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# Educational Weekly 

The Educational Weekly.
Edited by 'l'. AkNOL.1 HaUidian, M.A.

TERMS: Two diollars per annum. Clubs of three, $\$ 5.00$. Cluhs of five at $\$ 1.60$ each, or the five for $\$ \$ .00$. Clubs of twenty at $\$ 1.50$ each, or the twenty for $\$ 30.00$.

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Janks V. Whigit, Gienernd Mataper.

## TORONTO, , MARC/ 3, 1S57.

In some patts of Manitoba there seems to be a scarcity of qualified teachers, though a large number of schools are closed during midwinter in the rural districts. The question of an adequate sup. ply of suitable persons to take charge of our schools is yearly becoming more difticult of solution. The question must be solved and a supply provided, for the people will no: be satisfied with schools without the vitality or teachers without the ability to teach. An increased grant of money to each school will not insure an increased supply of teachers, and it will be wasted without it. About 300 candidates are examined for certificates annually, of whom from one half to two thirds pass and receive licenses for shorter or longer periods. Where are these candidates prepared? What inducements are offered to schouls preparing them? How can the supply of properly instructed candidates be maintained from year to year? These questions must be examined and steps must be taken to insure satisfactory an swers to them if we expect to keep our schools supplied with teachers able to give the instruction necessary to maintaining the standard of intelligence nus caisting among the people of Manituba The pre paration of candidates for cxamination is done at present largely in the city and town schools of the province, those for the higher centificates being confined to the cities of Winnipeg and Brandon. No special grant is made to any school to aid it in this work and no special effort or expendtture on the part of the iocal schoul can be expected or enforced without such a grant.

The high schuols of Umarno, the high and superior schools of New Brunswick and the comnty academies of Nova Scotia are devoted manly to the worh of instructing persons preparing for teaching, their traning in the art of icaching being aftelwards provided for in the Normal sciools. In Mamtoba the crammg of teachers is pro vided for in its Normal schools, as to the excellence of which there are no two opintons; but the wamt of proper mstruction for candidates before they begin this training is being severely felt and provisions will have to be made for 11 . The objection usually made to the establishment of high schools is that its necessity is secondary to the establishment of elementary schools, and so it 15 ; but to the extent that high schools supply teachers for the elementary schools, they are necessarily an essential part of an elementary school system. The estabhshment and adequate support of high schools in this province ts the tneans and only means by which the efficiency of its elementary schools canbemaintained, and this it will be the duty of the new legisiature to constder at an early date.E.x:

Tine final Report of the Royal Commission appointed to inquire into the Depression of Trade and Industry has bean recently issued. There are some matters in this report, says the Educational Times, of spucial concern to the schoolmaster. Our trade and commerce, it is alleged, suffer from the lack of mental suppleness in those who are engaged in them, and from an ignorance of the lan guages, customs, and resources of foreign countries. Dealing with the increasing scherit jof the competition of foreign coun tries, and our less iavourable position rela tive so those countries than in former years, the Royal Commissioners remark, "But, if we do not possess to their full extent the same natural advantages as we formerly enjojed, we have still the same physical and intellectual qualities which gave us so commanding a lead; and we sec no reason why, with care, intelligence, enterprist, and thoroughress, we shouid
nos be able 1, contintue to adance. In order to do so, however, it is obvious that we must display greater activity in the search for new markets, and in the effort to accommodate our productions to local tastes and peculiarities. liven in matters of so little apparent importance as weights and mensures, it would seem that oun dis inclination to adapt ourselves to the requirements of our customers has not been without is effect. In the matter of Education we seem to be particularly deficient as compared with some of our foreign competitors, and this remark applies, not only to what is usually called technical education, but to the ordinary commercial education which is required in mercantile houses, and especially the knowledge of foreign languages." These remarks are taken from that part of the Report which is signed by the greai majority of the Commissioners. Four of the Royal Com missioners dissent from the majority, and make a Report of their own. In this minority Report we find the following paragraph. " There is one department in the work of elementary schools, which, though of vital importance to the success of our industries, has not get, we think, received sufficient attention. We allude to the discuphary training of children. 1. is a remark often made by experienced man agers and furemen in manufactories, that the children who now cume to them from elementary schools are nut, to say the least, more receptite of that industral traming which is required to make them skiltul and actue workers than those were who came in former years, equipped with a smaller amount of school learning. We thank that the careful and thurough training ot chideren in habits of punctuality and order, of alacruty and diligence, and of close attention and prompt and implicit - obedience to instructions, ought to occupy more of the time and thought of teachers in elementary schools; and that its results should be more ctrictly tested in examinations, and should influence the amount of grants in aid mu:h more largely than is now the case."

## Contemporäry Thought.

TIIE United Slates to day has a very large amy of wealhy invalids, an ammy that seems to be on the increase, tou, and one that goes muaning up and down over the land seekich health and fuding mone. Everywhere yout fo, where location and climate have anything to offer, or healing waters containing aught of good to assist nature in her strup: le to lenglten out the days of thuse who have more ducats than digestion, you wili see the anxious eye and the halting gait of those who have fought the fight for gain, and now, crowned with victory and misery; find themselves in the great national hospital that moves about from Mooseheal lake to Tacoma, to Los Anpeles, to Jacksonville, to Dulath, to Denver, to isheville, to Minnetonka, to Santa Fe, to the Hot Sprimes and the Culd Spuings, to the iron springs and the soda sprirges, to the dry air of the noomeains and the wet air of the sea, with no lume that they can call permanent and no sure thing for the future hut a will contest and the long, starless nights of death.
Nea, York Trilunc.
Banizac's persomality went fors mething in his day. His was no wandering voice coming from impenetrable groves or speaking under a feigneal mane. He was en icidetce throughout, and set full in the light of the sun. "C-tte vaste mer," as Léun Guzlan calls him, wath his superb deams of troundless wealth and practical paucty of sous ; his luxuriant imagination ; his Oriemtal splendour of desire: his cane; his hair; his sollang walk; his elphamine ligure ; his powers of work ; his eas of black coffee ; his mysticism and his analy. sis, was of a kind to till the public eye and stimulate curiosity: Always on the point of making a colossal frreune, he was always in some sordid trouble with his creditors; and his actual debts pressed white his potential gains lingered. Henri Monnier's cynical "Avancemoi cent sous sur laffaire" -which was to be the crrain source of millions-crystalizes the whole substance of the romance and reality ruling balzac's life. The millions, according to him, were as sure as fate. All the same, he did not care to advance five francs on their security, and preferred to pawn his ideas to his friends for a few hundreds. Dreaied by his enemies, adored by his friends, feared and detested by his creditors, Balzac must have been a formidable associate to all those who were bound to him ; formidable becausc of that intense cgotism which he had in even larger ineasure than have most men of genius. Iic had no sense of the sufferings nor of the rights of others. The picture given of how, six or eight times in the night, he would rouse up his infertile and somnolent colloboratcur, Lassailly, and, with a pistol at his head, force him to work at the drama which was io carry paris-and did nut-is a measure of the rest, even when docked of its patent exaggeration. No wonder the poor fellow left Les Jardies as one flecing from the wrath to come, and never after spoke of Balzac without a wisible shudder and unconquera ble lerror.- Tempic Bar.
JUST let us conside what 14 hours of work means. We cannot reckon less than eight for slecp, which only leaves two for dressing and

4 undressing, for supper, and for going to and from the shop. This absorts the whole 24 hours, and not a moment is left for amusement or self-impovement, for fesh air or family lite, for any of those oecupations which cheer, brighten, and ennoble life-in fact, we literally say that not onls have shop assiatants not a moment to themselves, but they are so hard worked that at the end of the week they are fit to drop wilh fatigue. The whole country would gain if shop assistants had greater opportunitic.s of intellectual, moral, and spirituat improvement. Moreover, the creel effeet of the long homers is comsiderably increased by the fact that the unfortunate assistants have so stand the: the whole time. This long standing is a terrible evil. How injurious standing is we may cleatly see from the fact that though customers remain in a shop for so comparatively short a time they are invariably accommodated with seats. Comsidering, however, the relative need of eest as hetween the assistants and their customers, it must be admitted that the seats ate on the wrong side of the counter. Happily, I may say this is no question between shop-keepers and their assistants. There is wo such difference. I believe that shop. Diecpers are almost as anxious to close as the asoistants themselves. Perhaps, then, it may be said, why not leave the matter in their hands? Because almost in every case the arran pements for carly clusing have been rendered nugatory by the action of some very small minority among the shopkecpers. Over and weer again the shopkeep. ers in a given distroct have been amaious to close, and have all agreed ta do so with, perhaps, a single exception. But that single exception is fatal. One after another the rest gradually open again, the whole thing breaks down, and thus a small minority tyranaize over the resi. It setms clear that nothing lut legislation can remedy the evil. Voluntary action has been tried and failed over and over again, and the almost unanimous opinion of the winnesses, examined bufore the House of Commons committec was that it was hopeless to expect any shortening of the hours in that way. Such then is the present position of affairs, and, as 1 have said, the general fecting of the shopkeeping community is in favour of legislation. Even as long ago as 1873 the shopkecpers who canc to me with reference to the bill I then proposed, expressed themselves in favour of a general compulisory closing. I then thought this was impossible. Only by degrees have I become convinced buw deep and general this feeling is. -Sir fohn Labbock, in Good Words.

Whetuer a consent marriage is or is not legal at common law has never been determined. When the question was raised in England, nearly half a century ago, the judges of the Court of Qucen's Bench were equally divided ont the subject, and an appeal being taken to the Ilouse of Lords, the six law peers, including Lords Brougham, Denman, Camplell, and Lyndhurst, were equally divided. Simultaneously the question was raised in this country, sajs the San Frarcisco Call, and by a strange coincidence the judges of the United States Supteme Court were equally dividen, and Chicf Justice Tancy amounced that the Court was, in consequence, unable to pronounce a judgment. Since then tie States have undertaken to decide the question, antl some have decided in
one way, and some another. In California the framers of the code decided that a consent marrigge was lawful. It has leen urged that there was a rezson for this when the State was sparsely setlied, and it was sometimes dillicult for parties intending marriage to secuse the services of a magistrate or a minister Nos such reison exists now. There is no part of the State from which it is impossible to reach either one or the other official. In every county magistrates or clergymen can be found to solcmnize a matriage if the parties really want to have it solemnized. At atstract law, marriage being a civil contract, any two persons of opposite sexes, and capable of contracting, can make such a comtract without the intervention of a third party. Hut in practice, the conaequences of marriage as to cenjugal sights, and the rights of heirs, are so momentous that the interests of socicty absolutely require such ittervention, for where it dues not take place the woman is placed at the mercy of a man who maj: deny the consent marriage, and repudiate her, and, on the other hand, men may be blackmailed by female adventuresses, who declate that there was a consent marriage where there was none. No man who really desires to matie a woman his wife will object to the solemnization of the marriage : if he dues object, he tacitly adnits that he intends to cheat her. And with much more force may it he stid that no woman will Jemur when it is propesed to cluthe her matrimonial association with the forms of law. The matter commands little public attention, because cunseat mariages are so sare ; fanilies are generally careful enough of their children's honour te see that their marriages are duly solemaized; but if there were but half a dozen in a year, it would be worth the while of the legislature to alter the law so as to prevent even that small number of wrongs. The time will doubtlest come when some startling case will rouse the people of the United States to the expedienty of stripping the State legislatures of their control over marriage, divorce, and inheritance, and amending the Constitution so as to confer the control of these matlers upon Congress. A miform law, extending its authority over the whole country, is neaded. As matters stand, a man may be a married man in New Yoak, and a bachelor, for all purposes of marriage, in California; may have but one wife in Indiana, but tho in Massachuselts. A woman may be a lawful wife in one State, and no wife at all in the State adjoining. Her children may inherit in California, but, heing classed as illegitimate in Connecticut, may have no claim to property owned by their father in that State. The wistom of a discreet, well-guarded law of divoree is now conceded by all legishators, but there can be no justification or apology for thirtyecight different divorec laws, each differing from the other as to the causes of divorce, and as to its legal consequences. No ransaction in the life of a man or woman is more important than marriage. and its dissolution, either b) divorce or death. It is bat right that its regulations should not be left to the whim and cunceit of State convemions, often ill-equipped with minils competent to grapple with such problems. They should be committed for solution to the ablest men in the country, and their decision should be binding throughoul the land.-New Yorí Star.

