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# The Canada School Journal.

## AND WEEKLY REVIEW.

Vol. X.

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No 19.

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## The Canada School Journal and Weekly Review.

Edited by J. E. WELLS, M.A.

and a staff of competent Provincial editors.

An Educational Journal devoted to the advancement of Literature, Science, and the teaching profession in Canada.

#### -0-TERMS.-0

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## The Gorld.

The Dominion Senate has been interfering with the Scott Act in a way that will not commend itself to the admiration of the friends of that Act. They have cut a hole in the prohibition wall large enough to admit the influx of beers and light wines. Few can seriously doubt that such an amendment destroys all hope of a vigorous enforcement of the Act. Whether total prohibition is wise or unwise, practicable or impracticable, partial prohibition of this kind is sure to bring it into contempt. amendment concedes the main point by endorsing the principle of prohibition but takes away all hope of its enforcement. Probably the Commons will amend the amendment.

The rebellion on the Isthmus of Panama has been brought o an end by the unconditional surrender of the Rebel General.

the United States troops, to which we referred last week. Prohibited by his pledge to the American commander from engaging in a street fight, the commander of the insurgents had no alternative but submission. Some of the American papers point to this action, which no doubt was directed by Secretary Bayard, as a typical instance of proper interposition by a great power in the interests of civilization and for the protection of her own subjects, without seeking any ulterior advantage. The American troops were withdrawn as soon as their object had, been attained, and the combatants left to settle their own difficulties.

The end of our Northwest difficulties is not yet. reason to fear it may still be far off. The Half-breeds have skilfully utilized their advantages and are making a determined resistance to the advance of Gen. Middleton's troops. There can be no doubt of the ultimate issue of the conflict, but unless the rebels can be starved out, their capture and dispersion will involve, there is great reason to fear, a terrible conflict and loss of life. Some are beginning to murmur at the delay but if the end can be reached without the bloodshed that must attend storming the rifle pits in which the foe is so strongly entrenched, Gen. Middleton will deserve every credit for his humane cau-The case in regard to the Indians seems still worse. Poundmaker's fierce encounter with Col. Otter's force is ominous, though we trust the horrors of a prolonged Indian war may yet be in some way averted.

## The School.

We had intended to notice at some length a suggestive paper in the Andover Review for May, under the caption "what may justly be demanded of the Public Schools?" by S. T. Dutton. There are some good things in the essay. We give below one or two brief extracts, and may return to the paper in another number.

"The first and most just demand upon the school is that it lay the foundations of character, quicken the moral sense, and help the child to become an honorable citizen. That 'the brain is not all of the man' should be remembered and acted upon by every teacher."

So says S. T. Dutton in the Andover Review. The point is well taken, and there is need to have it reiterated and emphasized. Schoolmasters have almost as much to do as mothers with shaping national character. To a very important extent it is true that the nation will be what the teacher makes it.

We give in this number some extracts which were crowded out last week, from Dr. Withrow's pamphlet on the proposed federation of colleges. Since those selections were made two other papers on the same subject, but both hostile to Victoria's his issue seems to have been accelerated by the action of entering the federation, have come into our hands. One of these is from the pen of the Rev. A. Sutherland, D.D.; the other is anonymous. As our readers will wish to hear both sides we propose to select some of the strongest paragraphs from these opposition pamphlets, for a subsequent issue of the JOURNAL.

"The marking system, a relic and reminder of ancient methods, is gradually yielding to better incentives to study. What a pupil is forced to do, or is hired to do, adds little to his self reliant character. To build up and strengthen the forces 'within the child' is the highest art in moral training."

As we have intimated elsewhere we think such statements as the above, from Mr. Dutton's article in the Andover Review, altogether too sweeping. The marking system appeals to the spirit of emulation and love of approbation. doubtedly higher incentives to study, but there are likewise far lower ones. With the majority of children it is doubtful if a better stepping-stone to higher things can be found than a judictions use of the marking system, not in any sens is a finality but as a means to an end. The teacher must get hold of a young mind in order to lift it up, and in order to get hold of it he must come down to its own moral level.

A writer in the Ohio Educational Monthly argues with con-"rest day" for teachers and pupils. He attributes the frequency of "blue Mondays" to the excitements of Saturday thinks, be of great advantage to the many pupils who have to assist their parents on Monday mornings, and also to those nonresidents who have to come in from their country homes. The subjects in which many of the best schools in the United writer says :-

"If the rest-day came on Monday, school would be out for the week Saturday afternoon. Considerable amusement could be obtained before bed-time. Sunday would be given up entirely to rest, with no worry over lessons. On Monday the pupil would feel rested and invigorated—ready to play or work look over the lesson for "to-morrow morning," which is not so far off as Monday morning is from Saturday night."

Could not a still stronger case be made out in favor of having the rest in mid-week, say on Wednesday?

The injury done in many a school room by coarse, il! natured improvement on the old. sarcasms is incalculable. It is a cowardly, we had almost said Now what will be the effect of the holding of copyrights and always many others, whose natures are so sensitive and whose many of the best men of the age are on the stretch to a comp

be made the butt of ridicule is to them positive torture. rasps the delicate fibres of mind and heart, and leaves wounds that are often slow to heal. The timid are frightened out of all self possession; those with small self-reliance are utterly discouraged; the high-spirited are exasperated and embittered. Many a career has been changed, many a promising youth driven from study and intellectual pursuits, many a moral nature permanently harmed, by a nickname or a jeer, from the lips of a teacher. In no sphere of life is it more necessary for the man who would do his highest duty to set a guard over the door of his lips.

#### GIVING BONDS AGAINST PROGRESS.

One of the worst of the many bad features of a system of Government Text-Books is the effectual barrier it interposes against the adoption of any new and improved books, no matter how excellent. Every one at all conversant with the history of educational progress knows what marvellous advan ement has been made within a quarter of a century in the character of the text-books in many subjects. This has been one of the most fruitful agencies at work for the improvement of school systems. There is no reason to suppose that the end siderable force in favor of Monday instead of Saturday as the of such improvement has been reached. Far from it. We do not believe there is an intelligent teacher in Ontario to-day who does not perceive that many of the authorized text-b ok, are and the irregular meals of Sunday. The change would, he still very defective. There is altogether too much tendency in certain quarters to boast of our educational work.

Perfection is yet far off. There are undoubtedly several States have books better adapted to the capacities of children, and better fitted to interest and instruct than our authorized works on the same subjects. It is, of course, d strable to make haste slowly and never to change standard books for the mere sake of changing. But, on the other hand, it is of the very with zeal, and when evening came, could readily be induced to highest importance that those re ponsible should have every tacility and every inducement to introduce a new book whenever it is a great and manifest improvement on the old. In no other way can our schools be made to keep pace with the progress of the day. Every teacher should be encouraged to call the attention of the authorities to any new work which is a clear

brutal, thing for a grown man—the gentler sex we may hope plates by the Education Department? If the copyrights are are not often guilty in this respect to take advantage of his worth having they will in each case cost a handsome sum of superiority in knowledge or position, by indulging in ungener-money. The preparation of plates will involve another serious ous taunts and heartless sneers. Yet which of us has not often outlay. It will be therefore almost a matter of necessity that heard the thing done? Which of us has not to blush at the when a book is adopted by the Department it must stay recollection of having ourselves some time been guilty of the adopted for a term of years. Publishers too, will demand meanness? Some children are coarse grained by nature or in some guarantee against speedy change. Now let the D part heritance. Others are unhappily, but too well used to harsh ment do its best, it will be but in accord with all experience to tones and epithets in their own homes. Upon such the suppose that every year some new and improved method of teacher's unfeeling words may have little effect. But there are treating certain subjects will be introduced. The brains of ears are so little accustomed to any tones but those of kindly lish this end. But no such new book, though it's superiority command or reproof, that to be called dunce, or blockhead, or should be ever so manifest, can be taken up by the Depart-

ment without involving the sacrifice of an expensive copyright, is our best model, constantly appeals. The impulses upon expensive plates, and, perhaps, heavy compensation to publishers. Thus every inducement is offered to hold on to the antiquated and defective, and to shut the eyes to the merits of pushed forward towards perfection?

#### MOTIVES TO STUDY.

The little world of the school room, like the great world without, is ruled by motives. Motive of some kind, is the force which drives the complicated machinery of mind. whether the mind be that of a school boy or a philosopher. In accordance with this fact of nature and experience is the maxim which we have before quoted as the best practical rule for maintaining order and eliciting work in the school room.

"Let each pupil have always something to do, and a motive for doing it."

"That sounds very well," we can fancy some perplexed young teacher exclaiming, "but I want something more practical. It is easy enough to supply the work, but how to find and apply the effective motive is what puzzles me."

No wonder. In this question is involved the very science and art of Ledagogy. We cannot hope to answer it in a few sentences, seeing it is the theme of educators the world over, and the subject of lectures and essays and books innumerable. Yet it may be possible to offer a few helpful suggestions.

If we were asked to name the one motive which should be the inspiration and stimulus of the student of every class and degree, we should unhesitatingly respond "Love of Know-This is nature's own motive force. It is universal, ennobling, and should be all powerful. Just so far as the teacher succeeds in awaking this dormant passion, and making it operative, just so far does he succeed in his highest mission. We have no doubt that this innate principle taken hold of at the prop r stage by a competent teacher, would be found sufficient in almost every case. The curiosity, which is only the desire to know, of the child mind is proverbially intense. The trouble is that it is so often dulled, repressed, perverted. by neglect or bad methods before the child comes into the hands of the skilful educator.

The true teacher will always make it his chief and ultimate aim to arouse the love of knowledge, and stimulate it into healthful vigor. Every other motive he will regard as interior, to be used only as a means to this end.

Subordinate to this guiding principle, and in harmony with it the secondary law will be to apply in each case the motive which will be immediately most effective, provided always that it be never a wrong motive. There is a great variety of mot ves which may be brought into play in the school room, right enough in themselves, but differing greatly in elevation and in effectiveness. Emulation is a legitimate motive, so is love of approbation, though neither of them can be regarded as the highest. It is to such as these all systems of marking and classification appeal. Those who condemn everything in the nature of merit marks and prize lists as utterly bad, are surely

which they act are nature's own gift. Even fear itself, hangman's whip though it be, has its own proper and salutary place, though it is, undoubtedly, on a very low plane. The teacher's all new works. Is it in this way our public schools are to be law, we repeat, must be, to apply in each case some effective motive, but the very highest which can be made effective, and the use of the lower should in all cases be regarded as but temporary and preparatory to the application of a higher. It is doubtful, whether in every case, a stage may not be reached in High School or University, if not before, when all inferior motives may be discarded, and students trusted to do their work under the influence of a single, ennobling impulse, the love of knowledge. It is questionable whether class lists, prizes, scholarships, &c., should not be regarded as beneath the dignity of grown up students and the higher institutions.

It is to be feared, however, that the day will be long before such agents can be banished from the public school. The living teacher will always study his pupils as individuals in order that he may know what influence will be effective with each. This influence he will use vigorously, effectively, but always with a view to superseding it as soon as possible by some other higher in the moral scale.

## Special Articles.

#### UNIVERSITY FEDERATION.

From a Recent Pamphlet by Rev. E. H. Dewart, D.D.

#### GENERAL ADVANTAGES.

Such a union of the different Colleges, in one thoroughly equipped University, would confer great advantages upon the cause of Higher Education in the Province. (1) It would give us a uniform standard of examinations for all University degrees. The same degree would, in every case, represent the same standing in scholarship; and every shadow of temptation to lower the standard in order to increase the number of graduates would be removed. (2) It would enable us to build up and maintain a first-class University, possessing ample provision for efficient teaching in every department of University work, which would render it unnecessary for our best young men to go to other countries to complete their education. This is an object worthy of our patriotic ambition; and which cannot be attained by a system of struggling Colleges exercising University powers. (3) The intercourse and association of students during Codege life, would promote a spirit of unity and kindly feeling between young men of different Churches and parties, who must work together in the future in our municipalities and legislatures. At the present time, when Churches are drawing closer together, and sectarian animosities are dying out, it is eminently proper that we should give some practical evidence of this better spirit, by greater unity and liberality in our educational Professions of a desire for Christian unity are not worth much if they bear no practical fruit. (4) It would make our Provincial University truly Lational, as the University of the whole people; and place it more directly under the religious influence of the Churches which would form its constituency. This could not fail to elevate its spirit and life. (5) It would introduce a healthy competition between the Arts Colleges connected with the central University, which would give a new impulse to the different departwrong as well as impracticable. To such motives nature, who ments of College work. I have never believed that all the teaching

versities.

If it be objected that these benefits relate to the country in vent them feeling a patriotic, practical interest in the improvement other bank. of the Higher Education of the country, then it is certain that such a policy is too narrow and unpatriotic to be the educational policy of the Methodist people. As an important part of the people of this Province, the Provincial University belongs as much to the Is the sky, or a mountain, or a valley alluded to? The hand must Methodists as to any others. We should rise above prejudice, and point to it, or our imagination would fail to picture it. Does a look at the question from a liberal and patriotic stand-point. It is possible for appeals to sectional and denominational feeling to degenerate into an unreasonable sectarianism. Let us guard against this mistake.

In Toronto also, our College with its worthy Professors and theological students, and other godly young men, would touch the religious thought and life of the community in a way that it never could do in Cobourg. Why should we from sentiment adopt a policy that virtually shuts out our most gifted teachers from any position in the chief University of Canada? Is it wise to try to perpetuate this state of things?

We are all as one as to the importance of religious education. though we may differ respecting the best means of promoting it. Those who favor Federation are just as loval to religion as those who oppose it. Should any one ask: "Shall our Higher Education be Christian or Infidel?" I emphatically answer, Christian! And, in order to help in making it Christian, let us take our fair share in moulding the character and inspiring the life of our Provincial University.

3. What I have said in regard to the increase of our religious influence by removal to Toronto equally applies to the influence of our whole educational work. Toronto is the centre of the Educational, Political, Legal and Literary life of the Province. Good work done here is more under the public eye, and will tell more powerfully upon the whole community. The sagacious Franklin Metcalf pleaded hard to make Toronto the seat of our College. Its location in a small place, where it has had small local patronage and support, was a mistake that has been detrimental to the influence of Victoria during its whole existence. Our best professors have been partially buried out of sight in Cohourg, and the value of their work not properly known. A brilliant and gifted scientist, like Dr. Haanel, would have won a far wider and higher reputation in a central place, like Toronto, than his remarkable scientific work in Cobourg has given him. Similar statements might be made about other Victoria Professors.

#### ELOCUTION.

What is to take the place of the old-fashioned elecution? Or rather, what is the new fashion in elecution? It is hard to tell. In fact, it may be doubted if there is a new fashion. Listen to the most popular reciters to-day. Can you see wherein they vary from the ideal that prevailed when you were a school-child? Probably not. The ideals of your early days are still the popular ideals, and whether any other ideal will ever become popular remains to be seen.

But still, doesn't it seem a little absurd to hear a boy reciting, "The Charge of the Light Brigade," and to see him go through the motions which it may be imagined the soldiers made in that terrible gence.

of the country in University studies should be done in one College. ride? May not one be pardoned for smiling at a young miss who Competing Colleges are a very different thing from competing Uni- heroically tries to make believe that she has actual hold upon the clapper of the bell in "The Curfew Shall Not Ring To-Night?" In the "Legend of Bregenz" what a disillusion it is to see the general, and should not influence us as a Church, I reply. If the pretty Tyrol maid go through the motion of mounting her horse, policy of the opponents of University Federation is such as to pre- and to see how he plunges with her into the torrent and gains the

> If such attempts at literalism seem silly in school children, what shall be said of them in the case of professional elecutionists? And then the motion of arm and body at every possible suggestion. rider or the wind go rushing by? A sweep of the hand must symbolize it. Thus, on one pretext or another, there is a constant succession of gestures, for the most part nonsensical and distracting. But this style of declamation audiences applaud, and he would be a bold teacher or pupil who should expect approbation for anything less.

> What there is of revolt against this restless and artificial style shows itself at present in only two ways, so far as we know. In a few schools the old Friday afternoon declamations are discarded. The memorizing of selections is encouraged, but they are repeated, recited is hardly the word, in a semi-private way in the pupil's desk or by it. We have never felt that the abolition of the formal Friday afternoon exercises was wise, especially as no substitute is proposed for them. The loud declamatory style it was wise to abandon. But a formal and not entirely unpretentious exercise, readings, compositions, and quiet recitations, all prepared by careful drill and training, the participants taking their places on the rostrum, serves a purpose in the training of boys and girls, which is met by no other school exercise. Pupils, where all such performances are omitted, are destined to feel regret in later days that their school experiences were thus limited.

> The only other sign of reaction against the dramatic and declamatory fashion is that some teachers of elecution, they are not very numerous, discard it, and actually reducule the loud jumpingjack style of recitation in which every sentence has its gesture, and are teaching a more quiet and artistic manner of delivery, in which the voice and features do all of the expressing. This change has not yet reached the common schools, but it is on the way to them from the higher schools of oratory.

But there is one rule which teachers of children can adopt.

It will hardly be popular at first, but it is sure to be acceptable as taste becomes refined. It is submitted simply on its merits. We can quote no authority in favor of it. It is this :- Confine gestures to actual personation. In descriptive pieces allow them rarely. This rule will do away with that senseless and ill-timed swinging of the arms so common and so unpleasant to witness. It would deliver "The Charge of the Light Brigade" with hardly a motion of the limb. It would make no effort to imitate the supposed loud tone of the commander in the order "Forward the Light Brigade." But into the tone of voice it would put all the pathos and other emotions that the scene would awaken in the bosom of a sensitive spectator. When reciting the supposed words of Barbara Fritchie or Stonewall Jackson a simple gesture might come, but the grotesqueness of trying to imitate with any literalness the tone of voice of either of them should be avoided.

But anyhow, whether you attempt to follow any rule or not, teach your pupils that the highest beauty in reciting or reading consists in the emphasis and modulation of a well trained voice, and that excessive gesticulation and dramatic tones and attitudes are a blemish excepting where real acting is appropriate. - Intelli

## Prize Competition.

#### ARITHMETICAL PROBLEMS.

FOR CANADA SCHOOL JOURNAL COMPETITION PRIZES-FOURTH CLASS. BY MIGMA.

\* 1. Nine cords of hard wood have the same heating capacity as 5 tons of coal. A farmer burns 30 cords of wood in a year, for which he paid \$3.50 per cord. How much will he save (if anything) by changing to coal, which he can buy for \$5.75 per ton.

Ans. \$9.163 in favor of coal.

9 cords, 30 cords, 5 tons, 163 tons. So that 163 tons of coal=30 cords of wood 30 cords @ \$3.50=\$105.00 16g tons @ \$5.75= \$95.83g.

\$9.16% in favor of coal.

2. A school-house lot contained a quarter of an acre, and was 90 feet wide. The trustees proposed to add another quarter of an acre, by increasing the width 30 feet. How much had the length to be increased? Ans. 601 feet.

120 90 ft. 1 30 Sol.:  $\frac{1}{4}$  Ac=10890 sq. ft. ÷90=121 ft. length. 121 Ac=21780÷(90+30)=181½ ft. length of the half acre, and 1813 - 121 = 603 ft. Ans. 8 190

3. A Kingston money-lender borrowed money in Scotland at 3 % int. payable yearly, and lent the same money in Kingston and vicinity at 8 % the interest payable half-yearly; find his yearly income from a Scottish loan of \$50,000. Ans. \$2,580.

Solution: - \$1 for 1 year at 3 % amounts to \$1.03 \$1 @ 8 % payable half-yearly =  $(1.04)^3$  = \$1.0816, and \$1.0816 - \$1 03 = 0516 gained on \$1, and \$50,000 × '0516 = \$2,580.00 Ans.

4. A farmer was assessed at \$3,250. The R. R. tax was five eighths of a mill on \$. The H. S. tax was six-a-hundredths of a mill on \$. The P. S. tax was 43 mills on \$. The township tax was one-tenth of a mill on \$. The county tax was one and seven.

Ans. \$31.82. was one-tenth of a mill on S. The county tax was one and seven-a-thousandths of a mill on S. The interest on Co. debt was one and four-a-hundredths of a mill on S. Find the total tax.

Ans. \$24.154. Solution: -\$3250 × .000\$=\$ .2031\$ = Railroad tax \$3250 × .0006= .195 = High School tax \$3250 × 004\( = 14.95 \) = Public School tax \$3250 × 0001 = 325 = Township tax  $\$3250 \times .001007 = 3.2723 = \text{County tax}$ \$3250 × 00104 =3.38 =County debt tax \$24·154 Ans.

5. How much lumber will put up 100 rods of a running board fence. The bottom board being 10 inches wide, the second 8 inches, the third 8 inches, the fourth 6 inches, and the one along the top 8 given at a cred t solo with interest at 7 % for 1 year. On the 2nd inches. The pickets set 6 feet apart, and faced with lumber 8 of Feb. following these notes were sold to a money-lender for inches wide, sawn to suit the pickets which were 41 feet high. