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Educational Weekly

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Edited by T. ARNOLD HAULTAIN, M.A.

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JANKS V. WRIGHT, General Manager.

TORONTO, OCTOBER 21, 1886.

A REGARD for the health of the pupil, we recently contended, would be and should be the next step taken by our ever changing systems of education. Already, let us be thankful, something is being done, as the following review of an important report shows :--

"The subject of physical education," says *Education*, "is beginning to receive, in our higher schools of learning, something of the attention to which it is properly en titled. Although gymnastic exercises and athletic sports have long had their place in colleges, and although manual labour schools, or departments in schools, have had a pretty thorough trial, the whole subject of physical training, as related to health and to a symmetrical development of mind and body, has only recently begun to take that place in educational systems which its importance demands,

"One of the most interesting of the many valuable 'Circulars of Information'

issued by the Bureau of Education, under the administration of Commissioner John Eaton, is that upon " Physical Training in American Colleges and Universities,' By request of Gen. Eaton, Dr. E. M. Hartwell has collected from the various colleges the information which was accessible, and embodied the facts in a report embracing nearly two hundred pages of instructive matter, with illustrations and tables. The history of physical training in America is outlined, and a full account is given of the methods and appliances now in use at Amherst, Harvard, Vale, and other col leges, with diagrams of the best gymnasia in the country. Amherst College is reco gnized as the pioneer in the establishment of an organized department of physical training; and under the efficient management of Dr. Hitchcock it has still kept its rank as a model, and as one of the most perfect in this or any other land.

"The greatest impetus to the cause of physical education, however, was given at Harvard College in 1879, by the erection of the Hemenway gymnasium, and the appointment of Dr. D. A. Sargent as director and professor of physical training. This gymnasium was furnished with a full set of Dr. Sargent's developing appliances, and, ever since it was opened, has been manag ed in accordance with a system of training known as the Sargent system, -- 'a system,' says the report, 'more comprehensive, practical, and scientific than any hitherto attempted or adopted in any college.'

"A full description of the building and appliances of the Hemenway gymnasium is given in the report, with diagrams and tables sufficient to put the reader in pos session of all necessary facts in regard to to the method and working effects of the system.

"Not the least interesting among the items of this report is the statement pre sumably from Dr. Sargent's own pen-of his views upon exercise. It will interest educators to know that he regards the sub ject of physical training to be, 'not so much to make men active and strong as to make them healthy and enduring.' It is evident from the methods used that the supposed precedence given to athletic over mental training finds no place in the Sar gent system. The symmetrical development of the whole man is what is aimed at, and the results are what might be expected, considering the average character of the material upon which the work has been performed. The Sargent system has now been adopted in over fifty institutions, and a school for the training of teachers has been opened under Dr. Sargent's direction in Cambridge.

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"The report proceeds to discuss 'Ath letic Sports in the United States,' in which college athletic organizations are described, and the policy of the various colleges, in regard to sports, is outlined. A somewhat full account of the various things which counteract the influence of 'professionalism' in several leading colleges, shows that the authorities are moving in the right direction, and staving for the greatest good to the greates' number. A valuable appendix- on 'Phy ical Training in Germany' completes the volume."

THE Daily Chronicle (London, Eng.) commenting on Sir Spencer Wells's address as President of the Sanitary Congress, writes : " This, he says, is an age in which we must push popular education in both sexes far beyond conventional limits, otherwise we shall lose our place in the race of life, and no longer rank as 'heirs of all the ages, and foremost in the files of Time.' Evils may come, especially to women, from over pressure in education but then, says Sir Spencer Wells and no surgeon in Europe has a better right to dogmatize on such a subject 'if overwork sometimes leads to disease, it is note morally wholesome to work into it than lounge into it." Even over pressure in schools he traces, par Sir J. Crichton Brown, to 'some of our sanitary success.' The sanitarians have been the means of keeping in life the weaklings - the survivals of the least fittest and under the strain of a system adapted to the average boy and girl, they break down."

Contemporary Thought.

FROM 1852 to 1868 Chicago's population increased 5.1 times what it was in the first period. The death rate increased 3.7 times. The deaths from nervous disorders increased 20.4 times. These figures are significant of the wear of city life on the nervous system. Is not this strain of the nervous system a peculiarly American danger ? To be sure, all brain-workers in all countries are liable to it, but in our country climatic influences increase the tendency. Under these influences we have developed national characteristics, showing in form and feature. We do things in a hurry. We are in haste to get rich. We are in haste to be wise. We have no time for exercise. We have no time for play. Both exercise and play are by serious people often looked upon as a waste of time for adults, however good they may be for children and young people. A boy must be a man before his time, and a girl must be prim and staid, and must not romp like her more fortunate brothers, but must be a sober woman after she has entered her teens. It seems as if the battle of modern life (at least of modern city life) was a battle of the nerves. From nursery to school, from school to college, or to work, the strain of brain goes on, and strain of nerve--scholarships, examinations, speculations, promotions, excitements, stimulations, long hours of work, late hours of rest, jaded frames, weary brains, jarring nerves, all intensified by the exigencies of our school and city life." The worst of the mischief is that this strain falls most of all upon those from nature and circumstance least able to bear itupon our women. Public opinion frowns upon their exercising like men. Yet with a nervous system more sensitive than man's, they need the very exercises (out-of-doors) which, by a mistaken public sentiment, they are often forbidden to take. The healthy housework is often deputed to a servant, either because too hard for our American girls, or too much beneath them.-E. L. Richards in Popular Science Monthly.

As touching orthography, one word on the insanity of the *fonctik skül*, if that's the way they write it. It has gained some adherents among scientists and scholars; but I have never seen any answer to the inquiry, Would they, then, revolutionize all our literature and reprint all English standard authors in the new jargon? Does anybody imagine that a Shakspër, so metamorphosed, would smell as sweet? Is not the spelling of our old authors part of their genius? Admitting that modern editions have modified Shakspeare's spelling, can we afford to reduce it to illiteracy and read—

"That which we cal a roz

By ane other nam wild smel az swet."

This may not be approved spelling, but there are as many plans as roses in this $nu sk \bar{u}l$, and it will be as hard to decide between them as to keep on the old path. Granted that there is force in all that is said about the anomalies of English, there they are, and you must cut down the old oak to get rid of its gnarls and contortions. Our language is a growth, not a manufacture. Every word has a history, and orthography points out the history and suggests the etymology. To help the lazy and the

stupid must we make a holocaust of such precious elements as these? As a matter of fact, children of intelligence, taught by the eye, with chalk and blackboard, catch the correct forms very readily.

If education and not mere "preparation for business" is the idea, I must bear witness to the splendid gymnastics of mind to which our language subjects the growing boy. He learns a hundred things besides spelling in his spelling-class. He gathers the history of words, the roots of speech, the philosophy of language, and the elements of many languages besides his own. Here, if anywhere, applies the true wisdom of Providence, so beautifully signalized by the poet—

" Pater ipse colendi Haud facilem esse viam noluit. . . . curis acuens

mortalia corda, Nec torpere gravi passus sua regna veterno."

-Bishop A. Cleveland Coxe in The Forum (October.)

THE Appalachian Philosopher gives the following twelve ways of injuring the health :

t. Wearing of thin shoes and stockings on damp nights and in cool rainy weather. Wearing insufficient clothing, especially upon the limbs and extremities.

2. Leading a life of unfeeling stupid laziness, and keeping the mind in an unnatural state of excitement, by reading trashy novels. Going to the theatres, parties and balls, in all sorts of weather in the thinnest dress ; dancing till in a complete perspiration, and then going home without sufficient overgarments, through the cool, damp night air.

3. Sleeping on feather beds in 7x9 bed-rooms, without ventilation at the top of the window; especially with two or more persons in the same small unventilated bed-room.

4. Surfeiting on hot and very stimulating dinners; eating in a hurry, without half masticating the food, and eating heartily before going to bed, when the mind and body are exhausted by the toils of the day and the excitement of the evening.

5. Beginning in childhood on strong tea and coffee, and going from one step to another, through smoking tobacco and drinking intoxicating liquors, and personal abuse, and mental and physical excesses of other kinds.

6. Marrying in haste and getting an uncongenial companion, and living the remainder of life in mental dissatisfaction, cultivating jealousies and domestic broils, and being always in a mental ferment.

7. Keeping children quiet by giving paregoric and cordials, by teaching them to suck candy, and by supplying them with raisins, nuts and rich cakes; when they are sick by giving them mercury, tartar emetic and arsenic, under the mistaken notion that they are medicines and not irritant poisons.

8. Allowing the love of gain to absorb our minds, so as to leave no time to attend to our health; following an unhealthy occupation because money can be made by it.

9. Templing the appetite with bitters and niceties when the stomach says no, and by forcing food into it when n-ture does not demand, but ev.n rejects it; gormandizing between meals.

10. Contriving to keep a continual worry about something or nothing ; giving away to fits of anger.

11. Being irregular in all habits of sleeping; and eating too much, too many kinds of food, and that which is too highly seasoned.

12. Neglecting to take proper care of ourselves, and not applying early for medical advice when disease first appears, but by taking "celebrated" quack medicines to \perp degree of making a drug shop of the body.

THE following is well fitted for our "Contemporary Thought" columns :---

The Prince of Wales has addressed the following letter to the Lord Mayor :

Marlborough House, Pail Mall, S.W., September 13, 1886.

DEAR LORD MAYOR,

My attention has been frequently called to the general anxiety that is felt to commemorate in some special manner the approaching jubilee of Her Majesty's reign. It appears to me that no more suitable memorial could be suggested than an institute which should represent the Arts, Manufactures, and Commerce of the Queen's Colonial and Indian Empire. Such an Institution would, it seems to me, be singularly appropriate to the occasion, for it would illustrate the progress already made during her Majesty's reign in the Colonial and Indian Dominions, while it would record year by year the development of the Empire in the atts of civilization. It would thus be deeply interesting to Her Majesty's subjects both within and beyond these islands, and would tend to stimulate emigration to those British territories where it is required to expend the trade between the different British communities, and to draw closer the bonds which unite the Empire. It would be at once a Museum, an Exhibition, and the proper locality for the discussion of Colonial and Indian subjects.

That public attention has already been forcibly directed to these questions is sufficiently proved by the remarkable success which is attending the Colonial and Indian Exhibition at South Kensington, and I confidently anticipate that arrangements may be made whereby the more important collections, which have so largely contributed to this success, will be placed at the disposal of the Institution.

I have much satisfaction in addressing this letter to your Lordship as Chief Magistrate of the capital of the Empire, and to invite your co-operation in the formation of this Imperial Institute of the Colonies and India, as the memorial of Her Majesty's jubilee by her subjects. Should your Lordship concur in this proposal, and be willing to open a fund at the Mansion House, I would suggest that the contributions received be vested in a bedy of trustees, whom the Sovereign would be asked to nominate, and I would further suggest that the Institution should be under the permanent presidency of the Heir Apparent to the Throne.

I remain, dear Lord Mayor,

Yours truly,

ALBERT EDWARD, P.

To the Right Hon. the Lord Mayor.

In reply to this communication the Lord Mayor has expressed his readiness to co-operate heartily in promoting the formation of the proposed institute, and to open a fund at the Mansion House for the receipt of contributions. ----

Notes and Comments.

In our next issue will be commenced a series of papers on the Literature for Entrance Examinations.

WE hear that Mr. Thomas O'Hagan, M.A., has resigned his position as teacher of modern languages in the Pembroke High-School.

WE are requested by the Education Department to state that it is the intention to prepare papers for the next entrance examination to high schools containing a greater number of questions than the candidates will be required to answer thus giving them a choice of eight or ten on the paper. Also to make a correction in the circular sent out some time ago in which it was stated that candidates would be required to submit drawing books nos. four and five to the examiners : it should have read four or five.

THE American Teacher thinks every teacher's private library should contain some of the following list of books:--

Methods of Teaching : by John Swett.

Object-Teaching and Methods for Primary Schools: by Henry Barnard.

Mistakes in Teaching : by J. L. Hughes. Theory and Practice of Teaching : by David P. Page.

How to Secure and Retain Attention : by James L. Hughes.

School Keeping,-How to Do It : by Hiram Orcutt.

Science and Art of Education : by J.Payne. On Primary Instruction : by Simon Laurie The Elements of Pedagogy : by Emerson

E. White. The Education of Man : Froebel.

Ogden's Art of Teaching.

Hewett's Pedagogy.

How to Teach: by Riddle, Harrison &

Calkins.

Hailman's Educational Lectures.

Fitch's Lectures on Teaching. Theory and Practice of Teaching : by

Thring.

The Ends and Means of Teaching: by Henry Calderwood.

The First Three Years of Childhood: by Bernard Perez and James Sully, M.A.

THE 25th of October has been set apart as a second school Arbour Day in Pennsylvania. "This subject," says the Pennsylvania School Journal, "should be talked of pleasantly and profitably in every school in Pennsylvania. Every Normal School should give it earnest attention. Every County Institute should place it upon the programme for discussion of the best practical means of securing the more general planting of trees, vines and shrubbery, both in the vicinity of the school, and by the pupils at their homes, and so far as possible throughout the various school districts. Agitation, agitation is needed. Nobody disapproves what must b' only a growing benefit to the community. But the leaven of agitation in every educational centre is needed to convert passive approval into active personal interest and a resolute purpose that the work shall be done. This work is not for a day, nor for a year, but for the pleasure and profit of the next and it may be of succeeding generations as well as of the present. It is poor economy for one generation to rob the next of wood, shade, fruit, beauty, moisture. We should leave the world richer than we found it not poorer or less attractive. Let it he our aim then, definitely proposed, though, it may be, never to be attained-that every school shall plant trees and shrubs and vines about its buildings ; every church about and within its enclosure ; every good citizen about his home and upon his farm and waste lands; every township along its roads; every city town and village along its streets and in its public parks and squares. So shall the naledness of the land be clothed in beauty, the supply of all kind of fruits be more abundant in their season, the torrid heat of summer be mitigated, the purity and moisture of the atmosphere be increased ; the streams flow more full and steadily, and, in a word the Arbour Day millenium be realized."

EDUCATIONISTS generally, and teachers in particular (says the North liritish Daily Mail), would do well to study the admirable series of papers on "The Schools of Greater Britain" presently appearing in The Schoolmaster, the organ devoted to the interests of public school teachers in England, and a journal that has latterly been making consider. able headway in Scotland. The articles have been suggested by the very complete display made in the respective educational sections of the great Colonial Exhibition of South Kensington. They are as elaborate and exhaustive as if the writer had been specially commissioned to make a personal tour of our colonies, and to draw up a report bearing on every phase of the education question in Greater Britain. In the six papers that have already appeared a complete survey is taken of the schools in the Dominion of Canada, taking in the two divisions of Canada proper. Ontario and Quebec, with New Brunswick, Nova Scotia, Prince Edward Island, and British Columbia. The most striking differences'twixt the old country and these and other colonies are to be found in the fact that our kin across the sea despise and reject our system of payment by results and our worship of percentages, and with rare exceptions open their schools free to all comers, the school being supported by general taxes and local rates. Many interesting figures are given in the articles on the salaries of teachers in the Dominion. It is an eyeopener to learn that the average salary for schoolmasters in Nova Scotia is only $\mathcal{L}84$, and that the most highly remunerated headmaster there has a stipend of only $\mathcal{L}137$! What would the 500-pounder headmasters under the Glasgow School Board say to such comparatively slender emoluments? The articles in *The Schoolmaster* are of permamanent value, and are likely to be reproduced in book form. They are eminently readable and instructive.

UNDER the title "Rainy Days" a correspondent writes a letter to the *Schoolmaster* (London, Eng.) which we think many ought to read. It runs as follows:

"Str.,—My father is the treasurer of a voluntary school in the north-west of London; and it is my part, every month, to write out the teachers' receipt-forms for their salaries, and going to schools afterwards to receive them back, duly signed. Thus it is that the amount of each teacher's salary comes under my notice. And here let me state, that in my following remarks, for the sake of clearness, I shall refer to women-teachers only.

"Our teachers in the girls' and infants' schools command salaries varying from \pounds_{40} \pounds_{100} ; how much of this is laid by for a rainy day? Not much, I fear.

"Take a case in point : last winter, during the time of the Mansion House Relief Fund, one of our lady visitors whose duty it was to inquire into the merits of cases that had applied for relief, came upon the following sad case. A young woman, whose first child was but a few days old, the husband was out of work, their things were nearly all pawned, rent was owing, and they were in dire need of food and clothes.

"A few questions drew out the sad fact that up to the time of her marriage, this woman had been a teacher under the board, drawing a salary of \pounds_{120} per annum; of this she had saved nothing ! She did not know how the money went, but 'it always seemed to go out as fast as it came in."

"Can this be taken as a solitary instance of neglecting to lay by for the rainy day, which came so much sooner than expected; I should be glad to be able to think so, but fear it is not an uncommon case.

"Of course it must be remembered that though teachers can command better salaties in London and other large towns than elsewhere, yet the expenses of board and lodging will be comparatively greater. Also that teachers must always beneat and well-dressed, and that some of them, doubtless, contribute towards the support of aged purents.

"Yet all this taken into consideration, does not do away with the fact that many teachers might and ought to lay by something for a rainy day. Rainy days will come, and as they generally come unexpectedly, it is the more imperative that some provision should be made for them."

Literature and Science.

STONYHURST AND ITS SYSTEM. (Concluded from our last issue.)

A STONYHURST day is a busy one. It will be interesting to follow the order of exercises. Winter and summer, the scholars rise at half-past five. Morning prayers and mass follow in the chapel, which brings them to a quarter to eight; when there is a breakfast, for which a quarter of an hour is allowed. After breakfast follow two hours in the classes. Half an hour's recreation in the playground succeeds, when there is another hour's classes for mathematics and arithmetic. Dinner is served at half-past twelve, to be succeeded by an hour and a half's recreation in the playground. There is then half an hour's study, with an hour and a half's evening class; recreation then for about three quarters of an hour, chapel for a quarter of an hour, and "night studies" for an hour and a half; and with the welcome sound of "Put up your books" the working day comes to a close. Supper follows, with an hour and a half's recreation. All are in bed by nine. It will be seen that in this arrangement the spells of study and play are judiciously alternated.

A traditional "motor," if we might so cell it, for supplying interest to the studies is the dividing each class into two parties, called Romans and Carthaginians. This is regulated by a system of marks with banners, marked "S.P.Q.R.," pulled down on defeat ; the foremost boy being hailed as imperator, and the officers under him being styled tribunes. prætors, etc. This may seem fantastic, and with familiarity it might be thought would lose its force ; but the alternatives of success were accompanied by these never-failing stimulants to boyish industryreward in the shape of holiday and "banquets." This was a relic of the old Liege days; and, when the summer time came round, these accumulated debts were paid and the anticipated and hardly won enjoyments realized. There was what was called "a blandyke," or good day, when every enjoyment was provided; late rising on the following morning, luxurious breakfast and dinners, fishing, or some distant expedition to see the mysterious world without. One of the most gratifying and delightful feelings excited was the sense of privilege; companions being seen, throughout the day, pursuing the drudgery of school life, and casting wistful glances at the favoured holiday-makers. For a variety of services or merit this reward was given, and there were what were called "good suppers" in the old baronial hall; where the rafters re-echoed to song and laughter.

The Jesuit system of discipline for the

and fifty in number, of all ages and degrees, is a remarkable one. This is administered by three prefects-first, second, and third. These officers attend to these duties only, much as the proctors do at the universities ; and in the playground or at study-time one or other is always en faction. Though in later days there has been some modification. it is chiefly in the shape of delegating these duties to trusted "first-form" boys. Such concessions, however, are rather inconsistent with the principle of the society, which is that of rigorous supervision. This spirit is illustrated in the "castrated" editions of the classics of which De La Rue's "Virgil" is the most familiar instance. Our public schools go upon another principle; the argument being that the shock of introduction, on entering the world, to what has been so icalously excluded would only lead to sudden and fatal downfall. For my part I find the question a perplexing one.

The prefects, or lictors, as the classicists of the playground might style them, administer the corrective discipline of the place, The punishments are either ordered by the masters or by the prefects themselves, for infraction of rules, insubordination, etc. There are penalties of a mild sort-such as extra studies and forfeitures of various kinds. or, in the case of the more hardened, of the physical sort. A time-honoured instrument is the ferula; a springy piece of leather of the texture and weight of a carriage-trace; the culprit holding out his hand to receive from six to eighteen strokes; eighteen strokes being the maximum. Few things are more disagreeably painful and at the same time more harmless and transitory in its effects than the application of this instrument, Punishment was administered at fixed hours: and it was left to the lad himself to go at his own time and apply for castigation. In this way he had an opportunity of showing his manliness and of taking his punishment with a sense of having deserved it. It is evidence of the skill and tact of the order to have devised this method. For more serious offences there are severer punishments. In so large a gathering one or two "black sheep" are almost sure to be found, and these are promptly dealt with and removed for the general safety of the flock. The principle of settling quarrels by "fighting" is not tolerated; though occasional contests of course arise. Due allowance is here made; but anything like a battle arranged to " come off" in cool blood is severely visited on the offenders.

The studies are directed by an important cfficial, "the prefect of studies," who inspires the whole, examines every three months, and has to superintend the masters. Evidence of the success of the system is shown by the records of the London University, where control of a crowd of lads, about two hundred | during forty years, exhibitions, honour, and |

scholarships have been won far out of proportion to the number of lads sent up.

A provision that obtains in all the colleges of the society is a marked division of the scholars into two sections, which, though working side by side, hold no communication with each other. The three higher classes form one division, called the "higher line," the smaller boys another, the "lower line." It might be two different schools. In the playground a slight rising of the ground separates them. It may be said for this system that the lower classes, being in a state of childhood as it were, look eagerly for promotion into the upper division.

Nothing is so remarkable as to see this band of clever, learned, and laborious men all working hard in the drudgery of teaching and supervision, themselves under strict supervision; and all without fee or reward, save what they look for from the sense of duty well performed.

The associations of Stonyhurst are remarkable enough. The most famous pupil connected with it is Charles Waterton, one of the most genuine "personalities" of his generation. He was one of the first that entered the place. I had the good fortune to be intimately acquainted with him, and have often heard him relate his 'scapes, hairbreadth and otherwise, and his many strange adventures. Readers of " The Newcomes" will recall Thackeray's amiable description of him as "the good W.," who praved for the novelist in a church at Rome. The most brilliant of its scholars was certainly the late Mr. Shiel, who has left some pleasing sketches of the time he spent there. There are few places that binds its sons to itself by firmer and more far-stretching bonds. Here, too, young or middle-aged men and greybeards return again and again to the old home on festivals, sure of a welcome, to enjoy a day or two of the fine air and pleasant champaign country .- St. James's Gazette.

THE Lick Observatory, Mount Hamilton, California, has one great advantage over all others in that its altitude and location in that peculiarly favoured climate furnish a steadiness of atmosphere which permits the regular employment of telescopic eye-pieces which magnify two or three times as much as ordinary instruments. Its elevation also makes "effectively available " a much larger region of the sky than any other station.

IN an examination of 11,175 persons for colour-blindness, Dr. Worms, as reported to the Paris Royal Academy of Medicine, has found but two who were incapable of distinguishing one colour from another, while three were blind for red and six for green, eighteen could not distinguish green from red, fifteen saw no difference between green and blue or grey, and fifty-two had a peculiar weakness in colour-vision in general.

OCT. 21, 1886.)

Special Papers.

CONSERVATISM AND REFORM IN EDUCATIONAL METHODS. (Read before the Ontario Trachers' Ausciation, July 28th, 1886.)

(Concluded from last week.)

I HAVE now given you as briefly as possible a general statement of the most striking features of the "Old" and the "New" methods; and I would remind you again that I am very far from asserting that the socalled "new" methods are entirely new. There is not a teacher before me who has not been familiar with many of these ideas all his days. But the apostles of the "New Education " call these methods peculiarly their own; and for the sake of clearness I have for the moment accepted their assumption. The series of contrasted methods which I have tried to outline might have been more suitably described, some may think, by the terms "Rational Methods" and "Irrational Methods," but as the chronological distinction is the one in common vogue everywhere, I have preferred it, making at the same time a disclaimer as to its validity. No one can suppose that the great poets and philosophers and statesmen of the past were trained by abject fools, for abject fools our ancient and more recent predecessors must have been, according to the estimate of some modern ingrates. All the so-called new methods have not suddenly dawned upon the world in these latter days. Some of them have been the result of the experiences of ages. Many of them, however, are novel and are by no means in universal use.

It is our duty to give these newest methods our earnest consideration. If science and experience teach us that they are in the main right methods, we are all, I am sure, ready within our narrow limitations to effect whatever reforms are practicable.

My subject has again and again tempted me to go beyond its obvious scope, and to deal with a topic quite as important-" Rational Courses of Study." This topic I hope we shall be allowed to discuss at the next meeting of this Association if anyone can be found courageous enough to introduce it. The two are companion topics, and in dealing with the one I have found it necessary more than once to allude to the other. However good one's methods may be, it school-studies are arranged without regard to sequence in the processes of mental development the general results will be somewhat disappointing still. Milk and meat are both very good things, but milk is for babes, and "strong meat belongeth to them that are of full age." Reforms in educational methods have contributed to the solution of what should be regarded as the most momentous of the secular problems of this age; but the full

solution will not be reached without more radical reforms. Rational methods of study will have a career or struggle il they are divorced from rational courses of study. Nature has joined them together and the formal union must be consumated soon. As individual teachers we have a measure of freedom in the adoption of methods; as to courses of study we are the obedient servants of the educational authorities and must follow their guidance. The silent revolution is in progress and is making sensible and satisfactory headway. The educational authorities in this Province are moving as rapidly as they dare along the new lines. We are living in a season of necessary educational mutation. Notwithstanding the popular outcry against it, there must be change, continual change for many years to come, if we who should lead the vanare not to fall in the rear of the world's To stagnate while everything activities. about is in motion would be a sin and a disgrace. In every department of human industry and thought we see to-day life and change. The schools too must move. The schools should be the source of all that is best in the world's thought and the world's work, and the pulsations of their throbbing energies should be felt throughout the whole social organism.

In conclusion I would call your attention to a matter that comes home to us all. Anyone who reads the newspapers, the magazine, the latest scientific works must be well aware of this; the schools of to-day are lying under a heavy reproach. The Lancet (in effect) affirms that irrational educational methods are helping to deteriorate the race. A writer in the American Journal of Insanity asserts that "the bine of our present system of domestic and educational life is the cramming process which is mere remembrance, and may be indulged in with no more originality than are the chatterings of a parrot." A distinguished educational philosopher tells us that "the schools are out of joint with the times and the instruction which they afford is not the highest and best either as a disciplinary force or as a preparation for the duties and occupations of life." A writer in the Toronto Mail not twenty days ago declared that many "generations will come and go before the science of teaching is conducted on truly scientific principles." Are such declarations, hundreds of which prick our self-complacence every year, are such declarations to be resented as libellous ; or are they to be accepted as just and to urge us to vigorous reform? With me you will acknowledge that much of this reproach is merited, but you will protest that much of it is undeserved. There are two causes I think, of the indignity that is put upon us; one obvious, one latent. The question has often been asked, "Why is not teaching

regarded as one of the learned professions ?" Teachers nave always had a very ambiguous status. A mild sort of odium seems to be attached to the occupation of the pedagogue. Why is this? Public opinion regarding schools and school-masters is, to a great degree, the opinion of grown up boys and girls founded on reminiscences of their school days and on the estimate that was then formed regarding the nature and value of the work of their teachers. If a teacher is hated by his pupils, those pupils will carry some remnant of their hatred through their lives, and will judge the whole brotherhood of teachers accordingly. If a teacher's work is worthless because of inedequate scholarship or irrational methods, the very children will soon recognize the fact and they will always carry in their memory some trace of their early disrespect or contempt. Thus I believe that our present unsatisfactory status as a profession is partially the work of an unerring nemesis. The sins of the past are visited upon the present. We have our own faults to answer for, and the faults of our fathers too. If this be true we should realize the terrible responsibility that is ours. We are every day in the school-room fixing not only our own social and professional standing but also in no small degree the standing of those who are to fill our places when we are gone. Some of the opprobrium that is heaped upon us we deserve, and this it should be our first endeavour to remove. Some school-masters maintain that most of the wonderful inventions of the nineteenth century are the product of thought awakened in the schoolroom, and attempt to prove from this that the education of fifty years ago was not to worthless as represented. However that may be we may be certain of this : If we do our duty in this generation; if we banish from our schools all traditional methods that are bad and introduce all the newer methods that are good; if we set growth before knowledge; if we set things before books; if we set judgment before memory; if we see to it that our schools are hives of industry rather than dormitories of sloth; however great has been the progress of the century fast drawing to its close, however wonderful have bee . the works that have come from the ingenious mind and the cunning hand; however startling have been the revelations of science in its various fields; this marvellous century will not be worthy to be compared with the century that is soon to J. E. WETHERELL. dawn.

IN nine cases out of ten a fit of "the blues due to physical trouble. In sorrow and grief, when discontented and unsatisfied, do not sit down in idleness and brood over your misfortunes. Get up and do something; move about smartly; set the blood in motion; start the perspiration; occupy the mind and body alike with some useful purpose. The active man has not time to grieve, and when he is busy "the blues" disappear. — The Londom Advertiser.

GOOD MANNERS FOR YOUNG PEOPLE.

Good manners are not so easy to get, after all. Perhaps you never thought that man ners were something to be got, but that they just came of themselves, or grew up inside of you, and somehow got outside, and that you need not show you had them unless you wore your best clothes and felt just like it. That is all a mistake. They have to be got, and then they have to be worn all the time.

First of all, you want to have manners that will last. You do not want to borrow them by imitation: for then people will know they are not yours, and imitations wear out Much rubbing shows the real composition of ruything, just as the constant polishing of plated silver shows at last the base metal beneath. So, if a boy is at first very polite, but, when somebody bothers him, or asks him to do errands, or rubs him the wrong way, he then begins to get cross and rough, he proves that his politeness was of very thin plating.

Good manners must be founded on simple, sincere purposes; else their polish soon vanishes. It is not looks that makes good manners, and it is not money that makes style.

Style is a secret, and I will tell you what makes it; for it may be something you want. It is first, being straight, whether you are tal. or short, thin or fat. Round-shouldered boys and girls, even if handsome, are never stylish. Then it is wearing your hair according to the shape of your head, and when your head falls in at the back, putting your hair up so as to hide the hollow place; and when your forehead is low, not making it lower by too much "frizzling," or " banging ;" for boys even " bang ;" and by choosing the way that is most becoming, and always wearing it so, you will have a style of your own, which is what each one wants. Never cover with heavy lace the throat unless it is thin and long; and even then do not let the lace be wrapped in wads, but let it fall loosely around the neck. Wear your clothes, whether you are boy or girl, so that your walk suggests the thought of easy motion; and let them never be more than two shades of the same colour. When you bow or speak to people, do it as if you were glad to see them, and yet though they were a great deal better than you, and you will have cordiality and reverence in your manners, and will be stylish. Cool, or "bossing," or snubbing ways are never in firstclass style. The tone in which one speaks to a servant tells whether he is first, second or third-class type.

If you want to make other people and yourself happy, you must not be selfish; and you know what selfishness means when you are teasing some one. You must be really in earnest, and not be kind because it is fashionable, or because you can get your own way

better; but because it will help some one else, though it may not help you; and then you will not have your conscience tormenting you, which is a great hindrance to happiness. But as we cannot get rid of it, we have to keep it silent, by obeying it right off, clse it even spoils our dreams.

Yet if you have simple, sincere purposes, you may not have good manners. Do you not often say of some boy, "Oh I he is good enough ; but he is so awkward ! He has not any manners?" Or if a girl : "What is the use in her being so good, when she has not any tact?" So you admit that goodness is the first thing. But your toes do not feel much better if they are stepped on by accident rather than on purpose, though it makes a difference as to whether you will knock down the offender or tell him to take care. When a kind-hearted sister hunts for your ball, you wish she would not tell all the other fellows that you are "the plague of her life;" and when the sister asks her brother if he likes her new dress, he need not reply: "Well enough. If girls didn't have new clothes, they wouldn't amount to much."

Very good boys and girls eat fast and eat with their knife, slam doors, rush through a room, talk aloud, sit with their arms wide apart, swing their arms, shake their shoulders, bow as if they were as stiff as ramrods or as loosely jointed as a jumping-jack, so that they bow all over themselves, never offer older people a seat, make up faces, say careless things, and use bad grammar and slang. Besides being good, you must have enough taste to see that all these things are ungraceful, unneat and rough. You may not think so at first. But I have known many a boy very much out of sorts just because he has seen some one who never does these things, and yet is as good as he is, and whom everybody likes; and I have seen many a girl stand before the glass and wonder why people look askance at her and never ask her to parties.

So manners are something to be studied; but are not all to be of the same pattern, else they will be borrowed. Affected girls, and swaggering and "dude" boys, always borrow, and are always laughed at.—*The Independent*.

A YOUNG man who treats religion and religious institutions with respect secures more respect from others, and has more self-respect, than he who shows contempt or indifference for such matters.—Our Youth

WE argue for a liberal education of our children, not merely to prepare them for some particular employment, but rather to give a broad mental culture which will bring into full action all the powers of the mind, and thus better enable them to judge of their capabilities and their adaptation to special employments in life.—S. Brownsberger, in the HealdsburgsCollege, Cal.

Educational Opinion.

EDUCATION AND CRIME.

IT has been a mistake to claim overmuch for education beyond the range in which its influence was legitimate. There is scarcely any limit to its possible influence, though there is a definite limit to its inevitable influence. In the realm of morals the possibilities are grand, but the inevitable is not great. Education might be so applied as to exterminate crime, but left to itself there is little assurance of high, positive effect upon the proportion of crime. Because the teaching is usually done by men and women of high moral character, and definite moral aim the education of our schools is emphatically beneficial. While there is nothing in the mere development of intelligence to cure malice, lust or greed, and while the instinct of thievishness may be the same in the boor and the scholar, it is time that the teacher,--the universal teacher,--who has any fair opportunity, should reduce the probability of crime manyfold. It is too much to ask that the teacher with fifty or seventy children in her care, shall eradicate all the vicious notions sown by an anarchist family that concentrates by heredity, constant companionship, and venomous talk all that is fiendish in the socialistic philosophy. The teacher cannot always counteract these combined evil forces, though she frequently rescues children from all the consequences which appear inevitable in birth, companionship, and surroundings.

It is fashionable just now to decry the probable good influence of mere intellectual training. In the name of philosophy and experience we do not hesitate to affirm that the good teacher,-and the vast majority of our teachers are good,-through intellectual culture alone sways thought and emotion, head, heart, and life in moral ways. No man leads other men with such permanent and powerful mastery as he who unfolds the mind, develops its powers, reveals its possibilities to itself. A good man or woman who, without special moralizing, commands the mental activities of the young is by these very mental evolutions reducing the probabilities of crime, and increasing the chances of virtuous activity.

The mistake is in having too little opportunity for such leadership. The worst feature of the industrial education tendency is, that there is danger of diverting the thought of teacher and pupil for clear-cut intellectual activity. It ought not so to be. The mind ought to be led more effectively when it follows hand and eye than when it soars abstractly; but unless the teacher has the skill to keep the mind active, it gets into ruts,-loafs, lingers, and is a prey for vicious thoughts, as the street lounger is for vicious Ocr. 21, 1886.]

companions. Keep the children at school remove the mechanical requirements from the teacher, do everything possible to enable him to stimulate the mind in its studies, and you are lessening the probabilities of crime. Some men highly cultured will be successfully preyed upon by tempters and temptation. The noblest family inheritance. the best of home training, the choicest lifelong companionships, even activity in the church itself, is not enough to make some men sure to escape crime. It is too much, therefore, to ask that education take children who inherit all the appetites, tendencies, and dispositions that make for crime; whose home life sets, like a tidal wave, sinward, and make every one of them upright, honourable, law abiding, virtuous.

Taken all in all, intellectual education in the hands of good teachers has as much moral improvement to show for its expenditure of energy as any philanthropic reformatory, or even religious effort. There is a philosophy for this experience, and the nation may rest more hopefully in the moral and patriotic product of her schools than in any other force that she commands. The church needs the best fruits of the schools upon which to found her faith and ethical activity intelligently.—New England Journal of Education

OVERWORKED SCHOLARS.

IT seems, according to a writer in the Chicago Times, that some recent statistics have been taken on this subject, and this time by a president of one of our colleges. His evidence was collected by sending circulars to one hundred and fifty teachers and physicians of observation and experience, asking for their opinion on the matter in question. The almost unanimous answer was that the school-room work ordinarily allotted was not detrimental to the health of the pupils. The unanimity was broken, however, by five. The alarm, therefore, concerning over-study as an imminent danger may be set aside, and yet there is some caution worthy of being instituted. For this evidence brings out the fact that very many of the pupils in our public schools were injured by the branches pursued out of school, by injudicious home-training, etc. With the girls, who are pupils, and who are also in the social current, or touched by it, the pressure is somewhat greater. Whether, other things being equal, they are able to bear the same tug and strain that boys can undergo, was not inquired into; but the fact was elicited that they really do undergo more. The study of music alone, which is almost exclusively a girl's extra, entails additional mental activity, together with two hours' time besides, given up to dreary and monotonous practice. School-girls, also, are often out at evening parties, and when

at home they are often shut up in the parlour to receive calls. While they are whitening themselves with a sedentary pallor by attending to these exactions, their masculine schoolmates are out in the fields and jumping over fences, or playing ball, or doing something of an athletic or open-air nature. It may not be quite as moral tc climb trees and rob birds' nests, or to do a thousand things of the horse-play nature that boys will do, as it is to sit in the house and be a lady; but it is, without doubt immensely more healthy. — The Hour.

THE PROVINCIAL UNIVERSITY.

THE Globe, in an article on "Victoria College and Toronto University," says :--It is not going too far to predict that judging from the present outlock, the Provincial University, with its circle of affiliated colleges, will in a very few year be second to no university on this continnut as a centre of the highest and most liberal culture. If it fails to reach this proud eminence its failure will, to all appearance, be due to lack of support from the Province at large rather than to lack of liberality on the part of the Methodist church. In one respect the University of Toronto has an enormous advantage over the best of American universities-it draws its alumni from secondary schools that are more efficient now than those of any State of the American Union, and are yearly becoming more so. With a better start, equal average ability, and as good facilities for the acquisisition of learning, the Canadian student will more than hold his own in the keznest competition. He is doing that now.

The citizens of Toronto have a deep interest, in this great question as citizens of Toronto. Those of them who are Methodists have a greater interest, of course, but all others have some. The presence in a large city of such an institution is productive of incalculable, but enormous benefit. This is due not merely to the fact that it is a source of intellectual life and culture, though that is a matter of great importance. It is due even more to the fact that it is a centre of social and moral influence, without which mere intellectuality can do little for either the conversation or the improvement of that organized society which men call "the State." The power of the Provincial Univesity for good, from this point of view, will be more than doubled by federation, for it will become " Provincial" in a more significant sense of the term, and the city in which it is situated will benefit more than any other place.

The greater the importance of the University system of Toronto, the greater the responsibility for its efficiency. There are wealthy citizens who are not Methodists, who should be willing to aid in making

Victoria College what it ought to be-a thoroughly efficient competitor of the Provincial University College. The more efficient it is on its secular side the better for both institutions, for the cause of higher education, and for the city. In Montreal all classes, without distinction of creed, have assisted in making McGill University a credit to their city. The citizens of Kingston have been equally liberal towards Queen's University, in which all take a local pride apart from denominationalism altogether. So it should be in Toronto. The expectation of the promoters of the scheme, that they will be able to secure in Toronto funds sufficient for the needed buildings is not an unreasonable one. On the contrary, the people of Toronto should contribute also a portion of the endowment, and we have no doubt that they will when the appeal is made to them to do so.

The Popular Science Monthly for October does good service for American children when it pleads for such direction to the teaching of the public schools as shall emphasize common sense and reduce credulity to the minimum. There is no question but that the schools have not checked the credulous element in man so much as they ought with their opportunities. No child can make a reliable man, with intellectual characteristics for self-protection, who is over-credulous. It is a reflection on the work of the public school when the quack and the confidence man thrive, when it is profitable to flood the mails with faudulent advertisements which only credulous, unbalanced, untrained minds will spend the time to read even. It would be a great economic boon to the country to have the school so far enlarge the common sense of the youth as to save the next generation from the fraudulent arts of the quack.

THE lack of a pronoun of common gender in our language occasionally causes the forination of some amusing sentences. Thus, a writer speaking of the natives of Point Barrow, observes : "If anything was given a child it showed its appreciation thereat sometimes in words, but more often in smiles and by informing its plavfellows that he or she had been shown especial favours by the great white captain." An educational article, referring to school-children of either sex, says : "We believe there was not a single individual who did not understand the full purpose of their act." The pronoun whoso might be used more frequently than it now is in cases of this sort. The following is a good sentence in point : "The English language itself, with its treasures of great books, is, in my opinion, quite capable of furnishing to whoso will study it rightly all the indispensable means of mental culture.- The Student. TORONTO: THURSDAY, OCTOBER 21, 1886.

OVERCROWDING IN THE PRO-FESSIONS : ITS SOURCE AND ITS REMEDY.

A LEADING article in a recent issue of the Toronto *Globe* contained the following paragraphs :--

" In a country like ours, where farming must for many generations to come, continue to be the leading and most profitable industry, the problem of how to 'keep the boys on the farm' is sure to be an important one. The professions have long been so overcrowded that nothing short of extraordinary aptitude and exceptional industry and perseverance can secure for a young man a reasonable promise of a competence in any of them, except it be after years of patient labour and stringent economy. In the trades there is certainly no better promise, as the nine-hour movements and other devices for dividing the available employment among as many as possible amply prove, while the lighter employments, such as those of drygoods and grocery salesmen, bookkeepers, and copyists offer still less promise of satisfactory remuneration.

factory remuneration. "And yet in spite of all this farmers' sons will continue to leave comfortable homes where, through patient industry and reasonable economy, they can be sure of a compe-tence and a life of comparative independence tostill further swell the ranks of pauperdom in ourcities. To the boy of eighteen the near prospect of four or five dollars a week more than hisboard is too apt to be over temptiny. Looking no further than the present and the very near future, he thinks only of having absolute freedom after regular working hours and four or five dollars each week with which he can do as he pleases. The allurements of city life invariably take a strong hold upon the imagination of a country-bred boy to whom rural enjoyments have become such matters of every-day existence that they are sure to be greatly undervalued.

"That a farmer's son having plenty of health and strength, as well as a practical knowledge of farming, should thus blight his own future, is indeed a pity, especially in a country like this where unimproved homesteads can be had for the asking, and where wild lands can be purchased at a nominal figure. Canada has land and remunerative work for everybody who wants to be a farmer, and yet she has thousands upon thousands of half-starved men, women, and children whose life is one long and bitter struggle with pinching poverty."

A writer in *The Week* also in the same strain says:

"That this is a young country and a rapidly progressing country we are all fond of saying over and over again. But some of us are sometimes apt to form very erroneous ideas as to what true youthful vigour and progress mean. To many the sole aim of life is to 'better one's self,' and by 'bettering one's self 'is meant entering a sphere of life presumedly higher than that in which one finds one's self, begining life where one's father left off. The farmer's son thinks he would rather teach than follow the plough; the tradesman educates his boy for the bar

or the ministry; the clerk behind the counter enters the medical profession. What is the result? A twofold disturbance between demand and supply: a deficiency of manual labour; a superabundance of intellectual labour.

labour. "The first is, to a large extent, counterbalanced by immigration; the second has no remedy—hence .he outcry against 'overcrowded professions,' low salaries,' underbidding'; hence also a lower grade of lawyers, of physicians, of clergy, of teachers. Competition being keen, and birth and education being at a discount, the status of the learned professions is not maintained; professional dignity, even sometimes professional honour, is lost.

"The important industry of the Dominion is undoubtedly the agricultural industry. This surely is undeniable when we remember not only the millions of uncultivated acres we possess, but also the magnificent means of transporting their products which we possess. Granting this it does seem a policy short-sighted in the extreme to tax the owners of these acres and these means of transportation in order that their sons may become B.A.'s or LL.B.'s rather than farmers or shopkeepers. If B.A.'s and LL.B.'s could be persuaded to follow the vocation of their fathers-to go back to the plough and the counter with the knowledge that a 'higher walk of life' means doing what their fathers did better, more iutelligently, more scientifically, all would be well and good-indeed better, for undoubtedly these Bachelors of Arts and of Laws would make the best ploughmen and the best clerks. Unfortunately they cannot be so persuaded."

If these views be correct, we must look deep for the source of the present state of overcrowding in the teachers' calling. That there does exist a state of overcrowding many facts afford evidence. It is to this that we must trace the very laudable attempts to raise the dignity and status of teachers: the endeavour to place the teacher on the same footing in society as the members of the Bar, Medicine, and the Church. To this also must we trace the undoubtedly low average of salary paid to intellectual work of no mean character. Indirectly perhaps also may be traced to the same source the project of forming a College of Preceptors for Ontario recently mooted.

What are the remedies for this s ate of things? We think they should be vigorous whatever they are. The causes are radical, the treatment should be radical. It 's uscless to prescribe for the symptoms merely. Underbidding cannot be put down by banding together. Social status cannot be gained by clamouring for right to social status. Increase of salary will never be obtained so long as supply is greater than demand.

Two remedies are possible : discourage intellectual pursuits, encourage rural occupations. To effect this, more stringent measures regulating the granting of teaching certificates are required; and the creation of some legitimate inducements by which fewer persons shall be tempted from the plough and the harrow to the pulpit, the consultation-room, or the schoolmaster's desk.

Too long already have the inducements been on the other side. Too liberal an education has been obtainable and can be obtained in Canada for a comparatively small sum of money. A degree in Arts, not inferior to the "ordinary" degree of Oxford or Cambridge is within the reach of those to whom not even the expression "well-to-do" could be applied. Fees are small in Arts, in Medicine, and in Divinity. In short, the "higher education," almost we might say the highest education, is obtainable by the vast majority of the inhabitants of the Dominion.

If then we would strike at the root of the whole difficulty these inducements must be done away with, nullified, or counterbalanced.

To do away with them suddenly would be dangerous even if possible. To nullify them would be difficult even if feasible. To counterbalance them is within our power.

We can at this time merely hint briefly at a mode by which we think the course of study in our high and public schools could be so altered that a greater number of Canadian boys may be induced to take as their vocation the "important industry of the Dominion"—the agricultural industry.

We should recommend that there be introduced into our school curricula certain optional subjects bearing directly and indirectly upon such matters as are of importance to the farmer and the stockraiser. To be more explicit : that, say by the time the pupil has arrived at the stage of the Third or Fourth Reader (although this is a minor point which can be afterwards determined), he should be allowed to substitute for certain studies certain others such as the relation of soil to plants, plants to animals, and animals to man; the constituents of the soil; varieties of soil and their relationship to varieties of crops; climate and its effects upon soils, plants, and animals; the elementary anatomy and physiology of plants and animals, including such topics, for example, as the nutritive material of cereals, from whence they are derived, how they

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are increased, heir relative values, the nutritive nuterial of beef and mutton, from whence they are derived, how they are increased, their relative values, etc., etc.— It is needless, however, to enter, at this early stage, into detail as regard these subjects; our readers will understand at once the aim and scope of the change we advocate.

To us it seems that the scientific aspect of agriulture has not as yet been sufficiently recognized among us. One agricultural college we possess, but what is it among so many? Again : is not the whole system of our higher education one eminently adapted to tempt our youth away from agricultural pursuits? Excellent examinations they can pass in all such subjects as are required for the initiatory stages of a course in Arts; of the common objects of every-day countrylife (where the vast majority of our lads are bred and born) they know next to nothing. Ground these lads thoroughly, say we, in the rudiments, then, if they wish it, let there be given them an opportunity of gaining some information on matters which will in a short time be of the most v'.1 importance to them.

This suggestion opens up a wide field for thought and discussion. It is sufficient in this place to have brought it before the notice of our readers. We hope to continue the subject in future issues, and in the mean time solicit an expression of opinion on our suggestion.

OUR EXCHANGES.

DR. JOHN S. NEWBERRY, Professor of Geology in Columbia College, opens the November number of The Popular Science Monthly with the story of the great ancient ice-sheet which once covered half our continent, and which, more than any other single cause, gave to it its present surface configuration. With the aid of illustrations the record left by this mighty agency of the past is very clearly interpreted for the general reader, who will obtain from the account an insight into the mode of working of Nature's forces that only years of special study could afford. The Rev. Dr. A. H. Lewis writes in the same number on the origin and results of Sunday legislation. His contention is that the day was first instituted by pagan sun-worshippers, and that it has only been possible to maintain its status in Christian nations by the constant exercise of the authority of the state. Professor Charles A. Young contributes an instructive paper on "Recent advances in Solar Astronomy." In it he summarizes in a very readable way the results obtained and the discoveries made during the last five years by the principal investigators who have been studying the physics of the sun.

REVIEWS AND NOTICES OF BOOKS. The Art Gallery of the English Language. By A.

H. Motrison. Toronto : Williamson & Co.

The following is the *Literary World's* review of Mr. Morrison's book :--

This is distinctly an anomalous book. It is constructed on a somewhat fanciful theory and contains much that is absurd and even grotesque. But it has also very definite merits. The author is an enthusiastic lover of English literature and the English tongue. He draws freely from the ample resources at his command ; and his taste is so catholic, his ideas are so honest and even audacicus, his enthusiasm is so sincere, that while one finds on almost every page something objectionable, one also finds a great deal to admire. The rhetoric, now and then tawdry, ill-designed, and glittering with the tinsel of far-fetched metaphors, is more often firm-woven in well-selected colours, and its texture is a source of mental pleasure. The author's theory is soon outlined. Language is verbal architecture because "words are verbal bricks with which we plan our phrases, build our sentences, and round our periods ;" verbal sculpture, "embodying . . . the corporeal or mental characteristics of an individua., as truly as does the marble bust or statue convey to the human eye the lineaments and form of the being symbolized ;" verbal painting, " containing within its manifold vocabulary all the appliances of the artist to represent form and texture, light and shade, colour and atmosphere ;" verbal music, " appealing by sound to that sense of the beautiful which is innate in every human nature." The reader can easily imagine how the materials are cut to fit the theory. A passage from "Ossian" is likened to the hoary relics of Stonehenge, "each of these rugged periods, isolated, weather-stained, tempest-torn, a verbal monolith;" Carlyle's style is Gotl ?; Shakespeare builds in "pyramidal climaxes;" Bacon in "verbal stories or flats, so to speak, one over the other ;" DeQuincey's "foundations are in the clouds, and he descends by flights of fancies ever broadening to the base, which spreads outwards into the mists of uncounted centuries, and buries itself fathoms deep in the slime and reeds of a forgotten past;"-all this ingeniously, nay felicitously, illustrated, with skilfully chosen specimens and deltly worded arguments in which the frequent digressions are fully as attractive as the lucubrations bearing more closely upon the main theme. Mr. Morrison's incidental remarks with regard to poetic forms are full of suggestions :

"Blank verse is of all mediums perhaps the best for word-building. The smooth iambic penta meter, unhampered by the tricketies of rhyme, lends itself readily to the production of stately effects, and to symmetrical magnificence of construction. The octo-syllabic iambic verse of which we find so much in the romanic school of English poetry is better adapted to the painter's att. . . . Short words are more suggestive of colour, that is, of the commonest colour, and being short they can be massed readily, monosyllable on monosyllable, and trope on trope, till the page becomes a very transformation scene, according to the humour of the artist. . . If the rhyming tetrameter be colour and life-sense, then the decasyllabic of blank verse is Patian marble, or Scottish granite ur may be, cedar of Lebanon. The vistas are c. nnades; Doric pillars or giant trunks. The *ii*maxes—domes, gables, friezes, many-fashioned summits—stretching out to the horizon in straigh. lines, geometrical and correct, with occasional grand sweeps and slightly sinuous undulations, or p creing uv , the heavens to tower above ordinary constructions, as the obelisk erect, looks down on the prostrate column at its feet.

Mr. Morrisen does not, however, insist upon his interpretation of literature and language as absobute an' immutable. He sees that there can be no absolute standard of style and finds in that fact a source of rejoicing. If everyone thought alike "liberty in fetters would mourn in anguish over a Sahara-like waste of inanity," and Mr. Morrison would not be able to propound his interesting conundrums:

"How much of beauty, of ugliness, of happiness, of misery in this world belongs to a vivid imagination or a good digestive apparatus, how much to reality or an ill-conditioned liver? How much of the beauty of literature dwells in one's self, and how much in one's author?"

a conundrum perhaps best answer. ... by him who sees in every work of art "a shalow looking back at itself in quivering but not unsympathetic outlines from the crystalline depths of the psychical profound !"

This of Carlyle is better expressed :

"His thoughts are worthy, and, because worthy, immortal, though giant-like, their limbs are thrust too far through the arms and legs of their often illfitting garments. They have out-grown the meagre and threadbare resources of the verbal wardrobe. Their muscular hero-worship and their double jointed cynicism set the wristbands and trouser straps of a conventional diction at defiance."

The book bears the test of quotation. Its faults are, for the most part, the faults of excess. It ought to be carefully revised, ruthlessly pruned of extravagances, corrected of its glaring errors in punctuation, and provided with exact references, a list of authors quoted from. and a good index. Thus modified it would be an admirable manual for literary training, as well equipped in form as it is now fresh in thought, agreeable in illustration, and attractive in style.

BOOKS RECEIVED.

- The Autobiography of Benjamin Franklin. With Notes and a Chapter Completing the Story of His Life. Part II. From 1732 to 1757; with a sketch of Franklin's life from the point at which his autobiography ends, chiefly drawn from his letters. The River-ide Literature Series. Boston: Houghton, Mifflin & Co. 1886.
- Exercises in False Syntax, and Other Forms of ".d English. For the use of teachers, and candidates preparing for Departmental and Matriculation Examinations. By II. I. Strang, B.A., Head Master Goderich High School. Fifth edition. Toronto: The Copp, Clark Co. (limited), 9 Front street west. 1886. 92 pages
- Hints Towards a Select and Descriptive Bibliography of Education. Arranged by topics, and indexed by authors. By G. Stanley Hall and John M. Mansfield. Boston: D. C. Heath & Co. 1886.
- School Devices; a Book of Ways and Suggestions for Teachers. By Edward R. Shaw, of the High School, Yonkers. N.Y, and Webb Donnell, of Washington Academy, East Machias, Me. New York: E. L. Kellogg & Co. 1886.

Mathematics.

PROBLEMS IN ARITHMETIC

SUITABLE FOR CANDIDATES PREPARING FOR THE ENTRANCE EXAMINATIONS.

9. IF wheat is worth 90 cents a bushel, find the price per cental.

10. John and Thomas have \$329, and Thomas has \$64 more than John. How much has each?

11. A dishonest milkman puts 1½ pints of water into every gallon of milk. What part of each gallon is milk?

12. What is the least number that must be taken from $175\frac{1}{25}$ so that the remainder will contain exactly $11\frac{1}{2}$?

13. By selling tea at S7 cents a pound I gain 16 per cent. What is my gain on a sale amounting to \$60?

14. How long will it take 559.5925 to amount to five times itself at 7 per cent?

15. If money be worth 9 per cent. in what time will \$50.50 amount to 3½ times itself?

16. At what rate will \$70.80 amount to S times itself in 14 years?

17. Find the largest number that will divide 34,137 and 67,638, leaving for remainder 201 and 102 tespectively.

18. What will 7 loads of peas cost, each containing 50 hushels, 50 Res. 21 621/2 cents a bushel?

19. Reduce $\frac{7}{2}$ of four days to the decimal of $\frac{1}{2}$ of $\frac{2}{2}$ weeks.

20. What is the number from which if $5\frac{2}{3}$ be taken $\frac{3}{3}$ of the remainder is $66\frac{2}{3}$?

21. What is the interest on 30 guineas for a year 4 months at 6 per cent?

Answers will be given in a future issue.

(To be continued.)

THE interest manifested by the general public in the Canadian display at the Colonial Exhibition continues in much the same grooves. Inquiries of a general nature are frequently made with a view to obtaining information relative to Canadian woods, minerals, and seme classes of manufactures, and to the growth of cereals, grasses and roots, while constant interest is being taken in the samples of virgin soil exhibited from various parts of the North-west. This exhibit of soils has been of great value in explaining the fact, which it is difficalt for the English farmer to understand, that North-west crops are mostly produced without the aid of manute. The adult visitors to the agricultural section continue to be in a good proportion those of the farming classes, and though many of them do not now intend to emigrate themselves, they almost invariably talk of friends who are contemplating such a step. Among other callers have been a number of gentlemen desirous of sending their sons to Canada in the spring. Many seem to favour a course of preliminary instruction on the Government farms which it is proposed establishlishing next year, though it is not known whether it is intended to allow tuition of this nature to be carried on at these institutions, - Canadian Gentle.

Methods and Illustrations

ANECDOTES OF AUTHORS.*

[The following anecdotes of authors are selected from old numbers of *Literary Life*, —a magazine of high literary merit, published at Chicago.]

CHARLES DICKENS once received a check for $f_{1,000}$ from Holloway, the pill man, which was placed at the author's disposal on condition that one line of complimentary reference to Holloway's cures should appear in the book which Dickens was then publishing in monthly numbers. Dickens sent the check back by the messenger who brought it, without any answer at all.

JULIAN ARNOLD tells a curious story of his father, Edwin Arnold, writing the most of his "Light of Asia" on the cuff of his shirt sleeve while riding on the cars to and from his office. He says his father went into London every morning, and during the ride would write on his cuff with pencil. In the evening, after his return home, he copied the lines off on paper, and in this way wrote most of the beautiful poem.

LORD BYRON was as proud of his feats in swimming as of his poetry. His greatest exploit was swimming the Hellespont, seven miles, in imitation of Leander, the hero of the classic fable. Lieutenant E. Kenhead was his companion, and is said to have been more rapid and more graceful in the water than Lord Byron. Neither of them appeared to be exhausted, but the latter rested several times, swimming to the boat that accompanied them, and holding on to the side while he took some refreshment. Byron had a curious fashion in his daily baths in the Bosphorous, while at Constantinople. He took with him always two eggs and a few biscuits. After undressing, he threw one of the eggs with all his force, marked where it struck, swam to it and ate it in the water. He did the same with the other egg, and then, after swimming till satisfied, dressed himself, ate his biscuits and returned to the city. The uniformity of this practice showed that with all his eccentricities he had some tendencies to regular habits.

THE following story about the late William Culien Bryant is told by the poet's son-inlaw, Parke Goodwin: Mr. Bryant was challenged to fight a duel by a Dr. Holland, now deceased, on account of some offensive words that had appeared in the *Evening Post*; but remembering that Dr. Holland had been previously challenged by William Leggett, without taking any notice of the challenge, he replied to this effect :

"MY DEAR SIR.—I am not familiar with the code of the duellist, but I believe that, according to its provisions, no one has a right to send a challenge to fight a duel so long as an unanswered challenge hangs over his head."

Then the matter was dropped.

A. M. B.

PRONOUNCE THE CONSO-NANTS.

[The practical character of the following article makes it deserving of a place in our "Methods and Illustrations" columns.]

THE British assert that there is a large amount of twang in America. The Americans assert, on the contrary, that it is we who do not speak English. The question is a delicate one; it is like the question of men and women—it will never be solved. We can, therefore, under such circumstances only say what can be done to help the matter. I am going to give you a little key that will be of great value to you all.

The fundamental law of English elocution is to pronounce the vowels well, and let the consonants take care of themselves. It is the mosterroneous statement that ever was made. It explains the American "twang." The rule should be reversed, and should be -Pronounce carefully your consonants and let the vowe's take care of themselves. A great many of our teachers are carried off by pulmonary consumption and diseases cf a similar kind. I am perfectly satisfied that apart from the bad structures that we have in England, a large percentage of the deaths arise from not pronouncing well the consonants. That lesson was taught me by an An arican when I was nincteen years of age. and I read to a mirror for six weeks. I discovered, to my advantage ever since, that I could speak to an audience of two, three, four, or five thousand people without the least inconvenience, and without suffering frem sore throat. What is called in England " Parson's sore throat" is produced by following wrong methods in this respect.

Besides this mechanical knowledge of the language, one must know the use of words. The work of Archbishop Trench has turned the thoughts of the people to the history of each of the words that are to be found in the language, and that history is interesting enough. Suppose you make yourselves masters of the whole that Mr. Trench has suggested : do you know the language? No you do not. You know the history of a word, but the story of a word is not in your mother-tongue. The point to be arrived at is to make every single word produce a definite idea in the mind. Half the prejudices of mankind, and more than half its follies, would disappear if men would thoroughly

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[&]quot;Notz.-These anecdotes might be found by teachers to be of great me in various ways, especially as themes for composition.-En.

Ост. 21, 1886.]

understand the words they use. Of course it is not always possible to give an exact and precisely the same meaning to the same word. Context decides that. But having familiarized your pupils and yourselves with the exact idea of your word, cast it into sentences, and analyse and compare it with others. In doing this you are becoming master of the tongue you are using. But be not deceived; the old sentence of Bacon stands true still : "Reading maketh a full man, conversation maketh a ready man, but that which maketh the accurate man is writing." You have learned from experience that if there is anything your pupils hate it is writing.

If you will educate your pupils through their mother-tengue, they will love books. They will learn enough political economy and physical science from the text-books which are prepared, if they know the language well. One-fifth of the civilized part of mankind use the English language. There is imposed upon teachers the duty to do the best they can to perfect it, and the highest and best gift we can give to any boy or girl is the power of reading I have no faith in anything else.—Monseigneur Capel in the American Teacher.

ENGLISH AND FOREIGN METHODS.

MUCH may be learned from the following extract from Mr. Matthew Arnold's recent report :---

It was suggested that I should ask the teachers to set papers in Dictation and Arithmetic, on the model of those which are set in our schools under the Code, and should bring the papers away with me so that they might be compared with the papers worked in our schools. The curriculum, or course of school study, followed in the foreign school study, followed in the foreign school study for be compared with the curriculum set forth in our Code.

In order * procure specimens of examination paper, worked under the same conditions as ours, I took abroad with me a number of the Arithmetic cards in use in my own district, and would have set them to children of the same age as the children who have to work them here at home. But there was, first of all, the difficulty that most sums on our cards deal with our English money, weights, and measures, not familiar to foreign children. And even when I found suins in volgar and decimal fractions where this difficulty did not exist, the whole spirit and course of teaching in a foreign school was, I found, opposed to setting in school hours a number of sums and leaving the children to do them by themselves. Our notion is to give children the sule for doing a sum, and then test them by seeing if by that rule they can do so many sums right. The notion of a German teac. is that the school hour for arithmetic is to be employed in ascertaining

that the children understand the rule and the processes to which it is applied. For each branch of their instruction there is, in the plan of instruction, a Lehrziel-an aim and object prescribed for the teacher to have in view. In teaching Arithmetic, says the Saxon programme, "the instruction is to render the pupils capable of solving, independently and with certainty, the calculations which are likely to come before them in their ordinary life." It is thought that this aim is best attained by oral teaching and questioning. When, therefore, in order to test a class, I put a sum in vulgar fractions upor, the blackboard, the teacher, as a matter of course, asked me to call up children to the blackboard and let them work it before me giving their reasons for every stage in the process. The same with Dictation ; if I gave a passage for dictation, the teacher's notion was that in school time children were to be tested in writing from dictation by being brought up one after the other to the blackboard, writing what was dictated, and being questioned on punctuation and other matters as they wrote. The children acquitted themselves very well, both in their sums and in their writing from dictation ; but I secured in this way no bundle of exercises to carry off with me, and I found that without uncivil persistency I could not make the teachers depart from the methods natural to them.

The best test, however, of school work is afforded, in my opinion, by what oneself sees and hears the scholars do; for that reason, I looked upon it as the essential part of my business to be as much as possible in the classes while they were at work, and I spent there every hour I could.

SCHOOL RGOM METHODS.

I THINK the chief difficulty I have found with students has been to introduce them to themselves, to let them know that they really have minds and ought to put them to proper use. Young men and women naturally feel that they are dull, yery dull, and they come to us with the record and memory of duliness ; so the first thing we do is to discover in them some palpable evidence of ability of which they were before unaware. We have a morning exercise for that particular end. If a boy can whistle better than any other boy, I want him to whistle. If he has a marked talent in any direction, I get him in some way to trot it out, that we may all see how smart he is, and that he may get credit for so much. It encourages him and gives us access to him. It shows him that although he may be dull in some ways, he is not in all ways. I find also that young men have this trouble of expressing themselves about which Mr. McAdam spoke. The first thing a bry says is, "I know what it is, but I do not know how to express it." In a sense this is true, but not so fully as he

imagines. He often has an idea that never formulated itself in language, and so he concludes that he cannot express it. I want a boy to say exactly what is in his mind, just because 1 know the first thing he will say is the thing that is not in his mind, and he will be so surry that he cannot say what he wants to that he will struggle until the words come. That is a victory. It is not merely teaching him "gab," for when he has conquered his diffidence and mastered expression, then he will see the importance of having something to express. I have started more boys to reading by showing them their ignorance when they stand upon their feet. than I can here state .- Prof. S. S. Packard at the Business Educators' Convention, as reported by the Penman's Art Journal, N.Y.

SELF-MADE.

THE success of men of strong original faculty and persistent will is no disproof of the value of education, although it is often a decisive test of our educational methods. Two boys of equal native power begin their educational career. One, at six years of age is put into school, and, until twenty-one carriedthrough the routine which is still called education, and to which the majority of scholarly people were subjected, even a generation ago. He is taught everything at secondhand. At twenty-one he comes out well trained in memory, in reasoning from propositions accepted without question, with a great mass of information of various degrees of value, a forcible man for doing the same thing that has been done by his teachers ; a man elaborately gotten up to fit a certain artificial need of a complex social state, in which whole classes of people spend their lives, with as little vital contact with the realities of things as is possible in this world. Of course, when this man is compelled to wrestle with the situations and events that make up the stern realities of our existence, his so-called education fails to save him at every point. He has not been trained to the skilful and truthful use of his own faculties in the observation of nature, in the study of men, in dealing with affairs. He goes through life, unconsciously to himself, dependent on a certain forbearance, expecting the treatment that is accorded to women. and children, and men devoted exclusively to learning and spiritual affairs. What wonder that so many of the most elaborately cultivated people are failures the moment they step out from the charmed circle of letters into the real world, of which literature and science are, at best, the record.-Ex.

AFTER all the ado that has been made about the science of teaching, it may yet be possible that it is the science of play, to which we must go to learn how the mind of a little child should be taught to work.— Good Housekeeping.

Table Talk.

AN OLD-FASHIONED SCHOOL-MISTRESS.

A CONTRIBUTOR to the New York *Evening* Post thus describes Miss Rittenhouse, who, in 1816, kept a school in Jay street, New York :--

" Miss Rittenhouse was one of the celebrities of old New York. She educated two generations, parents and children, of both sexes, and I was one of her happy pupils in 1S33. Seated in the corner of the room on the first floor, with her gouty foot tied up in numerous wraps, resting on a chair in front, she, every morning, with the exception of Saturday, received her pupils of both sexes, they having deposited their lunch-baskets in the hall prior to their entrance, for her hours were from nine to three-a long, weary day for children from three to seven years of age. Miss Rittenhouse was a large woman, and very dictatorial; she wore a cap with a wide ruffle on the border, and a plaid gingham dress. She exacted the greatest respect from all her pupils. We made our how on entering the room, saying, 'Good morning, Miss Rittenhouse. How do you do this morning, ma'am?' She replied to our salutation, waving her hand toward our allotted seat. There we were ranged in front of her ladyship on little chairs; boys on one side, girls on the other. Then commenced the duties of her day. Each child had to stand by her side alternately and repeat his A, B, C, or Ba, Re, Ri, at her dictation. She had on a stand near her a large leather strap, and if we did not master the lesson quickly, as she thought, immediately she called upon the boys, if the offender was a girl, to rise and turn their backs, and the little innocent was lifted over her knee, the strap being applied to the bare skin with a heavy hand; or, if a boy, she lade the girls do likewise, and he had to endure the same torture. This is the way we and our parents had the alphabet spanked into us, and also learned to read by the same inspiring process. Yet we had the greatest respect for the old dame, and though I had been across her knee and felt the weight and smart of her strap many times, I called on her regularly on New Years' Day as long as she lived; in fact, I was afraid not to do so. Miss Rittenhouse educated, or perhaps I should say taught to spell and read, the best people in New York."

THE real object of education is to give children resources that will endure as long as life endures. -Sidney Smith.

TEACHERS should spend less time in cultivating the memory, and more in developing the reasoning powers.—Central Scheel Journal.

INTELLECTUAL growth is not to be gauged by the length or the number of daily recitations. There is often too much continuous study. The school should be made attractive for boys who are not drawn by the study of books, as well as for those who seek a literary or professional career. The former class of boys is not a dall class, but they always appear at a disadvantage with boys who have a good memory for words. Such boys are ploughed under in our schools because it is thought they are not worth harvesting. The

manual training school intends to harvest both kinds of boys.-Dr. Woodward, St. Louis Manual Training School.

THE late Professor Louis Agassiz, in his early manhord visited Germany to consult with Oken, the transcendentalist in zoological classification. "After I had delivered to him my letter of introduction," he once sajd to a friend, "Oken asked me to dine with him, and you may suppose with what joy I accepted the invitation. The dinner consisted only of potatoes, boiled and roasted ; but it was the best dinner I ever ate; for there was Oken. He unfolded to me, during the hours of a long afternoon, the principles of his system more completely than I could have obtained them from his books. There never was such a feast ! Never before were such potatoes grown on this planet; for the mind of the man seemed to enter into what we ate sociably together, and I devoured his intellect while munching his potatoes. I repeat it, I never ate such a dinner before or since."

THE Gloie (Eng.) in an interesting article on superstitions connected with the cultus of the ass, says: "This cultus of the ass culminated in the famous Festum Fautrum, which in certain dioceses of France was known as the Festum Asinorum. The ass was led in solemn procession to the cathedral; and there, before mass, the clergy chanted the celebrated Frose de l ane, composed by Pierre de Cordeille, the chorus of which, repeated by the people after every verse, ran thus:—

> "Orientis partibus, Adventavit asinus, Pulcher et fortissimus, Sarcinis aptissimus.

"Hez, site Asne, hez, chantez; Belle bouche, rechignez, Vous, aurez du fein assez, Et de l'avoine a plantez.

"At mass the responses of the assistants took the form of imitations of the braying of an ass. The medieval mind saw nothing irreverent or shocking in this apotheosis of the ass."

A VERV pretty story reaches us from Windsor. Prince and Princess Henry, of Battenberg, were cut walking in Windsor Park recently, and came across a woebegone little boy sitting at the root of a tree crying his very hardest. The little man on being questioned admitted that he had wandered beyond the limits assigned him by his mother, and had succeeded in thoroughly losing himself. How to get luck to the maternal apron was a question that sadly puzzled him. Prince and Princess Henry, Samaritan like, resolved on restoring the little wanderer to the fold, and set out with him across the park. As the boy was tired the prince mounted him on his shoulder, and "so to Windsor." Before, however, reaching the maternal abode, Princess Beatrice took the boy into a confectioner's shop and surfeited him with dainties, besides providing him with a huge hag of comfits for his stay-at-home brothers and sisters. The truant's mother was non-plessed when Princess Beatrice laughingly gave up her charge, and begged that he might not be punished. We feat, however. that Tommy got a slapping for his "imperiaence" in giving so much trouble to the prince and princess .- Belfast Witness.

Educational Intelligence.

GYMNASTICS IN GERMAN SCHOOLS.

THERE are several things in regard to instruction in gymnastics in the German common schools that are worth considering. In the first place the object to be attained is a definite one. It may be stated in general, to be the development of bodily power and dexterity. But then this development is to be secured by such a process of training as will produce health, a graceful carriage, and punctual obedience. Then the means provided are ample. Connected with each public school is a building designed for instruction in this department. It is usually one story high, and stands apart from the school-house, at the farther part of the play-ground. By this arrangement the noise and jar from the exercises do not disturb the school. The gymnasium is fitted with apparatus of various kinds, such as parallel bars, ladders, vertical poles, spring-boards, ropes, etc.

Formal gymnastic exercises are not usually begun till the third school year. From that time on they are obligatory, as much so as arithmetic or reading; and, so far as my observation went, they are no more neglected. It does not seem to be the policy in Germany to require more than can be done in the schools. If it is thought best to have a certain kind of work done, that work is done till it is deemed expedient to put something else in its place.

The distribution of time among the classes is such as to give each pupil two hours a week in the gymnasium. These two hours are divided into two lessons of one hour each. The Germans think this is a better arrangement than more and shorter lessons. Their theory is that exercise of sufficient vigour and length to produce fatigue, although coming but twice a week, will cause more development of power than a larger number of exercises that fall short of the fatigue point. But whether this theory has developed the present practice, or whether the practice has caused the theory, is a matter of doubt. Of course it would be impossible to take each separate class into the gymnasium every half-day, or even every day. In the large schools two hours a week for each class is enough to keep the gymnasium in constant use. But there is much to be said on the side of prolonged exercise.

The lessons that I saw were generally managed with great care. They began with easy exercises, such as marching, and free movements with the arms, and changed gradually to those of greater sevenity. When the time came for pupils to suspend themselves by ropes in swinging, to climb ladders and parallel vertical lars with the hands, and to perform other exercises requiring much strength, they were called out in squadz; so that much of the time was spent in testing. But toward the close of the lesson the work was so managed that all the class performed with vigour. One feature of this instruction was noticeable; it was designed for an educational end, and not for amusement. It was work, and not play. The teachers were kind and genial, but did not sacrifice the purpose of the lesson to the mere pleasure of the pepils.

The teachers of this subject were the regular teachers of the school. Not every teacher taught gymnastics. Some had a special liking and aptitude for this work, and these did most of this kind of teaching. But all who taught this subject were teachers first, and teachers of gymnastics in addition. This was not peculiar to this subject. It was the same in music, drawing, sewing, knitting, and the like. All who taught were trained for the work of teaching in general. This general training included training for teaching gymnastics.

l attended a portion of an examination ol candidates in this subject. It consisted of four parts; (1) The writing of a theme upon the subject, for which they were allowed three hours; (2) An oral examination in the principles and methods of teaching gymnastics; (3) Teaching a set of physical exercises, specially selected for the occasion, to a class of children in presence of the examiners; and (4) Performing a large number of exercises at the dictation of the examiners. Then the exercises themselves are specially described in the guide for teachers, so that experts determine what is to be done, as well as the qualification of the teachers. -New England fournal of Education.

REGISTRATION OF TEACHERS—A SUGGESTION.

THE following admirable suggestion appears in the appended letter addressed to the Scheelmaster, (London, Eng.):

"SIR,—For various reasons I have thought on the above subject very much lately. It seems to me that, in our own interests, we teachers should endeavour to urge upon the Department the desirability of some scheme of registration.

"Could we not have an official ' Teachers' List ' similar to the 'Army List' issued, say, half yearly?

"As I think such a list should be confined to certificated teachers, I would suggest that it be drawn up on the plan of the army list. In the first place it should contain a complete list of all teachers, who have received the Department's certificate, arranged alphabetically and divided into two great classes : (1) Those dead, (2) Those alive. The first list should give the date of death. A second list should contain the names of all living teachers, arranged according to the years of the issue of their certificates. Those not serving in elementary schools now might be put into a separate list. Means might easily be adopted for recording the class of certificate, and whether the holder had been trained? and, if so, where? and for how long. Vours faithfuily,

"A NORTHERN TEACHER."

JAS. A. MILLER has been engaged as assistant teacher in the Greenlank school.

TEN thousand public schools receive financial support from the government of Mexico.

THE salary of Miss Naturasa, of No. 5 ward school, London, has been raised from \$275 to \$300.

W. A. MILNE, teacher of School Section No. 2, Aldhoro, has tendered his resignation, to take effect on the first of November. WM. HADLEY, recently teacher at Byron, and who disappeared, is in Londonderry, Ireland. He has written from the green isle to his father at Newbury.

MR. J. G. CARRUTHERS, of the Decewsville Public School, has been appointed head master of the Cayuga Public School, in place of Mr. J. A. Murphy, resigned.

It is the intention of the Brantford I'ublic School trustees to have penmanship taught in the Central School as a separate study, and a teacher in writing will be appointed,

J. A. MURPHY, head master of Cayuga Public School, has been appointed governor of the county jail, rendered vacant by the death of his father. The Cayuga Advacate commends the appointment as a good one.

THE Sherbrooke (Que.) Board of School Commissioners are allowing those teachers only a holiday who will engage to use it in visiting the Convention in Montreal. The rest will have the classes of the absent teachers divided amongst them.

A FROVISIONAL teachers' association for South York has been formed with the following officers: Inspector David Fotheringham, president : James Hand, Stouffville, vice-president : J. A. Wismer, Parkdale, secretary-treasurer. The regular meetting will be held in January, 1887, at Parkdale, when probably 100 teachers will be present.

On Wednesday afternoon the pupils in Miss Ridley's class, Queen street school, Chatham, presented her with an address and a handsome gold ring and keeper. Miss Ridley, who has been one of the most efficient members of the Chatham teaching staff, recently resigned her position, which resignation took effect on Thursday. She goes to Winnipeg to reside with a married sister. For some time she had been troubled with the throat affection, and a change of climate was recommended by her physicians.

WOMEN have hither to been excluded from the sittings of the French Academy of Sciences, but at the recent meeting the interdiction was raised in favour of Mile Sophie Kowlewska, Professor of Mathematics at the University of Stockholm, and daughter of the eminent paleontologist. Admiral Jurien de la Gravière, who presided, welcomed her in graceful terms, and said that her presence should be a cause of pride and pleasure, not only to the mathematicians present, but to the whole Academy. As she entered, the whole of the members rose to salute her. She took her place heween General Fave and M. Chevreul.

A LARGE meeting of the educational association for Baddeck, C.B., was held on September 15th, Essays were read by Messis, J. W. McDougall. Freeman, A. J. G. McEachen, Dr. Bethune, M.P.P., J. Calder, D. J. Bethune, McKenzie and Miss Keid. Impector Gunn, professional gentlemen, and many other outsiders were present. The meeting in some respects is considered by competent judges one of the best of an educational character that has been held in the province. The discussions were intelesting and lively, and were

participated in by Rev. Dr. McDonald, Hon.Mr. McCurdy and Messrs. Freeman, McEachen, McDougall, McKinnon, B. McDonald, A. McIver, Calder, Smith and others. Mr. J. Calder's discussion of "mathematical studies," a passage at arms between McEachen and Freeman, with regard to the value of classical studies, and McEachen's essay, "What to Read, How to Read it, and Why," were specially admired and enjoyed.

IN his speech at the opening of the Aurora High School, the Hon. G. W. Ross, amongst other remarks, said that Ontario had a school system which had become a model for other countries, and had been copied by the State of Tennesee and one of the Australian colonies. The Ontario Assembly contained perhaps more teachers in proportion to its members than any other legislative body in the world, and men on both sides of the House well willing and able to aid and improve the educational system. The system was in many respects an ideal one. In the first place the schools were free-free almost from the Kindergarten to the University. Out of 466,000 of children of school age in Ontario there were but 6,230 who attended no school, there were between four and five millions of children in that position out of the fourteen millions of children of the United States. He believed that education being free, the compliment of that was that education should be compulsory. The school system of Ontario was democratic. The Minister of Education was under the control of the representatives of the people-the trustees were appointed and controlled by the people themselves. In the public schools the children of the poor man sat side by side and competed with, the children of the rich man, and thus the process of levelling went on, and the nation was saved the distinctions of class. which were not consistent with its institutions. All classes learned thus to know and respect each other.

THE Hitzferien (heat holidars) which are now established by law in. Germany and Switzerland deserve imitation everywhere. When the thermometer reaches a certain point lessons cease. Throughout Prossia the observance of this regulation is compulsory in all private as well as in public schools. Indeed the private school in Pru-sia is fast becoming public, since no director or proprietor of a private school is allowed to employ as teacher, either male or female, any uncertificated person, while even the books ased in private schools are bound to be legitimate school editions. During the coming term, for instance, at a private school in which there are at least 20 English girls, the mistress has received a notification that she must use a Schulaurgale of Schillar, in order that the pupils may employ the new spelling which the Minister of Education now demands. The Basel Government has just issued a new regulation for the Hitzferein in the Basel schools. When the temperature rises to 200 (Reanmar) in the shade at 10 o'clock in the morning, holiday is to be proclaimed to the scholars until the afternoon. Two such holidays were proclaimed during the heat of last week, to the no small delight of the boys and girls, whose jubilant greeting of the announcement ceald be heard from the open windows of the

Examination Papers.

UNIVERSITY OF TORONTO. ANNUAL ENAMINATIONS, 1886.

Junior Matriculation.

ARTS AND MEDICINE.

LATIN-PASS AND HONOURS.

Examiner-J. E. HODGINS, M.A.

N.B.-Candidates in Medicine and pass candidates in Arts will take I. and II. Honour candidates in Arts will take II. and III.

> GRAMMAR AND PROSE COMPOSITION. I.

t. (a) Decline in the singular only : idem tempus, meus filius, sapientior senex, quivis, quaestor locunles.

(b) Give the genltive singular and the gender of : nutus, nemo, musus, magistratus, locus.

2. Give other degrees of comparison of : senior, mature, faciliter, arduus, pudacius,

3. Write the 2nd sing, of the indicate present and future, and of the subjunctive present and imp-rfect of : nolo, edo, co fio, possum.

4. Write a list of propositions that govern either the accusative or the ablative, and state the difference in meaning : ccording to the case.

5 (a) When is quisused for aliquis? (b) Mention three post-positive words.

6. Distinguish the meaning of :

(a) consulo te, consulo tibi, consulo in te.

(b) caveo te, caveo tibi.

(r) tempero equis, tempero equos.

(d) vir integri corporis, vir integro corpore.

(c) gratias habere, gratias agere, gratiam referre.

7. Write notes explanatory of the construction of the italicized portions of :

(a) Gloria, divitiae, honores incerta ac caduca sunt.

(b) Spernandce igitur sunt divitiae et honores. (c) Volsci civitatera quam habebant optimam,

perdiderunt.

(d) Montis periculo defuncti sumus.

(c) Ingenii hoc magni est.

П.

Translate into Latin :

1. I believe him to have been the first within human memory to perpetrate such a monstrous crime, and I hope he will be the last to venture on anything of the kind.

2. It is said that she told many falsehoods in order to make herself seem younger than she really was.

3. Where, said he, did you come from, and whither and when do you intend to start hence'r

a. It was, he used to say, the special peculiarity of Kings to envy men who have done them the best service.

5. He replied that nearly the whole army had been annihilated, and that it made no difference whether it had been overwhelmed by famine, pestilence or the enemy.

6. Then again, taking advantage of the change of tide, he endeavoured to reach that part of the island which was best for landing, as he had discovered during the previous summer. And in this | specific gravity of the liquid.

matter the pluck of the soldiers was especially praiseworthy, since, though in transports and heavy ships, they by continuous rowing kept pace with the ships of war, which were lighter and consequently better adapted for rapid motion.

111.

Translate :

We call gods and men to witness that we have not taken up arms against our father-land, nor to injure any individual, but in order to protect our persons from violence, (we) who in our misery and poverty have been deprived, most of us of our country, all of us of fame and fortune. It has not been permitted any of us to appeal to (uti) law, nor, since we have lost our estates, to enjoy personal liberty; so great has been the severity of the usurers and of the practor. Of entimes your ancestors in pity of the Roman plebs, by their decrees relieved want; and quite recently, within our recollection, debts due in silver were paid in brass (and that too) with the approval of all good men. Oftentimes the plebs themselves incited by either the desire of power or by the hauteur of the magistrates, have taken up arms and seceded from the patricians. We, however, seek not power, but liberty, which no gos, man will bear to lose save with his life.

PHYSICS.

Examiners-J. M. CLARK, M.A.; T. G. CAMP-BELL, B.A.

1. Define velocity, mass, force, energy, and trork.

2. State Newton's three Laws of motion. Give a practical illustration of the application of each of these laws.

3. Shew that a force can be accurately represented by a straight line.

4. Enunciate the principle of the Parallelogram of Forces.

Two forces S and 10 act at an angle of 60°. Find the magnitude of their resultant.

5. What are the conditions that a number of given forces acting in one plane on different points of a body may produce equilibrium.

6. Define pressure at a point and shew what is meant by saying it is the same in all directions.

A closed vessel, full of liquid with its upper surface horizontal, has a weak spot in this surface not capable of bearing a pressure of more than S lbs, to the square foot. If a piston be fitted into an aperature in the upper surface whose area is a square inches, what pressure upon it will burst the vessel?

7. Show that the pressure at any point of a liquidat rest varies as the depth below the surface.

A cistern, shaped like an equilateral triangle, of which each side is eight feet, is filled with water to the uepth of two feet, find the pressure on the hase and sides of the cistern.

S. To what extent is a body immersed in a fluid pressed upwards? How may this be shewn by experiment?

Two bodies of weights 5 and 6 lbs., and specific gravities 7.7 and 11.14 joined together weigh 9 lis, when immersed in a certain liquid ; find the

9. Describe the construction and use of a barometer, and state the advantages and disadvantages of the mercury barometer.

If the tube of a barometer be 36 inches long, and on account of air being in the upper part the instrument stands at 24 inches when a correct instrument stands at 29.6, compare the density of the air in the imperfect barometer with that of the air surrounding it.

10. An elastic body of specific gravity .6 is compressed to

> 20 + 1 20+41

of its natural size by immersion to the depth of nft. in water. If its weight be 12 lbs., at what depth will a force of three lbs. keep itat rest?

ARTS.

LATIN AND GREEK GRAMMAR.

HONORS.

Examiner-GEO. H. ROBINSON, M.A.

1. Decline in combination πult upias, fervens jecur.

2. Give stem and dative plural of $i\pi\pi\epsilon v s$, yiyas, owna; nix, cinis, fortus.

3. Compare Guquis, y Epains. µala; bene, nuper, facilis.

4. What auxiliary verbs are found in Greek and Latin? Give examples.

5. Greek and Latin for Sth, 18, 28, 80, 800.

6. Give the principal parts of aline, aquinput, φέρω, φημί, inrévuca ; aufero, vello, adipiscor, tollo, cardo.

7. Explain the forms : pridie, mehercle, mi, rexere, a. d. vi. kal. sext. : xaptr, avwyrew, θρίξι, είπών, ήνειχυμην.

S. Translate into English, with syntactical notes:

(α) δπως μοι μη έρεις ό τι έστι τα δώδεκα δis έξ.

(β) πολλάκις της ήμέρας.

(γ) σιγήν γάρ, εί χρή τωνδε θήδομαι πέρι.

(δ) οιχοίος τε είμι μή οι λέγειν.

(a) Capita conjurationis caesi sunt.

(b) Cui beno juit ?

.(c) Quo plures erant, co major fuit caedes.

(d) Non its te aiulor ut me panitest.

9. Translate into Greek :

(a) You should cultivate $(\alpha \delta \varkappa \epsilon \omega)$ virtue.

(β) He conquered the harbarians in the battle of Marathon.

(y) l'ersons were not allowed to go into the General when he was not at leisure $(\sigma \chi \sigma \lambda \alpha \zeta \omega)$.

(5) If any one should do this, he would do me a great service (aspelea).

10. Translate into Latin :

- (a) He is the same man that ever he was.
- (6) With my usual prudence I said nothing.

(c) We have read this in Virgil.

(d) He praised the soldiers, and dismissed them.

A MUSICAL journal of Leipzig states that Liszt's posthumous planoforte method, to which all pianists have been so exgerly looking forward, is not complete in the manuscript.

ARTS : PASS-MEDICINE : HONOURS. CHEMISTRY.

Examiner-FRANK THOMAS SHUTT, B.A. Candidates in Arts will take questions 1, 2, 3,

4, 5. Candidates in medicine will take full paper.

1. Write a short account of the chemistry of Hydrogen, giving two methods for its preparation.

2. How is Ammonia prepared? What are its properties?

3. Give equations shewing the decomposition of the following substances by heat: (a) Potassium Chlorate, (b) Ammonium Nitrate, (c) Ammonium Nitrite, (d) Calcium Carbonate, (c) Manganese dioxide.

4. Define the following terms: Malecule, Atom, Equivalent, Radicle, Acid. Base, Salt.

5. State the law of Multiple Proportions, and illustrate it by the compounds of Nitrogen and Oxygen.

6. Discuss the chemical relations which exist between Chlorine, Iodine, Bromine, and Fluorine.

7. What volume (O°C and 760^{mm}) and weight of Oxygen will be produced on heating 122.5 grammes of Potassium Chlorate?

Calculate what the volume will be at 15° C and 740^{mm}

K = 39; Cl = 355, O = 16.

S. What is understood by the term Quantivalence? Use the elements Carbon, Nitrogen, oxygen and Chlorine to illustrate your answer. Correspondence.

DR. McLEI.LAN'S "ELEMENTS OF ALGEBRA."

To the Editor of the EDUCATIONAL WERKLY.

SIR,—The remarks in the EDUCATIONAL WEEKLY of September 2nd regarding Dr. McLellan's new algebra are in the main correct, and show that the writer has some knowledge of what the book contains. I wish, however, to take exception to the statement that "it would enhance the value of the book if answers were appended."

Now, my opinion—and I have arrived at that opinion after a very careful examination of the work, and after using it in my classes for a number of months—is that it is the best elementary algebra ever published, and I wish to give some of the reasons why I think sc.

1st. Because answers are not given in the book. It might be an advantage to some *teachers* to have answers appended, but I do not see why.

It seems to me that a teacher should be certain that he understands the principles on which the solution of any question that he intends to bring before the class, depends, and understanding thoroughly the principles he ought to be able to test his work : if he cannot, he had better leave such questions alone.

It will be understood from what I say that I would have the teacher attempt to teach nothing but what he is thoroughly familiar with. In my opinion there has been too much working from the answer to the question on the part of both teacher and pupil. For my part I would like to see the answers left out or torn out of all our text books on arithmetic as well. I repeat that if I am not able to solve a question for my class and know positively that the solution is right, I have no business to bring it before them.

Perhaps some will ask, What are we to do if pupils come to a question which we do not understand sufficiently to enable us to know that we have obtained the correct answer. Well, I would say that if you can explain the question you *can* know when you get the correct result, and if you cannot explain it properly you had better not meddle with it; you are only wasting and worse than wasting the time of the class.

Don't try to make your pupils believe you can solve a problem because you can obtain the answer given in the book, if you cannot give a reason for every step in your solution.

2nd. The examples in the different exercises are graded better than in other algebras.

This is a very important matter, as upon it the progress of the pupil to a great extent depends.

3rd. The method of treatment of special forms of multiplication and division, G. C. M., L. C. M. and factoring are in many respects an improvement on those of other books.

4th. It contains the best chapters on factoring, fractions, equations and problems that I have seen. MILES FERCUSON.

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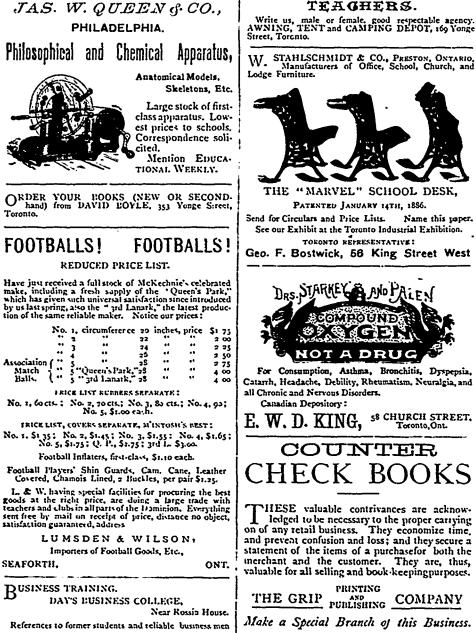
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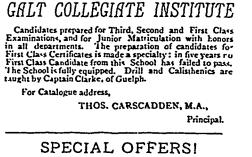
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