The Christian is told that he must be ready to give a reason for the hope that is in him; and if he would do so, he must beware of disparaging or neglecting our noblest attribute, that attribute without which religion would be inconceivable.

4. The next remark is at once the most obvious and the most important. In the formation of opinion, as in the acquisition of knowledge, we must have a supreme regard to truth. Truth must always be preferred; and neither prejudice nor our party possessions must be allowed to stand in the way. We must, of course, be aware that, in the absolute sense of the words, this is impossible. It might then seem useless to insist upon the principle as a duty, or even to mention it; but such an inference would be as erroneous as it is unreflecting. As well might we blot out of the Sermon on the Mount the Divine words, "Be ye therefore perfect, even as your Father in heaven is perfect," because all men are sinful and imperfect. We know that we can rise above the poor, low level of our former selves only by keeping this glorious standard before our eyes. And so it is only by keeping before our minds the attainment of perfect truth as an object never to be abandoned, that we can ever escape from any of the falsehoods and confusions in which we are involved. We may well feel the difficulty of this enterprise. But we must not for that reason abandon it. We must resolve and endeavour to reach truth in our judgments and opinions, in spite of *prejudice*, in spite of *interest*, in spite of *party*. Let us look at these obstacles which lie in our way.

(1) *Prejudice*.—What does this mean? It means our preconceived notions, whether true or false. And

we have no need to start with the presumption that they are probably false. Most of our convictions, especially our practical principles of life, are probably true in the main. But, when we come to the thoughtful consideration of any subject which we are required to investigate, we must start with this conviction, that our previous judgments must be either verified or abandoned. If they are true, then the most searching examination will only confirm them. We must at least bring them face to face with acknowledged facts, sincerely, earnestly, honestly, or as honestly as we can. If they are compatible with the facts and harmonize with them, it is well. We shall return to them with fresh confidence, with deeper conviction. If they are incompatible with the facts, if our opinions and undeniable facts cannot stand together, then our opinions must undergo change or modification.

(2) A second hindrance to the formation of right opinions—and one which is closely connected with our prejudices—is found in our *interests*.

It is hardly possible for a man to consider any subject, especially one of a practical character, without asking, or having the question forced upon him, how it will affect himself. We may go further and say that such a consideration will bias him without being consciously present with him at all.

The operation of this principle is often remarked in the presence of any proposed change in the laws of the land. By whom are such changes ordinarily—we say not always—opposed? Naturally enough by those whose interests are really apparently assailed. It is said that the English clergy, as a class, opposed the abolition of the corn laws, because they feared it would lead to the reduction of their tithes. And it is quite possible that the clergy, like

other men, did not wish their incomes to be diminished. It is said that the innkeepers throughout the country were opposed to the early closing of their houses, as being at variance with their interests. It has been asserted that the Coventry weavers were in favour of free trade in everything but ribbons.

This subject might be illustrated in a thousand ways. It is very hard indeed for a man to take an impartial view of the public interest in a matter by which his own private interest is affected. And yet it is only as we can rise above these personal considerations that our judgments have any real value, that we can have any reliance upon the accuracy of our opinions. It is only as we care for truth, and believe that it is better than error, even if the error should happen for a time to benefit ourselves; that our opinions are likely to be true opinions.

(3) Another great hindrance to right opinion is *party feeling*. It is generally believed to be the strongest and the most baneful of all. Some think that there is nothing so cruel and unscrupulous as party feeling, when it gains thorough dominion over a man. Mr. Ruskin says,* “Men associate in parties only by sacrificing their opinions, or by having none worth sacrificing; and the effect of party government is always to develop hostilities and hypocrisies, and to extinguish ideas.”

On the other hand, it is asserted that the government of a country could not be carried on without party organization. Party, it is said, is organized opinion, and, if you believe that it is for the good of the community that you should give effect by your opinions, you must organize for this purpose. In other words, you must act in parties.

* Fors Clavigera, No. 1, p. 7.

It may be that the existence of parties in Church and State is a necessity, and we need not determine this question. But no one will deny that party feeling is an erroneous obstacle to the formation of true opinions. Even in the judgment of matters of fact, the most opposite results are arrived at by different men when the proofs presented are the same. The simple explanation of the matter is to be found in the fact that one party is determined to believe all the alleged facts simply because they consider them helpful to their own party interests, while the other party, for a similar reason, determine that they are not to be believed.

Is there, then,—it may be asked— to be no loyalty to party? The answer ought to be very simple: loyalty to party must always be subordinate to loyalty to truth. The greatest philosopher of antiquity (he was a heathen, but how much might Christians learn from him!) set for the certain opinions which, he said, were at variance with the teaching of Plato. It was true, he said, that Plato was his friend; but truth was a still dearer friend. Is it not sad that the disciples of Jesus should need to go to Aristotle to learn a lesson so simple, so fundamental? Loyalty to truth is loyalty to God. Loyalty to party, when it is opposed to truth, is not only disloyalty to God, it is disloyalty to man and to the conscience itself. Be loyal to your party when the only sacrifice is your own private feelings or your own private interests. But there must be limits to such loyalty. When your party deserts its principles, when it deserts truth, God, humanity, then be true to yourself, whatever it may cost you.

5: There is one question which demands consideration in connection with the general subject now before us. We refer to the *changing of opinion*.

It is a subject on which it is easy

enough to lay down general principles which cannot be gainsaid; and yet it is a subject on which there is often great difficulty in applying those principles. For instance, we can say, without hesitation, that it is lawful to change one's opinion, and in certain cases it is necessary, and our bounden duty. To refuse to change from error to truth is to confess one's stupidity or want of principle. To say that a man is bound through life to adhere to the opinions which he was taught as a child, is not merely to imply that every one is taught opinions sufficiently good for the conduct of his life, but that humanity is incapable of learning or of improvement. It is hardly necessary to refute a theory so monstrous, a theory which some persons are foolish enough to assert, but which no one is unwise enough to act upon.

On the other hand, to be continually changing one's opinion is a sign of inconsiderateness and inconstancy, and it is a proof that our adoption of opinions is of no value. The love of novelty, or an inherent weakness which is incapable of resisting every new impression, may account for such changes, not the love of truth.

But there is another remark which it is no less necessary to offer in this connection. It is quite lawful for a man to change his opinion, and almost every one does so in matters small or great, and sometimes without knowing it; but it is not lawful for a man to hold, at the same time, opinions which are incompatible and mutually contradictory. Nor is this a matter so uncommon as might be supposed; and it arises from the neglect to refer our opinions to deep and universal principles. Instead of basing our judgments upon self-evident truths and the sure teaching of ascertained facts, we allow our conclusions to be determined by sentiment, by passion, by prejudice, by self-interest.

The consequence of which is that we judge of other men's actions on principles which we will not allow to be applied to ourselves. And we guide our own conduct by considerations which we pronounce invalid when we see their operation in the conduct of others. Every rule is good which justifies ourselves; every law is bad which condemns us.

There is no other remedy for this evil, but that which is a remedy for every evil, the *subjugation of self*. When we know that the truth and the love of God are our best guides, and the approval of God our highest reward, then, and not till then, we shall love truth and seek after it, whether we seem to gain by it or not.

6. Finally, in order to test the truth of our opinions, in order that they may be of any real value to us, we *must live them and work them*; we must submit them to the crucial test of practical application.

It is at a glance apparent that no opinion can be of any value unless it is carried out into life and practice, for our opinions are the guide of our life and their genuineness can be proved in no other way than by giving effect to them in our life. But this which is the evidence of the genuineness of our opinions is also the test of their truth. Let principles slumber, and you cannot tell whether they are true or false, good or bad. Put them in motion, work them, apply them to the actual business of life, and then you will see what there is in them, whether they will stand or break down.

And there is more than this. The setting forth of our opinions in practice and in conduct is certainly a test

of our sincerity and a means of ascertaining whether they are workable or not. But it is more, it is one of the surest means of finding our way to truth. In many cases there is only the one alternative or the other to be chosen, and the failure which reveals to us the falseness of the one will also disclose the truth of the other. And this is one of the rewards which the God of truth prepares for those who are found faithful. When they walk in darkness, doing their best to find the path of duty, He brings them out into the perfect light. When they are loyal to their erroneous convictions, or to the half-truths which have been made known to them, He sheds upon them the fulness of His truth.

The formation of opinion is a subject on which we often think and speak very lightly; and when we do not go beneath the surface, it may seem a very simple matter. When we look deeper—when we consider the history of human thought in the past and all the wonderful strayings of the intellect and the imagination; when we consider that the essential meaning of opinion, involving the reception of truth and goodness on the one hand, or of falsehood and evil on the other; when we look forward to the issues of opinion and consider how greatly it affects the usefulness and beneficence of our life on the one hand, or its uselessness and mischievousness on the other, then we shall surely feel that a grave responsibility is laid upon us in the formation of those opinions which are the very rulers of our life, and which in their exercise will make us a help and a blessing, or a hindrance and a curse to the Church and to the world.

We beg to call special attention to the unusual facilities which can be found in Toronto for the prosecution of medical studies,

as seen from the announcements of the medical faculty of the University of Toronto and Trinity Medical College.

SANITARY SUPERVISION OF SCHOOLS.*

BY H. P. YEOMANS, M.D., MOUNT FOREST.

EXPERIENCE in sanitary work in our Province has clearly shown that however adequate sanitary legislation may appear on the statute book, it must fail to accomplish the desirable result if not wisely and judiciously administered by suitable executive authority.

The Public Health Act of 1866 was inefficient because the proclamation necessary to bring it into active operation was issued only when some unusual widespread epidemic or contagious disease threatened and alarmed the public. Being called into existence at irregular intervals and unexpectedly, the organization required for its effectual administration was necessarily imperfect.

The Act of 1873, conferring upon municipal councillors the powers now granted to local Boards of Health, failed also, inasmuch as municipal authorities remained inactive and never appreciated the necessity of constantly guarding against the many causes of sickness and death continually in active operation around them. Even after the establishment of the Provincial Board of Health, and the effort to arouse municipal authorities in 1882, a further change in the Public Health Act was found necessary. Consequently the Amendments of 1884 were passed, providing for the appointment of special local Boards of Health, composed of not less than three rate-payers, who might be selected outside of municipal councils. This gave an opportunity for securing the services of those who were particularly interested in sanitary work and better qualified for these duties.

* Read at the Conference of the Boards of Health at Lindsay, Ont., August, 1888.

Now we have besides all this the active co-operation of executive medical Health Officers, who are organized for the purpose of rendering more effectual the various legislative enactments that may from time to time be granted for the preservation of the public health. Thus we are rapidly proceeding in sanitary reforms, amending or improving our Provincial sanitary organization as time advances and experience directs.

Permit me, then, Mr. President, to ask your attention to one feature of public health service which at present appears to be worthy of the consideration of this Association of Executive Health Officers,—“The present need of sanitary supervision of schools.”

The Public School Act requires that every child between the ages of seven and thirteen shall attend a public school in which elementary instruction is given for the period of at least 100 days in each year, and makes the parent or guardian responsible under a penalty for such attendance. It is obviously wrong for the State to enforce a system of compulsory education which might possibly endanger the health or lives of children confined within school rooms for several hours each day. Consequently trustees are required by law to provide adequate school accommodation according to the regulations prescribed by the Education Department, and to keep the school-house, outbuildings, and grounds in a proper sanitary condition. These regulations require trustees to

1. Provide a school site which shall be removed as far as possible from a swamp or marsh, and so elevated as to admit of easy drainage.

2. Provide a well or other means of procuring water, so placed or guarded as to be perfectly secure against pollution from surface drainage or filth of any kind.

3. To take proper care to prevent unhealthy or unpleasant odours and to secure cleanliness.

4. To provide sufficient air space not less than 250 cubic feet for each pupil.

5. To provide heating apparatus so placed as to keep uniform temperature of at least 67° during the whole day.

6. To arrange for such ventilation as to secure a complete change of atmosphere at least three times every hour.

7. To provide seats so graduated that pupils of different sizes may be seated with their feet resting firmly on the floor, and the backs of the seats constructed so as to give proper support to the pupils.

For High Schools and Collegiate Institutes in which the grant of public money is apportioned according to "condition and suitability of buildings," besides those requirements already mentioned, trustees are expected to make provision for cleaning and deodorizing closets and urinals at suitable intervals.

To provide door mats and scrapers, cap hooks—separate for both sexes—lavatories and other suitable arrangements for both sexes. Blackboards properly placed with regard to light. Lighting of sufficient quantity from the left, windows large and numerous with large panes placed well up in the walls. A proper supply of blinds—opaque blinds, should there be windows on the right side, in the rear or front.

To provide *Heating*, if by stoves, of sufficient capacity, these and the stove pipes being so placed that all parts of each room shall be properly warmed. A thermometer in each class-room.

A uniform temperature of 67°. Provision for heating the halls, waiting-rooms, cap-rooms, teachers' private rooms.

To provide for suitable *Ventilation*. Proper arrangements in each room for the ingress of pure air and the egress of foul air, so that there may be a complete change at least three times every hour; windows to be so adjusted with pulleys and weights as to be lowered readily from above, and raised from below. Movable fan-lights over each door.

The Smead & Dowd system has now been adopted in many school buildings with advantage; the air may be changed under this system ten or twelve times each hour, and it is not necessary to open windows in order to secure thorough ventilation. Thus we may avoid creating injurious draughts in the school-room where pupils are compelled to sit near a window.