## Notes and Comments．

We have received through the kindness of Dr．Wilson，President of University College， the advance sheets of his swo papers read before the Ruyal Society of Canada in the months of May， 1885 and 1886，and entitled ＂The Hand and Left－handedness，＂and ＂Palæolithic Dexterity．＂

If the farmer wants his boys to stay on the farm，let him wosk with his head as well as his hands，and teach them to do likewise． Let him show them that it is a calling requir－ ing brains as well as muscie．A few simple and comparatively ittexpensive labour－saving contrivances will not only pay for themselves in a short time，but greatly interest the boys as well．－The Globe．

A society for the promotion of the higher education of women has been founded in Japan，under the presidentship of the Prime Minister，and with the support of various influential foreign and Japanese gentiemen． Besides regular courses of instruction which will be provided，special courses of after－ noon lectures will be delivered by the pro－ fessors of the university．The whole insti－ tution will be under the control of a foreign lady principal，assisted by two or more foreign lady teachers．
USING the language of current science one would say that the first necessity of man is so learn his environment and act effectively upon it，or，in simpler words，to become acquainted with the things among which he has to live and to make the utmost use of his o：un powers in dealing with them．It was worth something to James Watt and to the world that he took note of the power of steam in lifting the lid of a kettle and changed that lid into a piston．The chieflesson taught in school is not to look about you and not to use your fingers．Teachers know too well that Satan finds mischief for idle hands．－

## Montreal Witness．

Desicn and modelling，and their develop． ments in other maferials，are as play to children，and if they are properly taught，the results may quite as well be of a vaiuable and important nature，as a trifling one． Such work familiarizes the：n with the use of tools，develops their constructive facuities， and awakens quickness of perception．It easily accustoms them to the first step in discipline，that is to keep quiet and obey a superior．This is so well recognized that I once within a few days received letters，one from a lady trying to teach a class of young Holtentots far in the interior of Africa，and another Irom a missionary＇s wife in Alaska doing the same with a number of little semi－Eskimo savages．Both wanted to set their pupils at anything which would keep them still and familiarize them with school－ habits or discipline－C．G．Leland，in the Critic．

Tine proposal to extabish a college at one of the British universities，where boys would seceive，between the age of sixteen and eighteen，a training which should fit them lor a business career，has not（says the Pull Hall Gazelle）been very well received by the public．The proposition is in the nature of a half－measure，and is for that reason of no great value．Schools for commercial education are needed in this country．Boys who will gointo a business house at eighteen might apend the last two or three years before that time in a more useful and more special kind of education than that of our public schools．But this education should be given at separate institutions unconnected with the universities．Their object would be not to give the boys the＂advantages of a university education，＂but to turn them into men of business fit to compete with well． trained Belgians and Germans．
A deputation from the city of St．Thomas and the adjoining townships of Southwold and Yarmouth left for London lately to walt upon Mr．G．W．Ross，Minister of Educa－ tion，with a view to securing a change in the law by creating Southwold，Yarmouth， Port Stanley and St．Thomas a separate district for high schnol purposes，and reliev． ing the townships and village named of the tax of $\$ 890$ which is now assessed against them for the Vienna，Aylmer，and Dutton High schools，in which they are not inter－ ested and from which no benefit is derived by them．The deputation consisted of M． Payne，reeve of Port Stanley；W．O．Pol－ lack，reeve of Yarmouth；D．Turner，reeve of Southwold；Mayor Midgley，of St．Thomas； D．K．McKenzie，chairman of the Board of Education，and Messrs．Principal Miller，of the Collegiate Institute，A．McCriminon，J． H．Coyne，and Robt．Miller．The legisla－ tion has been called forth in view of the action of the county council in cutting down the grant of the St．Thomas Collegiate in－ stitute from $\$ 1,700$ 10 $\$ 1,200$ ．

Some members of parliament have re－ cently been advocating the establishment of a＂University of Commerce，＂as a means of levelling up the education of English youths designed for a mercantile life to the same standard oi attainment as that reached by foreigners．We will not comment on the odd use of＂University＂，as applied to an institution of a purely technical character． What we wish to point out is that，if this ＂University，＂already existed here in full working order，it would not save lis from these terrible Germans．The Times corres－ pondent in Brussels，writing recently to his paper，pointed out that Belgium possessed such a University of Commerce at Antwerp， the Institut Superieur de Commerce，and sub－ sidised by the State．This institution is in a flourishing condition，and is considered to answer well the purpose for which it was
established．Great care is bestowed there on the thenratiral and practical teaching oi modern languages，but thas does not prevent Antwerp and Brussels being overrun by German clerks，as well as London and the other large English Lowns．－Eiducational Tïncs（Lomton，E゙ット．）．
Mr．Froudt：hay written a very interest－ ing letter to the Pall Mall Gaxetle on the teaching of English literature at the Uni－ versities，in which he says：＂I hesitate w say that an understanding of English litera． tute is impossible without a knowled，of Greek and Latin literature．Many of our very best writera knew little or no Greek and Latin．Shakespeare had＇small Latin and less Greek．＇Pope translated Homer，but was a poor scholar．De Foe，Bunyan，Burns， Byron，Carlyle，Cobbett，Charles Lamb－ these and many other names occur to me which disprove the position as is concerns writers；and 1 think you might find very good students of English literature also equally ignorant．The Scandmavian litera－ ture，not the classical，was the cradle of our own．At the same ume I regard the Greek and Latin literature as the best in the world， as superior to the modern as Greek sculpture is superior to the schools of England and France；and that no oue can be a finished scholar and critic（l do not say writer）who is ignorant of it．Our national taste and the ．one of the national mitellect will suffer a jerious decline if it ceases to be studied smong us．＂
The liail has the following ：－There is likely to be a conflict of interests between Kingston and Otrawa as to the desired estab． lishment of the School of Practical Science for Eastern Ontario．Mr．Mowat，in his ansiver to the Kingston deputation，intimated that Ottawa might lay claim to assistance for such a project．This is explained by an interview in the Ottawa Journal with Princi－ pal McCabe，of the Ottawa Normal School， who says that when he，heard of the Kingston project，he thought it his duty to at once ask the Ontario Government that the school should be established at Oltawa in connec－ tion with the Norinal School，for the follow－ ing reasons：－That the Normal School being a Gover：ment institution already well equip－ ped for practical science work，would save the expense of endowing another institution； also that the fact of the Geological Museum being situated in Ottawa，in which are stored the best specimens of mincral and other de－ posits from all over Canada，would not neces－ sitate the establishment of a museum in con－ nection with the school．Then again，the Oltawa Valley is acknowledged to be the richest place in the Province in mineral deposits，which is another great advantage Kingston does notpossess．Principal Mc－ Cabe＇s idea will probably be vigorously pushed here．

## Literature and Science:

## THE POSSIBHITTIES OF゙ MMENICAN FICTION.

"ONE great drawback to good work in fiction is the financial inability of capable writers of both sexes to put their work before the community. It is useless to say that publishers are ready to seize everything new, and eager to give the public the latest thoughts. This may be true of some puiblishers, but many are as eager to make a hit and reduce fancies or ideas to hard coin as any merchant in the land. Thes publish books to make moncy, and a striking title is often prized more than a geod plot. The publishers themselves are human and often short-sighted. Every one knows that some of the best works ever given to the world were knocked about from publisher to pul. lisher and finally sold for a song. Why is this? Back of the publisher are 'the readers of manuscript,' the one man and one woman, sometimes the two men and one woman, who must sit in judgment on the author's work. With ali due espect for the judicious men engaged in publishing books, it is an undoubted fact that these readers do not always possess especial fieness or knowl. edge of the works in question. It may sound like treason, hut it is undoubtedly true that many excellent volumes of fiction are now hidden away, condemned by some 'reader' far less experienced and gifted than the writer, which, if published, would sank high and benefit the reading world. Any onc who spends much time in an editorial capacity knows that mistakes as to acceptance and rejection const intily occur. It is the merest folly to talk of the 'individuality of the writer' and 'the reality of experience which is the secret of success' when a book of real experience, far more captivating and filled with moving, thrilling life, is sat down upon, behind the scenes of some publisher's desk, by men and women who 'think it will not pay.' Why talk of the reality of ex. perience? The real enemies of good fiction are the unappreciative, inexperienced 'readers,' who can no more understand the sym. pathetic life of the people than a mere mechanical painter can understand the good points of the Rembrandt in your library. They are good men, good women, who are paid to sit in judgment on the heart-throbs of real workers, real thinkers, real doers, and their total inability to write a good work of fiction renders them unfit to decide upon the work of those who already have the public ear and are eager to give 'our own conflicts a place in this fiction of the day.' The possibilitics of American fiction are enormous, the life of the American people fruitful, but the outcome will not be satisfactory
unil genius and application, ideas and im. persomation are unt subjected to the crucial test of incompetent 'readers,' nor white publishers pay more attention 'to making a hit,' than the merits of a voiume. The fault does not rest with the makers of fiction, but its producers in the market,' so, at least, says the Boston (imbe.

## YOUTHFUTALESS IN SCIENCE.

Evek college instructor knows only too well how the more active-minded students are cager to grapple with the mightiest $\boldsymbol{s}^{-15}$. jects, all in the untexted pride of developag intellinence. Their themes are: "The Irnogress of Democracy:" "The Comparison of Fiench and Engish Literature," "Solar Energs," "The Datwinian Theory," "The Ori, in of Mind; $"$ in sihort, all the vastest problems, such as a lifetime is inadequate for. Most of us can gather from our personal recollcutions some examples of the foible. Youth does not know its measure. Only ma!urity, and not always even maturits, realizes how tiny and feeble is the force of the individual when it turns to attack the world problems, which stand more mysieriously and longer than the sphinx to perplex and baffe humanity. The adolescent mind is confident; for it has never been beaten, since it has never engaged in any real fighting. It proadiy believes in its own success, and it is but too apt to look disdainfully on great thinkers, because they left more to be thought. It glories in generalizations, and is gladly indifferen: to the harassing details and preliminaries, with which, if it continues active, it will afterwards be chiefly and sensibly occupied. The young man is often a would-be revolutionist. He is surprised that older and wiser and better men are so benighted. let us not be misunderstood. The joung man we are characterizug is the one in whom the faults his years are prone to are strongly acsented. We have no intention of wholesaic condemnation toward a class to which we have belonged, and therefore may be supposed to think of respectfally. If the untortunate individual or type we are discussing betakes himself to science, he may do useful and praiseworthy work, but he is pretty sure to injure its meritorious part by adjuncts of misshapen generalization, and of criticisms very bad in taste and unjust in substance. His pages show a saddening spectacle of overgrown self-confidence, betrayed by the tone of expression, by the ill-reptessed laudation of his own theories, and the had-mannered fult-finding with oihers, perhaps merely because their observations, without which the young man could have done nothing, were not exhausive of the field. Next follows pitiless criticism; the pedestal of fimsy logic is dashed away; the victim falls from his eminence.

The specious argumentation is reft, and the man's ignorance is exposed nakedly. Last comes the cruel abasement, all the worse to bear because it is the sequel of elation. And still the young man must be grateful if the late lesson can be learned by his aching and repentant mind. Would that the fire of the soul always purified, and never consumed: -Scicnce.

## SCIENTIFIC TRUTHFULNESS OF GERI/AN IVONKS.

In the production of elaborate works on natural science for the genetal scientific reader or student, the Germans are facile firincets. Besides bearing evidences of thoroughness and general accuracy, such works usually present a homogencity and completeness rately attained in English ones of a similar class. To vivacity of expression and the more purely literary embellishments or literary codiments, they rarely make pretensions; and yet he who has read in the original the writings of such authors as Haeckel will readily concede that the German style may be not a whit less charming, less simple, and less interesting than the French or English, while at the same time combining, what is often such a fatal defect in many French works on general natural science, a rigid regard for scientific truthfulness. Buffon made many book naturalists, but he inas much to answer for in the selfsufficient complacency and inexactness of many of the French naturalists who have succeeded him. It is a rare :alent that can excel in attractive literary exposition, and yet command the respect of the critical scientific naturalist.-Science.

It may not be known to some what causes the different colours of bricks. The red colour of brick is due to the iron contained in the clay. In the process of burning, the iron compounds are changed from the fersous to the ferric condition and rendered anhydrous, thus developing the colour. Certain clays-like those in the vicinity of Milwauke, for instance-contain little or no iron, and the bricks made from them are light or cream-coloured.

The Madras Government is about to engage in the cultivation of jalap. It was found that the plant grows very well there, and some years ago a large quantuty of tubers were given to private individuale in order to encourage them to grow the remedy. But the demand this year from the Madras Medical Department was for 1,300 pounds, and only 400 pounds could be obtained. So the Government has decided to cultivaci jalap itself until such time as private growers are in a position to supply the demand.

## Speciai Papers.

I.EFT:GANDEJNESSS.-A HIVT FOR EDUCATORS.
Dr. Daniei. Whison, president of the Royal Society of Canada, has lately contributed a paper to the Proceedings of that society on the subject of left-handedness, to which he has managed to give an unexpected and very practical interest, affecting all who have children or who are concened in their education. The auther had written previously on this subject, but not with such full and efective treatment. He reviews the various causes to which the general preference of the right hand has been ascribed, and also those te which the occasional cases of left-handedness are attributed, and finds them mostly. unsatisfactory. He shows clearly that the preferential use of the right hand is not to be ascribed entirely to carly, training. On the contrary, in many instances where parents have tied up the left hand of a child to overcome the persistent preference for its use, the attempt has proved futle. He concludes that the general practice is probably due to the superior development of the left lobe of the brain, which, as is well known, is connected with the right side of the body. This view, as he shows, $\because$ 'as originally suggested by the eminent anatomist, Professor Gratiolet. The author adopts and maintains 11 with much force, and adds the co-relative view that "left-handedness is due to an exceptional development of the right hemisphere of the brain."
A careful review of the evidence gives strong reason for believing that what is now the cause of the preference for the right hand was originally an effect. Neither the apes nor any others of the lower anmals show a similar inclination for the special use of the right limbs. It is a purely human attribute, and probably arose gradually from the use, by the earliest races of men, of the right arm in fighting, while the left arm was reserved to cover the left side of the body, where wounds, as their experience showed, were most dangerous. Those who neglected this precaution would be most likely to be killed; and hence, in the lapse of time, the natural survival would make the human race, in general, "right-handed," with occasional reversions, of course, by "atavism," to the left-handed, or, more properiy, the ambidexirous condition. The more frequent and energetic use of the right limbs would, of course, react upon the brain, and bring about the excessive development of the left lobe, such as now generally obtains.
The conclusions from this course of reasoning are very important. Through the effect of the irregular and abnormal development which has descended to us from our bellicose ancestors, one lobe of our brains and one side of our bodies are left in a ne-
plected and weakened condition. The evidence which Dr. Wilson produces of the injury resulting from this cause is very strik. ing. In the majority of cases the defect, though it cannot be wholly overcome, my be in great part cured by carly traming. which will strengthen at once both the body and the mind. "Whenever," he writes, " the carly and persistent cultivation of the full use of both hands has been ascomplished, the result is greater efficiencs, without any corresponding awkwardness or defect. In certain arts and poofessions, bothi hands are necessarily called intoplay. The skilful sur geon finds an enormous advantage in beang able to transfer his instrument from one had to the other. The dentist has to multiply instroments to make up for the lack of such acquired power The fencer who c.in transfer his weapon :n the left hand, places his adversary at a disadvantage. The lumberer finds it indispensable, in the operations of his wooderaft, to learn to chop timber right and left handed; and the carpenter may be frequently seen using the saw and hammer in either hand, and thereby nat only resting his arm, but greatly facilitating his work. In all the fine arts the mastery of both hands is advantageous. The sculp:or, the carver, the draughtsman, the eneraver and cameo-cutter, each has recourse at times to the left hand for special manipula. tive dexterity; the pianist depends litule less on the left hand than on the right; and as for the organist, with the numerous pedals and stops of the modern grand organ, a quadrumanous musician would stll find reatson to envy the ampler scope which a Bria. reus could command." That all this is truc is abundantly shown by the numerous examples cited by the author,--from the grea:es: of artists, the left-handed Leonardo da linci, to the distinguished ex-president of the American scientific association, Prof. Edward F. Morse, and (we may add) to Dr. Wilson himself, both of wiom are known to be accomplished draughtsmen with this tonneglected hand. In view of these facts, it evident that few more important subjects can be offered for the consideration of educators than that which is presented in this impressive essay:-Science, Vol. /.I., Nor. 2th, pp. $, 4 \mathcal{F}, t_{7}$,

Fok a free play of the faculties the natural method of obscrvation and actual experience canno: be surpassed, though they can be supplemented and assisted by artlficial means.-E.x:

There are 172 specimens of blind creatures known to science, including crasfish, myriapods, etc. They are mostly white, whether fiom lach of stimulus of the hight, or from bleaching out of the skim. Sume species have small eyes and some have none.

## Educational Opinion.

## A MOTHIERS TALR TO GilkなS

lou would not be surprised if I were to ask your brother what he intends to make of himself, but if I put the query to you perhaps you might open your cyes in astonish. ment. You expect to go to school untily you graduate and then become a young lady in society and to have a nice time. Do you intend to go to parties and to have beautiful costumes? Who will foot the bills? "Oh, papa, of course," and in return you will emhroider him handsome slippers on material for which he pays and have them soled at his expense at figures thece times as great as would pay for a pair ready.made, and then jou will think yourself very dutiful. You will mahe bamners to hang on every space wail space, and crizy quilts for yourself and friends at an enormous expendhure of um= and mones. You will dust the parlour furniture and take care of your ewn room and fancy yourself industrious; you will help the dressmaher pian elaborate garniture for jour new dresses, and call it being econom. inal. Perhaps you practise the pano an hour daily, belong to a reading club, and call yourself studious, but what is to be your lifework? If called upon to.day in carn your own living is there any one thing: you could do so well that some one would pay you to do $1 t$ : You don't expect to have to work for a living, yet your brother does. He woud feel ashamed to calculate on bein; supported all his life. Why should not your brother he supported as well as you? But what is the use of a girl's learning a business when the chances are that she will get married and never have an opportumaty of following the vocation which has cost ber so much ume and tabour? To mantain her self-respect, if for wothing else.
Why should you live an aimless life? The world needs workers; why not be one of them? If you have a talent-and who $h$ is not?-why not cultivate it so as to make it of avail to you? Why not be ambitious to do something and to do it well? The time you put upon it will not be lost, for it will develop you, it will make you stronger, more worthy of living.

True worth is in being, nut secming,: In dome each day that goes hy,
soune latile good, nut in the dreammg Of great thangs to do by and by,
l.earn a trade, a piofession, a business. Find your work and make a place for yousself in the world. Then, if you are promoled to the dignity of wifehood and mother. hood, and nust lay aside your less importiont business, you will not be less worthy, less the woman, or less the mother. The very knowledge that you can support yourself will perhaps relieve you of much dreadul
foreboding. Many a woman has found use 1 for hor skilled hands in the support of an invalid husband and helpless children. Then, ton, 1 think ii will make you more careful in the choice of a husband. You will not be planning to marry for wealth or a home, and can afford to wait sill you can marry for love. You will think more of yourself and thus demand more of the man whom you honour with your heart and hand, and, as your ultimate desting, will doublless be to marry, no matter what other vocation you may choose, be sure and obtain a practical knowledge of all the dulies of woman in the home.
 E.rctiange.

## COLLEGE TRAINWG.

Is his articie in The Forum, on "How 1 was Educated," the Rev. Dr. Vincent writes:-"To state the matter fairly and fully at the outset, 1 must confess that 1 have neve: been at college. The reader can scarcely conceive the griel, made up of regret, discouragement and mortfication, which this fact has occasioned me through most of the years of my mature life. Even now 1 sometimes feel the sting of it in the society of college men. It has been my 'thorn in the flesh.' 1 have never found entire reliel from ite sharp prickings in the long list of distinguished men and women in both hemi. spheres and in all ages-writers, artists, sages, statesmen-who never enjoyed the benefits of a college training; nor of recalling the melancholy failure, in so many ways of so many men who have been matriculated, educated, graduated, and be-titled by the greatest universities; nor in the 'practical' man's notion that classical education unfits a man for business. And certainly, I have never felt the comfortable self-complaceny which is sometimes attributed to the selfeducated man. The, to me, uncomforiable fact that Inever even entered college, I have through all these years honestly faced and deeply deplored. The genuine regret which 1 have felt has supplied a darge part of the conviction and inspiration under which 1 am now working for the increase of faith in the value of the college on the part of the average American citizen and parent. By voice, by pen, by example, in the ordering of my own son's education, and by the Chautauqua service, 1 have for many years devoled my energies to the cause of the higher education; and I make this statement concerning my relation to the college to place myself with the advocates of liberal culture as against the mistaken and mercenary theory of the utilitarian; and thus i make humble protest against the pitiable vanity of those self-educated men, who, not content with making bnast of personal achievement, depreciate educational adrantages which they failed to secure."

## WANTED, SENSTBLE WOMEN.

 Specialized education does not neces. sarily create companionable or even senyible women; clse, by parity of reasoning, would all proiessional men be personally charming and delightful, which undoubredly they all are not. A girl may be a Greek scholar, a brilliant mathematician, a sharp critic, a fartiless grammarian, yet be wanting in all personal tact and temper, clear observation. ready sympathy.and noble self.control which make a companionable wife and a valuable mother. Nor is unprofessional or unspecialized instruction necessarily synonynous with idleness and ignorance; while a good :lllround cducation is likely to prove more servicable in the home and in sociely than one or two supreme accomplishnents. Many of us make the mistake of confounding education with acquirements, and of running ingether,mental development and intellectual specialization. The women of whom we are most proud in our history, were not remarkable for special intellectual acquirements, so much as for general character, and the harmonous working of will and morality. The Lady Fanshawes and Elizabeth Frys, the Mary Carpenters and Florence Nightingales, whose names are practically immortal, were not noted for their learning, but they were none the less women whose mark in history is indelible, and the good they did lives after them and will never die. And taking one of the, at least, partially learned ladies of the pasi-is it her Latinity and her bookishness pasi-we admire so much in Lady jane Grey? or is it her modesty, her gentueness, her saintly patience, her devotion?-in a word, is it her education or her character?一the intellectual philosopher or the sweet and lovely and noble woman ?-The Fortuightly Reviéu.
## MAKING VERBS OF NOUNS.

THE rendency of American newspapers to take unwarrantable liberties whth certain nouns is one of the most unsatisfactory features of contemporary journalism. To turn a defenceless noun into an aggressive verb is an act as lawless as it is unpunishable. When a reporter asserts that "John Smith suicided" he mukes his meaning clear, but he shocks the nerves of those conservatives who base their English on dictionary precedent. "Interview" used as a verb is another outcome of journalistic independence. But even the two words cited are by no means the most striking illustrations of the tendency referred to. A Western paper says that one of its subscribers "Thanksgave" at home. Shades of Noah Webster, what a word! It is on a par with another provincialism which sometmes shosk, the nerves in such a sentence as the following:-"James X-— and his brother Sundayed in town." The list of these vagabond verbs might be indefinitely extended, but the above will suffice.
It seems to be a characteristic of our people to take the shortest road to the goal of their desires. The process of turning nouns into verbs is one of the most effective methods of making one word serve the purpose of two or three. Bus is elegance to be sacrificed for so petty an object ? $-E x$.

## Mathematics.

## ALGEBAA SOLUTIONS:

(Continuth from fack grs.)
(Sie page S71.)
S. Assuming $x^{4}+\mu x^{3}+\eta x^{2}+r x+a$ tobe a perfeet s!. let it lee represented by $\left(x^{2}+a x+b\right)^{2}$.
Then $x^{4}-p x^{3}+7 x^{2}+r x+8$, and $x^{4}+2 \pi x^{3}$ $+\left(n^{2}+2 l\right) x^{2}+2 u b x^{2}+h^{2}$, are jidentical:
9. Let $a-1, n$, and $a+1$ be the numbers. The sum of their cubes is = il $3 n\left(a^{2}+2\right)$ which is by $3^{\circ}$.
10. $2 x=a^{\prime} \div b^{n}, \therefore 2 n 2=n a^{n}+n b^{n}$.

- Valued requited

$$
\begin{gathered}
=\frac{a^{\prime \prime}}{n a^{n}-n \bar{b}^{\prime \prime}}+\frac{b^{n}}{n b^{n}-n a^{\prime \prime}} \\
=\frac{a_{n}}{n a-n b}-\frac{b^{\prime \prime}}{n a^{\prime \prime}-n^{\prime}} \cdot=\frac{a_{n}-b}{n\left(a^{n}-b^{n}\right)}=\frac{t}{n} .
\end{gathered}
$$

11. ENp. $=1$. It presents no difficulig.
12. Since the two edpuations hold tor the same value of $x$.
$\left.\therefore a a^{\prime} x^{2}+a^{\prime} b x+a^{\prime} c-0,\right\}$, hold for the same valuc of $x$.
.. $\left(a b^{\prime}-a^{\prime} b\right) x=a^{\prime} c-a c^{\circ}$.

$$
\therefore x \cdot \frac{a c-a c^{\prime}}{a i^{\prime}-\frac{a^{\prime} b}{-b}}
$$

$A \operatorname{gain} a c^{\prime} x^{3}+b c^{\prime} x+c c^{\prime}=0$,
and $i^{\prime} c x^{2}+1 \circ c x+c c^{\prime}=0$,
$\therefore\left(i^{\prime} c:-\| c^{\prime}\right) x^{2}=\left(b c^{\prime}-\mid i r\right) x$.

$$
\ldots x=\frac{b c^{\prime}-b c}{a c-a c^{\prime}}
$$

$\therefore \frac{a^{\circ} c-a c^{\circ}}{a^{\prime} j^{\prime}}=\frac{\left\langle c^{\prime}-b^{\prime} c\right.}{a^{\prime} b}=\frac{i^{\prime} c}{}-a c^{\prime \prime}$

$$
\left.\therefore\left(a b^{\prime}-a^{\prime} b\right) i l c^{\prime}-b^{\prime} c\right)=\left(a^{\prime} c-a c^{\prime}\right)^{2}
$$

J. $\mathbf{H . T}$.

## A PHOBLE.I BY W.F. C. SHARP. M.A.

In a circular cubic, prove that (1) the directrices, or chords of contact, correspunding to concyclic foci, pass through the centre of the focal citcle, which is the point of contact of one of the tangents parallel to the real asymptote; also (2) the four centres lie at the intersections of the cubie and a rectangular hyperbola which has an asymp. tote in common with the cubic.

## Solution by Prof. Nash, M.A.

A bicircular quartic is the envelope of a circle whose centre is on a given conic, and which cuts: given circle orthogonally. The bicircular quartic becomes a circular cubic if the coric is a parabola. In either case the points of contact of the variable circle with its envelope lie upon a line passing through the centre of the fixed circle. Since this is tue in the general case, it is also true when the radius of the variable circle is evanescent. i.c.. when the circle reduces to a focus, and there: fore the chord of contact of fangents from a focus passes through the centre of the circle rpon which the focus lies.-From Educational Times.

Methoa's and Illustrations

## ENGIISH L.ITERATURE. thomison's "stasons."

1. Descrine the condition of Euglish literature during the period preceding Thomson's appearance as a poet.
2. Write a note on the character of Thomson's poetry.
3. Compare Thomson and Cowper as descriptive pots.
4. Give in your own words, introducing quotations, the substance of either of the following :
(a) The story of Lavinia and Palemon.
(b) Description of the eveniag occupation of women.
(c) Description of industry and its effects.
5. Quote, with proper punctuation, either of the following :-
(a) The 17 lines beginning-
" Mer form was fresher then the morning rose."
(b) The 24 lines beginning-
"Oh may their eses no miserable sight, save weeping lovers, see."
6. Quote any six single lines that you think particularly meritorious.
7. Illustrate from the "Seasons" ;
(a) Characteristics of the writers of Thomson's time.
(b) Characteristics peculiar to Thomson.

8 Write brief notes on the following:
(a) Diric reed.
(b) The summer suns concocted.
(c) Libra weighs in equal scales the year.
(d) Arcadian song.
(e) Full mouthed cry.
9. Paraphrase the following lines:
"Ifence every form of cultivated life In order set, protected, and inspired, Into perfection wrough:. Uniting all, Socieiy grew numerous, high, polite,
And happy. Nurse of art, the city reared
In beauteons pride her tower encircled head;
And, stietching street on strect, by thousands dew;
From twining wooly haunts, or the tough yew To bows strong-straining, her a-piring sons."

CloUGH:S "as Ships becalmed."
10. Give, in few words, the substance of the poent.
11. "Throughwinds and tides one compass guides." What do you understand the "one compass" to be? If both were guided by one compass, how can the divergence be accounted for?

## bryanr"s" evening wind."

12. Write a brief sketch of IBryant's life, mentioning his chief works.
13. "The conception of the poem is truly poetical." .Discirss.
14. Point out the chief beauties of the poem.
bxTractr from ruskin is high school. KEADER.
15. Reproduce the extract in brief outline, giving the general divisions, the leading propositions under each division, and the arguments by which they are supported.
16. State clearly the three lessons which, according, to Ruskin, the arts and labours of life teach us of life's mystery.
17. Explain the dilemma in the last two paragraphs.
hongrellow's " hanging of the crane.
18. Name the chief fatures of Longfellow's style. What is the principal charm of this poem?
1y. To what does the poet compare the ; visions of the future ?
19. Quote, or reter to, any pans iges that you think faulty, giving reasons for your opinion.
20. Write bricf notes on the following:
(a) Hanging of the Crane.
(b) Rolled on its harmonious way.
(c) Ariadne's Crown.
(d) Knight-er. untry.
(c) Sunny regions of Cathay.
21. Vrite is brief epunme of the poum.
22. Name other American pocts.-l'eterbornogh Daily Eicning lievicu.

## HOル 「O STUDY HISTOR J.

It hats always seemed to me very credit. able to the brains of children that they are apt to rebel against the study of history, as it is usually presented to them. Why should any boy or pirl sincerely wish 10 know in which Olympiad the victory of Corcebus took place, or whether Ottoman was or was not the son of Ortogrul? When the witty Madame du Chateiet nwned to Voltaire her profound indifference as to this last point, he did not reprove her, but rather praised her. He told her that she was quine right in her indifference. but that if history could only be taught as it should be-with the really; unimportant names and dates left out, and those only retained which really throw light on manners or great events-history would then become for her the most interesting of all studies. Then, when Voltaire himself wrote history, he carried out his own theo. ries, and laid the foundation of the modern school.

There still remain among us many educa. tional institutions where historic teaching means only a list of wames, or a complex chart or "River of Time." A graduate of a Boston grammar school once told me that she was sequired in her school days to put on paper every date that occurred in the portion of Worcester's fistury studied by the class. On a large sheet she made five columns of these dates; she then learned them by heart so thoroughly that she could repeat them backwards, and at the age of twentytwo she had forgotien every one.

