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THE CANADA

EDUCATIONAL MONTHLY

AND SCHOOL MAGAZINE.

OCTOBER, 1893.

HOME FOR THE SAXON RACE.

C. OCHILTREE MACDONALD.

IT is an auspicious period in the progress of any nation when the patriot bends his gaze along the horizons of space and time, in search of a home for his surplus parent race. This period is swiftly approaching and the problem looms up before us of providing an adjacent sphere of opportunity and action for the surplus energies and pre-eminent ideals peculiar to the Anglo-Saxon race. It is vain to suppose that Britain as an expansive, restless and resourceful nation can longer preserve all its excellences within the narrow limits of the British Isles. If our vast population remains there confined, overpressed and exposed to the unhealthy influences of anti civilization, the virtues, ideals and magnificent energies of such proportions as are not essential to the progress of the country must enter into the stage of decay for progress is impossible under circumstances of idle inaction. has ruined the ancient and threatens the modern nations. Consequently that which Britain requires to-day,

side her own narrow, geographical limits in which ample opportunity to excel, subdue, conquer, transfigure and improve, will call forth and nurture the latent energies now drooping in the relaxing habits of the Old Home. For such opportunities the Englishman vainly searches in Europe, and inspired with its stupendous consequences to truth, happiness and racial progress, which the current restless dissatisfaction of large sections of the people, is destined to produce, the patriot meditates a new locality for the overpressed. Immediately we remark that our national emergency was foreseen and provided for by the framer of our national destinies. This may be well appreciated by an indulgence in historical retrospect. When Jacques Cartier's successors unfurled upon the rising ramparts of Port Royal, Nova Scotia, the flag of Old France, the relative positions of the French and English people were in some respects the reverse of those obtaining. France puissant, wealthy, cultured and refined conis a wide horizon of opportunity out- | trasted favorably with the rising nation of islanders, harassed with domestic perplexities and jealously supervised by the great continental Powers. Viewed from an impartial standpoint. dominion in the New World was the desert if not the right of the thriving. polished and consolidated nation which so brilliantly reflected the glories of Ancient Rome in the old province of Gaul and the thunder of hostile cannon at Port Royal or Ouebec proclaimed that this, at least, the Gaul contemplated. With jealous eyes he regarded the progress of the English Atlantic colonies east of the Allegheny Hills, and carried on by that enthusiasm, if imprudence, which reappeared in the Revolution, and First Empire. penetrated to the Lakes, descended the Mississippi to the Mexican Gulf, and in the long chain of forts stretching from Nova Scotia to Louisiana via the Lakes, actually restricted us to the Allegheny region. In this the historical student cannot fail to remark the over-reaching ambition of an imaginative race of statesmen unsupported by any pronounced national desire to colonize and uninfluenced by the steady principles which originate in a sober perception of the attributes or destines of the mother land. the other hand, the modest colonies of the English were erected and cautiously enlarged under the influence of the natural expansion of concentrated energies, and instead of long, unprotected frontiers, and an immense domain. disgraced by sanguinary feuds, oppression, extortion and exposed to hostile ravages, New England offered a strong if small theatre for the national instinct of colonization. Thus in the New as well as in the Old World, the rival nations stood their trial, and by the adoption of sound, industrious' habits, generous laws and well sustained effort, England was marked out as' the dominant nation. A review of these circumstances in the light of historical events

makes it clear to the student that the English were early destined as the fittest in the survival of races. doubt this was not revealed to our ancestors, but in the light of the ages it is elear enough. As far as our ancestors were concerned it is no injustice to them to suppose that they were merely influenced by a desire to punish French aggression and themselves of the presence of an hereditary rival rather than the acquisition of territory for the sustenance of a prospective prosperity. Upon us, however, they have bequeathed the onus of justifying the carnage at Quebec, as well as their illogical antipathy against all things French upon American soil. As we stand at the close of the century and examine the condition of Great Britain generally, with its overflowing populations of restless eager empire-builders, and glance for a moment at the dwindling numbers of the French in Europe, we can realize the subtleness of the justification of the annihilation of French rule in Canada, which Providence has prepared for us. We and our ancestors are on trial, and if we English neglect Canada in the stern face of national need, we veto the actions of our predecessors and render their labor in Canada largely vain. But we do not intend to further neglect Canada. We have poured our treasures and energies into the volcanic Republics of the Southern Cross, nursed, petted and fondled the United States into nationality and prosperity, laid the foundation of empire in Africa, and spoiled the sober progress of Australasia with adulation, caresses and unearned gold. In spite of this, however, the race remains at home, dissatisfied, groping about vaguely for the Canaan of which their acuter instincts whisper. The new land to satisfy and invite must reproduce the conditions of the Old, and such is Canada north of the initial parallelaround which cluster the glories, traditions, struggles and progress of Great Britain—the 49th. What the agencies are which are turning the national countenance towards Canada as turns the sunflower to the sun, I cannot pretend to explain. Undoubtedly they are partly economic, but the destiny of the race is subtler

than economics. Whatever it is, the Guiding Hand which led our stock from their primitive settlements of the Caspian, through vicissitudes, trials, struggles and complications to the present epoch, is now pointing through the setting sun at Canada, as the new home for the Saxon race.

THE CLAIMS OF CLASSICS.

BY PROF. G. A. H. FRASER.

HERE is a well known passage in the Vicar of Wakefield, where the Principal of the University of Louvain makes the following remarks :-- "You see me, young man, I never learned Greek, and don't find that I have ever missed it. I have a doctor's cap and gown without Greek, I have ten thousand florins a year without Greek, I eat heartily without Greek, and in short," continued he, "as I don't know Greek, I do not believe there is any good in it." Of the assaults made upon the ancient classics by modern linguists, scientists, and so-called practical men, a vast number may be reduced to much the same terms as those employed by the sapient Principal. Such attacks, as well as others of a more plausible exterior, have been received by classical men often with an apologetic urbanity which has only encouraged fresh aggression; more frequently with a silent indifference which, interpreted as arrogance, has elicited louder outcries and more unmeasured denunciation. Their moderation has passed for a tacit acknowledgment of the weakness of their cause, and the good-humoured and amused silence with which they have borne a vast quantity of unintelligent detraction has been construed some

times as the presumption of a groundless self-confidence, sometimes as the voiceless impotence and dumb despair of the followers of a lost and hopeless cause. Meanwhile the general public, having as little inclination as capacity to decide in the disputes of specialists, has evinced its customary willingness to accept readymade opinions, especially such as are most loudly and persistently advocated. The heathen who "thought they should be heard for their much speaking" were mistaken only in that they measured gods by men: in addressing their fellow-mortals they were well aware that to voice a theory frequently and stridently enough, was sufficient to secure for it a measure of belief and a body of adherents. The world at large then has evinced a regrettable inclination towards the vociferous apostles of iconoclasm: and has been very ready to substitute the real for the ideal, success for beauty and money for truth. It may not be out of place, then, to sketch, in barest outline, a few of the claims of classics, not merely to tolerance, but to prominence, if not pre-eminence, asserting their educational importance without disparaging that of any rival branch of study.

The first claim usually made for classics is, that they afford an unsurpassed mental training, an excellence which has perhaps received an undue prominence above the training they give in æsthetics and philosophy of man and of life. This fact need not surprise us, however, if we remember how many classical beginners never proceed beyond a High School acquaintance with the subject. can rarely receive from it anything more than a disciplinary advantage; and therefore we may fairly be asked how and to what extent classical discipline, pure and simple, fits the student for the practical duties of every-day life. With a view to answer this question, let us glance at the ordinary processes of translating from Greek and Latin into English, and vice versa, and attempt to trace their educational effects. First, then, in ordinary translation the student must learn to quickly recognize forms with their minute differences: from the form to decide upon, first, the possible and then the probable relation; from the relation to arrive at the meaning; and finally to clothe that meaning in idiomatic English. Further, if he be well taught, he is given the advantage of the characteristic freedom in the arrangement of the words and clauses in a Greek or Latin sentence. is compelled, not merely to fit together fragments of ideas, like the pieces of a puzzle; not merely to search diligently for a subject to satisfy the obtrusive verb which confronts him in some unexpected position, or for a noun to which to tether the vagrant adjective which he finds standing all forlorn at the beginning of the sentence; but he learns to receive the ideas in the order in which our Greek or our Roman spoke them -an order usually differing radically from onr own-to hold them simultaneously before his mind; and finally to combine them into a complete

whole, living, glowing with something of the grace and emphasis that the writer breathed into them two thousand years ago. Or, suppose him writing Latin or Greek prose. He is then obliged to dive beneath the surface of language and find its meaning to translate our ubiquitous metaphors plain, common-sense prose; to turn the abstract into the concrete: to distinguish between fine shades of meaning: to determine the real subordination of thought;—in a word, to exercise almost every faculty which education aims at stimulating. generalization on such points is unsatisfactory. Let us examine the educational effects of these processes more closely.

There is, confessedly, no quality more essential to success than concentration—a quality which the difficulty and complexity of the classic languages exact from the student at every turn. A fixed and prolonged attention is absolutely required to disentangle long and involved periods, to grasp the elusive uses of Greek moods and tenses, to avoid some unhallowed desecration of the sacred mysteries of the Latin subjunctive.

Nothing but intensest concentration will serve the student's turn: and hence when the classical man in active life is confronted with difficulties to be conquered and problems to be solved, he will not give up without a hard struggle. He has met just as ferocious and as obstinate lions in his path when he toiled through his Virgil and his Xenophon; and if he beat them then, he is not apt to quail before their kindred now.

But if a man is to be a success in the world, he needs a retentive memory and a logical habit of thought. He must have a stock of facts and experiences in mind, and the capacity of continually adding to his store. Now the classics are confessedly un-

surpassed in the exercise they give the memory; and in this respect furnish a valuable corrective to the modern tendency to lay royal roads to learning, and to lighten the burdens which our fathers bore with great benefit to their muscles. They necessitate the most precise, exact and available acquaintance with all sorts of slightly varying forms. The fact that the change of a single letter will often radically alter the meaning of a sentence, shows how indispensable is accuracy of memory in dealing with these tongues. And they cultivate, not only retentiveness, but orderly, logical habits of thought.

No reasoning is closer, no logic more precise than that demanded by the Latin subjunctive or by Greek conditionals. The student grounded in even elementary classics will pass into life with a memory toughened by many a wrestling bout with elusive declensions and grim irregular verbs; with the habit of arranging his thoughts with method and precision; and with the capacity for holding what he knows, and what he may learn, thoroughly in hand, and available for instant use. there is a faculty still more important than these, which classics cultivate as no other study can—the faculty of judgment.

Wherever or whatever we may be in life we are momentarily confronted with problems capable of only a more or less probable solution; with questions in which mingled truth and error lie on both sides. Now all the qualities which enable us to decide intelligently in such cases, are exercised in even a rudimentary study of classics. The student finds that in translation. etymology and syntax, cases present themselves where more than one version, construction, or derivation are possible:—that he must balance probabilities on both sides, and decide as judiciously as he may. The far-

ther he advances, the more numerous and complex do such questions become. The difficulties of his earlier years reappear in a more subtle form: and take to themselves many other perplexities worse still than them-Problems in interpretation, textual criticism, taste and philosophy swarm about him, and tax his dis-Thus he crimination to the utmost. is educated to balance between likelihoods; and, better still, at times to confess impossibilities. When comes to active life, he will be no unintelligent dogmatist, intoxicated with the plenitude of his own self-sufficiency; but a man of sound and liberal judgment, with powers well trained to distinguish the essential from the accidental, the permanent from the temporary, the true from the false. Time would fail one to examine the accuracy, the penetration, the taste, the tact, which classics cultivate: or to discuss the well-known facts that they alone can give a true insight into the structure of our own tongue; or that even a smattering of Greek and Latin reads meaning and life into the otherwise difficult, and indeed almost unintelligible nomenclature of all the Natural and Mental Sciences.

One more disciplinary advantage of classics may preclude the transfer of the discussion to higher ground: viz., the mastery over the English language which their use imparts. days of old, our ancestors were required to be ready to do or die: of their descendants a somewhat easier thing seems to be expected, viz, that they be ready to speak in public. may not fall to the lot of our student, even in this country, to make a speech, or write a poem, but he will be obliged to use his tongue or pen in his daily avocations; and it will be of vast advantage to him, not merely as regards his reputation as a man of culture, but as to his advancement in the world, to be able to express himinelegantly in conversation or on

paper.

Classics may not give this power: but if they do not, nothing else will. Translation from Latin or Greek into English will give a large command of words: translation vice versa will develop a full understanding of their force; and a strong, clear habit of thought, attended by a strong, clear style of expression.

But great as are the disciplinary advantages of Latin and Greek, the claims of classics rest upon ground still higher. They have been for ages, and are to-day, in as full measure as ever, the models to the world of taste, symmetry and elegance of form and thought:—the embodiment of culture; the eternal types of grandeur and beauty. We are living to-day in a

plainly, precisely, and not very prosaic world: and in a very · unideal part of the world. Sentiment is nothing; money everything. Exaggeration, sensationalism, bombast, superficiality, in a word, bad taste, pervade our literature, our oratory, our science, our life. Where to day, in life or letters, shall we find the calm dignity and power, the balance of language and thought, the loftiness of style and sentiment that stand forth on every page of the classic master? May we not fairly ask ourselves whether we have not gone fast and far enough in the ways of utility: whether there is not something wanting in our life; whether we would not be the better of a calmer spirit, of steadier and wider thoughts, of more grace and beauty in our bearing, our work, our character?

(To be Continued.)

CHURCH AND STATE.

BY REV. WM. MOORE, D.D., OTTAWA. (Special Revision.)

THE STATE.—The most practical definition of the State is found by an examination of what it does or claims to do. The State is a power claiming and exercising supreme jurisdiction over a certain portion of the earth. Here it acknowledges no superior except God. It is the sovereign arbiter of life and death. It fixes civil status. It regulates social action. To a very large extent it determines, according to its sovereign pleasure, the rights, the duties, and the relations of all human beings within its territorial sway.

As a matter of fact, the liberty of the individual is circumscribed by the will of the State. If the subjects of one power enjoy a larger measure of personal liberty than those of another, it is simply under a concession from the same absolute source.

The State assumes to determine the public good for which it exists and for this end claims the highest prerogative of sovereignty. It takes charge of the person, and of personal defines conduct. Ιt crime. makes its prohibitions and commands the measure of what is lawful and right. Hence even in the teeth of its own disclaimer, it raises or lowers the standard of public morals. It employs force to an unlimited degree. It punishes by the infliction of pain to any amount it may think necessary. It banishes, imprisons, and puts to death.

The State claims to be the source of all rights of property. Whatever is held, whether of land or chattels. is by its permission and under its regulation. The State grants, confiscates, and determines the tenure or conditions of holding as it pleases. It prescribes how property shall be obtained, transmitted, inherited, or devised. It determines what shall be money. It has unlimited power of taxation. It demands the sacrifice of individual convenience for the sake of what it deems, rightly or wrongly, to be the general good. It makes war and peace with other nations. It suppresses rebellions at whatever cost of treasure and blood. the life of every man for the public defence, and, for that matter, in every conflict it may choose to wage, aggressive or defensive. whether whether right or wrong.

The State determines ultimately all political rights as they are commonly called: all political duties, as I would prefer to call them. It prescribes the age, sex, and qualification for the exercise of the franchise. As its most important power, and one inseparable from its action for good or ill, it regulates all social relations. It declares and must declare what shall constitute marriage and what shall cause its dissolution; whether it shall be an invincible bond, or a mere contract to be terminated at the convenience or whim of the parties.

The State educates, prescribing both who shall teach and what shall be taught. It takes possession of us at our birth, keeps us under control during our whole life, and when we die it marks the time, and place, and cause of our departure, and the place of our burial.

All these sovereign attributes are inherent in the State and have their times of practical exhibition. In short, there may be predicated of every such ultimate political organization what has been said of the British Parliament, as the represen-

tative of the British nation, "It is omnipotent. There is no earthly power that can touch its hand or say unto it, 'What doest thou.'"

And all these powers or prerogatives belong to every State irrespective of form. They inhere in a republic as truly as in an absolute despotism.

People sometimes talk of the State as if it were the creature of the constitution, whereas the very framing of a constitution is one of the highest exercises of sovereignty. The limitations woven into the constitution are self-imposed, and, being thus imposed at pleasure, may, at pleasure, be repealed.

Forms of procedure cannot ultimately restrict the State in this respect, for the simple reason that it makes the forms themselves. State can be what it pleases to be, either through formal proceedings which it calls constitutional amendment, or through a steady tendency of judicial and political constructions always moulded by the popular tendencies lying behind them, or, if these be considered too slow, or some real or fancied exigency demands it, by falling back upon the absolute sovereignty as something never lost, and from which constitutions emanate, as being, even in their restrictions, an ultimate unlimited expression of power.

Whence comes this marvellous entity, the State?

Does it come from the consent of the parts? No; for the simple reason that it claims and exercises powers which no social compact can possibly confer. This is a case in which the whole is greater than all its parts. As the temple was more than the stone and timber and brass and iron and gold and silver and jewels of which it was composed; as the human body is more than the simple aggregation of all its particles, so the

State is more than all the individuals within the scope of its authority. The State stands; the parts are in perpetual flux. The State may say, as does the brook,

"Men may come and men may go, But I go on forever."

There is indeed a sense in which it is true that government exists by consent of the governed. But here we must distinguish things that differ. The form of the Government, or the personnel of the administration is one thing, the State itself is another. The form of Government or the personnel of the administration may be, and often is, changed at the behest of the people; but the State, or Government of some sort, tense and powerful as that which acts under our own Imperial Constitution, or tenuous and weak as that which rules among the wandering Eskimo of the far north, there must be, and from this not even anarchy itself can set us free.

Again. Is the State founded on brute force? We have been told that civil government, in its first stages, classes rather with the dynamic than with the moral forces. the law of the strongest, a mere physical absolutism without any consideration of right whether as due to enemies or subjects. But surely this is idle talk. Government from its very nature cannot begin with the strongest. As between rulers and ruled, the strength is always with the mass of the people. A physical absolutism is absolute absurdity. Men or factions can get possession of the powers of the State only under some pretence of right, under some claim of moral or religious sanction. Take even the case of Parkinson, of New Orleans. His power over the mob, of which he was the leader and inspiring genius, lay in his appeal to the instinct of self-preservation. In substance he said, when the law, or State, is powerless to protect, the people must resume the original right of self-defence and enforce it, if need be, by the destruction of robbers and assassins. The plea is not, we have the power, but we have the right; in other words, in the last resort the use of brute force must vindicate itself on moral grounds. As Aristotle long ago said, "men are political animals." There is a pre-existent necessity for the State, and its foundations are laid in the constitution which we received from the hand of God.

Let us not obscure the real issue. The State must be, to use the imagery of John Milton, either a grand Christian man or an atheistic brute. There is, in point of fact, no middle term.

Let us for a moment assume the current secularist theory of the nature and functions of the State and see where it leads. It follows, as a necessary consequence, that there can be no prayer at the opening of the parliament or legislature, no chaplains appointed for the army or navy, or for the asylums or other institutions under the care of the State; that legislation must proceed on purely non-religious grounds; that marriage becomes a mere civil contract; that the Sabbath, if protected at all, must be upon purely sanitary grounds, the absolute necessity for a periodic rest, an interruption of the incessant grind of competition, in order to preserve the physical well-being of the race; that churches must be taxed because the secular state cannot recognize the Church except as a mere club or fraternity, one among many. There follows, also, the entire secularization of education, so that the very name of God must be excluded from the text books of the public schools; and finally the abolition of the oath in courts of justice in so far as it implies an appeal to the revising judgment of the heart-searching God, and the substitution therefor of an affirmation sanctioned only by the civil penalties of fine and imprisonment. In a word, it implies the practica' adoption of four at least out of the live planks of nearly every infidel convention, the report of whose proceedings has come under my observation in the last twenty-five years.

That I am not overstating the logical consequences of the adoption of this theory of the nature and functions of the State, I think, is clear from the positions already assumed

under its guidance.

As far back as 1842-43 a law was passed in the State of New York forbidding sectarian teaching and books in the public schools. Under this law everything was regarded as sectarian to which anyone objected on religious grounds. In some instances teachers were actually dismissed for using the Lord's Prayer in the presence of the pupils at the opening of the school.

In the State of Wisconsin, on the platform of one of the State Normal Schools, a regent of the University of Wisconsin publicly protested against the prayer with which the exercises of Commencement Day had been introduced on the ground that, the moment a teacher, in his capacity as such, begins to exercise any religious function whatever, to exert any religious influence upon the minds of those under instruction, that moment he infringes upon the reserved rights of the people.

The Popular Science Monthly, vol. 30, page 356, says, "What more dishonest and unworthy method of preempting and prejudicing the mind of the young could possibly be devised than that of school worship." The same writer says, "The one thing in connection with religion in the school which is most indefensible of all, is worship."

Dr. Guyot's series of geographies, said to be the best in the market at the time, were rejected by the School

Board of Chicago after a year's trial because they recognize the existence of God.

A Christian college President said to the Rev. H. D. Jenkins, D.D., "That is my Political Economy prepared for use in High Schools and Academies. I sent it the other day to one of our State Superintendents of Education; but it was returned to me with the note that its first sentence condemned it for use in public schools. The first sentence was, "The source of all wealth is the beneficence of God." Further illustration is useless.

Well might President Theodore Woolsey, in his great work on Political Science, vol. ii, page 414, ask "Shall it come to this, that even the existence of the Supreme One is not to be assumed in the schools, nor any book introduced which expresses any definite faith in regard to providence or final cause."

It has come to this long ago, that a minister of the Gospel (the Rev. Dr. Spear, of Brooklyn) has justified the State insomuch as he affirms it "Proposes to give only a secular education, that would be useful and needful if there were no God and no future for the human soul."

If it were possible to vacate the premises and leave them absolutely void; if it were possible for us to eliminate revealed religion from the whole circle of human learning without at the same time putting something else in its.place; if it were possible to leave conscience in perfect darkness, entirely undeveloped, it would be bad enough. But it is not possible. No religion is irreligion. The denial of Theism is Atheism. Exclude religion from the public schools and a godless evolution must take its place only to be poured into the minds of youth in the most pliant and receptive period of their existence.—Presbyterian Review.

· (To be Continued.)

THE TEACHING OF CIVIC DUTY.*

JAMES BRYCE IN THE "CONTEMPORARY REVIEW."

66 IN Britain, as in most countries, each step in the extension of popular education has been due to some antecedent political change. Men have not received the franchise because they had been already sufficiently instructed to exercise it, but have been provided with the means of instruction after the franchise had been given, partly because they used their new power to demand those means, partly because it was felt that the education of the citizens had become more directly and pressingly needful for the welfare of the State. It was soon after the establishment of Household Suffrage in the boroughs by the Act of 1867 that Mr. Robert Lowe delivered his famous counsel, 'Educate your masters.' was under the impulse of that Act that the reformed Parliament of 1868 passed the Elementary Education Act of 1870. In 1884 and 1885 we had in the County Franchise and Redistribution Acts two still more sweeping measures of Parliamentary reform, by which government of the country was fully, and as all are agreed, irrevocably committed to the hands of the masses of the people. great change has been followed, as was to be expected, by a general stirring of the popular mind, by a desire to use the power thus gained to carry sweeping legislative measures and effect large changes in the social and economic sphere. Here, as in other countries, the air is now full of new schemes. Efforts are made in all directions; cries are heard from all quarters. The need for knowledge

and judgment among the voters who have become the rulers is even clearer and stronger than it was in 1870.

"Strangely enough, Mr. Robert Lowe, whose phrase became famous as the expression of what everyone had begun to feel, was of all the British statesmen who have had to deal with education, the one who, despite his literary culture and his brilliant natural gifts, took narrowest views of what education ought to be and might effect. Revised Code did much to tie the teacher down to merely elementary subjects and to deprive him of due opportunities to train and widen the pupils' minds, and of the motives likely to stimulate him to use those opportunities. For the kind of training that would help him to bear his part in governing it made no provision. To teach reading, writing and arithmetic, became nearly the whole of the teacher's function; and it is only by slow degrees that our schools have reverted to that larger and freer, but not yet sufficiently large and free, system under which they are now at It was a grave error to lay so much stress on these mere mechanical instruments of education, reading and writing, and to neglect the objects they were to serve. Reading and writing are no more education than the lane that leads into a field is the field itself; and you might as well try to feed a flock of sheep on the flints of the lane as send children away from school and hold them to have been prepared for their life's work with the mere possession of reading and writing. It is not the power of reading that makes the difference between one man and another so much as the being taught what to read and how

^{*} Abridged from an address delivered to the London Association of Head Masters of Public Elementary Schools, December, 1892.

to read, that is, having acquired the taste for reading and the habit of thinking about what is read. More and more is it our task to-day not to be content with having built schools, and gathered children into them, and compelled their attendance by law and relieved the parents from the payments of fees, but to widen the scope and deepen the grasp of the teaching given, leading the child to love knowledge, and forming in it wholesome tastes and high feelings. It is of one such kind of knowledge and one such group of feelings that I have undertaken to speak to-day that which touches the relation to the community of the child who is to grow up into a governing citizen. But before we inquire how civic duty is to be taught, let us attempt to determine what civic duty means.

"The French are fortunate in possessing a word civisme, for which there is no precise English equivalent, since 'patriotism,' as we shall see presently, has received a slightly different sense. Civisme is taken to include all the qualities which make up the good citizen—the love of country and of liberty, respect for right and justice, attachment to the family and the community. This is perhaps not too wide an extension to give to civic duty, at least in a free country, where the love of liberty is no less essential than the respect for constituted order. Or we may describe it as one aspect or side—the domestic side—of the love of country, a virtue generally thought of as displaying itself in services rendered to. and sacrifices made for, one's fatherland in struggles against external enemies, but which ought to be extended to cover the devotion to all that can subserve her inner welfare. To desire that the State we belong to shall be not only strong against other Powers, but also well and wisely governed, and therefore peaceful and

contented, to fit ourselves for rendering to her such service as our capacities permit, to be always ready to render this service, even to our own hurt and loss—this is a form of patriotism less romantic and striking than the expulsion of a tyrant, or such a self-chosen death as that of Publius Decius or Arnold von Winkelried; but it springs from the same feelings, and it goes as truly in its degree to build up the fabric of national greatness.

"This home side of patriotism, this sober and quiet sense of what a man owes to the community into which he is born, and which he helps to govern, has been found specially hard to maintain in modern times and in large countries. It suffers from three difficulties. One is the size of our modern States. In small city republics, like those of Greece and Rome, or of the Italian Middle Ages, every citizen felt that he counted for something, and that the fortunes of the community were his own. When a riot occurred half the citizens might When a swarm out into the streets. battle was fought the slaughter of a thousand men might mean ruin or the loss of independence. The individual associated himself heartily with all that befell the State, and could perceive the results of his own per-Now, in a vast populasonal effort. tion like ours, the individual feels swallowed up and obliterated, so that his own action seems too small a unit in the sum of national action to be worth regarding. It is like the difference between giving a vote in a representative assembly, where you are one of 670, or perhaps of only 356 persons, and giving a vote at a general election, where you are one of six millions. Another difficulty springs from the peaceful life which Englishmen and Americans are fortunately now able to lead. There is nothing romantic about the methods in which we are now called upon to show our devotion to the State. The citizen of Sparta, or the peasant of Schwytz, who went out to repel the invader, went under circumstances which touched his imagination and raised his emotion to the highest point. In the days when the safety of England was threatened, the achievements of Drake at sea, the chivalric gallantry of Sir Philip Sidney at Zutphen, struck a chord which vibrated in every English heart. us, with exceptions too few to be worth regarding, such a stimulus is seldom applied. What can be less romantic, and to the outward eve and ordinary apprehension less inspiring than the methods of our elections-meetings of committees and selections of candidates; platform harangues, and huntings up of careless voters, and marking crosses on bits of paper in hideous polling booths, with sawdust-sprinkled floors? Even the civic strife in Parliaments and County Councils, exciting as it often is, wants the elements which still dazzle imagination from the conflicts of fleets and armies of the past. third difficulty springs from the extent to which party spirit tends to overlay, if not to supersede, national spirit in those self-governing countries whose politics are worked by parties. To the ordinary citizen, participation in the government of his country appears in the form of giving a vote. His vote must be given for a party candidate; his efforts must directed to carrying his party ticket. Each party necessarily identifies its programme and its leaders with the welfare of the State; each seeks to represent its opponents as enemies, even if it may charitably admit them to be rather ignorant than malevolent, still, nevertheless, enemies of the highest interests of the State. a rule the men who care most about public affairs are the most active and

earnest party men: and thus the idea of devotion to the whole community, and to a national ideal, higher and more enduring than any which party can present, is apt to be obscured and forgotten. We all admit in words that party and its organization are only means by which to secure good government, but, as usually happens, the means so much absorb our energies that the end is apt to slip altogether from our view. obstacles to the cultivation of civic duty are all obvious, so obvious that I should hesitate to repeat them to vou were it not the case that some truths, just because they have passed into truisms, have ceased to be felt They are obstacles which as truths. will not disappear as time goes on, and party organization becomes more perfect. All we can do is to exhort ourselves and one another to feel the growing greatness of the interests committed to our charge, and to remember that civic virtue is not the less virtue because she appears to-day in sober gray, and no longer in the gorgeous trappings of military heroism. Even at Trafalgar there was many a powder-monkey running to and fro between decks who saw nothing and knew little of the progress of the fight, but whose soul had been stirred by the signal of the morning.

"You may ask me in what the habits of civic duty consist which the schoolmaster may seek to form in his pupils and by what methods he is to The habits are, I think, form them. these three—To strive to know what is best for one's country as a whole. To place one's country's interest, when one knows it, above party feeling, or class feeling, or any other sectional passion or motive. willing to take trouble, personal and even tedious trouble, for the wellgoverning of every public community one belongs to, be it a township or parish, a ward or a city, or the nation

as a whole. And the methods of forming these habits are two, methods which of course cannot in practice be distinguished but must go hand in hand—the giving of knowledge regarding the institutions of the country

—knowledge sufficient to enable the young citizen to comprehend their working—and the inspiring of a love for the nation, an appreciation of all that makes its true greatness, a desire to join in serving it."

HOW TEACHERS ARE TRAINED IN THE PROVINCE OF ONTARIO, CANADA.

EFORE a candidate for a teacher's certificate can be admitted to a training school of any grade in the Province of Ontario, he must have passed what is called the non-professional or academical examination prescribed by the Education Depart-This examination varies with the grade of certificate for which the candidate is an applicant. papers on which the examination is based are prepared by a committee of experienced teachers who have no interest in the candidates. They are despatched from the chief offices of the department under seal to the Public School Inspectors of the Province or others appointed by the Department to preside at the examination and submitted to the candidates under very stringent regulations as to copying, prompting, etc. The answers are returned under seal to the Department and then submitted to a committee of experienced teachers. This committee is appointed by the Department from persons actually engaged in teaching, who hold either a degree from a provincial University or the highest class of certificate obtainable by a public school teacher. Although the examination is conducted by the Department of Education it is practically an examination of candidates for the teaching profession by members of the profession of the highest standing and the widest experience.

In order to guard against even a suspicion that a teacher, who may be an examiner of his own pupil, should abuse his trust, a number is assigned to each candidate at the time of his examination and this number, (not the candidate's name) appears on the examination papers. Any candidate who takes any means of making himself known to an examiner is disqualified, and the Department has the power of cancelling the certificate of any examiner who has been known to dishonestly advance the interests of any candidate. In the same way the inspectors or other persons who preside at the examination and give out the papers are liable to lose their standing if convicted of improper practices. When the papers are read, the examiners report the results to the Minister of Education, and on their report non-professional certificates of three grades are issued, viz: primary, junior and senior, these being the academical basis of third, second and first class certificates afterwards issued when the training school course is completed.

Training schools are of three grades corresponding to the three classes of academical certificates, viz: County Model Schools, Normal Schools and the Provincial School of Pedagogy.*

^{*}There is a training course for Kindergarden teachers, extending over two years, but an account of it is omitted for want of space.

COUNTY MODEL SCHOOLS.

County Model Schools for the training of third-class teachers are established by the Education Department on the recommendation of a board of examiners in each inspectoral They now number sixtydivision. The school usually selected for this purpose is the largest public school most conveniently situated in the district. In some counties there is one Model School, in the larger counties there may be two or even three. The plan assumes that there should be a County Model School in every district containing a hundred public schools. No Model School, however, can be recognized by the Education Department as suitable for the purpose of training third-class teachers unless:---

- (1). The Principal holds a first-class provincial certificate and has had at least three years' experience as a public school teacher.
- (2). Unless the school is provided with three assistants, each holding at least a second-class provincial certificate.
- (3). Unless the school is properly equipped with maps, globes, blackboards and other necessary equipments of a first-class school.
- (4). Unless a room exclusively for the use of the teachers in training is provided in addition to the accommodation required for ordinary public school purposes.

(5). Unless the Principal of the school is relieved of all public school duties, except management, during the Model School term.

The number of teachers in training at each school rarely exceeds twenty-five; the average last year was nearer twenty. A fee of five dollars is exacted of every candidate as an examination fee. The course begins on the 1st September and closes at the Christmas vacation. No candidate

is admitted who will not be eighteen years of age before the close of the Model School term.

During the term the Principal of the school delivers a course of lectures on school organization and management based on "Baldwin's Art of School Management," and also explains to the teachers in training the best methods of instruction to be adopted with respect to all subjects taught in the first four Forms of the public school. With the aid of his assistants he illustrates in the various class rooms of the school the best methods of teaching these subjects. When the teachers in training have been in attendance four or five weeks they are permitted to teach small classes in the presence of the Principal. These test lessons are made the basis of criticism and discussion by the Principal and the other members of the training class, and thus, partly by lectures, partly by illustrative lessons and partly by practical teaching for a period of four months the young teacher is initiated into the mysteries of the profession which he proposes to enter.

Although it is assumed that the teachers in training have completed their academical course before entering the County Model School, the Principal is not debarred from submitting such tests of scholarship in the various subjects of the school programme as he may consider necessary for training purposes. Without adequate knowledge of the subject in hand, there could be no efficient teaching. The Model School course is, therefore, to a certain extent, a review of the academical course for the purpose of presenting the knowledge which that course supplied logically to an ordinary class of pupils.

Besides the course of instruction above referred to, teachers in training receive lectures on hygiene with special relation to temperance and the sanitation of school-rooms. Their a tention is also called to the school law and regulations, so far as they relate to teachers and pupils. Special instruction is given in Music, Drill and Calisthenics.

At the close of the term an examination is held by a board of examiners composed of the inspectors for the county and two other teachers holding first-class certificates of qualification. This examination is conducted on papers prepared under the authority of the Education Department. In estimating the standing of candidates at the final examination, the examiners are governed by three considerations:

- (1). The report of the Principal of the County Model School on the work of each candidate during the term.
- (2). The attainments of each candidate with respect to his knowledge of school organization and methods of instruction based upon the written examination on papers above referred to.
- (3). His ability to teach by a practical test with a class of pupils in the presence of the examiners.

The candidates who pass the examination are reported to the Education Department, and are then awarded third-class certificates. These certificates authorize them to teach in any part of the Province for a period of three years.

Each County Model School receives a grant from the Education Department of \$150.00 a year, and an equal sum from the treasurer of the county in which it is situated.

It may be said that the course of training for such a brief period as four months is of comparatively little value. Experience has shown, how ever, that this is not the case. Those who attend the training course at the County Model School are face to face with the fact that they are just enter-

ing upon a professional career. They are brought into contact with a Principal and a staff of well accredited attainments. They are under the eye of the inspector and other school authorities, and being relieved from the drudgery of academical work, their minds are free to receive a new form of instruction which they now feel to be indispensable to their future profes-The frivolity of the sional success. student is exchanged for the calmness and dignity of the teacher. feel they are no longer boys and girls. but men and women, about assume all the responsibilities of active life, and although it is not assumed that the County Model School does all in the way of training that could be desired, an experience of seventeen years in Ontario has shown that as a means of rejecting persons at the very threshold of a profession who are evidently not adapted to be teachers, and as a means of directing the attention of the young teacher to the elements of didactics and giving him a professional inspiration at the beginning of his career, no better system has yet been found. Until boards of trustees are prepared to pay larger salaries than they now pay, there must be some relation between the demands made upon the teacher on entering the profession and the remuneration which he afterwards receives. At all events it is the settled educational opinion of the Province of Ontario that the teacher trained in the County Model School is far in advance of his predecessor who entered upon his duties fresh from the school-room without such preliminary training.

NORMAL SCHOOLS.

The Normal Schools of Ontario are two in number, and were originally established with a view to give academical as well as professional training. They are now confined exclusively to the training of teachers who are candidates for second-class certificates. They are under the control of the Education Department, and are manned with a competent staff of teachers holding first-class certificates of qualification. Each has a practice school, or model school, with from three to four hundred pupils.

The Normal School term for the training of pupils consists of about five months. Candidates are admitted only upon evidence that they have taught successfully at least one year and that they are the holders of the necessary academical certificate of qualification. Before being enrolled they are, however, required to pass a preliminary examination upon the first seven lectures of "Hopkin's Outline Study of Man," the first sixteen chapters of "Quick's Educational Reformers," and the first five lectures of "Fitch on Teaching." The object of this preliminary examination is to induce habits of thoughtful reading on the part of those who aspire to the rank of second-class teachers. Should it appear that they have not read this course they are refused admission.

The course of professional training is of a higher grade although on the same lines as the course in the County Model School, with the addition of lectures in psychology and the study of the most modern authorities in methods of instruction and professional literature generally. They are subjected to similar tests on the theory of education and in practical teaching, and their final examination is conducted by the Education Department through examiners appointed by the Minister of Education, these examiners being usually public school in-Their standing depends spectors. upon the report of the Principal and his staff, their knowledge of the theory and history of education and a practical test of actual teaching in the

presence of the examiners in the practice school. In the case of those who pass this examination satisfactorily a second class certificate is This certificate is valid awarded. during good behavior and the only fee chargeable is an examination fee of

The provincial normal schools of Ontario are in no sense different from the ordinary normal school of the United States, except that in Ontario the whole course is purely professional. A longer course would no doubt be better. It is felt on all hands that the time is too short for the proper assimilation of the many lectures which the Principal and his staff are required to give, and particularly for giving that careful consideration to the development of lessons in the practice school so necessary to suc-At an early date it is hoped that the normal school course may be extended to one year and be still maintained as at present on purely professional lines.

THE ONTARIO SCHOOL OF PEDAGOGY.

When the academic work of the normal schools was abolished the Education Department had to look to the high schools of the Province for the education of the teachers of the public schools, now numbering over 8,000. In order that this work might be well done, and that the future teachers of the public schools might form correct habits of study, it was necessary to provide for the training of their teachers. Provision had already been made for the training of second and third-class teachers, but as yet no provision had been made for the adequate training of first class teachers or for the training of the teaching staff of the high schools. To meet this want the Ontario School of Pedagogy was established.

The qualifications for admission to this school are, (1), either a degree from a university in Canada or some other part of the British possessions, or (2), the standing of an undergraduate in Arts of the 3rd year in the Provincial University or its equivalent in any other university, or (3), the non-professional standing required of the first class public school teachers. In addition to this, candidates must have completed their 21st year before or during the term. In the case of candidates who pass successfully the required examination at the close of the term, an interim certificate is awarded qualifying them to teach as an assistant in a high school for six If on examination at the months. end of that time it is found they have taught to the satisfaction of the Education Department, they are then allowed a permanent certificate as an assistant high school teacher. holding a degree in Arts, after serving satisfactorily as an assistant for two years are allowed the standing of principal.

The School of Pedagogy is located in Toronto, the capital of the Pro-Hitherto there have been two courses in the year; it is now proposed to make the course a full year. The school is conducted under the regulation of the Education Department. Its Principal, who is a lecturer in psychology, receives a salary of \$3,000. His staff consists of lecturers in school organization, the best methods of teaching the classical and modern languages, mathematics and science, English and physics. those who desire to fit themselves specially for teaching commercial classes a course of instruction in penmanship and stenography is prescribed. Lectures are also given in physiology and sanitary science and practice in music, drill and calisthenics.

And here it might be observed, as in the case of the other schools, there is a gradation of the professional work from what was quite elementary in the model school to what is sufficiently advanced to be adapted to the attainments and capacities of University graduates of three years' standing in the School of Pedagogy.

At the close of the term an examination is conducted, as in the case of the other training schools, on papers prepared by experienced teach ers under the authority of the Education Department, and on the result of this examination, together with the report of the Principal and his staff, the certificate desired is given or refused. It has already happened on many occasions that a graduate of a university is found unable to attain to the professional standard required by the Education Department.

The certificate awarded is, like the certificate granted in similar cases in the German Seminar, merely an interim certificate. It is not until the holder of such certificate has taught six months to the satisfaction of the Department that he obtains a permanent license. The School of Pedagogy is sustained entirely out of provincial funds. Candidates, however, pay an examination fee of \$10.

The preceding sketch of the training schools of the Province of Ontario shows the effort that has been made to work out a comprehensive system of professional training in conjunction with the state-aided system of education. By means of existing public schools, and with a grant in all of less than \$20,000 over 1,000 teachers of the lowest grade, unfortunately the majority both in Canada and the United States receive a reasonably thorough drill in the elements of pedagogics.

The next grade having been educated academically in the high schools, and having passed through the county model school, and having, moreover, obtained a year's actual experience in teaching, go to a normal school. These number annually, about 400.

Then comes the class who have a university education; many of these had been previously trained at a county model school and a normal school, but they have still to run the gauntlet of the School of Pedagogy. These number over 100 annually.

The professional imprimatur is essential for all, irrespective of their literary attainments. It may, there-

fore, be safely assumed :-

(1) That the settled policy of the educational authorities is that every teacher engaged in any class of schools receiving public aid, must submit to professional training.

(2) That mere academic attainments are not considered sufficient quali-

fications for the teaching profession.

- (3) That the true examiner of the teacher is the man who has had professional experience as a teacher himself.
- (4) That to secure necessary uniformity in standards and an economic gradation of certificates and examinations a reasonable amount of centralization is necessary.
- (5) That the separation of the academical and professional training of teachers is possible, without injury to either course of study.

Geo. W. Ross.

Minister of Education, Province of Ontario, Canada.

PUBLIC SCHOOL CRAMMING CONDEMNED.

BY REV. DR. TALMAGE.

FOR July 30 Rev. Dr. Taimage took for his theme "Children's Rights," and for his text, Judges xi: 36; "My father, if thou has opened thy mouth unto the I ord, do to me according to that which hath proceeded out of thy mouth."

Jephthah was a freebooter. turned out from a home where he ought to have been cared for, he consorted with rough men, and went forth to earn his living as best he could. In those times it was considered right for a man to go out on independent military expeditions. Jephthah was a good man according to the light of his dark age, but through a wandering and predatory life he became reckless and precipit-The grace of God changes a man's heart, but never reverses his natural temperament.

The Isrealites wanted the Ammonites driven out of their country, so they sent a delegation to Jephthah,

asking him to become commander-in chief of all the forces. He might have said, "You drove me out when you had no use for me, and now you are in trouble you want me back," but he did not say that. He takes command of the army, sends messages to the Ammonites, to tell them to vacate the country, and, getting no favourable response, marshals his troops for battle.

Before going out to the war Jephthah makes a very solemn vow, that if the Lord will give him the victory, then, on his return home, whatsoever first comes out of his doorway he will offer in sacrifice as a burnt offering. The battle opened. It was no skirmishing on the edges of danger, no unlimbering of batteries two miles away, but the hurling of men on the point of sword and spear until the ground could no more drink the blood, and the horses reared to leap over the pile of bodies of the slain.

In those old times opposing forces would fight until their swords were broken, and then each would throttle his man until they both fell, teeth to teeth, grip to grip, death stare to death stare, until the plain was one tumbled mass of corpses, from which the last trace of manhood had been washed out.

Jephthah wins the day. Twenty cities lay captured at his feet. Sound the victory all through the mountains of Gilead. Let the trumpets call up the survivors. Homeward to your wives and children. Homeward with your glittering treasures. Homeward to have the applause of an admiring Build triumphal arches. Swing out flags all over Mizpeh. Open up your doors to receive the captured treasures. Through every hall spread the banquet. Pile up the viands. Fill high the tankards. The nation is redeemed, the invaders are rooted, and the national honor is vindicated.

Huzza for Tephthah the conqueror! Jephthah, seated on a prancing steed, advances amid acclaiming multitudes, but his eye is not on the excited populace. Remembering that he had made a solemn vow, that returning from victorious battle, whatsoever first came out of the doorway of his home, that should be sacrificed as a burnt offering, he has his anxious look upon the door. I wonder what spotless lamb, what brace of doves will be thrown upon the fires of the burnt offering. Oh horrors! Paleness of death blanches his cheek. Despair seizes his heart. His daughter, his only child, rushes out of the doorway to throw herself in her father's arms and shower upon him more kisses than were wounds on his breast or dents on his shield. All the triumphal splendor vanishes. Holding back his child from his heaving breast, and pushing the locks back from the fair brow, and looking into the eyes of inextinguishable affection, with choked utterance, he says, "Would God I lay stark on the bloody plain. My daughter, my only child, joy of my home, light of my life, thou art the sacrifice!"

The whole matter was explained to This was no whining, hollowhearted girl into whose eyes the father looked. All the glory of sword and shield vanishes in the presence of the valor of that girl. There may have been a tremor of the lip as a roseleaf trembles in the sough of the south wind; there may have been the starting of a tear like a raindrop shaken from the anther of a water-lily; but with a self-sacrifice that man may not reach, and only woman's heart can compass, she surrenders herself to fire and to death. She cries out in the words of my text, "My father, if thou hast opened thy mouth unto the Lord, do unto me whatsoever hath proceeded from thy mouth."

She bows to the knife, and the blood, which so often at the father's voice had rushed to the crimson cheek. smokes in the fires of the burnt offer-No one can tell us her name. There is no need that we know her The garlands that Mizpeh twisted for Jephthah the warrior had gone into the dust; but all ages are twisting this girl's chaplet. It is well that her name came not to us, for no They may take the one can wear it. name of Deborah, or Abigail, or Miriam, but no one in all the ages can have the title of this daughter of sacrifice.

Of course this offering was not pleasing to the Lord; but before you hurl your denunciations at Jephthah's cruelty, remember that in olden times, when vows were made, men thought they must execute them, perform them, whether they were wicked or good. There were two wrong things about Jephthah's vow. First he ought never to have made it. Next having

made it, it were better broken than kept. But do not take on pretentious airs and say, "I could not have done as Jephthah did." If to-day you were standing on the banks of the Ganges and you had been born in India, you might have been throwing your children to the crocodiles. It is not because we are naturally any better, but because we have more gospel light.

Now, I make very practical use of this question, when I tell you that the sacrifice of Jephthah's daughter was a type of physical, mental, and spiritual sacrifice of ten thousand children of There are parents all unthis day. willingly bringing to bear upon their children a class of influences, which will as certainly ruin them as knife and torch destroyed Tephthah's ' daughter. While I speak, the whole nation, without emotion and without shame looks upon the stupendous sacrifice.

In the first place, I remark that much of the system of education in our day is a system of sacrifice. When children spend six or seven hours a day in school, and then must spend two or three hours in preparation for school the next day, will you tell me how much time they will have for sunshine and fresh air, and the obtaining of that exuberance which is necessary for the duties of coming life?

No one can feel more thankful than I do for the advancement of common school education. printing of books appropriate for schools, the multiplication of philosophical apparatus, the establishment of normal schools, which provide for our children teachers of largest calibre, are themes on which every philanthropist ought to be congratulated. this herding of great multitudes of children in ill-ventilated school-rooms. and poorly equipped halls of instruction is making many of the places of knowledge in this country a hugé helocaust.

Politics in many of the cities get into educational affairs, and while the two political parties are scrambling for the honors, Jephthah's daughter perishes. It is so much so that there are many schools in the country to-day which are preparing tens of thousands of invalid men and women for the future; so that, in many places, by the time the child's education is finished the child is finished! In many places, in many cities of the country, there are large appropriations for every thing else, and cheerful appropriations; but as soon as the appropriation is to be man: for the educational or moral interests of the city, we are struck through with an economy that is wellnigh the death of us.

In connection with this, I mention what I might call the cramming system of the common schools and many of the academies; children of delicate brain compelled to tasks that might appal a mature intellect; children going down to school with a strap of books half as high as themselves. The fact is, in some of the cities parents do not allow their children to graduate, for the simple reason, they say, "We cannot afford to allow our children's health to be destroyed in order that they may gather the honors of an in-Tens of thousands of children educated into imbecility; so, connected with many literary establishments, there ought be asylums for the wrecked. It is push and crowd, and cram, and stuff, and jam, until the child's intellect is bewildered, and the memory is wrecked, and the health is gone. There are children turned out from the school who once were full of romping and laughter, and had cheeks crimson with health, who are now turned out in the afternoon paledfaced, irritated, asthmatic, old before their time. It is one of the saddest sights on earth, an old-manish boy, or an old-womanish girl.

Girls ten years of age studying algebra! Boys twelve years of age raking their brain over trigonometry! Children unacquainted with their mother tongue crying over their Latin, French, and German lessons! All the vivacity of their nature beaten out of them by the heavy beetle of a Greek lexicon! And you doctor them for this, and you give them a little medicine for that, and you wonder what is the matter with them. I will tell you what is the matter with them. They are finishing their education.

In my parish in Philadelphia a little child was so pushed at school that she was thrown into a fever, and in her dying delirium, all night long, she was trying to recite the multiplication In my boyhood I remember that in our class at school there was one lad who knew more than all of us put together. If we were fast in our arithmetic, he extricated us. When we stood up for the spelling class he was almost always the head of the Visitors came to his father's house, and he was almost always brought in as a prodigy. At eighteen years of age he was an idiot. lived ten years an idiot, and died an idiot, not knowing his right hand from his left, or day from night. The parents and the teachers made him an idiot.

You may flatter your pride by forcing your children to know more than any other children, but you are making a sacrifice of that child, if by the additions to its intelligence you are making a subtraction from its The child will go away from tuture. such maltreatment with no exuberance to fight the battle of life. Such children may get along very well while you take care of them, but when you are old or dead, alas! for them, if, through the wrong system of education which you adopted, they have no swarthiness or force of character to take care of themselves. Be careful

how you make the child's head ache or its heart flutter. I hear a great deal about black men's rights, and Chinamen's rights, and Indian's rights, and women's rights. Would God that somebody would rise to plead for children's rights. The Carthagenians used to sacrifice their children by putting them in the arms of an idol which thrust forth its hand. child was put into the arms of the idol, and no sooner touched the arms than it dropped into the fire. was the art of the mothers to keep the children smiling and laughing until the moment they died. may be a fascination and a hilarity about the styles of education of which I am speaking, but it is only laughter at the moment of sacrifice. Would God there were only one Tephthah's daughter.

Again, there are many parents who are sacrificing their children with wrong systems of discipline—too great rigor or too great leniency. There are children in families who rule the household. They come to be the authority. The high chair in which the infant sits is the throne, and the rattle is the sceptre, and the other children make up the parliament where father and mother have no vote! Such children come up to be miscreants.

There is no chance in this world for a child that has never learned to mind. Such people become the botheration of the Church of God, and the pest of the world. Children that do not learn to obey human authority are unwilling to learn to obey divine authority. Children will not respect parents whose authority they do not Who are these young men that swagger through the street, with their thumbs in their vest, talking about their father as "the old man," "the governor," "the squire," "the old chap," or their mother as "the old woman?" They are those who in youth, in childhood never learned

to respect authority. Eli having learned that his sons had died in their wickedness, fell over backward and broke his neck, and died. Well he might. What is life to a father whose sons are debauched? The dust of the valley is pleasant to his taste, and the driving rains that drip through the roof of the sepulchre are sweeter than the wines of Helbon.

You cannot scold or pound your children into nobility of character. The bloom of a child's heart can never be seen under a cold drizz'e. Above all, avoid fretting and scolding in the household. Better than ten years of fretting at your children is one good, round, old fashioned application of the slipper! The minister

of the Gospel of whom we read in the newspapers that he whipped his child to death because he would not say his prayers, will never come to canoniza-The arithmetics cannot calculate how many thousands of children have been ruined forever either through too great rigor or too great leniency. The heavens and the earth are filled with the groan of the sacri-In this important matter, seek divine direction, O father, O mother Some one asked the mother of Lord Chief Justice Mansfield if she was not proud to have three such eminent sons, and all of them so good. "No," she said, "it is nothing to be proud of, but something for which to be very grateful."

LEGAL RIGHTS AND DUTIES OF TEACHERS, PARENTS AND PUPILS.

BY A. J. FALKNOR.

WHAT is the limit of the teacher's authority? Does his jurisdiction extend beyond the immediate school grounds? The rule, that when the parents' authority is resumed the teacher's ceases, is true only with exceptions. And, again, the line that marks the boundary of their respective authorities is often like the line that marks the beginning of day and ending of night—shadowy.

This question of jurisdiction has come frequently before the courts, and a careful study of the decisions discloses no conflict in the findings of the various courts. A reasonable construction of the decisions would seem to support the general rule, that whenever a pupil is guilty of an offence out of school which directly affects the government and welfare of the school, the pupil is liable to reasonable punishment from the teacher.

In 1885 this principle was enunciated by the supreme court of Mis-ouri. Several boys on their way home quarrelled, used profane language and fought. On the following day the boys were whipped by the teacher, who in turn was arrested for assault and battery. The supreme court in deciding the case used the following language: "If the effect of acts done out of the school room, while the pupils are returning to their homes and before parental control is resumed, reach within the school room and are detrimental to good order and the best interests of the school, no good reason is perceived why such acts may not be forbidden and punishment inflicted on those who commit It would seem from this decision that when parental authority is once resumed, no act of the pupil falls within the teacher's jurisdiction,

until he leaves home the following day for school; but a case reported in 32 Vt., 114, is much broader in its application of this principle. In the Vermont case. A. B. Seaver was teacher of a district school near Burlington. Peter Lander, an elevenyear-old boy, was one of his pupils. About an hour and a half after school had closed and after the boy Lander had been home, Seaver met him in company with some other pupils of his school driving a cow. As Lander passed Seaver he called him "Old Jack Seaver." The next morning young Lander received a thrashing with a small rawhide for this insolent The court in giving its language. decision on these facts said: "When the child has returned home or to his parents' control, then the parental authority is resumed and the control of the teacher ceases, and then for all ordinary acts of behavior, the parent alone has the right to punish; but where the offence has a direct and immediate tendency to injure the school, as in this case, when done in the presence of other pupils and of the master and with a design to insult him, we think he has the right to punish the pupil for such acts if he comes again to school."

As a logical and sweeping conclusion from this decision it could be laid down that the teacher's authority to punish for offences that affect the welfare of a school would extend to acts committed on Saturday or Sunday. It is quite doubtful, however, if any court would carry this doctrine to that limit. 'Texas has pushed the doctrine to the verge of sound law and possibly beyond it. In the Texas case a pupil was assigned a task to do at home and on failing to perform the task was whipped.

In an action for assault and battery the question of the teachers' jurisdiction was raised and the court held the failure to perform the task a punishable offence, and the infliction of the punishment within the teacher's authority. In 30 Iowa, 429, a case is reported somewhat at variance with the other cases on this subject, but the supreme court of Iowa has overruled this decision and fallen in line with the findings of the other courts on the authority of the teacher out of school. In concluding this point, I would say, it a teacher decides to punish a pupil for an offence out of school, the important question is does the offence directly affect the well-being of the school? if it does, he is justified in punishing; if it does not, he renders himself liable to an action at law in case he punishes.

Can a parent dictate what studies his child shall pursue? All courts are agreed that the board can decide what branches shall be taught, and can require a classification of the pupils with respect to the branches of study they are respectively pursuing, and the degree of proficiency in the same branches; and that no parent can insist on his child being placed or kept in a class whereby others will be retarded in their studies, or that it shall be taught studies not in the prescribed course or allowed to use a text-book different from that adopted; but whether or not a parent loses all control over the education of his child and cannot from the prescribed studies select such as he desires his child to pursue, is a much mooted question.

Courts are pretty evenly divided on this question, but a majority of the late decisions deny to the parent the right to make such a selection. 1886 at La Porte, Ind., a boy was expelled for refusing to study music -a prescribed study. The boy had been directed by the father not to study music, and the father's wish had been communicated to the superin-The parents' right to select tendent. came squarely before the court in this

The action of the board was upheld and the boy had to dance to the music of the school. A' decision in the 29 O. St., 89, is in harmony with the Indiana decision. In the Ohio case a boy was expelled at Defiance for refusing to declaim—a prescribed duty. The boy in his refusal to declaim acted in accordance with the wishes of his father, and action was brought against the teacher and board, but the court refused the parent any relief. Illinois and Wisconsin have repeatedly announced the opposite of this doctrine. In Grant Co., Wis., 1874, a parent requested a teacher not to instruct his boy in geography. The request of the parent was disregarded and the pupil whipped for refusing to study the branch. An action was instituted against the teacher. The circuit court in its instructions to the jury "The order of the father to the teacher did not annual the right of the teacher to control in such matter." The supreme court reversed the judgment on the ground that the circuit court committed a fatal error in the above instruction to the jury and said: "We do not really understand that there is any recognized principle of law, nor do we think there is any recognized rule of morals or social usage, which gives the teacher an absolute right to prescribe and dictate what studies a child shall pursue regardless of the wishes of its The learned judge overdraws the authority exercised by the teacher and does not intimate whether or not the teacher supported by the board could exercise the power of dictating the studies. A parallel case came before the supreme court of Illinois, wherein a boy had been expelled for refusing to study grammar. The teacher acted under the direction of the board in expelling the boy, but the court denied that such power rested with the board and followed the Wisconsin ruling.

Such is a brief review of the cases on the right of a parent to dictate studies. Ohio teachers are pretty safe in dictating what studies the pupil shall pursue, even if the parent request to the contrary, in view of the case reported in the 29 O. St., 89. Precaution suggests always that a teacher

Whence come the funds that sup-

be supported by the board.

port our public schools? The ordiance of 1787 declared that "Religion, Morality and Knowledge being essential to good government, it shall be the duty of the General Assembly to pass suitable laws to encourage schools and the means of instruction." This declaration has been made a constitutional provision in Ohio, the burden of whose taxation is to-day to establish "means of instruction." The funds to establish schools and pay instructors are collected principally from three sources. Congress in the first place devotes one section, sometimes two, in each township of the public domain "forever to the diffusion of knowledge." This amounts to one thirty-sixth of all public lands. All told, Congress has placed on the altar of learning for the common schools nearly sixty-eight million acres, and for university purposes nearly two hundred thousand acres. In 1862, Senator Morrill secured the passage of a bill that placed nearly ten-million acres of land as an endowment for technical and agricultural learning. The policy of our government towards education has certainly been laudable and generous. Ohio secured from section sixteen in each township more than seven hundred thousand These lands have been sold acres. and the proceeds placed in the state treasury, constituting the "common school fund "which is an irreducible debt of the State on which the State

pays annually six per cent interest. The interest on this debt is not apportioned according to the enumeration of youths, but each township receives the interest on whatever it realized from the sale of its section of land. The second source of school funds is from taxation. taxes are levied, one on the grand list of taxable property of the State, and is generally about one mill on the dollar, the other tax is one levied by the Board of Education and constitutes the contingent fund. ter tax cannot exceed seven mills on the dollar. The money raised from the tax on the grand taxable list constitutes the "State common school fund," and is apportioned according

to the enumeration of youths. The third source of school funds is a variety of fines turned over to the county auditor for the purpose of education. This third source of school funds is very uncertain and insignificant and not much attention is given it.

Thus is concluded a brief and hurried outline of the most interesting parts of that branch of the law governing the Rights and Duties of those directly involved in the management of our public schools.

The subject merits a closer and more critical study by those upon whose shoulders rests the grave responsibility of shaping the civic characters of future citizens.

-Ohio Monthly.

FEAR AS A SCHOOL INCENTIVE.

BY DR. E. E. WHITE.

THE use of fear as an incentive formerly characterized school discipline, especially in elementary schools. Fear was relied upon not only to secure "good order" but also diligence in study and even attention in class exercises. The ever present rod or "ruler" was a constant reminder that the commands of the teacher were to be obeyed. In grammar and higher schools the motive force was somewhat equally divided between "rewards and punishments" -such artificial rewards as prizes and privileges being used to allure the more ambitious pupils, and the rod or the dunce stool to urge forward the laggards

Nor has this old time regime wholly disappeared from the American school. There may be less threatening of bodily chastisement, less display of "the emblems of force," but other pains and "penalties," have been devised. One of these is non-promotion and an-

other suspension from school. In some of our "highly organized schools" the fear of non-promotion is haunting more children in their sleep than the fear of the rod ever did; and dreams of "not passing" are quite as full of terror as former dreams of "flogging." There are too many teachers who make school life a misery by their increasing ding-dong about low per cents, not passing, demotion, suspension, etc. They play (?) incessantly upon the fears of their pupils, and think they have made a "point" when they have frightened some sensitive pupil into tears. It is our belief that these teachers (few or many) who are zealously using this non-promotion scare to impel pupils to study are guilty of more cruelty than the old-time "wielders of the birch."

These statements raise the question whether fear is a proper school incentive, and, if so, what are the purposes and limits of its use.

The special function of fear is to restrain from wrong doing-not to incite to effort. Under the moral government of God wrong doing is attended with loss or pain and right, doing with gain or happiness. fear of the consequences of wrong serves as a restraint; the desire for the results of right action as an incen-Fear is the sentinel to restrain man from the violation of the laws of his being; desire is the impulse, the spur, to the right use and activity of his powers. Fear restrains; desire incites and impels. Fear is negative; desire, positive.

It is claimed by some that fear may co-operate with desire in impelling activity, but this view arises usually from a confounding of fear with aversion, which often does support desire. The desire for strength may, for example, be supported by an aversion to weakness; the desire for wealth by an aversion to poverty; the desire for fame by an aversion to obscurity, But fear and aversion are different feelings, and they differ much · in their influence. Aversion strengthens the corresponding desire; fear dissipates desire. Aversion quickens and energizes activity; fear depresses

and arrests it. Aversion directs attention to the object desired; fear disquiets the mind and diverts attention. Instead of assisting effort, fear prevents one from doing his best. It dissipates energy, distracts attention, and wastes activity. The only exception, perhaps, is what is called "the strength of desperation," and this is simply the concentration of on one point energy with loss of power in other directions.

It follows that it is a serious mistake to employ fear as an incentive to application or other school duty. The threatening of punishment, for example, in case of failure never made a good writer or an accurate speller. Fear puts neither skill in the fingers nor acuteness in the mind. Its true office is to serve as a check, not as a spur-to suppress activity, not to energize it; and even its use as a restraint to wrong doing requires judg-If there be any "last ment and care. resort" in school discipline, it is the frightening of pupils to prevent wrong action. What is needed to secure the best efforts of pupils is the inspiring ideal, the awakened desire, the aroused interest.—Educational News.

NOTES FOR TEACHERS.

A. E. Winship: Life consists not in knowing so much as in doing and being. The school is not for teaching as for inspiring a hunger for knowing. Every hour that we try to urge knowledge upon unwilling minds, giving a distaste therefor, is worse than wasted.

HE was against the cry for a socalled commercial education, and greatly in favour of the study of the classics, and in particular of the study of Greek, which had peculiar advantages in that it was intensely hard and intensely human. Mathematics, in his opinion, dealt too much with abstractions to be able to kindle the interests of boys. It would always be his aim to turn out from Sherborne boys who were gentlemen—that was to say, boys who possessed the backbone of sincere faith in God.—The Head Master.

Wages of the Industrial Classes.

—In reply to Sir John Leng, Mr.

Mundella said: The annual earn-

ings of the classes in the United Kingdom usually called the working classes, or manual labour classes, including domestic servants, soldiers, sailors, and others, as recently estimated by Mr. Giffen, were about £600,000,000. Dividing this sum by the number of working days in the year would give an average daily earning of about £2,000,000; but the sum actually paid in money as daily wages, owing to the board and lodgings included in many cases and the numbers paid by salary and not by daily wages or by piecework, would probably be much less than the average amount of daily earnings reckoned in the way described.

THE "pouring-in process" tends to weaken the pupil's ability and desire for *self-teaching*; in proportion as we employ this method we diminish the power of original research. It is the opinion of all the eminent educators that telling will deaden, instead of stimulating the God-implanted desire to know. Of Jacotot, the great French teacher, Quick says: "Instead of pouring forth a flood of information from his own ample stores—explaining everything, thus too frequently superseding in a great degree the pupil's own investigation of it, Jacotot, after a simple statement of the subject, with it leading divisions, boldly started it as a quarry for the class to hunt down, and invited every member to take part in the chase. All were free to questions, to raise objections, to suggest answers. The professor himself did little more than, by leading questions, put them on the right scent."

THE MORAL NATURE.—The author of a popular novel makes his principal character cry out, "Why did not my father bring me up to be able to earn

my living!" It is another expression of the thought that lies at the basis of the movement in favor of manual All teaching must bear on life— on higher living. To be able to recite the words in a series of books may have a bearing on the life of a pupil and it may not. A teacher visited the parents of a pupil who had shown extraordinary ability in mathematics to urge that he be sent to college; he was told that he had that morning beaten his mother severely on the head with the copy of Hockley's geometry because he was asked to bring in some wood. "Why should there not have been as growth of moral as there was of power?" intellectual was the problem the teacher went home to consider. The intellect had been addressed, had expanded, but the moral nature had remained touched; in fact, it seemed to have deteriorated.—School Journal.

The eye only sees that which it brings with it the power of seeing.—
Kingsley.

The happiness of love is in action; its test is what one is willing to do for others.—Lew Wallace.

He who feels that he is not what he ought to be is already on the high road to amendment.—George Ebers.

Is your mind set upon fame? That is quite right, and I am very glad of it, but you must know that he who would gather that rare fruit must water it with the sweat of his brow.—

George Ebers.

No man can safely go abroad that does not love to stay at home; no man can safely speak, that does not willingly hold his tongue; no man can safely govern that does not willingly become subject; no man can safely command, that has not truly learned to obey.—Kempis.

PUBLIC OPINION.

WE WANT MEN AND WOMEN .--Bishop Westcott's speech, at the opening of the new Girls' Grammar School at Birmingham, is a pleasing contrast to some of the utilitarian utterances on which we commented last month. The Bishop has a profound belief in the virtue of scholarship; his most precious endowment in the whole work of life he has found to be "that absolute belief in the force of words which I gained through the strictest verbal criticism," in which he was indoctrinated by his old headmaster, Dr. Prince Lee. Words are things, and, in spite of the vulgar antithesis between words and things, the study of language is no less scientific than the study of gases or beetles. may differ, and do differ, from the Bishop in assigning to this subject an educational pre-eminence, but the methods of study that he recommends are of universal import. Sympathy as the spring of the teacher's influence; service as the end of the scholar's; activity, not receptivity, of intellect as the ideal of true education -of which information (to quote Bishop Butler) is the least part these should be the watchwords both of Classicists and Modernists, the only amulets that can keep the teacher untainted by the craze of examinations, unspotted from the world of pseudo-"We do not want liveconomists. ing encyclopædias or perfect machines, but men and women eager and fit to take part in social service."-The Fournal of Education.

"THE INFLUENCE OF THE GREEK MIND IN MODERN LIFE."—A crowded meeting of ladies and gentlemen took place in the Egyptian Hall of the Mansion House last Saturday afternoon, when Professor Jebb, M.P., Regius Professor of Greek in the

University of Cambridge, delivered the annual address to the students of the London Society for the Extension of University Teaching.

Professor Jebb, in opening his address on "The Influence of the Greek Mind in Modern Life," said that the circumstances in the working of the society during the last few years rendered the choice of that subject an appropriate one. Large and constantly-increasing numbers of men and women of all classes and callings were beginning to apprehend the twofold claim which entitled Greek to a prominent place in a liberal education. The first claim arose from its intrinsic power of satisfying mental and moral needs; and there was, in the second place, the historical claim arising from the relation of Greece to the literature and the life of subsequent ages. Imperfect though our knowledge was, did it not warrant the belief that no people had yet appeared upon the earth whose faculty for art, in the largest sense of the term, was at once so fine and so comprehensive as the Greek? It was from the classical literature of Greece, however, that the mind of the race was most fully known to us, and Macaulay said that thence had sprung all the noblest creations of the human intellect. The Greeks were the people with whom the very conception of artistic literature began, and in all the principal branches of poetry and of prose they achieved work so abounding with intellectual life and so excellent in form as to remain for after ages an inspiration and a standard. Greek influence had acted upon modern life and literature even more widely as a pervading and a quickening spirit than as an exemplar of form. The distinctive quality of its best literature was the faculty of rising from the earth into the clearest air: to borrow Plato's phrase, it was "the power of the wind on the human soul." History showed how, through the Roman age to our own, Greece had everywhere helped to educate gifted minds, through which her light had radiated in ever-widening circles. and it had entered as a vitalising essence into the most varied forms of modern thought. All that was most beautiful and instructive in Greek achievement was our permanent possession, and it could be enjoyed without detriment to those other studies which modern life demanded. In recent vears there had been a vast increase in the number of those who had come under Greek influence, not indirectly merely, but directly through their own study of Greek literature and art, and as regarded literature this was largely due to the issue of really good trans-Neither Latin nor German. lations. nor even French, however, lost so much by translation as Greek.

was the most perfect among the forms of human speech; in fact, it was a perfect organ of expression. ought all to rejoice in the remarkable success of the experiment that that society had made in teaching the language. To his mind it was a movement likely to mark the beginning of a time when a first-hand knowledge of Greek would be much more widely diffused, and he commended the new enterprise to the heartiest sympathies of all who were interested in classical and literary studies of any kind. would be a notable and fruitful result if the interest felt in the Greek language should grow into anything that could fairly be described as a popular interest, and in view of what had already been accomplished such a hope was not chimerical. He hoped and believed that the society would continue to prosper more and more, and that it would bring forth honour to London.—The School Guardian.

GEOGRAPHY.

THE WOODS OF BRITISH GUIANA. -The United States consul in Demerara, in his last report on British Guiana, gives some interesting information respecting the timber of that colony. The varieties of lumber are numerous, in colour from dark red to almost pure white, and in specific gravity from nearly double that of water to less than half. The principal building timbers are green-heart, mora, wallaba. The first is a most valuable wood, being classed with teak in the regulations at Lloyd's, while its durable qualities are placed on a level with oak. It is heavy, very close grained, gray with a greenish cast, and may be obtained fifty or more feet in length, and squaring twelve to eight-Under water and in the een inches. tropics it is superior to all other tim-

bers, house frames a hundred years old having been found still unperforated by worms. The mora is not quite so close grained as green-heart, but it is classed with it at Lloyd's and is almost equally durable. Its colour is reddish, and it may be obtained as Wallaba is a large as green-heart. dark red wood, with an unpleasant odour when new, very durable, but not obtainable in such large-sized logs. Being easily split, it is commonly used for making shingles, palings, cask and vat staves, etc. Other timbers are particularly suited for special purposes, such as the bullet tree, which was formerly considered the only timber fit to be used for the arms and shafts of windmills. Then there is the silver bally, which is light, and suitable for boat-building, because it

contains a bitter principle obnoxious to worms and barnacles. The woods suitable for furniture, of which there are about a hundred different kinds, will, no doubt, be appreciated in many, other parts of the world when known a little better than at present. native ceder (cedrela), which is quite different from the timber of the pine family, is very useful for wardrobes and cabinets, its scent tending to keep away insects. Mahogany is not native to the colony; but the wood called Guiana mahogany is that of the carapa, commonly known as crab wood. It is not as dark in colour or as hard in texture as mahogany, and being more easily worked, is used for all kinds of furniture. Letterwood is, perhaps, one of the prettiest, but as the peculiar dark marks are only found in the heart, only small logs can be obtained, rarely exceeding six inches in diameter. Purpleheart is unique in being of a pretty violet colour when fresh or new, which, however, turns to a dark brown after being worked If it were possible to prevent this change, it would be a most beautiful wood, but even as it is the furniture made from it exactly resembles that from rosewood. Every colour known is represented in the Guiana woods, from almost black, through browns and reds to deep and pale yellow, and almost to white. are curiously free from irregular veining and knots, the marks being uniform and in parallel lines; neverthelest they are by no means wanting in beauty. For panelling nothing can excel the nearly black wamara, contrasted with the pale green heart or the lighter and more easily worked white simarupa. At present the demand is so limited that many of the fancy woods are difficult to procure, the woodcutters looking only for such timber as they know will command a market. If, however, a market were opened, these could be collected as easily as green-heart, mora, and wallaba are at present.—

The Imperial Post.

HER SPECIALTY.—"An how's your little Cely gettin' along wid her schoolin', Mrs. Flaherty, dear?" inquired an interested neighbor. "Foine!" replied Mrs. Flaherty, laconically. "An' is she the head av her class in shpellin'?" "Naw!" said Mrs. Flaherty, with a scornful sniff. "There niver was a Flaherty yet could stop to shak' hands wid the shpellin'-book; they've no taste for that kind av work."

"Mebbe it's 'rithmetic that she loiks best," suggested the neighbor.
"'Rithmetic, is it?" said Mrs. Flaherty. "Shure, an' if Cely knows a noine from a siven it's more nor I'm' countin' on. She has no heart for noombers, that Cely."

When reading and writing had been mentioned by the neighbor, and geography had been hinted at, only to be met with instant disdain, Mrs. Flaherty herself was asked to name the study in which Cely was making

such rapid progress.

"I had me doubts," said Mrs. Flaherty, placing her hands on her hips in an easy attitude, "an' so had Tim, when Cely first wint to school, av her iver makin' a scholar; an' her cards that she brought home wid her av a Saturday wasn't rale encouragin', as fur as Tim an' me could mak' out.

"But the other day when I had Cely out gettin' her a new hat, who should I see but the school-teacher, shtandin' right forninst us. He put his hand on Cely's head—there aint a sowl could hilp loikin' the choild, wid the winnin' ways av her—an' says he, 'Mrs. Flaherty,' says he, 'Cely has got a great talent for procras-ti-na-tin'.'

"Wasn't I the proud woman thin? I couldn't shpake for j'y, but I just

drapped a curchy, an' turned as red as any bate."

"An aint that a new shtudy?" inquired the neighbor, cautiously forbearing any attempt to master the

imposing word.

"I may say it's an exthry," replied Mrs. Flaherty, with condescension. "I axed Cely a few questions about it, but—it's the truth I'm tellin' yez—that choild couldn't tell me no more than I knew a' ready. Ye see, the teacher is insthructin' her unbeknownst to hersilf, the way they do now. But some day we'll know all about it, an' it'll be a happy day fur me an' Tim whin we can sit on the platform in our best clothes, an' hear little Cely—grown a great girl—l'adin' the whole class in pro cras-ti-na-tin?"—The Youth's Companion.

QUEENSLAND MEAT.—Sir James Garrick, Agent-General for Queensland, presided at a dinner given at the Whitehall rooms, Hotel Metro pole, by the Queensland Meat Export and Agency Company (limited) to mark the commencement of a new development in the importation of meat from Australia. Up to a short time ago, it may be mentioned, the supplies of mutton reaching this country from Queensland were insignificant as compared with those from

New Zealand. But the pastoral system in Queensland has undergone considerable development of late, and the colonists propose to take advantage of their enormous stock of sheep estimated at 20 millions, together with their 6,000,000 of cattle, in order to contribute much more largely to the food supplies of Great Britain. It is further proposed that depôts and freezing stores should be opened at the Mediterranean ports, at Gibraltar, Aden, Cevlon, Hongkong, Singapore, and other places for the supply of fresh Australian meat to British troops and British sailors stationed or calling there. Such a procedure, it is claimed, would confer a great boon on those who have to depend on the local supplies obtainable at the ports and places in question, would add to the defensive powers of the "Greater Britain beyond the seas," and would also open up a valuable trade for the Queenslanders themselves, who, in anticipation of such developments, are organizing the establishment of refrigerating and other appliances throughout their colony, so that the pastoralists up country, instead of boiling down their mutton for tallow, may freeze it for the purposes of export as food. the meat served at the dinner was from Oueensland.

ASTRONOMICAL NOTES.

OCT .- NOV.

There is probably no one possessing a telescope who does not take very great interest in observing Jupiter, now so favorably situated for study. Little more than a year ago and our knowledge of the giant planet seemed complete, but the discoveries made at Mount Hamilton and at Areguipa, have shown that we may commence anew the study of the Jovian sys-

tem with much profit. There are certainly features which are not easily reconciled with known physical laws; the axial motion of the satellites is in itself remarkable; while their constitution, according to Prof. Pickering, is quite unique in the solar system so far as yet known. Much credence has been given to his theory, that the satellites are globes composed of

separate meteorites; there seems indeed to be no other explanation offered to account for the low densities as compared with the volumes. although, if the nebular hypothesis be true, we would scarcely expect to find the outer planets formed of elements of as great specific density as the inner ones. It may be worthy of remark that when La Place proved the system of Jupiter to be stable, there was nothing known or suspected of other satellites, or rings of matter. Perhaps the question of stability would bear reinvestigation, more especially as the tidal theory would seem opposed to the possible stability of any system of bodies revolving about a primary. Jupiter rises now about 8 o'clock, and is retrograding; his greatest angular diameter will be about 46' on Nov. 17th at opposition. Observers of particularly keen eyesight have sometimes recorded seeing the planet as a clearly defined disc with the unaided eye.

Venus, now evening star, is rapidly approaching the "half-phase," and increasing in brilliancy. It may assist the observer to find the planet in the day time, by noting that the meridian passage on Oct. 10th occurs at 2h. 42m. p.m., being one minute later each day following; her altitude on the 10th is 25° increasing about 15' daily.

Saturn emerging from the sun's rays may be seen in the November morning twilight, the ring presenting the beautiful spectacle of 12° elevation.

The very general interest taken in observations of the aurora ought in the end be productive of some important results. The coincidence of its appearance and the solar rotation has been much discussed; some dispute it altogether, and certainly coincidences at all times are to be viewed with suspicion; Commander Ashe, of Quebec, has recently written on the

contrary side of the question, and is very emphatic in his denial of any immediate connection between the aurora and the sun's rotation period. It does seem that if we are ever to have a thoroughly satisfactory explanation of the phenomenon it is scarcely likely to be attained by simply recording the times of appearance and its beauty. It is probably the physicist armed with the spectroscope and polariscope, who will give us the most information. But if even there is no other result than that of bringing amateurs into the field for the study of celestial phenomena, a great work will have been accomplished by Dr. Veeder, who has been to very great pains in arranging for systematic series of observations. The interest of amateur astronomers is being very well looked after by the publishers of "Astronomy and Astro-Physics," who have just issued the first number of a periodical which has been named "Popular Astronomy." If contains an article of great interest on "Tupiter's Comet Family " by Mr. W. W. Pagne, illustrated by a diagram showing the orbits of all comets known to be in any way connected with the giant planet. The "Capture" theory is discussed, and the conclusion reached that the weight of evidence is in its favour.

It certainly does seem quite probable that as the solar system moves through space, many erratic bodies might come within its sphere of attraction and be permanently connected with it..

Past question, every experience is serviceable to us.—Lew Wallace.

A man is never so on trial as in the moment of excessive good fortune.—

The Same.

It is never a shame not to know, only a shame not to learn.—C. R. Robinson.

EDITORIAL NOTES.

When we wrote last month upon the character of examination papers, we had not much concern as to the conduct of these examinations.

The things which have come to the public in the press and at meetings of the Senate of Toronto University have brought the conduct of public examinations unpleasantly into public notice.

Here are some of the statements made about the examinations held in

Ontario last July:

r. That the bags containing the examination papers which are sent out by the Department had been in the hands of those to whom they were sent weeks before the examination took place.

2. That these bags were not taken proper care of. We will not give the details on this point, which have been given to us from a most reliable source.

3. That the answers of candidates to the proposed questions, which should have been guarded with the utmost care, were tampered with

most shamefully.

4. That the time-table for the examination was not followed in several particulars: (a) papers were given to candidates days before the proper hour, (b) candidates were allowed, if late, to make up lost time, (c) if ill, were permitted to write longer than the time given on the time-table, to make up deficiency.

(d) That some of the presiding examiners were careless in regard to time of beginning, and closing the examination for each day, and to being present in the room when the candidates were or should have been writing

their answers.

(e) That access was obtained by some persons to the room in which the answers of candidates were kept, and thus the answers of candidates might be completely changed.

Another statement has been made to us several years in succession, which is of a grave character and implies a lack of a proper sense of responsibility on the part of those concerned, but as there may be an explanation for it, with pleasure we withhold it for the present.

Such are some of the statements made regarding the examinations by those who ought to know whereof they speak. Meanwhile, those who wrote for honours and scholarships are waiting in provoking uncertainty and anxiety to hear the results of the examination.

We do not know personally how much truth there is in the above statements, but we believe that there is a good deal more truth than fiction. We all know that the state of matters is so grave that the Senate of the University of Toronto refused to accept the report of the examiners re the examination for honours and scholarships at matriculation in July, 1893. And that the proposal of the Minister of Education to hold an investigation into the doings connected with the late examination was accepted.

It is needless to remind our readers of the disappointment and chagrin of candidates and all those immediatly interested, especially parents and masters. Evidently the authorities responsible for the annual examinations are face to face with a serious crisis in educational work. The question now is, what next.?

We are given to understand, upon very good authority, that one part of the experiment of this year will not be repeated. The examination for Scholarships will be held henceforth in the University Buildings and under the immediate control of the Senate of the University of Toronto. We

are sure all masters and University men will feel relieved and pleased at the announcement. We advise and urge the Senate to go farther and order that all candidates who wish to compete for honours must write in

the same place.

If candidates are to have relative standing, they must write under the same conditions if that standing is to be worth anything. Candidates writing to pass the Matriculation examination may be allowed to write at various centres under proper safeguards. The number of candidates who wrote for Matriculation in July, 1893, was, we are informed, about 500; the total number who wrote was about 7,200, leaving for all other examinations 6,700.

This large number the Education Department must take control of. Now, keeping in view the statements made in the beginning of this article about the unsatisfactory results obtained under the present system of examinations, what remedy do our readers suggest?

Because such public examinations as ours have a great educative influence upon the character of our people, we defer our suggestion on this till next issue, and will be glad to publish any suggestions from any of our readers upon this delicate and wide-reaching question.

An important addition has been made to the staff of the Ontario School of Pedagogy by the appointment of Mr. I. M. Levan, B.A. Mr. Levan has acquired experience in management and teaching during the time he was Principal of the Collegiate Institutes in St. Mary's and Owen Sound. From those who have known Mr. Levan most intimately at College and School, we have good reports as to his industry, energy, ability and gentlemanly character. To Mr. Levan, as well as to the other members of the

staff of the School of Pedagogy, we extend our most cordial support and we wish them, in their arduous and difficult work, the highest and noblest success.

The annual announcements of the Medical Faculty of the University of Toronto, and of Trinity Medical College, appear in our advertizing pages this month. We beg to direct the attention of our readers to these important announcements.

SLEEP

Withdraw thee, soul, from strife,
Enter thine unseen bark,
And sail across the dark
And silent sea of life.
Leave Care and Grief, feared now no more,
To wane and beckon from the Shore.

Thy tenement is bare,
Shut are the burning eyes,
Ears deaf against surprise,
Limbs in a posture fair.
The body sleeps, unheeding thee,
And thou, my sailing soul, art free

Dream winged, thy boat may drift Vhere lands lie warm in light;
C. sail, with silent flight,
Oblivion cleaving swift.
Still, dusk or dawning, art thou blest,
O Fortune's darling, dowered with rest!
ALICE BROWN IN Harper's Magazine.

"A teacher is one who has liberty, and time, and heart enough, and head enough, to be a master in the kingdom of life; one whose delight it has been to study mind, not in books, but in strange realities of dull and ignorant pupils; one who has found joy in darting a ray of light into dark corners, and wakening up hope and interest in the sacred lesson-learners who have not learned."—Thring.

SCHOOL WORK.

-Annual Examination, 1893. High School Entrance.

COMPOSITION.

Examiners: { J. E. Hodgson, M.A. John Seath, B.A.

- 1. (a) Write a letter to a friend giving an account of your daily work at school, and telling where and how you intend to spend the coming vacation. (48)
- (b) Write the address for your letter within a ruled space the size of an ordinary envelope. (2)
- 2. Give in your own words an account of any one of the following:
 - (a) The Discovery of America.
- (b) The events related in the lesson "Edinburgh after Flodden."
 - (c) A Railway Accident.
 - (d) The Wrongs of the Indian.
 - (e) The Mound Builders. (50)

DICTATION.

Examiners: { Isaac Day, Ph.B. J. E. Hodgson, M.A.

NOTE.—The Presiding Examiner shall read each sentence three times—the first time, to enable the candidate to collect the sense; the second, slowly, to enable the candidate to write the words; and the third, for review.

It didn't matter whether he was kneeling or sitting or lying down.

They began to question him more for the pleasure of hearing him talk, than from any curiosity.

The many decorations of this gorgeous ship had glittered in the sunny water.

The figure and features of this old farmer were precisely the same as those of old Mr. Toil.

When a considerable depth of snow has accumulated, the pressure upon the lower layers squeezes them into a firm mass.

The sound was wrought into a variety of tunes that were inexpressibly melodious.

They had long since ceased to believe in the existence of the lake. The general result of the battle was the deliverance of the army from a most imminent danger.

The admiral tried to soothe their distress, and to inspire them with his own glorious anticipations.

The enormous quantity of water there carried off by evaporation disturbs the equilibrium of the seas.

Judging that a display of enterprise and boldness might act as a check on the audacity of the enemy, he, at last, gave his consent.

DRAWING.

Examiners: { Isaac Day, Ph.B. J. S. Deacon.

NOTE.—No rulers are to be used.

- 1. Draw a square, each side four inches; divide it into twenty-five equal squares; describe a circle passing through the corners of the large square. (7)
- 2. Draw three books of equal size, one inch in length, standing on end, side by side, so that an observer behind them may see one side of one of them, and an end of each. (7)
- 3. Draw three butter-tubs of equal size, above the line of sight, one sitting partly within the other; drawing to be two inches in height. (7)
- 4. Draw a lounge six inches in length,

PRIMARY ALGEBRA AND EUCLID.

- 1. (a) Divide $4a^2+4a(n-1)d+(n-1)^2d^2$ by 2a+(n-1)d.
 - (b) Divide $1-x^3-y^3-3xy$ by 1-x-y.
- 2. (a) Show that the difference of the squares of any two consecutive odd numbers is equal to twice their sum.
- (b) Prove that the cube of the sum of any two positive numbers is greater than the sum of the cubes of the numbers, by three

times the sum of the numbers multiplied by their product.

3. Solve the equations:

(a)
$$\frac{2x}{5}$$
 $\frac{3}{6}$ = 12.

(b)
$$(x+7)^2+(5-x)(x+5)=36x$$
.

- 4. (a) What is the price of bread per loaf if an increase of 25 per cent. in the price would reduce the number of loaves that could be purchased for one dollar by two?
- (b) The breadth of a field is two-thirds of its length; if the breadth is increased by 100 yards, and the length diminished by the same amount, the new area is equal to the old. Find the length of the field.
 - 5. (a) Factor x^0-64 ; $x^4+x^2y^2+y^4$.
 - (b) Show that x+y is a factor of
 - $\{(I-m(x+py)^{3}+\{mx+(I-p)y\}^{3}.$
- (c) Factor $16a^2+4ab-4ac-12b^2+17bc-6c^2$.
 - 6. Simplify

(a)
$$\frac{(101)^4 - (99)^4}{(101)^2 + (99)^2}$$

(b)
$$\frac{(p-a)}{(a-b)(a-c)} + \frac{(p-b)}{(b-c)(b-a)} + \frac{(p-c)}{(c-a)(c-b)}$$
.

- 7. Define axiom, postulate, hypothesis. State Euclid's postulates.
- 8. If two triangles have two angles of the one equal to two angles of the other, each to each, and one side equal to one side, namely sides which are opposite to equal angles in each, the two triangles are equal in all respects.

Show that every point in the bisector of an angle is equidistant from the sides of the angle.

9. If two angles of a triangle be equal to one another, the sides subtending those angles are equal.

Find a point on the given straight line AB such that the distances from two given points on the same side of and without AB shall be equal.

If the given points be on a line at right angles to AB, how must they be placed to render the problem possible?

JUNIOR LEAVING AND UNIVER-SITY PASS MATRICULATION.

NOTZ.—Candidates for Junior Matriculation will take sections A and B, and Candidates for the Junior Leaving, sections B and C.

A.

1. To construct a triangle whose three sides shall be respectively equal to three given lines, the sum of every two of which is greater than the third.

Give reasons for considering the condition embodied in the above enunciation a necessary condition.

- 2. The triangle formed by joining the middle point of one of the non-parallel sides of a trapezium to the extremities of the opposite side is equal to half the trapezium.
- $\frac{1}{3}$. In the triangle ABC the angle A equals the sum of the angles B and C. If from the vertex A a right line be drawn to the middle point of the oppoite side it is equal to half that side.
- 4, If a straight line be divided into two equal and also into two unequal parts, the rectangle contained by the unequal parts, together with the square on the part between the points of section, is equal to the square on half the line.
- 5. In equal circles equal angles at the centres or at the circumferences stand upon equal arcs.

В.

- 6. If a straight line be bisected and produced to any point the square on the whole line thus produced and the square on the part of it produced are together double of the square on half the line bisected and of the square on the line made up of the half and the part produced.
- 7. If a line be a tangent to a circle and from the point of contact a chord be drawn cutting the circle, the angles made by this line with the tangent are respectively equal to the angels in the alternate segments of the circle.
- 8. Inscribe in a given triangle a parallelogram whose diagonals shall intersect in a given point.

- 9. ACB is an arc of a circle, CE a tangent at C, meeting the chord AB produced in E and AD is a perpendicular to A B meeting the tangent CE in D. Prove that if C be the middle point of DE the arc AC is equal to twice the arc CB.
- 10. AGB is the diameter of the circle whose centre is C. D is the middle point of CB. DE at right angles to CB terminates in the circumference at E. Prove that the square on DE is equal to three times the square on DB.

C.

- 11. From a given point without a given circle to draw a tangent to the circle.
- 12. If ABCD be a quadrilateral circumscribing a circle, the sum of two opposite sides must equal the sum of the other two.
- 13. If a straight line, falling on two other straight lines, make the alternate angles equal to one another, then the straight lines shall be parallel.
- 14. To describe a square that shall be equal to a given rectilineal figure.
- 15. ABCDEF is a cyclic hexagon (one inscribed in a circle) and AB is parallel to its opposite side DE, and BC is parallel to its opposite EF; prove that DC is parallel to AF.

HONOR MATRICULATION.

1. To inscribe a circle in a given equilateral and equiangular pentagon.

Prove that an equiangular circumscribed polygon is regular.

2. If a straight line be divided into any two parts, the square on the whole line is equal to the sum of the squares on the two parts together with twice the rectangle contained by the two parts.

ABC is a right angled triangle right-angled at C, and CD is a perpendicular from C on AB. Prove that the square on the sum of AB and CD is greater than the square on the sum of AC and CB by the square on CD.

3. In equal circles angles at the centres, or at the circumferences which stand on equal arcs, are equal.

- If A, B, C, be three points in the circumference of a circle, and D and E the middle points of the arcs AB and AC; then if the straight line DE intersect the chords AB and AC in the points F and G, the straight line AF is equal to AG.
- 4. To inscribe a circle in a given triangle,
 Inscribe a circle in a sector of a given
 circle.
- 5. If four right lines be proportional the rectangle contained by the extremes is equal to the rectangle contained by the means.

The rectangle contained by two sides of a triangle is equal to the rectangle contained by the perpendicular on the third side from the vertex opposite this third side and the diameter of the circumscribed circle.

6. To divide a given undivided line similarly to a given divided line.

To divide a given line (a) internally, (b) externally, in the ratio of two given lines.

 Similar triangles are to one another in the duplicate ratio of their homologous sides.

Express the area of a triangle in terms of the medians of the triangle.

HISTORY AND GEOGRAPHY.

Note.—Only five questions in all are to be answered by any candidate, but one of them must be EITHER question 4 OR question 8.

- r. Give a sketch of the characters and careers of Colet and Erasmus, and of their influence upon the educational and religious awakening which marked the earlier years of the sixteenth century.
- 2. "Cromwell is in fact the first English minister in whom we can trace through the whole period of his rule, the steady working out of a great and definite purpose."—Green.

Give a sketch of the character and career of Thomas Cromwell, and show what his "great and definite purpose" was, and to what extent and in what way; he succeeded in effecting it.

3. Give an account of the origin, character, and influence of the Elizabethan Drama, and sketch briefly the life, character, and dra-

matic work of (a) Greene; (b) Marlowe; (c) Shakespeare.

- 4 Sketch concisely the rule of Fngland over Ireland under the following heads:
 The policy of Henry VII. The policy of Wolsey. The policy of Cromwell. The policy of Henry VIII after Cromwell's death. The policy of Somerset. The policy of Mary. The policy of Elizabeth as administered by Sidney, Lord Grey, and Mountj by. The policy of Chichester. The Colonization of Ulster under James VI.
- 5. (a) Sketch the character and the political and literary career of Lord Bacon.
- (b) Describe what you conceive to be Bacon's chief claims to be considered one of the world's great men.
- 6. (a) Give a sketch of the later years of Milton's life.
- (b) Describe how and to what extent Milton's life and character were typical of Puritanism, and show that Paradise Lost, both in its excellences and in its deficiencies, is a reflection of the higher types of Puritan character and culture.
- 7. Describe the character of Charles II both as man and monarch, and contrast his methods of personal government with those of his grandfather, his father, and his brother. Illustrate your points wherever possible by reference to specific acts of the king.
- 8. Sketch the character of Ashley Cooper, Earl of Shaftesbury, and describe concisely his political career:
- (a) prior to the Restoration; (b) while in opposition to Clarendon; (c) as a member of the Cabal; (d) while in opposition to Danby; (e) as Lord President of the King's Council, 1679; (f) from his dismissal from the Council until his flight to Holland and death.
- 9. (a) Show how in the reign of William III the powers and functions of government, both legislative and executive, were fully and finally transferred from the King to the House of Commons.
 - (b) What benefits to the kingdom,

both constitutional and financial, were the first fruits of the new life possessed by the House by virtue of these changes?

no. Name in chronological order all the more important battles (including sieges) in which Oliver Cromwell was personally engaged; state the geographical position of each, and give concisely the main particulars concerning each.

ENGLISH GRAMMAR, PHILOLOGY, RHETORIC AND PROSODY.

NOTE.—Candidates will take sections A, C, D, and ANY THREE questions of section B.

For woman is not undevelop man,

Like perfect music unto noble words.

Α.

- 1. (a) Give a grammatical analysis of the above selection so far as to show the nature and construction of the principal clauses, and the nature, construction, and relationship of the subordinate clauses. (NOTE.—Each clause must be written out in full, and its bare subject and bare predicate be clearly indicated.)
- (b) Specify and explain the grammatical difficulties to be found in the fourth line and in the last line of the selection.

B

- 2. Explain by means of Grimm's Law the relation of English (i.e. the native element of our speech) to (a) Latin or Greek and (b) High German.
- 3. Write historical and etymological notes on :-

Minister, monastery. Wonder, marvel, admiration. Ways and means. Feast, sete. He must needs (necessarily, of necessity) depart at once. What went ye out for to see? The statement contained in:

- "And Frensch sche spak ful faire and fetysly,
- After the scole of Stratford atte Bowe, For Frensch of Parys was to bire unknowe."
- 4. Write notes on the SUFFIXES of the following words, indicating the force of each suffix; the language (or languages) from which the suffix is derived; the form (or

forms) of the suffix in the language (or languages) from which it is derived:

B.shopric, cottage, carpenter, criticism, delegate, doggie, foolish, grotesqueness, gauntlet, kernel, lessee, philosophy, poetics, prowess, serfdom, wealth, wisdom, wooden,

5. "Long lines of cliff breaking have left a chasm;

And in the chasm are foam and vellow sands:

Beyond, red roofs about a narrow wharf In cluster; then a moulder'd church;

and higher

A busy street climbs to one tall-tower'd mill!"

Distinguish the terms Presentive and Symbolic as applied to words. In accordance with your distinction, classify the words in the lines above as presentive or symbolic. Discuss the relation of Encliticism and Symphytism to the symbolic or presentive nature of words. Show clearly the usual metrical value of symbolic words in relation to presentive words.

6. Show clearly what is meant by a phonetic alphabet. Illustrate the chief defects of English spelling from the standpoint of the phonetician. Indicate the chief causes of the irregular or unphonetic spel!ing of present English. Give the arguments for and against a phonetic spelling of present English.

"Poetry is the record of the best and happiest moments of the happiest and best minds. Poetry thus makes immortal all that is best and most beautiful in the world."-Shelley.

7. (a) Clearly indicate the steps in the exposition by which Shelley reaches his conclusion-"Poetry thus makes immortal all that is best and most beautiful in the world."

(b) Show clearly that his style, as (i) to Diction, (ii) Figures, (iii) Quality, is in harmony with the thought he desires to convey.

D.

A lovely lady code him fair beside, Upon a lowly ass more white than snow; Yet she much whiter; but the same did hide

Under a veil, that wimpled was full low; And over all a black stole she did throw: As one that inly mourned, so was she sad, And heavy sat upon her palfry slow: Seemed in heart some hidden care she had; And by her, in a line, a milk-white lamb she

8 (a) Describe the form of the stanza above

(b) Give its name and origin.

(c) State the effect of the concluding line upon the rhythm.

A Frankeleyn was in his companye; Whit was his berde, as is the dayesye. Of his complexioun he was sangwyn. Wel lovede he in the morwe a sop in wyn.

Ful redy hadde he his apotecaries, To send him dragges and his letuaries, For ech of hem made other for to wynne: Here frendschipe has not newe to begynne.

9. (a) Scan each of the lines above.

(b) Write notes on the value of final e in Chaucerian metre.

(c) To what extent did Chaucer use freedom (i) word-accent, in (ii) cæ:ura?

ALGEBRA.

Solutions by S. A. MITCHELL, Queen's Coll.

(Concluded.)

8. (a) Establish the theorem $_{n}P_{r}=n(n-1)(n-2)\dots(n-r+1),$ and thence deduce the theorem

$$_{n}C_{r}=\frac{n!}{r!(n-r)!}$$

(b) Upon a plane are drawn n lines, of which p pass through one and the same point. Show that the total number of determined points is $\frac{1}{2}(n-p)(n+p-1)+1$.

8. (a). Suppose we are to choose from n things; for the first choice we may take any of the n things. Setting this aside we may choose any one of the remaining (n 1). things, and the number of ways in which the two things may be selected is n(n-1). We have now (n-2) things left, so that the number of ways in which we can choose 3 things out of n is n(n-1)(n-2). Thence

by induction we find that we may choose r things out of n things in

$$n (n-1) (n-2)....(n-r+1) \text{ ways}$$
Now $n (n-1) (n-2)....(n-r+1)$

$$= \frac{n(n-1)(n-2)...(n-r+1)(n-r)...3.2.1...}{1, 2, 3....n-r}$$

$$= \frac{\frac{n}{\lfloor n \rfloor} \text{ or } \frac{n \rfloor}{(n-r) \rfloor}$$

But if nCr be the number of combinations of n things r together, each combination may give rise to r! permutations.

$$\therefore {}^{n}C_{r} \times r! = \frac{n!}{(n-r)!}$$

$$\therefore {}^{n}C_{r} = \frac{n!}{r!(n-r)!}$$

- (b). n-p lines not concurrent determine $\frac{1}{2}(n-p)(n-p-1)$ points. The p lines can interest the n-p lines in p (n-p) points altogether. Besides this p lines determine one point. Therefore the number of points determined is, $\frac{1}{2}(n-p)(n-p-1) + (n-p)p+1$ or, $\frac{1}{2}(n-p)(n+p-1)+1$
- 9. (a) Write the r^{th} term in the expansion of (1-x)-n, and state what this coefficient is in regard to homogeneous products.
- (b) If p, q, s denote the product, quotient, and sum, respectively, of two numbers, then

$$p=s^{2} \left\{ \begin{array}{l} q-2q^{2}+3q^{3}-+ \dots \text{ ad inf.} \right\} \\ 9. (a). (1-x)-n=1+nx+\frac{n(n+1)}{112x^{2}}-\\ + \dots \text{ and the coeff of } x^{r}-\text{ is} \\ \frac{n(n+1)(n+2)\dots(n+r-1)}{r} \end{array} \right.$$

This is an expression for the number of homogeneous terms of r dimensions that can be made from n letter and their powers.

(b). Let x, y denote two numbers.

Then p = xy, s = x + y, $q = \frac{y}{x}$ from which we must elininate x and y

Thus,
$$y = \frac{p}{x} = s - x = q x$$
,
Whence $\frac{p}{q} = x^2$ and $x = \frac{s}{1+q}$
 $\therefore \frac{p}{q} = \frac{s^2}{1+q^2} = s^2 (1-2q + 3q^2 - + \dots)$

10. (a) Find expressions for the sum of an A.P. and of a G.P.

(b) If the n^{th} terms of two A.P.s be respectively a-bn and b+an, show that

they have a common sum for the same number of terms if a+b is a negative integer; and that under the same circumstance they have also a common w^{th} term.

10. (a) This is common book-work.

b. The series are: a-b, a-2b, b+3a, etc., and their sums are: $n a + \frac{1}{2} n (n+1) b$, and $n b + \frac{1}{2} n (n+1) a$, and these being equal gives $n = \frac{a-3b}{a+b} = \frac{a+b-4b}{a+b} = 1 - \frac{4b}{a+b}$.

: If $\frac{4b}{a+b}$ is a negative integer, n is a positive whole number.

Also they have a common n th. term if a-b n=b+a n, i.e. if $n=1-\frac{2b}{a+b}$.

But if $\frac{2b}{a+b}$ is a negative integer, so also 4b

- 11. (a) Establish a formula for the present worth of A dollars due in t years at r cents per dollar compound interest.
- (b). A man 30 years old enjoys \$600 annually from the rent of buildings, during his life. If his probable duration of life is 20 years more, what is the present cash value of his anuity, money being at r cents on the dollar?

(Only a symbolic result is required.)

II. (a) Let P denote the present worth, then P put to interest for t years at r per unit should give A.

$$A=P | \mathbf{I}+r |^{t}.$$

$$P=\frac{A}{(\mathbf{I}+r)^{t}}.$$

(b). Let P be the present cost value and et A denote the annual income.

The last payment is A.

The payment before the last is AR, when R=1+r. The next previous is AR^2 , etc. So that the total amount of all the payments at the end of 20 years is:

$$A(\mathbf{1}+R+R^2+\ldots R^{19})=A\frac{R^{20}-\mathbf{1}}{R-\mathbf{1}}$$

But P put to interest for 20 years should give this sum:

$$P(1+r)^{20} = A \cdot \frac{R^{20}-1}{R-1};$$
or, $P = A \cdot \frac{R^{20}-1}{R^{20}(R-1)}.$

CONTEMPORARY LITERATURE.

On turning over the pages of the September Overland, one cannot but be struck with the extreme beauty of the scenery portrayed. The number is also noticeable for the excellence of its verse.

The papers in Littell's Living Age for September 16 are nearly all biographical, including A visit to Prince Bismarck, Gilbert White of Selborne and Charles Baudelaire and Edgar Poe. There is a capital short story from Temple Bar entitled The Helgorn.

American magazines, whether of purpose or not, contain more and more matter which is especially interesting to Canadians. In the September number of Scribner's we find The Tides of the Bay of Fundy, by Gustav Kobbé, finely illustrated by Twatchman and Pérard, and a richly colored poem entitled Harvest, by Duncan Campbell Scott. Articles of special literary interest are Izaak Walton, A Thackeray Manuscript in Harvard College Library, A Letter to Samuel Pepys, Esq., by Andrew Lang, and Richardson At Home. by Austin Dobson. The Sharpness of Death is a short story by E. K. Tompkins, so lifelike and penetrating that one hardly dares to hope that it isn't true.

Of all modern magazines there is mone that presents a more scholarly appearance than Shakespeariana. Type and paper are all that can be desired and the wide margins impart an air of leisure and dignity which is extremely becoming. There are only two articles in the issue but these are notable. The first is, "The First Heir of Shakespeare's Invention" by Appleton Morgan, and gives his grounds for doubting that Shakespeare wrote Venus and Adonis. The second is "A Plea for the Adoption of the Bankside Reference Canon," by Alvey A. Adu. The second and third chapters appear of "A Man That's Married," a Shakespearean story by Charles Falkner, ir.

September is the World's Fair number of the Cosmopolitan. The most interesting of

the papers devoted to the subject are: A First Impression, by Walter Besant; Transportation, Old and New, by the Editor, Mr. Walker, and Points of Interest, by Ex-President Harrison. By far the most interesting part of the magazine, from a literary point of view, is contained under the new department, " In the World of Art and Letters," where one may read month by month what Sarcey, Boyesen, Lang and Janvier have to say. Mark Twain contributes an interesting and somewhat extravagant short story entitled "Is he living or is he dead?" The Traveller from Altruria is rather discouraging this month, but perhaps this is the inevitable effect of our atmosphere on an Altrurian.

BOOKS RECEIVED.

From Messrs. Mccmillan & Co. (London and New York) through the Copp, Clark Co., Toronto, we have received the latest volumes of the Blementary Classics, English Classics and Twelve English Statesmen Series, viz:

Homer Iliad VI. Edited by Walter Leaf and N.A. Bayfield, M.A.

Macaulay's Essays on Clive and on Warren Hastings. Edited by K. Deighton.

Edward the First.

All of these are excellent numbers of their respective series, but the las merits a much more extended notice. It is a remarkably clear and vivid narrative of the life and reign of Edward I. and a valuable addition to historical biography, and the author, Prof. T. F. Tout, shows research and skill in his marshalling of facts and development of the history of the great king "whose work lived on in his own realm of England where after ages agreed to recognize him as one of the greatest and wisest of her rulers."

The Sixth Book of the Iliad is part of the work to be read for Matriculation this year, and the edition above mentioned supplies all that a student could ask for in the way of notes, vocabulary and general information.

Longman's German Grammar. By J. U. Rausom, M.A. (London & New York: Longman, Green & Co.)

An Introduction to the French Language. By Prof. Van Daell. (Boston: Ginn & Co.)

Virgil. Æneid VII. Edited by W. C. Collar, A.M. (Boston: Ginn & Co.)

Four Canadian text books have appeared this month, Virgil's Æneid, Book II. Edited by John Henderson, M.A. and E.W. Hagarty, B.A.

Black's Life of Goldsmith. Edited by F. H. Sykes, M.A.

La Belle Nivernaise and Le Chien du Capitaine. Edited by J. Squair, B.A., and A. F. Chamberlain, M.A. Pa.D.

Virgil's Æneid, Book II. Edited by J. C. Robertson, B.A.

The first two of these are published by the Copp, Clark Co., and the others by Messrs, W. J. Gage & Co. They are all most carefully edited and creditable in every way to authors and publishers.

Messrs. Ginn & Co. have just republished "Bishop Brooks' Lecture on Biography" (Phillips' Exeter Lectures) at the request of many teachers.

The Dread Voyage. By William Wilfred Campbell. (Toronto: William Briggs.) This is the second volume of verse published by our Lake Poet and the present collection includes the now famous poem of "The Mother." Some of the others, such as "Sir Lancelot" and "The Children of the Foam" appeared for the first time in Canadian publications. The concluding poem, entitled "The Dead Leader," is on Sir John A. Macdonald. William Wilfred Campbell is a true poet. The publishers have reason to congratulate themselves on the attractive appearance of the volume.

Advanced Lessons in English. By Mary F. Hyde. (Boston: D. C. Heath & Co.) The author has already prepared two excellent text books in English for Primary Schools and for American Grammar Schools respectively. This third, volume of the Series is comprised in four parts, I. Kind of Words, III. Classes and Forms of Words, III.

Relations of Words. IV. Structure and Analysis of Sentences, and is constructed with the aim of teaching principles thoroughly by means of examples. The sentences are taken—as they ought to be—from English classics, and the book is a good one in every way.

"Songs of The Common Day." By Charles G. D. Roberts. Toronto: William Briggs. The latest collection of Charles G. D. Roberts' poetry has just appeared, to the delight of his friends. It is not given to many to express in words so worthy and sweet as our Canadian Poet Laureate's the subtle beauty of common and every day things. The most important poem in the present volume is "Ave"—an Ode written for the Shelley Centenary. The verse throughout is fresh and strong and always clear in tone.

Episodes from François Le Champi, par George Sand. Edited with Notes by C. Sankey, M.A. London and New York: Longmans, Green & Co. Messrs. Longmans have already published several elementary French reading books consisting of short extracts from some good story, connected by brief explanations in English. This is an excellent plan and will tend to keep up pupils' interest in the work.

The Cambridge Companion to the Bible. Cambridge: At the University Press. London: C. J. Clay & Sons. Few books for Bible students will be found of more real value than this, which takes up the structure, growth, and preservation of the Scriptures, and supplies a vast amount of well-arranged information on the history, antiquities, chronology, etc. Among the contributors are the Rev. Dr. Moulton, Profs. Ryle, Davidson, and Lumley; the Bishop of Durham, the Bishop of Worcester and many others.

The Classic Myths in English Literature. Edited by Prof. Gaylay, of the University of California. Boston: Gan & Co. This is an exceedingly useful book. It is based chiefly on the old familiar "Balfindi's Age of Fable," but its scope is greater, and its quotations are admirably chosen, while the maps and illustrations are of no small value, It is a capital hand-book for names and allusions.