The Education Department also has issued a very useful work under the direction of the Minister of Education, entitled, "Hints and Suggestions on School Architecture and Hygiene, with Plans and Illustrations." This work gives ample directions to school authorities for selection of sites, plans for the construction of school-houses, out-buildings, management of grounds and buildings, so as to preserve them in a good sanitary condition; for heating, lighting, seating, and ventilation of school-rooms, requirements of model school buildings, disinfectants—their uses—wells, water supply, tests for detecting organic impurities in water, characteristics of pure water, cubic feet of air space required for each child, information regarding the construction, location and management of wells, etc. The Education Department also requires the county and other public inspectors to see that all these regulations are carried out, mentioning

especially that proper attention shall be paid to the heating and ventilation of the rooms, and that they shall aid the trustees in these matters. The teacher also is expected to see that these sanitary regulations are obeyed as far as he can exercise his authority and influence.

In issuing sanitary regulations and information to school authorities throughout the Province, the Education Department has evidently not been remiss in its duty. When we consider, however, that the Public Health Act places a certain degree of responsibility in regard to the sanitary condition of our schools upon the Public Health authorities and Medical Health Officers, it is proper for us to consider whether these duties are fulfilled on our part.

The reports of the sanitary condition of schools gathered from various sources lead us to conclude that although there has been considerable improvement in several localities during the past three years, still we must admit that very much remains to be done. The report of 1885 as presented to the Provincial Board of Health informs us that about 5 per cent. report over 600 cubic feet of air space allowed to each pupil; about 3 per cent. report over 700 cubic feet; about 2 per cent. report over 800 cubic feet, and two in every 300 schools report between 900 and 1,000 cubic feet of air space for each pupil. Less than 300 cubic feet is most commonly reported as the allotted air space for each; about 40 per cent. report an air space of less than 200 cubic feet.

There are some cases in which scholars are confined in an air space of less than 100 cubic feet, while the least space given to each pupil is 40 cubic feet.

For heating purposes wood or coal stoves are mostly used. The stoves are placed most frequently either in

the centre of the room or in the centre passage way, between the scholars' seats, and near the door. Especially in large towns or in cities, furnaces are used and ventilating flues. These flues are not always smooth internally, and are frequently not heated as they should be, in order to create an upward current to convey the impure air from the rooms effectually. In some small school-rooms ventilating flues are placed in the ceiling, a plan certainly not to be commended, for the reason that a descending current of cold air creates an injurious draught. For the purposes of ventilation, the windows are in nearly every case made to open at the top and bottom. These are apparently regulated by the teachers as well as can be possibly done. However, in a very large number of instances, pure air thus admitted is reported as coming in with perceptible draughts. The window sashes are not usually hung on pulleys, which renders it all the more difficult to regulate the fresh air supply properly.

School rooms are invariably swept every school day, but the intervals of time for scrubbing vary from three months to seven years, frequently once a year is reported. Light is most frequently admitted from three sides, very seldom indeed is it admitted through windows placed in front of the pupils. In most instances the light supply is regulated by cloth blinds, hung inside and made to roll up in the ordinary way. In the construction of the school buildings there has been apparently no care exercised in placing the windows so as to admit or distribute the light to the best advantage.

With regard to contagious diseases, teachers report very favourably regarding the precautions exercised by them to prevent the spread of these diseases. With very rare exceptions, the practice adopted is to instruct the

pupils to remain at home until all danger of contagion is past, as certified in writing by a competent medical practitioner. The school regulations require that the teacher shall exercise all these precautions, and they have been strictly enforced in most cases.

On the other hand, usually no record is kept by the teacher of the number of absentees through sickness, or the nature of the sickness. The report of the Hamilton schools which has been published in the annual report of 1883 is one of the notable exceptions.

It appears that in the school register there is no column set apart for recording the daily or monthly number of absentees through sickness, and no blanks are provided except in a few instances.

There is room for improvement in the water supply. About 60 per cent. report having wells situated on the school ground, the remainder depend upon the generosity of their neighbours, and in one case the report mentions that the water is procured from a ditch. There are no means reported as being used for the purpose of testing the purity of the water supply. About 38 per cent., however, state their opinion that the water used is impure. We may presume that the remainder possess an abundant supply of pure and wholesome water, although of this there is at present no certainty. In some instances it is stated that the water is scarce, and impure; scarcity may possibly be in these cases an advantage.

The wells are situated sufficiently distant from school buildings and out-buildings, except in a very few instances. In one case, where instruction is given in hygiene, the well is only forty feet from the outhouses. In another case the well is ten feet from the school and twenty-five from the outhouse; soil sandy and no

drainage. In this case the report says, "The outhouse system is used, and the condition as to cleanliness 'beggars description'; 'no disinfectants are used.'" It was never cleaned since built. There are eighty pupils reported under charge of the teacher—winter average forty-four.

The report informs us that in a very few places water-tight boxes are used, and ashes or dry earth, with disinfectants for purposes of deodorizing the excreta, and that the boxes are properly emptied and the contents removed at frequent intervals. This is the exception to the rule, however, the old outhouse-vault system being almost universally used outside of cities.

In reply to the question, What measures are adopted to keep outhouses clean? the most common answer is, "They are swept, or they are scrubbed when the school is cleaned," indicating that nothing is done to remove the excrementitious deposits of years of accumulation. I have known instances in which the necessity for removal has been overcome by digging a new pit which, after a few years, would again be filled up and become unfit for occupation. In large schools where there is an attendance of between 300 and 400 pupils such a condition of affairs is very objectionable and should be disallowed.

One case is reported where there is a brick school-house—the outhouse is twenty-five feet from the school-house. In another place it is fifteen feet from the school-house. The outhouse-pit system in these instances must be classed as a nuisance.

There is very little to complain of with regard to care exercised by teachers in protecting children from injurious consequences of sitting in school with wet clothing. The seating of pupils at desks is very fairly attended to also.

In endeavouring to improve the sanitary condition of schools, trustees

may with advantage avail themselves of the services of the medical Health Officers in their respective localities, and thus co-operate with the local health authorities. This was provided for in the construction of the Public Health Act.

Among the duties of the Medical Officer the Local Health By-law provides that "he may, if thought advisable by the school trustees, act as Medical Inspector of Schools as well as Advisory Officer in matters pertaining to school hygiene." If the Medical Health Officer were properly remunerated and permitted to perform all the duties as Sanitary Inspector of Schools contemplated in the spirit and intention of the Public Health Act, we feel assured that Sanitary reforms would proceed more rapidly in our schools. Being appointed especially for sanitary work, he would occupy an entirely different position from trustees or other school officers, whose duties embrace all matters connected with educational affairs, construction and maintenance of school buildings and various other things. The Medical Officer would be able to direct his undivided attention to school hygiene. He might, with profit, also give instruction in hygiene by familiar lectures and practical experiments, by introducing improved methods of ventilation where necessary, by frequently testing the water supply, the air of school rooms and adopting various practical measures for securing the health of pupils.

These methods of instruction in school hygiene would make a most favourable and lasting impression on the minds of all the pupils and stimulate the local health and school authorities to more active interest in sanitary matters generally. With regard to instruction in school hygiene, I noticed in the report of the proceedings of the ninth International Medical Congress, held last Septem-

ber, in Washington, the following:— Resolved—That the section on hygiene cordially endorse the suggestions contained in the paper read by Dr. Cooke, of Nashville, Tennessee, as to the necessity of teaching hygiene in Public Schools, and recommends the following resolutions:—

That it is the opinion of the ninth International Congress—

1. That in all the Universities and High Schools hygiene should form a part of the compulsory course of study, and should be taught not simply from text-books, but by educated physicians.

2. That in all Public Schools the teaching of hygiene should form a prominent and essential feature.

3. That every State should establish a museum and laboratory of hygiene.

Upon enquiring I find that in many of the High Schools of the United States instruction in hygiene by physicians especially appointed for that purpose has been adopted with satisfactory results:

The first systematic medical inspection of schools is reported to have taken place in Belgium. Since then it has been adopted with good results in other parts of Europe.

A personal inspection of schools in New York State was made under the direction of the State Board of Health a few years ago. Dr. Lincoln made an elaborate report of this inspection, a perusal of which will amply repay any one, as it contains a great deal of useful practical information on school hygiene. Much good has been accomplished as a result of this inspection, not only in the United States, but in other countries also.

The report by Dr. Covernton, who represented the Provincial Board of Health, of the discussion on the sanitary supervision of schools at the General International Health Congress in 1882, contains the following

points which may be repeated here as embodying the views held by that important meeting. They recommend among other things,

1. The appointment of a School Physician-in-Chief, having consultative and deliberative functions with the Minister of Public Instruction.

2. The appointment of Local School Physicians, who should supervise certain districts set apart, containing not more than 1,000 pupils, and having consultative and deliberative functions with the school principals.

The duties of the Local School Physicians to be:

1. To regularly inspect school rooms, as to lighting, seating, ventilation, and heating, the condition of the school grounds, water supply, out-houses, and the manner of dealing with cases of contagious or infectious diseases.

2. In cases of the erection of new buildings, to give an opinion as to the sanitary conditions, and superintend during the erection, the methods of heating, ventilating, seating, disposal of excreta.

3. To measure pupils every six months, and place them at seats, or desks, conformable to the height of each.

4. To determine the condition of the refraction of eyes of pupils, and reduce the number of pupils where the light is imperfect.

5. He should be also consulted in the preparation of the programmes.

6. Every contagious malady that a pupil suffered from, should be communicated to the school physician. He should not grant permission to return to school, until he was satisfied that all danger of infection had disappeared.

7. To note in a register all interesting hygienic peculiarities of the school and notably the changes in vision of pupils. These registers to be sub-

mitted each year to the school physician-in-chief, who should publish an annual report on the hygienic condition of the schools under his control.

During school life and in college or university the tendency of the academic course, when physical health and training are neglected, is to impair the health of the close student. Hence in some instances young men predisposed to pulmonary diseases have entered a military college for the sake of the advantages which physical training gives.

The tendency to organic or constitutional disease may by such a course be checked, the chest developed, digestion improved and physical vigour attained. Pupils may, by proper methods of training suitable to each, gain good health, increased strength, and also correct physical defects of various kinds. Having this object in view, physical culture or the hygiene of education is now engaging public attention. This principle is now associated with the desire for industrial education. We are glad to be able to say that the Minister of Education has already taken steps to encourage this tendency of public sentiment in Ontario.

It may be urged that hard work, especially Canadian farm-work, prepares the young for mental labour. It truly does, under some circumstances, as experience has abundantly proved, by giving physical vigour. On the other hand, exhilarating outdoor sports and athletic or physical exercises directed on correct scientific principles, contribute to a more harmonious development of all the bodily organs, and in the case of the diligent student, are better adapted to supply the needs of mental fatigue. Consequently we have the Kindergarten system, and the gymnasia in connection with American colleges.

In Harvard, under Dr. Sargent, who takes charge of physical educa-

tion, the student is examined physically as he would be for admission to the army or navy—his measurements and records are all made and preserved, and he is not allowed to engage in any athletic exercises which might tend to impair his physical development. This method is adopted in some of the High Schools in the city of Brooklyn, U.S. By means of these examinations are ascertained his physical condition, his peculiar defects or weaknesses, the excessive development of some muscles or the imperfectly nourished state of others, variations from the normal standard of relative height, weight, chest measurement, his personal history or habits, inherited predisposition to organic or functional disease. These are all carefully noted and recorded. Then certain exercises are prescribed which are best adapted to overcome his peculiar defects or give required strength, just as though he were in charge of a physician for his health. Harvard is said now to have the finest gymnasium for the purpose of physical culture in America—it is named after the donor who gave \$110,000 for its erection.

The following rules, laid down on good authority, may be quoted as illustrating the general scientific principles upon which a system of physical culture may be based :

1. All gymnastic exercises should be devised with a due regard to the structure and functions of the body, and should, therefore, be founded on an accurate knowledge of anatomy and physiology.

2. Every exercise should have a definite aim, and be localized so that its action be understood.

3. Every part of the body should be exercised in turn, and having due regard to physiological function, not any part in excess of another.

4. Harmony of function, including suppleness, should be regarded as of

equal importance with the mere development of muscular power.

5. All exercises, while selected to the development of strength, should be kept within the vital capacity of the individual.

It is worth while for us to consider how much of the evil results of the so-called "cramming system," or over-study in our schools, may justly be ascribed to lack of physical education and to unsanitary surroundings. Of one thing, however, we are certain, that physical culture and healthful surroundings in connection with our present educational system and our invigorating climate should yield that mental energy and vigour which are essential elements for success in the world.

It has been said with truth that an ounce of talent plus a pound of energy, is worth more than a pound of talent, plus an ounce of energy.

Man indeed receives the heritage of vigour or of debility, of health or of illness, which his childhood has bequeathed to him, and therefore we cannot be too careful to watch over this decisive period or his life.

Among the various external influences in school life which will affect the development of bodies of pupils and engage the attention of the Medical Health Officer are the following :

1. Condition of the atmosphere as to impurities, degree of moisture, temperature, etc.

2. Lighting, heating and ventilation of school rooms.

3. Position of pupils at seats and desks, character of physical exercises and out door sports.

4. Effects of studies and methods of instruction on the physical development and health of pupils, defects in vision of pupils.

5. The age at which pupils should enter schools being guided by health temperament or hereditary tendencies.

6. The studies best adapted to the

physical and mental powers of different pupils.

7. The number of hours that pupils of different ages should be confined in school rooms. Special attention should be paid to limiting the daily hours of study and of single lessons to periods suited to the various ages of pupils. Edwin Chadwick, whose long continued observations and enquiries entitle him to speak with authority, lays down the following rule: At the age of from 5 to 7 a child can attend to a single lesson on one subject about 15 minutes; from 7 to 10 years of age, about 20 minutes; from 10 to 12 years of age, about 25 minutes; from 12 to 18 years of age, 30 minutes. The total daily work should correspond with the limits of a single lesson, ranging from 8 hours to $2\frac{1}{2}$, the latter being the limit for young children under 6 years; from 7 to 10, 3 to 4 hours, 2 in forenoon and 1 in afternoon.* (a) Exercise and general physical training with the objects: (1) Of giving grace and ease of movement. (2) Enlarging the chest, allowing free and healthy respiration and freedom of heart action. (3) Strengthening the muscular system and correcting or preventing spinal curvature. (4) Encouraging digestion and natural assimilation of food.

* The Kindergarten system for children under 4 years, 3 hours daily, after which symptoms of over-excitement appear. West Point, where physical selection of pupils is made, 10 hours daily.

NOTE.—It was found in England that the half-time system yielded good results. This was adopted to correct the abuses of confinement and overwork in the case of factory children. These children who attend class 3 hours daily and worked in the factory 3 hours every day made as good progress in their studies as those who attended 6 hours every day.

NOTE.—In High Schools during period of rapid growth and sexual development, 6 hours study daily is sufficient—girls develop rapidly from 12 to 15—then at 15 important functional change takes place which requires consideration.

8. The construction of school buildings, location, and management of wells or other means of water supply.

9. Selection of school site, drainage, and sanitary condition of grounds and outbuildings.

10. Methods of testing water and air in school-rooms, and of estimating the number of cubic feet of air-space allotted to each pupil, the amount of pure air entering and foul air passing out of each school-room.

The proper notification as provided in Sec. 94 and sub-sections of the Public Health Act of the existence of contagious or infectious diseases among pupils or families within the school district. The registration in a school register, provided for the purpose, of all absentees from this cause, the nature of the disease, the number of days absent, with any other information worthy of recording. The Medical Health Officer and the local Board of Health must, in conformity with these clauses, be associated with the school authorities in guarding or inspecting the sanitary condition of the school. The Medical Health Officer in the discharge of his numerous duties must study, not only the physiology of the human system, but also the relations between man and the surrounding world of nature.

The study of biology, all growth, all life, diseased states of all life, the effects of parasitic organisms in causing disease, have all contributed to enlarge the sphere of medical science, and to open up the field of preventative medicine. It is to-day within the province of medical science, and its highest privilege, to contribute towards the alleviation of human misery by adopting measures for removing causes of disease. These causes may be immediate or remote, they may exhibit themselves in the spread of disease by contagion, the propagation of disease by impure water, contaminated air or some simi-

lar immediate cause. Or, on the other hand, they may operate more insidiously by invading and destroying organic structure, thereby sowing seeds of chronic disease, undermining the vital powers and destroying human energy and mental vigour. In this latter form we most frequently observe them in school life.

To study the etiology of disease in all its various forms, and to demonstrate the laws by which it operates is a work of practical value to the nation. It contributes to the national

wealth and power by preserving the physical and mental vigour of the individual citizen. From an educational point of view, also, it adds to enlightenment and removes superstition by pointing out the true cause of disease, teaching man how much of sickness and suffering arise from transgression of natural laws, thus leading him to a higher life and greater self-control, bringing the lower impulses and faculties of his nature under the dominance of the higher.

CAUSES OF SOCIAL DISCONTENT.

BY BISHOP F. D. HUNTINGTON.

"MIKE," said a priest to a thriving parishioner, who, without being a student of philosophy or history, used his perceptive faculties, prospered by his wits, and had become a considerable person in the parish, "I don't see your children at the parish school any more." "And because they don't go there any more, your reverence," answered Mike. "But do you mean to let your boys and girls grow up without an education then?" "Not a bit of it, your reverence." "How is that, Mike?" "O, they go to the public school; it costs less, they learn as fast, and they grow up along with them that they are to deal with." "Ah, Mike, but that will never do. You *must* send them to the parish school." Mike's manner changed from grave to gay. Looking his shepherd in the eye, with a self-possessed smile, he continued the dialogue. "Father, you and I came over the water a few years ago, didn't we?" "Why, yes, Mike; but what if we did?" "Well, Father, when you and I came over the water we left 'must' behind us."

Here is a part of the answer to a much larger question. It not only

expresses a fact, and a fact of far-reaching significance; it utters a spirit of the national life so pervading and so active as to enter into our more serious problems, social, industrial, political, educational, financial. Formerly, in the older forms of society, it was a question of classes; the class denominated and overshadowed the individual. Now, with us, it is a question of individuals, and of more and more individuals, tending to work the people back into a class condition. The mistake of politicians is in trying to settle or to direct material interests without regard to immaterial forces. Many such managers, not without patriotism and a kind of sagacity, neglect this element in public affairs simply from the habit of their minds, inevitably failing thereby to rise to the dignity and power of statesmen. A smaller and blinder kind hate it, are impatient at it, call it contemptuous names, and imagine they can get on by chicanery and manipulation to the accomplishment of party purposes without it. But it refuses to disappear. Caucus and Congress, "bosses" and "workers," will go on leaving it out of their calculations;

but it stays by. They may drive it out, but it will come back.

No very deep insight is needed to see that the most troublesome issues now on hand, or approaching, spring from a source which is original only in the sense that it has not existed before on anything like the same scale. Apart from scientific phraseology, more of the people than ever before want what they have not got, think they have a right to it, see it to be in the possession of others about whom they seem to have no better natural right to it than they have, and believe that they can get it. There are, therefore, two questions, one of right and one of strength. The physical and moral elements are not very clearly discriminated, but they are both ever present.

An idea of justice, however vague or ill-guided, sustains the physical struggle, however violent. The socialist combination and the mob of anarchists find a sophistical justification in an instinctive notion that they are wronged or unfairly served, however unreasoning that notion may be. On the wisdom, patience, disinterestedness, large-sightedness, of those who are in power and possession, *i.e.*, of the voters, who are the government, depends the fate of the Republic. At present, organization, intelligence, army, police, wealth, occupancy, are on one side. Even with that preponderance, the last five years show how much mischief can be done and misery caused by the other side, and the proportions are shifting. The people at large do not know, because no confession will tell, in what degree capitalists and corporations are subjects of fear. Are there any thinking men who really suppose that labour-leagues and anti-poverty meetings and strikes, which are certain to play an increasing part in the politics of the future, have nothing behind or underneath them but money, victuals, ease,

and fine clothes? Woe to the country indeed, if that is true! Humanity is not so bad. The "lower classes" are not so bad. Even that great question of finance and industry which at this moment arrays the two leading political parties against each other, making the pending Presidential election more strictly than any that has preceded it a matter of political economy, has its super-political relations. Mainly it turns on points where the economists, practical and theoretical, ought to have something definite to say and ought to be heard, but it also plainly involves the social passions and sentiments which are agitating the whole American population, in city and country. In all the copious congressional debates upon it, no more sensible or indisputable sentence has been spoken than that of the Representative who remarked that the prosperity of the country is not made by tariff laws, but by the energy and thrift—he might have added by the self-command and integrity—of the people.

This phenomenon, at any rate, is now presented for consideration, and it is one of vital concern for sober-minded men of every class. According to the curious calculation made in 1884, by the advocates of high protection, it appeared that in the twenty years between 1861 and 1880 the wealth of the United States had been increased by an amount very much greater than the total acquisitions of the people during the preceding 200 years. But prior to this marvellous increase of the aggregate wealth, beggars were unknown and tramps unheard of; to-day vagrants infest every hamlet; deaths from starvation are not unfrequent; suicide in the desperation of extreme want is an occurrence of every day. Teachers of anarchism and communism find multitudes of eager disciples among workmen, and the latter are forming

unions, practically oath-bound secret societies, which are controlled, as armies are controlled, by their chiefs, with the sole purpose of wresting from their employers a larger share of the rewards of labour. It is, in fact, a state of social war.

What is the cause of these troubles? The cause is not single, nor does it lie altogether on the surface. If it can be controlled, the study of it is not less practical than the construction of disputed financial schemes and the electing of administrations to try experiments with them. Under one shape or another it will be found to belong, in comparison with the past and with other lands, to those altered conditions of social life which the Irish independent had vaguely in mind when he rebelled at the dictation of his ecclesiastical master. Long-established social distinctions and demarcations are broken up. Prescription has lost its hold. Classes are mixed and fused. No American thinks of remaining in any grade or calling or position because his ancestors have been there, no matter for how many generations. From the bottom to the top is but a single leap, and anybody can make the leap. It is common to speak of this as an unmingled advantage. Undoubtedly it stimulates enterprise. So does it stimulate greedy ambitions, wild expectations, and heated competitions. It sets up impracticable standards. It opens the lists to all, but there is a limit to the prizes, whether of office or fortune. What everybody wants and tries to get only a few can gain. Of aspiration come both the glory and the misery of mankind. Hope that is still hope inspires effort and points to success; hope disappointed and crushed is followed by a reaction of despair, of bitterness, perhaps of crime. A universal scramble for place and profit is not a producer of social peace or a school of social virtue. Take

away all the dishonesty in politics caused by an open competition for the offices, and all the dishonesty in business caused by an open competition for wealth, and what an upright people we should be! We are not finding fault with our system; much less are we recommending a remedy. We are accounting for the restlessness, financial upheavals, commercial disasters, unwholesome depressions, and needless impoverishments to which we are subject. We say that one of the causes is an unprecedented temptation to use indiscriminate means to "get up in the world," drawing thousands of men out of the safe, even, and sure path of a steady and contented industry.

Kindred to this inordinate passion, this pull and push, is an artificial estimate of the relative respectability of different kinds of work. It may seem rather late, to be sure, to be urging the dignity of labour. The point is that while men and women are eagerly determined to get rich, they are fastidious as to the manner and fashion and name of the service that is to accomplish it. The more wealth the country has, the more anxious people of all conditions are to put on the dress and style of wealth. The more the soil yields, the less they want to have to do with the soil. Leaving out of view the immense acreage of tillable but untilled lands at the West, waiting largely for foreign cultivators, observe the agricultural districts in all the Eastern and older States. For fifty years there has been going on a steady process of depletion of enterprise and vigour. Three lines of immigration run out from them—to the small cities and railroad centres, to the great cities, and also, but less, to the newer States and Territories. These emigrants of both sexes want two things: they want money, and they want to get it without working much with

their hands. There is also a fascination in social stir and excitement. In their search for chances some succeed, others have not the faculties that win success; some are weak in will, some are weak in principle, some are lazy. They are set free, in a strange place, from home restraints. The men and boys hang about inferior taverns and low boarding houses and dubious places of amusement, hoping that something genteel and pleasant will turn up for them. They would like to handle other men's money or business, and get a share of it without any other manual exercise. The girls seek situations in shops and "offices." They are glad to be rid of house-work on the farm. Their lives are dangerously exposed, at almost every turn. When off duty they are in a tempting liberty or else a perilous solitude. Dress is never long out of mind. The social instinct never dies. Christianity has made no very thorough, attractive, or genial arrangements for them. From this large and increasing class, male and female, society has something to hope and much to fear. Crime and poverty are far more likely to be replenished from it than from a community of homes. Meantime, what is the condition of the agricultural towns? Very little of the pauperism complained of is found there. The few needy persons, feeble in body or mind, mostly females, are easily and comfortably provided for in a "town-house," generally partly supported by a farm attached to the premises, where the healthier paupers must work. Beyond these there is scarcely a pauper to a town. Tramps seldom originate there; they stroll there from the scum and mire of thicker populations. Yet in all these inland towns there is uncultivated or illcultivated land enough to support double the existing population. Common labour is in demand. The present writer searched

four of these towns in the last season in vain for a domestic, to receive every comfort and three dollars a week. Skilled labour is scantier yet. If you want a carpenter or a mason to repair your buildings, you must wait a month for him. Propose to any one of a hundred thousand commercial travellers to work on a farm where two or three dollars a day, five or six hundred dollars a year, can be earned, what would his answer be? Offer one of the city girls every comfort and eight or ten dollars a month in cash for house-service in a good family, what would she say? Within the current week application has been made, without success, at nineteen well-kept houses of working people, in three villages, for board, at a good price, for two ladies. A farm in New Hampshire, yielding fifteen tons of hay and other crops each season, is reported to have been lately sold for fifty-two dollars, with a house and out-buildings. This is not a poor country. It is a country of abundance, where—except foreigners, by whose side natives are ashamed to work—everybody believes he ought to be rich with little manual toil and in handsome clothes. In nearly every New England rural town society would be stronger and happier in every element of a useful, intelligent, and virtuous citizenship, if the young men and women had been content to live and die there, not accumulating fortunes, but creating a more and more elevated and profitable husbandry; superior to want, voting against all needless taxation, and producing the necessaries of life, which will never fail of a market.

A correction of some of these false ideas and delusive estimates of welfare might be expected of a right system of general education. When public schools themselves have a just conception of what education is, that is, of what human life and character

are meant to be; when they are governed and ordered, not by small local politicians, but by committees chosen by reason of a personal manifestation of human life and character at their best; when teachers are employed who are of that superior order of men and women, and are not either teaching school temporarily as a financial convenience, or making the pupils instruments of their own advancement by factitious or showy examinations; when text-books are not devised and shifted for the profit of publishers; when half the studies are not in subjects and technicalities having no possible relation to the scholar's usefulness or good sense, and when morality is not pushed aside from among the things that children are to be taught, and religion is not forgotten or forbidden; when duties to God and man take their place in those primary conditions of civilized society for which the youth of a strong and Christian nation are trained—then the problems of poverty, labour, wages, communism, anarchy, will be disposed of in a way that the theorist, the *doctrinaire*, and the secret associations have not considered. They will be forestalled. A distinct occasion of social and industrial disturbance appears in the uncertainty of those many occupations which depend on appointment by the will of men. It will be a long time before a civil service reform obviates a tenth part of the evils of changing political administrations, felt down to the lowest class of the employed. No foresight can guard against the wrench that unsettles thousands of homes every four years, in every part of the country. One of the worst features of the growth of enormous corporations and individual accumulations of capital is their inevitable mutability. The suspension of any one of ten thousand vast establishments turns out into idleness and all its temptations a host of men, wo-

men, and children, supplying the countless array of vagrants, tramps, paupers, thieves, rioters. No wonder the owners of large investments and masters of finance dread a crisis. But the averting of the financial crisis is the duty of thoughtful business men quite as much as of the executive and legislative departments of the government or the professors of political economy. It is one of those attainments of which time and suffering and self-constraint are the instructors.

Under these stern disciplinarians our people are already beginning to adjust themselves to the immense hazards of national precocity. Both security in what we have and true progress toward a better estate will be gained by discovering what dangers can be averted by the sober intelligence, conscience, and unpartisan patriotism of the citizens, and what dangers cannot be, because they are involved in mighty drifts of population, race-development, laws of climate, and the elements of nature, which are beyond any personal or corporate calculation or control. If men would study history as they study grammar and arithmetic, or reflect and reason as much as they run about and speculate, they would learn great lessons in that "higher education" which better than any other deserves the name, which confers no titles, but builds solid commonwealths. We cannot stop immigration, with its freight of ignorance and appetite and lawlessness and lust, unless we mean to falsify the fundamental principles and ceaseless professions of the Republic; but we can devote our superfluous wealth to the education of foreigners and natives alike in all that literary and industrial knowledge which is real wisdom; we can hold in check the franchise of the immigrants till they have learned the spirit and letter of our laws; we can regulate the independence of "Mike" and the pre-

rogative of his spiritual ruler; we can in time root and enthrone the ideas of authority, obedience, law, with unhindered penalties and incorrupt courts, in the mind of generations to come. We cannot exterminate unthrif, laziness, incompetency, vice, any more than we can the infirmities of age, orphanage, and disease; but we can abolish indiscriminate alms giving, rationalize our sentimental philanthropy, multiply our bureaux of charity, punish impostors, distinguish real relief from a cruel and prodigal liberality, gradually substitute simple and moderate employment for an enervating bounty; and we certainly can abolish the tenement house inhumanity, with all its disgraces, as the breeding-place of barbarity, pestilence, and every species of sensual abomination. We cannot quench the thirst for alcohol; but we can convict the saloon as the destructive enemy of public virtue and peace, and shut it up. We cannot lift the

soul of a man or woman to a lofty preference of realities unseen and eternal over what is superficial and perishable, or transform selfishness into generosity; but, God helping us, we can so chasten and elevate our standards of living, by school and college and press and household nurture, that those who come after us shall not have been poisoned and belittled by the passion for material possessions, exclusive privileges, vulgar entertainments, or outside display. These are not unreasonable expectations. If it be said that they promise no instantaneous arrest of the disorders that threaten the social body, and no universal cure of its existing discontents, neither do the theories of the philosopher or the outcries of alarmists. Their latent power lies in the free will, the moral sense, the patient self-discipline of the persons whose well-being is at stake, and there lies the strength of the family, the church, and the State.
—*The Forum.*

THE ROYAL COMMISSION ON EDUCATION.

THE following is the part of the majority report (15 out of 23), which deals with the question of religious instruction in public elementary schools, issued recently by the Royal Commission, which had taken evidence from all classes of persons on the working of the schools in England.

RELIGIOUS AND MORAL TRAINING.

(57) That while we desire to secure for the children in the public elementary schools the best and most thorough instruction in secular objects, suitable to their years and in harmony with the requirements of their future life, we are also unanimously of opinion that their religious and moral training is a matter of still higher importance, alike to their children, the parents, and the nation.

(58) There can be no doubt, from the statement of the witnesses, whether favourable or hostile to teaching religion in day schools, and from the testimony afforded by the action of both school boards and voluntary schools, as to the opinion of the country generally on the subject of religious and moral training in day schools, and that all the evidence is practically unanimous as to the desire of the parents for the religious and moral training of their children.

(59) That to secularize elementary education would be a violation of the wishes of parents, whose views in such a matter are, we think, entitled to the first consideration.

(60) That the only safe foundation on which to construct a theory of morals, or to secure high moral con-

duct, is the religion which our Lord Jesus Christ has taught the world. That as we look to the Bible for instruction concerning morals, and take its words for the declaration of what is morality, so we look to the same inspired source for the sanctions by which men may be led to practise what is there taught, and for instruction concerning the helps by which they may be enabled to do what they have learned to be right.

(61) That the evidence does not warrant the conclusion that religious and moral training can be amply provided otherwise than through the medium of elementary schools.

(62) That, in the case of a considerable number of children, if they do not receive religious instruction and training from the teachers in the public elementary schools, they will receive none, and that this would be a matter of the gravest concern to the State.

(63) That all registers should be marked before the religious teaching and observances begin, scrupulous care being taken, in accordance with the letter and spirit of the Education Acts, to provide for the case of children whose parents object to such teaching and observances.

(64) That it is of the highest importance that the teachers who are charged with the moral training of the scholars should continue to take part in the religious instruction, and that any separation of the teacher from the religious teaching of the school would be injurious to the moral and secular training of the scholars.

(65) That we cannot recommend the plan which has been suggested of religious instruction to be given by voluntary teachers on the school premises out of school hours. That such a plan would be no efficient substitute for the existing system of utilizing the school staff and the hours of school attendance for this purpose, a system

which has taken deep root in the country, and appears to give general satisfaction to the parents.

(66) That the State cannot be constructively regarded as endowing religious education, when, under the conditions of the Act of 1870, it pays annual grants in aid of voluntary local effort for secular instruction in schools in which religious instruction forms part of the programme.

(67) That the 14th section of the Act of 1870, which forbids any denominational catechism or formulary to be taught in board schools, merely provided for perfect neutrality among Christian denominations. It does not exclude from the schools instruction in the Religion of Nature, that is, the existence of God and of natural morality, which, apart from belief in the existence of God, cannot be intelligibly taught or understood.

(68) That the conscience clause is strangely misconstrued, when it is understood to "prevent the possibility of any allusion to religious subjects during the ordinary hours of instruction," or to preclude a teacher from "bringing the sanction of the Christian religion to bear" on any moral offence, such as lying, which requires attention during these hours.

(69) That, inasmuch as parents are required to send their children to school, it is just and desirable that, as far as possible, they should be enabled to send them to a school suitable to their religious convictions or preferences.

(70) That in schools of a denominational character to which parents are compelled to send their children, the parents have a right to require an operative conscience clause, and that care be taken that the children shall not suffer in any way in consequence of their taking advantage of the conscience clause.

(71) That the absence of any substantial case of complaint and the

general drift of the evidence convince us that the conscience clause is carefully observed both by teachers and managers.

(72) That we recognize, nevertheless, the importance of removing, if possible, any suspicion of unfair play or undue influence in the administration of the conscience clause from the minds of those who entertain such impressions. And any further precautions which might tend in that direction without compromising still higher interests are deserving of the most careful consideration.

(73) That, greatly as the estimate of the value of the religious' instruction given in board schools varies with the standpoint from which it is regarded, there is good ground for concluding that where care is bestowed on the organization of such instruction, and sufficient time is allowed for imparting it, it is of a nature to affect the conscience and influence the conduct of the children of whose daily training it forms a part. That it is much to be hoped that the religious and moral training in all elementary schools may be raised to the high standard which has been already reached in many of them.

(74) That exactly the same facilities to hold annual examinations of

their schools in religious knowledge should be given by law to school boards as are now allowed under Section 76 of the Act of 1870 to the managers of voluntary schools.

(75) That increased support should be given by the State to the moral element of training in our schools, almost the only reference to the importance of such matters made by the State being that in the Code which is made under the head of Discipline.

(76) That general, fundamental, and fixed instructions to her Majesty's inspectors should be laid down as to moral training, making it an essential condition of the efficiency of a public elementary school that its teaching should comprise such matters as instruction in duty and reverence to parents, honour and truthfulness in word and act, honesty, consideration, respect for others, obedience, cleanliness, good manners, duty to country, purity, temperance, the discouragement of bad language, and the like.

(77) That it should be the first duty of her Majesty's inspectors to inquire into and report upon the moral training and condition of the schools under the various heads set forth, and to impress upon the managers, teachers, and children the primary importance of this essential element of all education.

NOTES FOR TEACHERS.

IN 1887 Canada had 12,292 miles of railway in operation, carrying 10,685,508 passengers during the year, 16,367,987 tons of freight, equal to 35 tons per inhabitant.

PROJECTED CRIMEAN CANAL.—The Crimean Peninsula is (the Odessa correspondent of the *Daily News* says) to have a canal cut through it. After many schemes have been discussed by the Russian Government and Rus-

sian private enterprises for piercing the isthmus of Perekop and opening a maritime highway through the Si-vash, there appears now every prospect of the undertaking being carried to a successful issue, not by the Russian Department of War and Communications, nor by Russian private enterprise, but by a French company and French capital. The Imperial Government has already given its adhesion to the project, and the Min-

isterial concession will shortly issue. The concessionary rights do not include any Government guarantee to the company. The total length of the canal will be 111 versts, and when completed will unite the Sea of Azoff and the Don Basin with the Black Sea and the basin of the Dnieper. The canal will have a mean depth of fourteen feet, and will offer very great advantages to the south-western provinces, which are rich in cereal products, salt and minerals. The Black Sea and Azoff Canal Company commence operations with a capital of 85,000,000 fr. The works will probably occupy about four years, and will be directed by M. Epsin, the superintending engineer of the Suez Canal. The southern press have some very lively strictures on the negligence of the Government and the extraordinary apathy of Russian private commercial enterprise, which have left a work of such magnitude and maritime importance to be undertaken by the French and worked on French capital.

TRIUMPHS OF SCIENCE. — Archdeacon Farrar in a recent address at Liverpool College, said:—"In this great commercial city, where you are surrounded by the triumphs of science and of mechanism—you, whose river is ploughed by the great steamships, whose white wake has been called the fittest avenue to the palace front of a mercantile people, you know well that in the achievements of science there is not only beauty and wonder, but also beneficence and power. It is not only that she has revealed to us infinite space crowded with unnumbered worlds; infinite time peopled by unnumbered existences; infinite organisms hitherto invisible, but full of delicate and iridescent loveliness; but also that she has been, as a great Archangel of Mercy, devoting herself to the service

of man. She has laboured, her votaries have laboured, not to increase the power of despots or add to the magnificence of courts, but to extend human happiness, to economize human effort, to extinguish human pain. Where of old men toiled, half-blinded and half-naked, in the mouth of the glowing furnace to mix the white-hot iron, she now substitutes the mechanical action of the viewless air. She has enlisted the sunbeam in her service to limn for us, with absolute fidelity, the faces of the friends we love. She has shown the poor miner how he may work in safety, even amid the explosive fire-damp of the mine. She has, by her anæsthetics, enabled the sufferer to be hushed and unconscious while the delicate hand of some skilled operator cuts a fragment from the nervous circle of the unquivering eye. She points, not to pyramids built during weary centuries by the sweat of miserable nations, but to the lighthouse, and the steamships, to the railroad and the telegraph. She has restored eyes to the blind and hearing to the deaf. She has lengthened life, she has minimized danger; she has controlled madness; she has trampled on disease. And on all these grounds, I think that none of our sons should grow up wholly ignorant of studies which at once train the reason and fire the imagination, which fashion as well as forge, which can feed as well as fill the mind."

ABUSE OF HIGH HEALTH.—High health is one of our best blessings. It enables us to make the most of life with the least wear and with the greatest enjoyment. With it is connected a vigorous digestion. Its possessors incline to eat more than is needed to supply nervous force to the machinery of the system, or to make good its incessant waste, for they are either unconscious of harm from undue in-

dulgence, or they rapidly rally from its immediate effects. To this class belong those who live to eat, instead of eating to live. We are not mere animals. We were made to be, predominantly, moral and intellectual beings. Now, nature allows no one to violate her laws with impunity. We exalt the bestial in us only at the expense of our higher nature. Some of the Roman emperors thus came to be more brutish than the brute. They were, of course, extreme cases—veritable monsters. But even the great pulpit orator of England once wrote, "I ate like a hog, and I preached like a hog." Many a man of lofty powers and position has been, for the time, utterly shorn of his strength through the demand made by his stomach on his brain. He who is thus yielding daily to the sway of his lower nature cannot reach the full capability of his higher. If he does not embrate himself, he must come far short of the full stature of his manhood. But there is another penalty which falls upon our physical powers. Where more food is eaten than is assimilated, it is deposited as encumbering fat; or it undergoes chemical changes that give rise to gout; or it inflames the kidneys in their struggle to eliminate it; or it congests the stomach and liver; or it breaks down the brain with softening or with apoplexy. Men of high health ought to live a hundred years; they are apt to fail of their threescore and ten. But high health may be abused in the direction of the intellect. Its possessor can work mentally more hours a day than others without exhaustion; can curtail sleep; can neglect physical exercise; can carry great loads of care and responsibility. Now, with such there comes to be, in time, a mighty momentum towards and beyond the limits of safety, and either their own habits, or the influences with which they sur-

round themselves, lead to the partial or complete breakdown of their brains. These are the saddest of all wrecks. But they are numerous.—*Youth's Companion.*

THE MODERN TEACHER.—The lot of the modern Board School teacher, like that of Mr. Gilbert's policeman, is not a happy one. In the good old days the dominic was second only to the minister in point of importance; in scholastic matters his own sweet will was almost his only consideration. But all that has been changed. In this "age of peevish introspection," the poor teacher is turned into a kind of Ishmael, whose hand is against every man's, and every man's hand is against his. Formerly the tawse may have been used in some cases with more vigour than discretion, but nobody troubled about it. Now not only is he liable to be dragged into the Criminal and Civil Courts for injudicious punishment, but every word and every action is scrutinized with a closeness which can only be brought about by a forgetfulness of the fact that the employé of the School Board is a human being. His knowledge, his abilities, natural and acquired, and even his common sense, have been impugned, till at last life to him is hardly worth living. The defect most recently discovered in this much misunderstood individual is a deficient knowledge of English grammar. There is "much virtue in your *if*," says Shakespeare; and the deduction from a recent correspondence in the *Herald* is that there is much variety of opinion as to the parsing of *but* in its various connections. In almost, if not quite, identical sentences this word has been parsed as an adverb, a preposition, and a conjunction. This, in its own way, is a serious matter; but what accentuates the seriousness is the fact that there is no ultimate Court of Appeal. One writer throws cold

water on antiquarian precedents; while another considers, and justly considers, that they are our only guides, for it is the custom of every grammarian to clinch his arguments with quotations from writers of more or less antiquity. It must be galling to our insular pride to think how much better they manage these things in France. There the Academy, or Institut de France, is the final appellate court. Scholars may not—as a matter of fact do not—accept unreservedly every rule laid down by the Academy; the Academy itself is not always held in universal respect. At times it may not have deserved to be, and may have merited the con-

tempt conveyed in the epitaph on Piron the poet—

Ci-gît Piron, qui ne fut rien,
Pas même académicien.

But for all ordinary purposes the rules laid down by that body are sufficiently accurate. The adoption of similar measures in this country would at least put an end to the perennial discussions on points of grammar, and would at the same time secure uniformity of teaching, and simplify the work for both teachers and scholars. We hear a great deal about "reforms" which are less urgently needed than an official codification of the rules of English grammar.—*Glasgow Herald*.

SCRIPTURE LESSONS FOR SCHOOL AND HOME.

NO. 17. SICK OF THE PALSY, ETC.

To read—*St. Matthew ix. 1—17.*

SICK OF THE PALSY. (1—8.) *A ship*—rather the *boat*—probably belonging to St. Peter, generally used by Christ. *His own city*—Capernaum—Nazareth having rejected Him. *They* who knew His power and love brought the sick man unable to come of himself. *Palsy*, or paralysis, very common disease. Their action showed:—

1. *Faith* in Christ's power to heal. 2. *Hope* in His willingness. 3. *Charity* to their friend. Christ first healed his soul's disease, then his bodily disorder. Which *is* easier to say? "Thy sins be forgiven." Why? Because man cannot see if effect follows. So Christ shows His power of God by healing the man. See different ways Christ showed that He was God:—

1. He knew the thoughts of the sick man and of the Scribes.

2. He healed his disease of soul and body.

Result. The man saved—friends comforted—God glorified.

II. CALL OF ST. MATTHEW.

(9—13.) (a) *The man*, a publican or tax-gatherer—sitting in his office by side of Lake of Galilee to take custom-dues from the ships—a rich man, able to give great feast.

(b) *The call.* 1. To give up worldly position. 2. To share poverty with Christ. 3. To be a disciple (learner), apostle (missionary), evangelist (writer of the Gospel).

(c) *The answer* was immediate, voluntary, for ever. No hanging back—followed Christ at once wherever He went.

(d) *The feast.* Christ allowed sinners to talk with Him. Why? 1. To try and reach their hearts. 2. To set example of humility. He loved the sinners, but hated their sins. So He gave account of His mission—to call sinners to repent. Examples:—The woman who had been a sinner. (St. Luke vii. 39.) St. Peter after his fall. (St. John xxi. 15.) St. Paul the persecutor. (Acts ix. 17.)

III. FASTING. (Read 14—17.) John the Baptist lived austere life—simple fare (chap. iii. 4)—had many

followers—some became Christ's disciples (St. John i. 37). Kept all fasts enjoined by Pharisees. Christ and His disciples did not. So complaint was made, Why did they not fast? Because Christ was with them, was to them as a bridegroom—full of love, care, and protection.

General lesson—things must be suited to each other—new cloth useless on old garments—new wine in old skins. Christ's presence is to bring joy, not gloom.

NOTES.

10. *Sinners came.* Not guests, but strangers—allowed to come in by Eastern custom.

17. *Old bottles.* Skins of animals—apt to crack when old.

NO. 18. FOUR MIRACLES, ETC.

To read—*St. Matthew ix.* 18—36.

I. JAIUS' DAUGHTER. (18, 19, 23—26.) (a) *The father*, Jairus, ruler of Synagogue—many incidents of Christ's life connected with Synagogues, e.g., His sermon at Nazareth, when they sought His life (Luke iv. 16); His healing woman with spirit of infirmity (St. Luke xiii. 12).

Synagogues ruled either by one man or by council of elders, of which one supreme. (b) *The Child*, twelve years old—name unknown—at point of death—died before Christ reached the house. (c) *The Saviour*: what did He do? 1. Left the table and meal to go at once. 2. Insisted on quiet in the presence of the dead. 3. Took three chosen disciples as witnesser. (St. Mark v. 37.) 4. Spake the word, and the dead lived.

This the first of three miracles of raising the dead. Notice the progress—Jairus' daughter just dead—widow's son being carried out to burial—Lazarus dead four days.

General resurrection only one step further.

II. WOMAN WITH ISSUE OF BLOOD. (20—22.) On road to Jairus' house. Notice:—

1. Her great *sickness*—chronic for twelve years.

2. Her great *faith*—one touch enough for healing.

3. Her great *modesty*—coming behind—trying to hide herself.

This the spirit Christ approves. Therefore notice His sympathy, encouragement, help. She was cured at once.

III. THE BLIND MAN. (27—31.) Two miracles in the Gospel of healing the blind—this in the house, privately—the other at Jericho, openly (xx. 30). Thought by Jews the most wonderful of all. (See St. John ix. 32.) What was required of them?

1. *Faith* to believe in Christ's power.

2. *Silence* as to their cure. Christ's hour not yet come. But they spread His fame everywhere.

IV. DEVIL CAST OUT. (32—35.) One other kind of miracle—man with dumb spirit. But what did the Pharisees say? Done by Satanic agency. This showed their *ignorance*—as if Satan would do works of mercy—also their *malice*, trying to prejudice people against Christ. What did Christ do in return? Did He stop His work?

1. He *went* everywhere on mission of mercy.

2. He *preached* the Gospel ("good news") of His Kingdom.

3. He *healed* all kinds of sickness.

LESSONS. All these miracles teach similar lessons—

1. To *go* to Christ in trouble, however great.

2. To *believe* in Christ as Saviour of body and soul.

3. To *acknowledge* Christ as Lord of heaven and earth.

PUBLIC OPINION.

THE Government grant per pupil, reckoned on the daily average attendance for England and Wales last year, was \$4.18.

ONE of the last acts of the Emperor Frederick III. was to grant a pension of 3,000 marks to the widow of Froebel, who lives in Hamburg.

SAN FRANCISCO Sabbath breakers received a sharp rebuke at the hands of the National Education Association which held its convention recently in that city. The Sightseers' Club, a local organization, had prepared an excursion on Sabbath to the top of Mt. Tamalpais for the benefit of the Association. They were on hand—both ladies and gentlemen—at the wharf on the Lord's Day morning, to escort their guests on the proposed outing; when lo! not one of the expected guests put in an appearance. Well done, teachers!—*Presbyterian Review*.

THE *Queen* gives a brief outline of the progress of our High Schools for Girls, many points in which will be found interesting. A company was formed some years ago to establish institutions of this kind, and all of them are in a prosperous condition. They number no less than thirty-two, educating over 6,000 girls; employ a staff of no less than 500 teachers at a cost of £60,000 a year for salaries; expend £1,200 annually in scholarships and prizes; and can boast of having educated no less than 20,000 pupils. This is the work of one company alone. Miss Brough, the registrar of the Teachers' Guild, states that there are at least 130 High Schools in working order, educating 24,000 pupils, and employing at least 1,000

mistresses. That these schools have improved the education of the present race of girls and young women who have passed through them, is manifest to every one.

A NEW departure in girls' schools is being tried in Russia. Countenanced and aided by the State, a lady has opened in a village near Kief a school where girls of the lower classes will be instructed in such branches of *petite culture* as women can profitably attend to, from market-gardening to bee-keeping. The school is to receive a yearly grant in aid of 1,500 roubles. Rural School Boards in England (says the *St. James's Gazette*) might perhaps take the idea into serious consideration. The wives and mothers of a future generation of British husbandmen would probably find a practical knowledge of dairy-farming and poultry-keeping even more useful than the arts and sciences they are now encouraged, if not required, to study.—*Schoolmaster*.

THE last report of the Superintendent of Education in Quebec comments on the very meagre salaries paid to teachers in that province. Female teachers in the rural districts rarely get more than from \$60 to \$80 a year for ten months' work; the average salary is from \$50 to \$60, and some of them are required to do certain "chores" in addition to teaching. There are 4,465 elementary schools in the province, of which 3,501 are Roman Catholic and 964 Protestant. The total school population is 258,607, the Roman Catholic pupils numbering 219,403 and the Protestant 37,484. These figures include the pupils at all the schools and colleges.

CORRESPONDENCE.

Editor of THE MONTHLY:

DEAR SIR, — During the annual meeting of the Ontario Teachers' Association last month the following statements were freely made:

1. That more than 6,000 applicants wrote for a certificate of some grade.
2. That 1,400 of these were successful in getting a certificate of some kind.
3. That if the directions given to those who read the answers of the candidates, by one who had prepared some of the examination papers, were followed, the number who got

certificates would have been less. Would you kindly explain the bearing of the above statements on High Schools? I beg to thank you for your timely article in your last issue on "Inspection." Never has the freedom and independence of THE MONTHLY been more needed than now, when the lines of inspection are being so rigidly drawn. Every true educator in the country will actively support your magazine.

Yours very truly,

Ontario, Sept.

TEACHER.

 EDITORIAL NOTES.

WE commend to our readers the notice on another page of our valued friend, Mr. Richard Lewis, the Head Master for so many years of the Dufferin School, Toronto.

THE MACKENZIE BASIN.—From the report of the Parliamentary Committee on the climate and resources of the Mackenzie Basin (Governor Schultz) we learn that what was formerly supposed to be an irreclaimable wilderness, with a wintry climate, is in reality a well-wooded country with a climate resembling Western Ontario; not only possessing an abundance of finest timber, suitable for all building purposes, but also containing 656,000 square miles of land fit for growth of potatoes, 316,000 suitable for wheat and 407,000 for barley. The lakes are stored with fish, there is an abundant supply of fur-bearing animals, valuable metals are found in the rocks, as well as other useful minerals, and even a vast amount of petroleum.

THE CHINOOK WINDS.—Mr. C. C. McCaul, of Fort McLeod, N.-W.T., gives interesting information about the Chinook winds in the *American Meteorological Journal*. The influence of this warm wind is felt chiefly in Southern Alberta. It blows from west to south-west, varying from a gentle breeze to a gale, and serves the purpose of moderating the temperature at any season of the year, being warm in winter and cool in summer. The approach is indicated by the accumulation of dark clouds about the mountain tops and a distant wailing or rumbling sound in the passes. The rise in temperature is wonderful, the thermometer, under its influence, occasionally rising from 20° below zero to 40° above. Southern Alberta is a vast, treeless, elevated plain, rising to the foot hills of the Rockies, to a height of about 4,000 feet, bounded on the west by a lofty range of mountains covered with ice and snow, beyond which are the mountains and valleys of British Col-

umbia, and still further, the waters of the Pacific Ocean, warmed by a current known as the Keiro Seiva, the Gulf Stream of the Pacific. The prevailing wind is westerly, warm and moisture bearing, from the Pacific this moisture coming in contact with the icy peaks and snow-clad sides of the mountains undergoes condensation and falls there in torrents of rain, but the heat which is evolved by this process of condensation comes through the mountain passes as a warm, dry wind from the west, familiarly known as the Chinook Winds.

IN answer to the letter of "Teacher" to be found in another column of this number, on some aspects of the annual examinations held by the Education Department, we offer the following remarks: It is correct, that about 6,000 candidates wrote for certificates of some grade, and that 1,400, or thereabouts, obtained a certificate, and the report at the annual meeting of the Ontario Teachers' Association was very general, that if the instructions to the readers of the candidates' answers given by one of those who prepared the examination papers had been followed, the number of certificates issued would have been considerably less.

Why should these facts disturb High School Masters?

Because the great majority of those who write at these annual examinations are prepared at the intermediate schools of the Province, and if they do not pass the prescribed standard of examination, the result is held to reflect discredit upon our preparatory schools, that is, on the masters. We refrain from stating here how masters are made to feel, and the means adopted to enable them to keep in

mind, the failure of their pupils; much to the discredit of those who represent the financial power of the people. To hold the master responsible for the rejection of his pupils is wholly unjust; for many write who, he knows, should not pass; are not prepared either by attendance at the school, or amount of work done, to pass; many write on chance; some write for the sake of the practice of writing. "The sight shot" of the marksman or the preliminary canter of the runner over the racecourse. How large a proportion these form of the total number it is impossible to say, but we are inclined to put it as between one-third and one-half. But now we state a fact which has for years perplexed the most expert masters in Ontario: of this unprepared half, say, of those who write on chance, some get their certificates, and of the prepared half, some of the best of them fail. What can be the explanation of this very disappointing result? Sometimes unexpected changes take place in university examinations; the candidates are interchanged among themselves in a manner unlooked for, but this is very seldom.

The chief difference in the conduct of these two examinations is that at the university examinations the examiner who prepares the paper reads the answers. At the departmental examination one sets the paper and the answers are given to a number of sub-examiners, who, if report be correct, are specially coached by the one who sets the questions. The opinion is pretty general, that if the same man who prepared the questions also read the answers of candidates, the results would be different, and not so disappointing to masters and candidates.

SCHOOL WORK.

CLASS-ROOM.

ARITHMETICAL PROBLEMS.

1. (a) What number is the same multiple of 5. that 148,995 is of 9?

(b) If the divisor be eight times and the quotient seven times the remainder what is the dividend when the remainder is 452?

Ans. (a) 82,775; (b) 11,441,476.

2. A team of horses and a carriage cost \$300; one of the horses and the carriage cost \$205; the other horse and the carriage cost \$215. Find the cost of each of the three.

Ans. \$85; \$95; \$120.

3. A farmer sold 12 bushels wheat, and 15 bushels barley, receiving for the latter two-thirds as much per bushel as for the former. He finds he received on the whole an average of $80\frac{2}{3}$ cts. per bushel. Find the price of each per bushel.

Ans. 99 cts. and 66 cts.

4. A farmer exchanges sheep worth \$5.75 per head with a neighbour for pigs worth \$7.25 per head, without either gain or loss to either party. Find the least number of animals that exchanged hands.

Ans. 52.

5. If a merchant were to sell a piece of cloth at 45 cts. per yard he would lose \$2.75, but were he to sell it at $62\frac{1}{2}$ cts. per yard he would gain \$6.87 $\frac{1}{2}$. Find the number of yards in the piece and the cost per yard.

Ans. 55 yards; 50 cents.

6. A bankrupt can pay only $33\frac{1}{2}$ cts. on \$1, but by one of his creditors relinquishing his claim of \$1,500, he can pay a dividend of $44\frac{1}{3}$ cts. Find his liabilities.

Ans. \$6,000

7. A grocer finds that by increasing $\frac{2}{3}$ of the quantity of sugar in a barrel by $\frac{1}{3}$ of the quantity, and then the number of pounds so obtained by $\frac{1}{15}$ of itself, he has a new barrel of sugar containing 15 lbs. less than the first. Find the number of pounds in the first barrel.

Ans. 225 lbs.

8. Two merchants buy equal quantities of tea at the same price. One sells his at an advance of $37\frac{1}{2}$ per cent. to a person from

whom he can collect only 80 per cent. of his bill; the other sells his for cash at an advance of 15 per cent., and thus gains \$1.25 more than the former. Find the value of the tea purchased by each.

Ans. \$25.

9. One man loaned another \$125 at 5 per cent. per annum, simple interest, and agreed to let him have the use of it until the interest amounted to the principal. When should the money-lender get the money?

Ans. 20 years.

10. The length of a postage stamp is to its width as 5 : 4, and it costs \$1,044.48 to cover with one cent stamps the walls of a room 17 ft. 6 in. long, 12 ft. 6 in. wide, and 10 ft. 6 in. high, allowing for three windows, each 5 ft. 6 in. by 4 ft., and three doors, each 6 ft. by 3 ft. Find the dimensions of a stamp.

Ans. $1\frac{1}{8}$ in. x $\frac{3}{4}$ in.

EDUCATION DEPARTMENT,
ONTARIO.

MIDSUMMER EXAMINATIONS, 1888.

Third-Class Teachers.

ENGLISH GRAMMAR.

Examiners: { J. F. White,
 J. E. Hodgson, M.A.

NOTE.—Seven questions count a full paper; but of these Nos. 3, 4, 7 and 10 must form four.

1. (a) State and illustrate the several ways of indicating number and gender in nouns.

(b) Give, with explanations, instances of nouns with (1) plural forms construed as singular, (2) two plurals with different meanings, (3) no plural form.

2. (a) How do you account for the two modes of comparing adjectives? Compare, when possible, *pretty*, *probable*, *historical*, *first*, *more*.

(b) Explain clearly what is indicated by each of the degrees.

3. Complete the following sentences, using the present or the past tense of the verb "be." Explain in each case the principle of agreement: Two hundred dollars—not

enough. Three-fourths of the apples—
unripe. Two-thirds of the money—his.
The ebb and flow of tides—now under-
stood. My brother or I—You, an I
not John,—You, and he, and I,—

4. If true there be another, better land,
A fairer than this humble mother shore,
 Hoping to meet the blessed gone before,
I fain would go. But may no angel
hand

Lead on so far along the shining sand,
So wide *within the everlasting door,*
'Twill shut away this good, green world.

No more
Of earth!—Let me not hear that dread
command.

Then must I mourn, unsoothed by harps
of gold,

For sighing boughs, and birds of simple
song,

For hush of night within the forest fold ;
Yea, must bemoan, *amid the joyous*
 throng,

Mine early loves. The heart that has
grown old

With Nature cannot, happy, leave her
long.

(a) Divide into propositions stating their
kind and relation.

(b) Parse *gone*, l. 3 ; *fain*, *may*, l. 4 ; *wild*,
l. 6 ; *let*, l. 8 ; *happy*, l. 14.

(c) Give the grammatical value and the
relation of each of the parts in italics.

(d) Supply the several ellipses.

(e) Why is the form "be" used in l. 1 ?
What time is expressed by "would," l. 5 ?
Why is "her" used in l. 14 ? What values
have "hoping," l. 3, "shining," l. 5 ?

(f) Explain the use of "there," l. 1 :
"it," l. 7 ; "then," l. 9.

5. Show clearly what time is indicated by
each of the tense forms of the indicative
mood. Name the tenses formed by inflec-
tion. How are the others supplied ? Illus-
trate.

6. (a) Divide the following words into
root-word, prefix and suffix, giving the mean-
ing of each of the parts : elucidate, redemp-
tion, indomitable, obstinacy, adventure, pre-
cipitous, epitomize, retrospective, prosperity.

(b) What are the ordinary noun and verb
forms corresponding to *broad*, *just*, *beautiful*,
laudable, *characteristic* ?

7. (a) Define infinitive. Compose sen-

tences where it is used (1) as a noun, (2) as
an adjective, (3) as an adverb.

(b) Account for the difference in the form
of the infinitive : I intended to *write* yester-
day ; He seemed to *have known* better days.

8. What difference between case in nouns
and case in pronouns ? Show the several
constructions in which nouns in the objective
case are found.

9. (a) Give the value and the relation of
each of the italicized parts : The way *they*
did it. He was told to *cut wool*. They
brought it out from *among his books*. They
spoke of *each other's* loss. He has no idea
that you are back.

(b) Write two sentences, using the nom-
inative absolute ; expand the absolute con-
struction into a clause, with different con-
necting words in each.

10. Criticize and amend the following :—

(a) This region was the emporium of the
slave trade, and though some Portuguese
were still interested in it, they could no
more be held responsible for their crimes
than England for those who were executed
at Newgate.

(b) Discovering on his property a vast
amount of suitable clay, he had been induced
to undertake this industry by the exorbitant
price for drain pipes.

(c) It stands on the banks of the river,
here a small and muddy stream, that we had
to cross by a ferry. The lower reaches, the
beauty of which we often heard extolled, and
always intended to have seen, we never un-
fortunately found leisure to visit.

(d) If the fruit is allowed to remain on the
trees, and only plucked as required, they last
all the year round. The late blossoms form
a second crop, which, ripening later in the
year, keep up the supply ; but these oranges
are small, with the pulp very crisp, contain-
ing (if any) very small seeds ; sometimes the
rind remains green, or of a pale greenish
yellow colour.

POETICAL LITERATURE.

Examiners: John Seath, B.A., Jas. F. White.

NOTE.—All candidates must take section
IV. They may select any two of sections
I-III.

I.

O strong soul, *by what shore*
Tarriest thou now! For that force,
Surely, has not been left vain!
 Somewhere, surely, afar,
 In the *sounding labour-house vast* 5
Of being, is practis'd that strength,
 Zealous, beneficent, firm!
Yes, in some far-shining sphere,
Conscious or not of the past,
 Still thou performest the word 10
 Of the Spirit in whom thou dost live—
 Prompt, unwearied, as here!
 Still thou upraiest with zeal
 The humble good from the ground,
 Sternly represses the bad! 15
 Still, like a trumpet, dost rouse
Those who with half-open eyes
Tread the border-land dim
'Twixt vice and virtue; reviv'st,
 Succourest!—this was thy work,
 This was thy life upon earth.

What is the course of the life
 Of mortal men on the earth?—
 Most men *eddy about*
 Here and there—eat and drink,
 Chatter and love and hate,
 Gather and squander, are rais'd
 Aloft, and hurl'd in the dust,
 Striving blindly, achieving
 Nothing; and then they die— 30
 Perish—and no one asks
 Who or what they have been,
 More than he asks what waves,
 In the moonlit solitudes mild
 Of the *midmost Ocean*, have swell'd, 35
 Foam'd for a moment, and gone.

1. State, with reasons, whether each of the foregoing sections is a complete paragraph.

2. Explain and comment upon the meaning of the italicized parts.

3. How does the poet himself explain what he means by "that force"; "somewhere, afar"; "is practis'd that strength, zealous, beneficent, firm"; and "eddy about"?

4. Fully exemplify and explain the poet's use of repetition and contrast in the foregoing extract.

5. Shew, as well as possible, wherein consist the beauty and the appropriateness of ll. 33-36.

6. What characteristics of the author are exemplified in the foregoing extract?

II.

"Girt with many a baron bold
 Sublime their *starry fronts* they rear;
 And gorgeous dames, and statesmen old
 In *bearded majesty*, appear.
 In the midst a form divine! 5
 Her eye proclaims her of the Briton-line;
 Her lion-port, her awe-commanding face,
Attempter'd sweet to virgin-grace.
 What strings *symphonious tremble* in the air,
 What strains of vocal *transport* round her 10
play,
 Hear from the grave, great Taliessin hear;
They breathe a soul to animate thy clay.
 Bright Rapture calls, and soaring, as she sings,
Waves in the eye of heaven her many-colour'd
wings.

"The verse adorn *again* 15
 Fierce War and faithful Love,
 And Truth severe, *by fairy Fiction drest*.
 In *buskin'd measures* move
 Pale Grief, and *pleasing Pain*,
 With Horror, *tyrant of the throbbing breast*.
A voice, as of the cherub-choir,
Gales from blooming Eden bear;
 And *distant warblings* lessen on my ear,
 That lost in long futurity *expire*.

1. How is this extract connected in sense with the rest of the ode? Account for the bard's attitude in the extract towards "Britannia's issue."

2. Explain the biographical references in "they," l. 2; "a form divine," l. 5; and "The verse—expire," ll. 15-24.

3. Discuss the meaning of ll. 1, 2, and 6-24, showing especially the force of the italicized parts.

4. Show, as fully as you can, how the poet has given beauty and force to his language.

III.

Break, break, break,
 On thy cold gray stones, O Sea!
 And I would that my tongue could utter
 The thoughts that arise in me.

O well! for the fisherman's boy. 5
 That he shouts with his sister at play!
 O well! for the sailor lad,
 That he sings in his boat on the bay!

And the stately ships go on
 To their haven under the hill; 10
 But O for the touch of a vanish'd hand,
 And the sound of a voice that is still!

Break, break, break.

At the foot of thy crags, O Sea!
But the tender grace of a day that is dead
Will never come back to me. 15

1. State and account for the author's mood in this poem. What is the subject of the poem?

2. Describe the scene before the poet's mind, accounting for the order in which he notices the different objects.

3. Explain how ll. 3-4, 11-12, and 15-16 are respectively connected in sense with the preceding context.

4. Show how the poet has harmonized his language and versification with his thoughts and feelings. What qualities of style are exemplified in the poem?

5. Write brief elocutionary notes on the poem.

IV.

1. Name and describe the nature of the class of poems to which each of the foregoing selections belongs.

2. Quote a passage describing (1) the path through life of those who strive "not without action to die fruitless"; or (2) the effect upon a village maiden of "the burden of an honour, unto which she was not born"; or (3) the condition of the "Revenge" immediately before its surrender, the surrender of the "Revenge," and the death of Sir Richard Grenville.

ENGLISH PROSE LITERATURE AND COMPOSITION.

Examiners: { John Seath, B.A.
M. J. Kelly, M.D., LL B.

NOTE.—All candidates will take sections III. and IV. A choice is allowed between sections I. and II.

I.

It was one of their happy mornings, They trotted along and sat down together, with no thought that life would ever change much for them: they would only get bigger and not go to school, and it would always be like the holidays; they would always live together and be fond of each other. And the mill with its booming—the great chestnut

tree under which they played at houses—their own little river, the Ripple, where the banks seemed like home, and Tom was always seeing the water-rats, while Maggie gathered the purple plummy tops of the reeds, which she forgot and dropped afterward—above all, the great Floss, along which they wandered with a sense of travel, to see the rushing spring-tide, the awful Eagle, come up like a hungry monster, or to see the Great Ash which had once wailed and groaned like a man—these things would always be just the same to them. Tom thought people were at a disadvantage who lived on any other spot of the globe; and Maggie, when she read about Christiana passing "the river over which there is no bridge," always saw the Floss between the green pastures by the Great Ash.

Life did change for Tom and Maggie; and yet they were not wrong in believing that the thoughts and loves of these first years would always make part of their lives. We could never have loved the earth so well if we had had no childhood in it—if it were not the earth where the same flowers come up again every spring that we used to gather with our tiny fingers as we sat lisping to ourselves on the grass—the same hips and haws on the autumn hedgerows—the same red-breasts that we used to call "God's birds," because they did no harm to the precious crops. What novelty is worth that sweet monotony where everything is known, and *loved* because it is known? (High School

1. What are the subjects of the foregoing paragraphs, and which are the topic sentences? What part does "Life—Maggie," l. 18, play in the paragraph-structure of the extract?

2. Name and explain the value of the different kinds of sentences in the extract, pointing out the most marked example of each kind. Exemplify, from the paragraph, the principle of Parallel Construction.

3. Distinguish "booming," l. 5, and "roaring"; "at a disadvantage," l. 14, and "at a loss"; "gather," l. 23, and "collect"; "tiny" l. 23, and "little"; and "lisping," l. 23, and "talking."

4. State, with reasons, which of the following is preferable in the foregoing extract : "bigger," l. 3, or "larger"; "great," l. 5, or "big"; "come up like a hungry monster," ll. 11-12, or "come up"; "green pastures," l. 17, or "verdant meadow"; "not wrong," ll. 18-19, or "right"; and "What novelty—known?" ll. 25-26, or "No novelty is worth—known."

5. Point out and account for the difference between the diction of "And—them," and "We—crops," ll. 5-13 and 20-26, and that of ordinary prose. Comment on the ellipses in "We—crops," ll. 20-26.

What qualities of style are exemplified in the extract? Point out one marked example of each quality.

II.

It was six o'clock. The battle had continued with unchanged fortune for three hours. . . (High School Reader, p. —.)

1. What are the subjects—leading and subordinate—of the foregoing paragraph, and which sentences contain them? Account for the order in which the subjects are introduced.

2. Name and explain the value of the different kinds of sentences in the paragraph, pointing out the most marked example of each kind. Exemplify from the paragraph the principle of Parallel Constructions.

3. Distinguish "desperate," l. 6, and "hopeless"; "unflinching," l. 6, and "unyielding"; "convinced," l. 16, and "certain"; "carnage," l. 17, and "slaughter"; and "reckless onslaught," ll. 32-33, and "thoughtless attack."

4. State, with reasons, which of the following is preferable in the foregoing extract : "fortune," ll. 1-2, or "luck"; "the entire of the army," l. 9, or "all the army"; "support," l. 17, or "maintain"; "fore-runner," l. 21, or "forerunners"; "whose success," l. 23, or "the success of which"; "were," l. 26, or "was"; and "we I might he exclaim," l. 35, or "exclaim."

5. Point out and account for the difference between the diction of the last two sentences and that of ordinary prose. Write a plain

unadorned paraphrase of these sentences, using as few words as possible.

6. What qualities of style are exemplified in the paragraph? Point out one marked example of each quality.

III.

"It is an acknowledged and generally admitted fact that the sparrow is both insectivorous and graminivorous. . . and then fly directly to their nests to feed the young. (High School Reader, p. —.)

1. Re-write the foregoing paragraph in good literary form.

IV.

Write a composition on either of the following subjects, using as paragraph subjects the subordinate subjects appended :

1. The Robin : (1) His moral character ;
- (2) Lowell's experience of him ; (3) An estimate of his value.

The Vicar of Wakefield's Historical Family Piece : (1) The Vicar and his family ; (2) The picture ; (3) Its fate, with reflections thereon.

HISTORY AND GEOGRAPHY.

Examiners: { J. E. Hodgson, M.A.
 { J. J. Tilley.

NOTE.—Only seven questions are to be answered. Of the first five only three are to be taken, and of the remaining six four are to be taken, but of these Nos. 6 and 1. must be two.

1. Describe the different ocean currents. Give their causes and show by examples the effect produced by these currents on the climate and natural productions of different countries.

2. Account for the following : hail, snow, fog, springs, deltas, land and sea breezes, variation of climate, variation in the length of our days and nights.

3. Describe and illustrate by diagram the water system of Ontario.

4. Locate the great commercial centres of the British colonies throughout the world, and mention the foreign trade for which each is specially noted.

5. Discuss the influence of the great physical features of North America upon :—

(a) The growth of grain, fruit and cotton ;
 (b) Mining, lumbering, grazing, and manufacturing ;

(c) Internal and foreign trade.

6. Name and give the dates of the various invasions of Britain, and mention the permanent results of these invasions with regard to (a) our language, and (b) our form of government.

7. Mention, and trace the results of, an important event in each of the following reigns :—(a) John, (b) Henry VIII, (c) Charles I.

8. Enumerate the principal inventions and discoveries that have contributed to develop the commercial and the industrial progress of Great Britain in modern times.

9. Define the position of the following places and connect them with important events and dates in English History :—Agin-court, Naseby, Utrecht, Plassey, Saratoga, Trafalgar, Fontainebleau.

10. Write a brief account of the war of 1812.

11. Under the following heads explain, as briefly and as clearly as you can, how the Dominion of Canada is governed : (a) The House of Commons, (b) The Senate, (c) The Governor-General, (d) The Provincial Legislatures, (e) The Sources of Revenue.

BOOK-KEEPING.

Examiners: { J. J. Tilley,
 C. Donovan, M.A.

NOTE.—Only six questions are to be answered, but of these the 4th, 5th, and 7th must be three.

1. (a) Mention the advantages that double entry possesses over single entry as a system of book-keeping.

(b) Explain how a set of single entry books may be changed to double entry.

2. Give the meaning of the following commercial terms : Blank credit, way bill, balance of trade, lien, tariff, trade discount, assignment, bill of lading.

3. (a) When are interest and discount debited? When credited?

(b) When will the excess in an account be placed on the debit side? When on the credit side?

(c) To what extent are the shareholders of a chartered bank liable in this country?

(d) Explain the meaning of *limited* in the following: "The Auxiliary Printing Company," (Limited.)

4. Give both A's and B's journal entries for the following transactions :

(a) A bought from B \$800 worth of goods, giving in payment his note for three months, bearing interest at 8 per cent. per annum, for \$500, and a check on the bank for the balance.

(b) B bought from A \$600 worth of goods giving a sight draft on C, of Hamilton, for \$400, cash \$100, balance to remain on account.

(c) A has this day paid his note in favour of B, giving him \$300 worth of goods and cash for the balance. Face of note \$500. Discount allowed \$20.

5 (a) A shipped to B, to be sold in joint account, 975 bbls. apples, invoiced at \$1.80 per bbl. 450 bbls. were taken from his warehouse and the rest were bought from C and paid for by check on the bank. On sending the apples away he paid charges in cash \$45.

(b) B on receiving the apples paid freight \$120, and cartage \$15 by check on the bank.

(c) B sold the whole assignment to D at \$2.60 per bbl. and received in payment F's note in favour of D due in three months (discount at the rate of 8 per cent. per annum) for \$300, and a check on the bank for the balance.

(d) B charged \$40 for selling the apples, 2 cents per bbl. for storage, and \$7.50 for insurance. He then rendered A the account sales and settled with him in full by a sight draft on K.

(e) A received the account sales and remittance.

(1) Give A's journal entries for (a) and (e).

(2) " B's " " " (b), (c) and (d).

6. J. M. Henry settled his account of \$170 with McIvor & Co., giving them his note for \$100, and \$70 in cash. In his journal Henry made the following entry of the transaction :

McIvor & Co., <i>Dr.</i> . . .	\$170
To bills receivable . . .	\$100
" cash	70
Make the cross entry necessary to correct this.	
7. Give day book entries requiring the following journal entries :	
(a) John Carson, <i>Dr.</i> . . .	\$800
To bank,	\$600
" cash	200

(b) Bank, <i>Dr.</i>	\$1000
To bills receivable . . .	\$600
" John Carson	400
(c) John Carson, <i>Dr.</i>	\$700
Bills payable	300
To bills receivable	\$700
" Interest	50
" Cash	250

8. Post the entries in No. 7.

CONTEMPORARY LITERATURE.

THE September *Wide Awake* is a good number, in which the current serials, the verse, and all the other departments are well represented. Articles on "The Ramona Industrial School," "Summer Lanes," and "Daniel Defoe," are excellent reading for young people, among whom the magazine is a favourite.

THE issues of the *London Illustrated News* for September are exceedingly interesting. Many illustrations are given of the great Glasgow Exhibition, and special sketches of the Queen's visit. Two engravings of beautiful pictures may be specially mentioned, entitled "Birthday Congratulations," and "It May be for Years." But the pictures are by no means all of this paper—the articles and fiction and the biographical sketches must not be forgotten.

THE *Overland Monthly* for September begins its fall work with vigour. The number opens with an illustrated article on the United States Soldiers' Home at Santa Monica, by Edward F. Adams. The industrial article of the number is a short but pithy and practical paper on orange culture, by Mr. Adolphe Flamant, of Napa. The Grand Canon of the Colorado, one of Nature's chiefest wonderlands, is described by Mr. J. G. Lemmon, botanist of the State Board of Forestry. Serials, short stories, poems, editorials, and reviews make up a valuable number.

"THE Relation of the Sexes to Government," is discussed by Prof. E. D. Cope, in the leading article of the October *Popular*

Science Monthly. Under the title "Ethics and Economics," Mr. Robert Matthews gives a thoughtful view of the social outlook, maintaining that the doctrine of individualism, which has just been having its day, involves too much selfishness, and that each member of society must, in future, pay attention to his duties, as well as insist on his rights. "Spiders and Their Ways," by Emile Blanchard, a French naturalist; and "Man in Relation to the Lower Animals," by Prof. Edwin Emerson, are also important articles.

Scribner's Magazine for September contains articles on a wide range of popular subjects by the Hon. Hugh McCulloch, ex-Secretary of the Treasury; General Horace Porter, W. H. Mallock, author of "Is Life Worth Living?" H. C. Bunner, author of "The Midge;" Robert Louis Stevenson, Will H. Low, Henry James, Thomas Wentworth Higginson, and other writers of distinction in prose and verse. This number is enriched with more than one hundred illustrations. "The Modern Greeks," by Thos. D. Seymour, pictures the personal and social traits of the people, and is a companion piece to the same author's "Life and Travel in Modern Greece," in the June number. F. D. Millet and Kenyon Cox furnish illustrations.

THE new number of the *Eclectic Magazine* now before us is noticeable among the magazines of the month for its variety and interest. Emile de Laveleye opens with a discussion of "The Future of Religion;" Henri Rochefort discusses the Boulangist

movement from the friendly radical standpoint. One of the most interesting papers is by Frances Power Cobbe, "The Scientific Spirit of the Age," deploring the materialistic influence of scientific progress. II. M. Hozier fin's England's Real Peril to be the great competition in trade and commerce pushed by other nations. "Mammoth Hunting in Siberia," and "Evolving the Camel," the latter by Grant Allen, are fascinating articles in popular science. An old traveller is discussed in "A Rival to Marco Polo." Two entertaining and well-written articles are those on "Charles Lamb's Letters," by William Summers, and "Montaigne." There is a capital short story, "A Fortune in a Fortnight," by Jessie McLeod; also several poems, all of them striking in their class.

St. Nicholas for September has a dainty frontispiece, showing that "More near than we think—very close at hand, lie the golden fields of Sunshine Land," as Miss Edith M. Thomas says in the poem which opens the number. Then come the "Two little Confederates." The late Mr. E. P. Roe collected "Some Stories about the 'California Lion,'" during his recent sojourn in Southern California and these stories are related in this number. There are several articles about birds. Richard Malcolm Johnston continues his record of the oddities of "Little Ike Templin." "The Mischievous Knix," by Langdon E. Mitchell, is a quaint sort of fairy story, well illustrated by Birch. A very practical article, valuable to all ingenious boys, is "What to Do with Old Corks," by Charles G. Leland. In "The Scent of Dogs," Theo. B. Wilson calls attention to some of the wonders performed by hunting-dogs. "A School Legend" refers to the short history of that well-known Mr. "Peter Rice," who is so fond of a fish diet. The pictures, jingles, and short verses are unusually abundant, and the departments contain the customary amount of interesting information for the young people.

THE HIGHER EDUCATION A PUBLIC DUTY.
By President Simmons. New York :
Board of Education.

TOPICS IN ANCIENT HISTORY. By Clara W. Wood. Boston : Ginn & Co

- (1) METRIC TABLES AND PROBLEMS. By Oscar Granger. Pp. 23. 25 cents.
(2) THE CIVIL SERVICE QUESTION BOOK. With full answers. Pp. 282. \$1.50. Syracuse : C. W. Bardeen.

THE ANNUAL CALENDAR OF MCGILL UNIVERSITY, Montreal.

ANCIENT HISTORY. Part I. The Eastern nations and Greece. By President Myers, of Belmont College. Pp. 479. \$1.55. Boston : Ginn & Co.

Those who have read President Myers' valuable work on "Mediæval and Modern History" will be glad to know of the issue of the present volume, which is founded on his "Outlines of Ancient History." The author has made good use of the wealth of material supplied by archæological researches in our own day, and has given us in a comprehensive and connected narrative the history of these ancient nations, to whom modern civilization owes so great a debt.

TWELVE ENGLISH STATESMEN.

- (1) OLIVER CROMWELL. By Frederic Harrison.
(2) WILLIAM III. By H. D. Traill.
(3) HENRY II. By Mrs. J. R. Green. 75 cents each. London : Macmillan & Co.

Mr. Harrison's biography of the great Protector is well worth careful reading, and is interesting as well as trustworthy and thoroughly impartial. We can heartily recommend it to our readers. (2) Mr. Traill's picture of William III. is an able portrayal of the character and life of one whose virtues are perhaps scarcely recognized as they ought to be by the people to whose interest he was so faithful, and this volume is one of the best in a good series; but (3) we will perhaps be pardoned for attaching even more importance to that on Henry II., written by Mrs. J. R. Green, who was the helper of her lamented husband in his life-work. It contains much that will be found new and interesting by the ordinary student, written in a bright and attractive style.

A HISTORY OF ENGLAND. By the Rev. J. F. Bright, D.D., Master of University College, Oxford. Period IV.: Growth of Democracy. Pp. 596. 6s. London: Rivingtons.

No one who possesses the earlier volumes of Dr. Bright's history will feel that he can do without the last one, which treats of Queen Victoria's reign and extends to the year 1880. It is a book that will be found eminently useful, written in a forcible and clear, though not brilliant style, and bearing the mark of painstaking and accurate research and scholarship. One regrets that more space has not been devoted to the history of literature, but it is ungracious to find fault with a book which is on the whole so valuable.

THE ROYAL UPPER CLASS READERS. The Great Events of History. Pp. 416. 2s. 6d. London: T. Nelson & Sons.

Messrs. Nelson & Sons have republished, as one of their Upper Class Readers, Collier's "Great Events of History." The present is a revised and enlarged edition, with numerous maps and illustrations, and the book is, as every one knows, an old favourite, on account of its readable and easily-remembered style.

- (1) THE NEW EXPLANATORY READER. No. VI. London: Moffatt & Paige.
- (2) THE ILLUSTRATED HISTORICAL READER. Standards V.-VII. Glasgow: W. Collins, Son & Co.

Both of these new readers are interesting and varied in their contents, and well adapted to the purpose for which they are intended.

ENGLISH HISTORY FROM CONTEMPORARY WRITERS. Edited by F. York Powell.

- (1) STRONGBOW'S CONQUEST OF IRELAND.
- (2) THE MISRULE OF HENRY III.
- (3) SIMON DE MONTFORT AND HIS CAUSE.
- (4) EDWARD III. AND HIS WARS.

In this series those who wish to learn history and have not access to original sources will find aid and reinforcement. Maps, tables, illustrations, etc., are added, and the series promises well. The materials have

been selected and arranged by the Rev. W. H. Hutton and others.

PITT PRESS SERIES.

- (1) MOLIERE'S L'ECOLE DES FEMMES. Edited by G. Saintsbury, M.A. 2s. 6d.
- (2) THIERRY'S RECITS DES TEMPS MEROVINGIENS. I.-III. Edited by Gustave Masson. 3s.
- (3) SEDAINE'S LE PHILOSOPHE SANS LE SAVOIR. Edited by the Rev. H. A. Bull, 2s.
- (4) BENEDIX' DOCTOR WESPE. Edited by Karl Breul, M.A., Ph.D. 3s.
- (5) SELECTED LETTERS OF MENDELSSOHN. Edited by James Sims, M.A. 3s. Cambridge: University Press. London: C. J. Clay & Sons.

Of these annotated modern language texts, edited for the syndics of the Cambridge University Press, we have a very high opinion and cordially commend them to our readers.

LATIN.

- (1) CICERO DE OFFICIIS. Lib. III. Edited by the Rev. H. A. Holden, M.A., LL.D. 2s.
- (2) CICERO. ORATIO PHILIPPICA SECUNDA. Edited by A. G. Peskitt, M.A. 3s. 6d.
- (3) VIRGIL. BUCOLICA. Edited by A. Sidgwick, M.A. 1s. 6d.
- (4) LIVY. BOOK XXI. Edited by Marcus S. Dimsdale, M.A. 3s. 6d.
- (5) THE EPISTLES OF HORACE. BOOK I. By E. S. Shuckburgh, M.A. 2s. 6d.

GREEK.

- (1) XENOPHON. CYROPEEDIA. Books III., IV., V. Edited by the Rev. H. A. Holden, M.A., LL.D. 5s.
- (2) THE ODYSSEY OF HOMER. Book IX. Edited by G. M. Edwards, M.A. 2s. 6d.
- (3) PLATONIS CRITO. Edited by J. Adam, M.A. 2s. 6d.
- (4) SOPHOCLES. THE ÆDIPUS TYRRANUS. Edited by Prof. R. C. Jebb. 12s. 6d.
- (5) PLUTARCH'S LIFE OF NIKIAS. Edited by the Rev. H. A. Holden, M.A., LL.D. 5s. Cambridge: University Press. London: C. J. Clay & Sons.

We regret very much that pressure on our space prevents us doing justice at length to the merits of these admirable classical texts, edited, in every case, by men of experience and scholarship, occupying important positions in the educational world. The arrangement of text and notes, and the typography-

cal excellence of the volumes, leaves nothing to be desired, and we are glad to take this opportunity of recommending students to avail themselves of the Pitt Press Series.

LAMARTINE'S PREMIERES ET NOUVELLES MEDITATIONS. Edited by Prof. Curme, of Cornell College. Boston: D. C. Heath & Co.

A selection from the poems of Lamartine is here presented, with biographical sketch and notes, suitable for the use of young students of French, with whom this volume will doubtless become a favourite.

MACMILLAN'S ELEMENTARY CLASSICS.

(1) XENOPHON. ANABASIS IV. Selections. Edited by E. D. Stone, M.A., of Eton.

(2) XENOPHON. ANABASIS II. Edited by A. S. Walpole, M.A. 1s. 6d. each.

We have pleasure in repeating our favourable estimate of this series of classical texts for the use of schools.

COLLOQUIA LATINA. By Prof. D'Ooge. Boston: D. C. Heath & Co.

This little book consists of simple Latin dialogues, designed to aid young students in acquiring a knowledge of the language.

CÆSAR'S ARMY. By Prof. Judson. Boston: Ginn & Co.

An attempt to present a picture of Cæsar's army, its evolutions, etc., as a source of information and interest to those studying his books, who will no doubt find it useful.

WENTWORTH'S PLANE AND SOLID GEOMETRY. Boston: Ginn & Co. Pp. 386. \$1.25.

The new and revised edition of this text book, which has met with marked success in the United States and other countries, is now issued; it contains as an addition to the previous edition some seven hundred original exercises.

THE COLLEGE ALGEBRA. By Prof. Bowser, of Rutgers' College. Pp. 550. \$2.

"The College Algebra" is a good text book, and we think teachers will find it valu-

able, especially on account of the large number of examples and the progressive character of the various parts.

(1) THE CAMBRIDGE GREEK TESTAMENT. The Gospel according to St. Matthew.

(2) THE CAMBRIDGE BIBLE. The Second Book of Kings. Cambridge: University Press. London: C. J. Clay & Sons.

This series, under the general editorship of the Dean of Peterborough, is very widely and favourably known. (1) Edited by the Rev. A. Carr, M.A., is in every way an excellent book; and (2), edited by Prof. Lumby, will, we are sure, be as highly esteemed as the other volumes of the series. It is well adapted for use in schools and colleges.

MODERN SCIENCE IN BIBLE LANDS By Sir J. William Dawson, C.M.G., LL.D., F.R.S., F.G.S. Montreal: Dawson & Brothers. Pp. 606. \$2.25.

Sir William Dawson's recently-published work deals with the geology and geography of Italy, Egypt and Syria, and embodies the opinions of its distinguished author on many subjects of special interest to Bible students and scientists of the present day. We need not inform those who have read works of Prof. Dawson's that this one is written in a catholic and scholarly spirit, that he invests his subject with added interest, and that much information may be gleaned from its pages by the unscientific as well as by those who are able to enter fully into scientific details. We regret not being able to extend our remarks, and would urge our readers to possess themselves of this valuable book without delay.

THE LAY OF THE LAST MINSTREL, GOLD-SMITH'S CITIZEN OF THE WORLD. Toronto: The Rose Publishing Co. Pp. 232. 60 cents.

This is the edition of the English texts for 1888-9 which has been authorized by the Minister of Education, and as such is sure to become familiar to our readers. The editors, Mr. J. E. Wetherell, B.A., and Mr. T. C. L. Armstrong, M.A., have supplied good notes for the use of students.

THE OCEANS. Moffat & Paige. Pp. 74-9d.

A convenient little manual, treating in a general manner of the waves, currents, tides, depths, etc., of the oceans, also giving a more detailed sketch of each division. Other useful information about routes, cables, etc., is appended.

TALKS ON PSYCHOLOGY APPLIED TO TEACHING. By President Welch. New York: E. L. Kellogg & Co. Pp. 136. 50 cents.

The writer aims to give help in the every-day professional work of the teacher by showing how to apply the principles of psychology to such work.

ENGLAND AS SHE SEEMS. By an Arab Sheik. London: Frederick Warne & Co. Pp. 190.

The delightfully fresh and quaint pages of this book will serve to pass a pleasant hour and perhaps bring to the reader some profitable reflections amid his smiles.

CASSELLS NATIONAL LIBRARY. The Victories of Love, and other Poems. By Coventry Patmore. New York: Cassell & Co.

A new collection of short poems by this favourite author.

A HANDBOOK OF FOREIGN MISSIONS. London: The Religious Tract Society. Pp. 356.

A compendium of information on this great subject which we can heartily recommend. It contains much information in regard to the workings of Protestant Societies, and an Appendix on Roman Catholic Missions.

LONGMANS' SCHOOL GRAMMAR. By David Salmon. London: Longmans, Green & Co. Pp. 263. 75 cents.

A useful elementary grammar, containing an unusually large number of examples and exercises.

FIFTY YEARS OF ENGLISH SONG. Edited and arranged by Henry F. Randolph. New York: A. D. F. Randolph & Co. \$5.00.

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The third number of the High School Drawing Course deals with the somewhat difficult subject of Perspective, and a considerable space is devoted to necessary explanations. It is illustrated by thirty-four diagrams, and, like the other numbers, provides blank spaces for the student's work.

THE ALDINE RECITER. Modern Poetry, for the Platform, the Home and the School. With Hints on Public Speaking, Elocution, Action, Articulation, etc. By Alfred H. Miles. Pp. 640. London: Moffatt & Paige.

This is a comprehensive collection of poems for reading and recitation. It is divided into the following sections. I. English Poetry from Wordsworth. II. American Poetry. III. English Poetry (by poetesses). IV. Scotch Poetry. V. Miscellaneous, etc., anonymous poems. The arrangement of the selections is excellent, and the number of standard authors represented is in itself a guarantee for the worth of the book.

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(2) SOUND, LIGHT AND HEAT. By Mark R. Wright. Pp. 244, 262. 80c. each.

The two volumes before us are, in many

respects, carefully prepared text books. They are designed for the use of students preparing for the South Kensington examinations, and contain a good deal of work suitable for somewhat advanced students. Physiography is one of the subjects to which more attention will probably be directed year by year.

THE WAYSIDE REST.

BY CHARLOTTE BAIN.

HUSH ! let no wandering wind
Invalidate the silence of our wayside bower !
No cruel chance unkind
Cloud the blue heaven of a happy hour !

Grant us Thy peace, Lord, now,
With brooding bird and crooning honeybee,
Under the blissful bough
Where blossom blushes on the apple tree !

Solace our world-worn eyes
With those quaint toys of Thine that please
us best,
Our childhood's grand surprise,
The old soft wonder of the new-built nest.

Through the dim budding woods
Alight with primroses, lead Thou the way,
Show us Thy downy broods
Around the hen—Thy silly lambs at play !

Bid Hope's glad anthem float
Thro' the dim chambers of the harassed
brain,
Sweeter than thrush's note
In leafy covert after summer rain.

Let joy peep shyly in,
Fresh from the meadows, dewy-footed,
fair,
A flower-crowned fairykin
With buttercups as yellow as her hair !

Soft ! how the moments pass
In this sweet nook as we sit dreaming on !
The dew is off the grass,
But we have caught it—now we must be
gone.

So, shouldering our load,
Cheered by a draught from Thy perennial
spring,
Thy pilgrims take the road—
The long white road—and, as we travel,
sing !

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The Editor will always be glad to receive original contributions, especially from those engaged in the work of teaching.

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