Warnel by experience, when she herself became a high school teacher she adopted a wholly different plan. Taking the success. ive periods, sine gave her pupils in each case a few outlines and a few dates from the manual. Then she gave a few questions, of which they were to learn the answers for themselves, in such books as they could find in the schonl library or elsewhere. They were to bring to her all the light they could obtain: she was to add whatever she had. From time to time wider examinations summed up the whole. This method often led to prolonged study of particular points. Thus the Reformation occupied one paragraph in the manual they used, but to that one paragraph her class devoted six lessons. The pupils eagerly discussed every point of the Reformation, lalking it over-l?otestants and Catholics logether-with pertect freedom, and at the end of the time they passed a written examination that amared her.

Nor did the benefit end here. Her pupils found their love of books rapidly develop when the charm of a special investi.ation was offered to them, and one joung girl told her, sevetal years later, that her whole intellectual activity dated from this course of les. sons, and that whereas she had before been content with an exclusive diet of Mrs. Southworth's novels, she had ever since demanded better food.

I am aware that 1 am suggesting nothing new to teachers of experience. I am awate, alsc, of the obstacles io any course that demards original research on the part of pupils. But, after all, it is only this flavour of original research. on however small a scale, that makes history tuke any real root in the mind, and a single period or event explored in this way fixes the very facts more vividly on the mind than if thes had been learned by heart from a neat lulle compen. dium, all conveniently arranged beforehared by somebody else.

Of course, history can be no more learned without names and dates than a body can exist without a sketeton. But the dricst anatomist does not seriously mantain that the skeleton is the body, and that fieth and blood have no business to exist. Yet the anatomical teacher of history does believe this, and grows indignant when you ask that his department should consist of anything but bones. For myself, I believe in the bones-in their place. No pupil should be permitied to take the picturesque and romantic part of any period without a perfectly connected framework of dates for its vertebral skeleton. But a few dates will answer for :his, and the fewer they are the more likely they will be to reman in the mind. It is better to learn only twenty of these, and carry them through life, than to
(Continued on page 938.)


fradakatos for the calling of a skilled workman lies outside the ordinary domain of school life. It is in special technical sehools, says Mr. liteh in his lectures on teaching, that the craftsman shoukd be helped to study the philosophy of his own trade. Such schools under the name of Licoles d" Afprentis in lirance, or of "lechnical and Trade Schools in Switerland and Germany, have long existed and done excellent work. Very few such insmur. tions have succeeded in England with the exception of the Trade Sohool at Bristo! founded by the late Cimon Moseley, and the Trade School established under the Endowed School Act at Keighley. Now that the old system of apprenticing to masters has died out, the hest substitute for it is to be found in the establishuent of schools which shall be accessible to the scholars who have left the primary schools, and in which the instruction in manual arts, though based on science, shall be consciously directed to practical ends.
The function of a Trade or Technical School is rather industrial than educational. It is to teach science in its application to industry and with a special view to the needs of the skilled artisan. Its course should include applied mechanics, experimental ;hysics, electricity, mag. netism and heat, chemistry, desoriptive geometry, the properties of matter, measurement of planes and solids, and the principles of construction generally. There should be a workshop, a museum of tools and implements, a chemical and physical laboratory, in which the learners can perform experiments under supervision; and the classes should be so arranged and divided that the learner may obtain an insight into the scientific basis and the practical rules of the paricalar craft which he intends to follow.

There should be no greal difficulty in the establishment of such schools in all great industrial centres; not even in de. vising a liberal system of inducements by way of scholarships or otherwise to encourage the most promising scholars from the primary school to devote a few months to such special studies before entering on the business of their lives. Enormous sums have been bequeathed in England for the purposie of apprenticing boys to trades. They are the survivals
from a time when the word "apprentice" had a real meaning, and when the provision of such funds was one of the wisest forms of benevolence. But the conditions of industrial life are so altered that these large funds have ceased to serve their inlembed purpose, and are too ofien only disguised doles of a mischievous kind. The disposition of such funds which will be most nearly akin to the intemions of the original donors is obviously the estab. lishment of technical schools and of such bursaries or scholarships as may facilitate access to them.

Many things, Mr. lïtch very truly says, are very well worth knowing, which it is not the business of a school to teach. The world is a great school in which we are to be learning all our life, and he who brings into it quickened facilities will leam its lessons well by actual experience. lut a child does not come to school to be told that a cow has four legs, that fishes swim or that bread is eatable, nuti ious, solt, white, and opaque. Nor does he come there to learn the special business of a farmer, or of an engineer, or of a shoemaker. He is there to learn precisely those thungs which could not be so well learned nut of doors, and to gain that sort of capacity and awakening which will enable him to acquire readily the lessons of common life and to turn them to the best account.

The best method of discovering what is the proper province of the school, is to consider what sort of lives your scholars lead, and the sort of homes they come from. In the houses of the very poor there is probably little talk going on such as would draw the attention of children to the most interesting facts of mature and of daily life. So in schoois in which children of this class are found, conversational lessons on common things, on birds and beasts, and on every day events, arr very useful and even necessary: If children live in towns and seldom see green fields, nccasional lessons on the crops, the aspects of nature and on rural life are legitimate parts of a school-course. But if children come from orderly and intelligent homes, in which they daily hear subjects discussed which are worth talking about, and if they know: something about the country, lessons of this kind are less necessary. Bear in mind that anything you can do to make the knowledge derived from daily observation more exact and
more useftal, is worth doing, because it helps to make the future study of science easier. But do not imagine that everything of which it is a shame for a child to be ignorant, is necessarily your business to teach. The right rule of action appears io be this. It is no concern of the teacher to teach in schools that when an observant and intelligent child would learn out of doors; but it is the concern of the teacher so to teach him as to make him observant and intelligent.

Nor is it incumbent on teachers to anticipate the requirements of future life by giving the knowledge suited to this or that employment or profession. To do that would not only be to do grave injustice to the child who did net mean to adopt the particular calling; but it would injure him who did, by prematurely specializing his knowledge and directing his thoughts into a certain money-making groove. The duty of the school is to call forth such activities and to givesuch knowledgeasshall be available alike in all conceivable professions or employments; and it can do. this rather by considering oftener what intellectual :rants are human and universal, than what is the way in which any particular child is to get his livelihood. A welleducated gentleman does not, it is true, know so much about a steam engine as an engineer, nor so much about the rotation of crops as a farmer, nor so much about book-keeping as a cily clerk, but he knows a great deal more about all three than either of them knows about the other two; and this simply because his faculty of thinking and observing has been cultivated on subjects chosen for their fitness as instruments of development, and not on subjects chosen with the narrow purpose of turning them to immediate practical use.

There can be little doubt that in the education of the future a larger space will be occupied than heretofore by the disciplinc of $t$ inductive sciences, and it will be well for those of ou: readers who are entering the teaching profession to accept this as inevitable and qualify themselves both to mect the want and to guide a movement which must for good or evil have important consequences. It is for them to take heed that the newer knowledge shall be not less educative and inspiring than the old, and that the word "science " shall not degenerate into the symbol for what is enpipirical and utilitarian, nor for another kind of memory work.

He who sets himselfto do this has befure him vast fields of usefulness.

No apology will be needed from us for quoting largely from Mr. Fitch, as the subject of industrial and trade schouls is one at present claiming a large share of attention, and as upon this subject Mr. Fitch may be regarded as an anlliority.

## OUK EXCHANGES.

Tus: March sftamic hegins with Mr. Lowell's poem. "Fancy or Fact?"; Dr. Holmes writes an account of his recent tip abroad, called "Our Ilundred days" : there is a paper on "Theophile Gautier," by James Breck Perkins, ind this is followed by the second part of Lawrence Siaxe's "Lady from Maine." agnes Repplier com" 'butes an artucle on the "Curiosities of Criticism," and William Cranston bawton has a f"erer on "The Hippolytos of Euripides." Mrs. Olipham's and Mr. Aldrich's "The Second Son," and Marion Conwford's " baul fanof," are continued ; there is a criticism of "Longfellow's Ant." by Mr. Horace E. Scudder ; and there are also criticisms of "Agnes Surriage," of books about actors, and of Recent Poetry: Louise Chandler Madten contributes a prem called "Come Back, Dear Days!" and the Contribuor' Chals and books of the Hon:h finish the mapazine.
Tue numbers of The Liaing dige for Ecbruary sth and 12th contain, China, by the Marguis Tseng, As:atic; Jubitee Reigns in England, National: The \%enith of Conservatim, ly MatThew Arnold, and Rural Life in Russia, Nincetenth Centary; Benvenuto Cellini's Character, by J. Addington Symonds, and The Presem l'osition of European Yolitics, Formicisly; The Land of Darkness, Blacterrood; The Seventh Eatl of Shaftesbury: Incidents in his I.ife and Lalors, Leisure Hoar; some recollections of Charies S:uant Calverley, Temple Bar; French Fimance, I'io Nonos Will, Iord Iddesleigh, and the trogress of Savage Races, Sfectator ; An Ancestor of the Czar, and Farm Life in the North a Century Ago, St. James' Gazette: Sjume Narrow Escapes, All the Year Kotrml; Ipecacuanha Cultivation in India, Nature; The Excavation of the Great Sphinx, Times: On a Jury, Globe : with instalments of "The Strange Story of Margaret Beanchamp," and "Richard Cable, the Lighishipman," and poetry.
The numbers of The Jiving Ase for February 19th and 26th contain Lord Shafestury's Life and Work, Quarterly; The Greeks in Asia, The Indian bourtons, and the Wellesteys in India, Asiatic Quarterly; Last Words with General Gordun, fortuightly; Moss from a Rolling Stone, Blackivood; The llighlands of San Paulo, Month; A Few Manchester Worthies, Temple Bar ; The "Man-cating" elephant of Mundla, Chambers'; A Belgian Christmas Eir, All the l'ear Round; Amateur Ant in the Seventeenth Century, Specta. for; How General Gurdon Saved My Lifte, Pall Mall; The Pilgrimage to Kertela, St. James'; Pitates, l'ast and l'tesent, Telegraph ; wih instal. ments of "Jack and Minory," "The Rubluer's Cave" and "Richard Cable" and poetry. For
fifty-two numbers of sixty-flour large mages each for more stan 3.300 pages a year) tie subseription price $(\$ 8)$ is low: while for $\$ 10.50$ the pullishers offes 10 sent ony one of the American $\$+$ momithies or weeklics with 7he livimg ise for a year, both postpaid. litell \& Co., Boston, are the pub. lishers.

## SEVIE:I'S AND NOTYCES OF BOORS.

Some years ago the author of "John llalifax Gentleman," puliliched a " : arable for Yound and Old," entited "The Lillic tame l'rince and his Travelling Cloak," with twenty.four illustrations by J. Acl. Ralition. The volume has keen out of print for some time, but we understand that a new edition is to lee issued immediase!y ly Messrs. Mc.lillan \& Co.

Hesides the "original" MS. book of "Alice in Wonderland," which has been published this weck, and the dramatiration of the story, we are also promised another variation on the ever- fresh theme. This is a selection of some twenty-four of Mr. Tenniel's drawings, enlarged and coloured under the superintendence of the artist. The volume will be called "The Nursery Alice."
D. C. Heath \& Co. have published the following new books on Eilucation: Campayri's Hiztory of Pedagugy : Gill's System of Eilucation : Kadestock'sllabitin Education: Kousseau's Émile; l'estalozzi's Leconard and Gertutude; lichter's Levana : The Doctrine of Eifucation: Rosmini's Method in Education ; Hall's Methods of Teaching Ilistory ; Bibliugraphy of l'edagogical Literature ; Lectures to Kindergartners; Monographs on E:ducation.

Ir is saill that when the unabridged edition of Webster's Dictionary first appeared (without a definition of the word unabritged), that great scholar, Cateb, Cushing, wrot a criticism on the stupendous Hosk, saying: thas, for its size, it had as ficw errors as could loe expected. This pura!ed the editors, who asked an explanation of Mr. Cushing's information on the subject of thuse errors. In reply, Mr. Cushing marked fire thousamin mistakes in the volume which had been presented to him, and sent it back.
" A Dehaghtrut litle handbook is 'The Mer. chant of Venice,' as issued by the Cassells, with a historical introduction of fifieen pages by Prof. Morles; and 'The ddventures of Gianetto,' the story of the 'Jew who wanted for his debt law a pound of the flesh of a Christian.' "i : : : linee cakes,' and the foem of 'Gernutus, the Jew of Venice, all ol which Shakespeare is supposed to bave made use in composing tis famous play. By the bye, we prosume that were sucil a plas written in the present age, it would be called a 'comedy drama.' Shake.peore's grocesses show what legitimacy means in the use of preexisting matetial. This is a vely different thing frum pla. giarism, especially when the material so used is wrought into forms whish differ alm.st as much from the otiginal as the iroduct of the loom docs from that which gocs into H."-N. Y. Evening Telegram.
 not offer a single atticle wore han average merit. The "Byronia," which fusms the $力$ ère de resstance, is confined to a siar:le page of verse,
"Opening Lines to Iara," and three pages of a letter of Byron's giving his secollcctions of Mar ame de Stail. George von Bunsen contuibutes a paper on "What Germany is Alkeut." and Malliew Arnold writes a hiographical sketch of General (ifant. The oller contributions-six in numberare agrecabic reading. The magazine is alltactively potten up at a shilling the numbers.- 7 he Crific.
"Tire novel is the literary form," says the Ne: Orleans 7imes. Demorrat, "which the nineteenth cer.tusy may trul) cham to have perfected. Set at the present time even the novel seems to tie suffering from the over-scientific spirit. In the struggle after perfection of sifle, more essential altributes are lact. Our leading novelist; seem to forget that the overshadowing purpose of a novel should te the unfolding of the plot, and that the novel was never intl did to expound schemes of philosophy and wire-dierin theoriss concerning the organic structure of the social fabric. livery perfect novel teaches many a moral, is does human life, of which the novel is but the mirror. There are few things more tedious than what the Germans call the 7emites-Novelle. It is better that Philosophy and Fiction should dwell apart. In all the provinces of imaginative literature we stand in dire need of the buojant naturalness which is characteristic of carlier writers. The louging for this quality is not to be satisfied by the anatomical accuracy and overwrought attention to detail which chiefly matks tie most applauded efforts of co..temporary genius."
Tilat noble, knighty, though not altogether stainless man, Sir Watter Raleigh, is the subject of a new volume by Mr. Eilmund Gosse, of the " linglish Wonthies Series," published iny Appleton§ Co. This hero of the Elizalicthan period had more to do with America tian any of the public men of Eingland whose memories are respected on this side of the Ocean. Ilis adven. tures as an exi lorer make him a hero of history; his favour at the count of Elizabeth makes hima hero of somatice. llis vile treatment by King James, his long imprisnmment, and his execution on the falsest charges make him a martyr. Mir. Gosse has spated no pains in collecting the materials for this life of Kaleigh, which is minute enough in its details, and yet not so long as to require much time for perusal. The nariative is singularly interesting, showing the weak as well as the strong points of Raleigh's character, and giving views of his qualities a: a domestic man, a counliex, a navigator, a man of letters, and a puriot, that mok= a rare combination. The acci unt of his trial and execution, though composed of well-knewn natcrials, is affecting. Bua more dramatic ; the clapter drecriling the irial at Winchester for plotting with others to raise King James' cousin, Arabella S.uart to the throne. There wias outrageous conduct and talk at this trial, particuiar!y on the part of the AttorncyGeneral. Sir Edward Cuke. Mr. Gusse has told of this and all the other events of Raleigh's life in the manner of a conscientiuus compiler and an expert litterateur. His is one of the best books of a series that should be possesied by every one that desires to be well acquainted with geat Euglish. mell and the work they have done. - Phitadelftis Evciting Bullstin.
(Continued from page 9.35.)
be able to repeat five columns backwards when you are sixteen, and to have forgoten them all when you are twenty-two.

If the principle applies to young people at school, it applies still more to those who, having left school, are reading by themselves or with a teacher. There is no young person, I believe, who could advantageously read through Gibbon's Rome, as a whole, or even through Bancioft's United States. But let the student take some very simple outline of facts, and proceed to throw light on it for himself, and it will soon prove interesting. How dry is Wurcester's brief narrative of the settlement of Massachusetts, for instance. But read with it the journals of the colonists, as given in Young's Chronicles of the l'ilgrims and Chronicles of Massachuselts, and throw upon these the side-lights obtained through poetry and fiction, through Whittier's. Margaret Smith's Jouroul, Mrs, Child's Hobomock, Longfellow's Miles Stardisha, Hawthorne's Scartet Letter, and Motley's Merry ifount. When you have ended, the whole period has become a picture in your mind, and the most thoughtful and serious discussion of it by Bancroft or Palfrey, finds you with a prepared and intellinent mind, if you have the time to give to it. And if period after period could be followed up in the same spirit, history would become for you a study of absorbing interest, and ines. haustible in is themes.

It may be said that some of these bnoks ase " light reading." They are light reading in the very best sense, if they throw light on what else would be dark. I do not believe in the theory that only what is disagrecable is healthy, but hold that labour itself is most useful when it is applied with a will, and not against one's will. "What interest is remembered," was one $c$ the favourite maxuns of Horace Mann. There is no danger of any one's acquiring any great range of histurnc knowiedge without corresponding tuil; but it is prossible so to lay the foundations of knowledge, that later toil shall be a relight, and the habit of study its own exceeding great reward.-Pennsyiennia School Journal.
HOW TO TEACH"LANGUAGi:" ro YOUNG rUjJILS.
Tite teacher should remember that by " lanjuage teaching, " we mean that training which shail result in a ready and correct use us linguage. She must also semember that ianguage is used in two ways only: orally arid in writing. Remembering also that chidren learn to talk by talking and to write by writing, she is prepared to take the first step in language teaching incelligently:

1st. Give the pupils something to talk about. Tell them a good story and then lea them, in sura, iell it to the class. Onepupil can ell! a litule of it, and another may then take it up and carry it on until a third is
ready to assist. In this way half a dozen, and even more, pupils mis take part in tell. ing the same story.

Other stories can be added from day to day untila sufficient stock has been accumulated for ordinary use. A list of these stories should be written upon the blackboard.

Daily, or whenever the pupils are weary of any class exercise, let the teacher say, "Now, children, tet us tell stories. Whe will tell the story about the 'monkey?'" Ned, and Annic and George tell this story in their own simple language. "Now, who will the story about our dog. Carlo?" Three or four other children take part in this story. And so the story-telling goes on unal it is time to resume the usual class exercises.

The children should be encouraged to tell these stories in their own words. Few if any corrections: should be made until the story has been fully told. Then the teacher asks if any one has noticed a mistake. Such mistakes as have been noticed will be commented upon bs the teacher, but in such a way that the pupils will feel perfectly free to "take a hand" in the story-:clling whenever they have a chance. The teacher should remember that most of the mistakes will disappear as the puph becomes accustomed to talking.

These stories should be told and not reand to the pupils, in the firs: place, by the teacher. Young children are very likely to catch the words o.f the bcok, and whenever they do so, the sinrytelling, as a language lesson, is of liate value.

When the children are old enough to write, these stories can be written upon the slates. Thus they may be trained in the use of torit. ten language. They should be encouraged to express themscives in writing just as they iave expressed themselwes when telling the story orally. Moreswer, the teacher chould neither talk herself nor allow anyone else to talk while this writing is going on. She may walk quietly among the scholars as they write and may take note of such crrors as she would like to comment upon before the whole class, but the pupils should have at least ten minutes of uninterrup:ed time for writing.

The work thus brielly oullined should be carried on for four or five years, the storics be:ag adapted to the ages or capacities of the pupils. If it be truc that children learn to talk by talking, and to write by writing, surely we have a right to expect that at the end of five years of such training they will express themselves both readily and carrectly in gond language.-Pradical Tenther.

## DICTATION EMENCOSES.

iberations exercises should be shors and :ddapied :o the needs of the pupils. Some exercises should contain words requiring the use of capital letters, some the use of abbre-
viations, some marks of punctuation, ssine forms of notes, bills, invitations, letters, etc. Every teacher in the lower grades of the grammar and all grades of the primary schools should prepare a large number of such exercises. If selected at hap-hazard or " on the spur of the moment," the teacher will almost certainly fail of adapting them to the wants of ier pupils.

Dictate to the class one of these exercises every day. The pupils will write it upo.a their slates as the teacher dictates. This being done, the teacher writes it correctly upon the board, and the pupils note and correct their own mistakes. If the teacher prefers, the pupils may exchange slates and earh mark the mistakes of his neighbour.

In the lower primary classes these exercises should comprise only one sentence: but in the highest primary, and in all the grades of the grammar school a succession of sentences should be dictated, in order that the pupils may learn to break them at the proper places, and use the proper marks of punctuation. If the teachers in the higher grades find this work too difficult at first, they should confine themselves to exercises containing only tiuo sentences until the pupils can with ease write them correctly.

Notes of inviation, letiers, bills, etc., should be dictated in order that pupils may be taught the best forms to be used, but it will not always be necessary to dictate them in fuct. The opening, including date and address, together with the few closing words and signature, may be all that is necessary, especially with more adranced pupils.

Fifteen minutes should be the extreme limit of time given to one of these exercises, including the examination of the slates. It is better to have a short exerciscevery day than to have a loug one only two or threc times a week. Ol course teachers must not undertake to examine the slates themselves. Few towns or even cities can afford to hire teachers to examine slates. Better results can be obtained if pupits are required to examine their own work and correct their own mistakes. In this, as in all mher school exercises, the teacher must learn to economize her time and her energy. But more will be said upon this subject when we come to speak of letter-writing and composition.matsical Tauker.

Mk. Max Mlit.rek's profound dejection, ocensioned by the death of his daughter, is causing serious anxiety to the friends whose intimacy gives them a close insight into his exceptiunally emutional namure. He has a strange longing to abandon all the pursuits which have hithe: to engrossed him, and to bury himself in obscurity in that dreariest of all German zowns, Dessau, which is his native plase.

## Educational Intelligence.

## COUNTY OF HALDIMAND TEACK. ERS CONVENTION.

Tue teachers of the County of Haldimand met in convention in the Public School, Dunnville, on Thursciay and Friday last, the grd and ith.
The President, Mr. Cheswright, addressed the teachers on the importance of institutes, and showed how they might be rendered more efficient. He briefly referred to the good work done by the Haldimand Institute, and concluded a very praciical address by urging on all present the importance of joining in the discussions.

Miss Jennie Taylor taught a model read. ing lesson to a second class.
Mr. J. J. Tilley, Model School Inspector, read a paper on discipline, based on Chapter IV. of "Fitch's Lectures on Teaching." He discussed : first, the importance of discipline ; second, the characteristics of good discipline; third, the means of securing good discipline. Mr. Tilley's paper was discussed by Messrs. Harrison, Kennedy, Blackman, Kinnear, Hindson, Bicknell, Rowat and Miss Moir.
Miss Chambers next took up map-drawing.
By request Mr. Gourlay si:nwed how a class might be taught to draw a map of South America.
On Thursday evening lectures were delivered in the Opera Houscio a large andience, by Mr. Tilley and Dr. Montague.
On Friday morning Mr. Gourlay, 13.A., Modern Languages Master, Galedonia High School, took up the subjec! of algebra.
The teacluing of fractions to a class of beginners was illustrated by Mr. Tilley, who showed the advantages of object teaching. At the conclusion of this lesson a discussion took place, in which Messrs. McCarthy, Hindson, Kennedy, Kinnear, Harrison and Miss Lambier took part.
The commituec appointed on the "Ryerson Memorial Fund " reported as follows:-
We, the commitue appointed to look after the raising of fundy for the Ryerson Memorial Fund, beg leave 10 report as sollows:-
" While we, as teachers, recognize our obligations to the late and estecmed Dr. Ryerson, wealso think the country generally is equall indebted to his labours, and there. fore as a public benefactor, it is only just that the amount of the deficit should be sup. plied from the funds ef the Provincial Treasury, especially as the teachers have already done their part."
The report of the commitee was adopied without dissent.

Mir. Hindsan, Zrincipal or Danville Public School, next tonk up the subject on "Mboralizy in Public Sthons" under ithe inthowing heads: 1. What is morality? =. Value of
moralisy; 3. The sear hing of marality. Mr. Hindson's remarks received the unanimums endorsation of the convention.
The Ontario College of Precepmors was discussed by L. Kimnear, B.A., Assistant Master Dunnville High School. The subject brought forth an animated and somewhat protracted discussion. Finally a resolution, favouring the establishment of a College of l'receptors, was adop:ed.

Mr. Tilley next discussed "The Relation of the Teacher tr His Work," under the following heads:-The relation of the tcacher, 1st, (1) the trustees; znd, to the people; 3 rd, to his pupits.
On motion of Mr. Moses, seconded by Rev. Percy Smith, a bearty vote of thanks was tendered Mr. Tilley for his valuable assistance during the different sessions of the convention.

## EAST GREI TEACHERS /NSTI. TUTE.

The East Grey Teachers' institute met in the music hall, Thornbury, Feb. grd.

In the afternonn Dr McLellan was introduced, and took up the "S:udy of English Li:eraiure in Schnols." The speaker contended that the culture of the heart was of lar greater importance than the mere training of the intellect; and that heart culture could be attained by the proper study of good English literature. He considered that libraries in the scinol would be a very great benefit.
Mr. Merchant. of Owen Sound. laid down a few principles on elementary drawing.
The second day's proceedings began at 9 o'clock on Friday forenoon.
The first subject introduced on Friday was "Corporal Punishment." A number of the teachers took part in the discussion.

Mr. Merchan: addressed the association on the proposed "College of Precep:ors for Ontario.'
Dr. McLellan then took up the "Art of Questioning." The speaker was only able io discuss one leature of in, viz. : - its ob. jects. Dy means of questions the Dr. called torth from the eachers present the differen: objects which the queswoner should have in view. 15:. To discover the pupil's knowledge; 2nd. To arouse his atiention; jrd. To fix the knowledge ine already has; fth. Thexiend his knowledge; 5 th. To test the pupil ; 6:h. to excite the interest of the dull pupils.

In the afternoon a communiataion was read from the Women's Christian Temperance Union, of Thorabury, asking the association to use iss infleence to secure the use of a text-book on :emperance in the public schonk. The communication was tavourably received, but the anoocianon had alreadj; saken the required action in the mater.
Mr. Lincsay being called unun zave a
paper on the proceedings of the Provincial Assoriation.

Mr. Whyte gave his method of teaching geometry.
$A$ vote of thanks was extended to Dr. Mcletlan for his services.

The public entertainment on Thursday evening was a success, a very large audience greeting Dr. Mcleillan, who delivered his celebrated lecture, "This Cinata of Ours."

## . MA.MTOLFA.

Tue regular quarienly meeting of the l'rotestant section of the Board oi Education was held lieduesday. Feb. and, in the education offices.
The appeal of the petitioners for the lshester school district arainst the refusal of the council of Spinsfield to comply with the request for the establishment of the school was considerch, and it was resolved that, in view of the fact that the purposed district dies aff, rd schonl accommodation to all the parties interested in the district 10 be served, the action of the council oc allowed to stand.
A by-law of the council of Turte Mountain estab:ishing Ferns Hollow School District. and another from the coungil of Glenwood torming Butany School District were confirmed; and the formation of Bethel, Alces. ter and Dumfries were also confirmed conditionally upon certain supplementary information being found sasisfactory.
The formation of Bruce School.District, in the municipality of Elton, was not agreed to. The superintendent was authorized to cooperate with the council in some systematic arrangement of school districts for the municipality.
A resolution was agreed to asking authority for an increase of expenditure for the Normal School, and the superintendent was authorized to make necessary modnications in the relation of the school to the Winniper schoul, and so report.
Memaranda :ugibented by a committee of the general boatd of education, in regard to legislation, were read, and enpies ordered to be supplied the members.
A statement of the explanations given by school sistriets which were in defauls in hear cersus returns hast November, was consider. 1 ard the superintendent authorized to remit the penalty in thuse cases in which the explanation was satisfactory.

## 

itr the last meeting of this buard communcations were read as follows:-
From Miss J. Holtori, lendering her resig. nation as teacner in the east ward schnol.
I'rom Miss M. 'Eep!nw-now in Toruntoasking the board, slumuld an opening present isself at lendsay, io have the oppotinning of tendering, her serviess as icacier ol the Kin. dergar:en system.

From Mr. Principal Harstone, reporting on the number and valae of books in the high school library; and of maps, globes and other furnishings. Reference was made to the Government regulations as determining grants made to high schools on equipment in the points noted above, and surgesting that the board should increase the library, maps and scientific apparatus-now below the requiremetis as regards number-and thereby gain the maximum grant attanable. At a luter stage of the meeting it was decided by resolution that the minimum amount of $\$_{400}$ be granted and placed under control of the manaring committee for the purcliase of books, maps, etc., in older to bring the equipment up to the desired state of excellence.
Reterence was made to school accommodation, which was noted as still insufficient. Comment was made on the seating capacity of the schools.

On motion of Col. Deacon the chairmen of the several standing committees were appointed as an executive committee to cooperate with the chairman on matters relat. ing to education, with power to deal with engagements of teachers, but io report to the board in the same manner as other coinmittees. The resolution was carried.

## STAATFORD SCHOOL. BOAKI.

Ar the last meeting of this board Mr. Chadwick announced that he wished his agreement to end at forty days from date. The board decided to accept the resignation.
The maraging committee reported that permissiun had been granted to Mr. Freelind, :eacher of staging, to give a demonstration of the Tonic-sol-fa system of teaching music.
Mr. Alexander, inspector, said that he was in reccipt of a communication from Mr. Hearness, inspector of Middlesex, who, from his experience of Mr. Frecland's work in his inspeciorate, recommended its adoption here. The board decided to give it a four mouths' trial, and with that object agreed to appropriate a sum ant more than 5120 , to be capended in that way. Messrs. Sharman, Kead and Barnsdale were appointed a commitice to make arrangements with Mr. Free. land for a course of lessons in some of the rooms.
1: was decided that Mr. Chadwich's pupils be pas into Mass Walker's room in the meantime, and that the board advertise for a principal to take charge of the model sehool, at a salary of Sg0, applications to be recewed up till second Tuesday in April, and dates to begin at the beginning of the fall term. The managing committer were empowered to wart on Miss Walker, and offer her the sum of $\$ 32 \mathrm{Eas}$ remuncratuoa fu: cxitra sersices during the lone teral.

The secretary was instructed to pay Mr. Chadwick two months' salaty, at the rate of $\$ 8 j 0$ at once, and relieve him, as he is sick, and likely :o be confined to the house for a week or more.

## FERGUS NOARI OF EDUCATON:

Ar the last mecting of this soard the chairman on behalf of the committee appointed to confer with the Elora School Board regarding non-resident pupils, reported that as the law stands where tue taxes paid by the parents of such children are less than the average taxes paid by the whole ratepayers of the municipality the board can make a charge of fifty cents per month for each non-resident pupil.
The committee ap;ointed to engage a monitor reported that they had secured Miss Maggie Samson till the summer holidays at the rate of $\$ 100$ per year. Miss Samson is assisting in Miss Slater's room, and since they are becoming accustomed to the arrangement they are getting along tetier than they did in the first place.
Mr. Craig thought the board had been very precipitate in their action in this matuer. Although he had never heard the idea of engaging a monitor hinted at, at the board or elsewhere, at the last meeting of the year, when a bare quorum of the members were present, it had been decided to engage a monitor. He thought it would be more sat. isfactory, in dealing with a matter that would ultimately mns: like!y involve an outlay of about $\$ 400$ a year, if, instead of pushing it hurriedly through at any one meeting, an intimation was given that at the next meeting a moion would be made bearing upon the subject. That would enable absent members to be present and hear what was to be said in behalf of the action proposed to be taken, and it would also ariord the. an opportunity of raising such objections as in their judgment the whole circumstances warranted.

## DUNMAS BOAKN OF $\because D U C A T 1 O N: ~$

At the last meeting of this boarc a letter was rearifrom the sectetary of the Mechan. ies' lastitute, asking: for the loan of geological specimens in the high school.
On motion the reques: was granted provided that the institute guarantec the proper care and safe return of the sliecimens.
The overcrowded enndition of the high school was discussed, and a metion carried, authorizing the property commitice to furnish the required seating accommodation at once.

Spplications for the position of assistant headmaster of the high school were then read from Messrs. J. I. Hatton, H. R. Lidicy and W. Dewar. None of these applicants possessing the proper cualifications it was moyed by ilr. Thomas, seconded by

Mr. Connell, and resolved, that Mr. Marshall be retained, and that the Secretary write the Educational Department that the board having advertised for a teacher and having had no qualified applicants for the position, have: kent Mr. Matshall.

## CHATHAM SCHOOL BOARD.

Ar the first regular meeting of this buard a petition way read by the secretary handed in by Mr. Mlurray and signed by some fifty persons, applying to the board requesting that coloured chitdren be admitted to the Forest Street School and other schools in their several wards.
It was moved by Mr. Cooper, seconded by Mr. Reed, that the petition just read be re-ceived.-Carried.
It was moved by Dr. Radley, secouded by Mr. Murray, that the petition as read be left to a committee to report. Carried.
The committee on sites reported in favour of purchasing lots 19 and $20-300 \times 200-$ situated fifty feet from the corner of Queen strett and Larwell avenue, having a frontage of 200 feet on said avenue, and ruuning southerly 200 feet along a street So feet wide. which is shown in the map.

The report was adopied and it was left :o the representatives of Ward No. 2 to enquire into the probable cost, kind of school house, etc., etc.

## NHA(GANA FALLS SCHOOL BOARU).

At a meeting held last month an application was received from Miss M. A. Henderson for increase of salary; a notice from the head master regarding introduction of fifth book in the school.
Moved by Mr. Groom and seconded by Mr. Carnochan, that Mr. Harcourt be appointed inspector at a salary of $\$ 50$ per annum, and that the cleri notify Mr. Har. court of his appointment. Carried.

Moved by Mr. Gray, seconded by Mr. Mckenzie, that the usual prize of 5.00 wonh of books be presented to the pupils passing the High Schonl entrance examination. Carried.
At a special meeting helc on Feb. $5^{\text {th }}$ it was moved by Mr. Mackenzie and seconded by Mr. Groom, that the secretary notify Kev. Mr. Gordon that the board will not require his services as inspector for the coming year. Carricd.

Miss a. liatiersos, Desmomi, has given up reaching, semporarily.
Miss Maticie Dowtisk, Alawick, has been appointed assistant school teacher at Josencath.

AN appropriation of S3000 has been matic hy Mount Forest to crect a new high school building in that tount.

Mk. Ascous Mc.inin.t, teacher of S.S. No 2, Saugeen, goes to Wirodstock this terma to altend the laptist Colloge.

Mr. Babcley a few weeks ago emered upon his duties at Duluth as principal in one of the high schools of that city.
Tite Uabridge Hoard of Eilucation is making preparation for the erection of a new high school building next summer. The first set of plans do not suit, they are negotianing for new ones.
Pue trustees of the Cotam School Section, since its division, putpose selling the old brick school hoase by putbic auction and building two new ones, which will add considerably to the taxes.

Mr. Geo. Dtacon has been appointed principal of S.S. No. 25, Vork Township, at a salary of $\$ 500$ per annum. The other ieachers are Miss Cooper and Miss bell, at salaries of $\$ 300$ and $\$ 350$ respectively.

The Union schoulhouse, near liobibins Mills, Ameliashurgh, was twice set on fire on the 10 h uht during a public meeting by the upseting of the chandeliers. A panic ensued, hut the fire was extinguished before serious damane was done.

Miss Kate MLleses, of 1'cmbroke, a pupil of the Iligh School there, who passed the chird class examination last summer, and was a pupil of the Kenfrew Molel School hast term, has aceepted the position of eacher of School No 3, March, near Oltawa city.
The Petrolea lligh school was closed one afternoon last week on account of water flooding the basement and putting out the lire in the furnace. Mr. Bell, of the schoel, has been confined to the house for a few days, and bas been unable to take charge of his department.

The concers given by the Ilighgate School for the purpose of getting a bell was a decided success. A long programme, consisting of readings, recitations, dialogues, and music, was given, presided over by the teacher, Mir. A. Samson. The proceeds amounted to something uver \$jo.

Messks. Macrenzie, Kice and Patullo, the Public School Management Committec, Woodstock, for the year, are making a tour of inspection through the schools. Miss Milne was engaged to teach in room numirat $1=$ East End. Niss Milne formerly taught in l'enth and Lambton counties.

Ties annual mecting of the United loasd of School Trustecs for the Williamstown lligh and Public Schools was held recently: (i. 11. McGio. livray, Esqๆ., was unanimously elected chairman: John A. MeDonald, sec.-Ircas., and i). J. Me. Donald, auditor. Afier some desultory business the anecting adjourned sime dic.
Tile annual convention of the high and jublic achool teachers of East Victoria opened at the lligh School, Ininsay, on the $10: h$ ult. $A$ very iarge programme of matters interesting to the profession was provided and discussed. In the cvening, at the Opera House, Mr. James A. Mcleclian delivered an able address. Sibiject, "- Critics (Eilucational) Criticired."
Miss Fifesmas, the lady priacipai of the Wimodstock Collese, before taking her departure for her home in liova Scotia, was the other day presented by the ladies of the college with an alloum. The inseription on the vutsitic cover of the book was as follows:-" To Miss Fireeman, from her g sls ul 'S6.7." The gentleman stuitents gave her 2
folio edition of "Evangeline," bound in aliggator. The Facults gave her a large, richly illustrated volume of "The Heroines of the Poets." These presentations were all made at different times and were entirely informal.

A merinst: of the lluntsvite Schoul liuaral was held recent!y to decibe on what kind of a school building should be erected this summer. After a good deal of discussion a resolution was carried to buide a brick builiding to cost between two and three thousand dollars, and put up in such a wis) that an addition can be added when circumstances require it. The archisect, Mr. Cuff, of Lindsay, is to mepare the phans, and it is hoped that cuerything can be got ready this winter, so that the contract can be let and work commened on the building as soon as weather will permit.

A meernicg of the Dundalk School Board was beld in the sehool-house on the gth ult. It was moved by R. Cornett, seconted by II. Jate, hat the secretary is herely instructed to get a list of scholars who have not attended any school the legal number of days during the past year, and to notify the parente or guardians of such childsen that unless the; comply with the school regula. tions at once, the law will lee enforeed without fear, favour or affection.-Carried. The trustecs were favourably impressed with the managemen: of each department, hut were disappointed with the average altendance.

Ar the regular meeting of the Wingham Schrot board held on the Sth ult., a commanication was read from Miss Catley, teacher in the thind depastment of the schoo!, who has been laid up ill at hes home in llount Forest for some tiule. Miss Catley stated that if the lioard did not desite to retain Miss Saell to teach in her place until she recovered, she would send her brother, who holds a Second $A$ and has been teaching for four years, tu fill the position. Considerable discussion ensucd over this communication, when it was finally zesolved to retain the services of Miss Snell for another month, at the end of which time, if Miss Catley is nut sultaciently well to resume her duties, the secretars is to ne.ify her that the Board would aceept of her sesignation.
Tuf. Tozomo lloard oi Education have ap. pointed four new seachers-Misses C. Davis, M. Coleman. J. Ilislop and b. Chisholm. A recommendanion to remodel the Central Scheol was referred back to the Internal Management Comwitlec for futher consileration. The board's finances are in a had way, and on the lirst of last month the accoant was over $\$ 27,050$ on the wrong side. The number of childien on the ralls is 7,246 , and it was stated that at least 1,000 wete without proper accommodiation. Many are taught in sheds with leaky roofs and whose walls bave neither lath nor plasicr. The Central sichool, tinc largess in the city, is almost unfit for use with. ont being atmost aitmether rebuils. At present the loord has not moncy to make the secescary alterations, and it was sugsested that the City Council should le asked for a special assessment of six mills, which would give the lhard $\$ 1=0,000$ The Internal Management Commillee will iry to devise some means to get over the financial difir. culties.

## Examination Papers.

COUNTY CARLETON
PKOMO:HON EXAMINATIONS:

## DECEMAI:K, $188 G$.

ENTRANCS TO ROURTH CLASS:

## AKITHMETIC.

1. Wrate: in worls the following numbers: 30040, $1003756,913762$.
2. Final the value of 16 sack; of corn, each weighing 133 lis. at 45 cems a busbel. (A bushel 36 llis.)
3. A ship sails for 6 wecks, 3 days, and 5 hours at the rate of 13 miles an hour: how far has she gone?
4. Keduce 15 Sqo feet to miles.
5. Three men are employed to cut woal at 6 cents a cord ; how long will it take them to carn $\$ 90$, if each man cuts two cords a day ?
6. Find the 11.C.F. and L.C.M. of $5_{4}, 165$, and 436.
7. What change should be returned from a $\$$ to lill given in payment of iS $\frac{3}{4}$ yards of cloth at 40 cents a yard?
S. Find the amount of the following bill: $12 \%$ jards at iS cents a yard; $S$ yards at 27 华 cents a yard : 63! yards at 2 S cents a yard ; and 27 yards at 33/is cents a yard.
8. A larrel containing iGO apples is bought for \$3.25. If the ajphes are retailed out at the rate of 3 apples for 5 cents, how nuch is gained b; the transaction?
9. Multiply 300040 by 20060 , and test the ate curact of the work hy dividing the product by the mulajplier.

## GEOGKAPH:

2. Define, Isthmus, Cape, Volcano, Bay, Lahe. Channel.
3. What two llemspheres have you stadied? Name the grand ditisions of land in each.
4. Whereare the following islands: Vancouver, Cula, Prince Eiluatr, Mantoulin, Calumet?

- Where are the following lakes: St. Clair, Nijpssing, Muskoka, Ontatio, Kainy ?

5. Into what do the following rivers flow: St. Inwrence, Missısiphi, Ollawa, Kideau, Maitland?
6. What enunties of Untario botiles on the Otawa ziter? ㅅame their comaty towns.
7. What counties border on the Si. Lawrence Name sheir comnty towns.
S. Name the provmees of the Dominion of Canath, and give their capizals.
8. Where are : the Rocky Mountains, the Alleshamy ?!nuntains, the Gulf of Mexico, the Istimus of Darien, the liermuia Islanis?
9. Wha: pursuits do the people of Ontaris f seneraily follow?
(iKAMMAK.
"When Nisht with wings of starsy homotn O'ershadows all the earnh and skies, Like some dark lecautecus trirl, whose piume Is sparkling with unnumbered eyesThat sacred stoom, hhuse fires divine, So grand, so countess, Lord! ate thine."
I. How do you know the nuun from the other parts of speech? How do gou know its number and gender?
10. Write out the nouns in the above stanza, giving their number and gender.
11. How do you know the serl) from the other parls of speech? How do jou know whether it is transitive or intransitive?
12. Write out the verbs in the forchoing stanza, distinguishing between transitive and intransitive.
13. What is an adjective ; an adverlo: a pronoun?
14. Write ont in separate columns the adjectives, adverbs, and pronouns in the abote stanza.

## TE EDUCATIONAL WEELK

| 7 . State w $n$ bat case cath of the following words is used in the above, fiving reasoms for jour answer: Nigh, wings, earth, whone thine.
8. Atsach a predicate to each of the following suljects:

The thermometer-
A clouds morning-
The leasts that roam over the plain-
9. Atach an enlarged sulject to each of the following predicates:

- sends forth thame, smoke and ashes;
___ is called an inthmus;
—_mends wi:h enpromsion;
—__mate cint red the fam yard.

10. Dride into subject and predicate:

The old man's story amused me very much.
In what province of the Duminion do yous reide?
The largest they in the room was punished.
EidCHLERS who desire to ohnams a stebtitute are
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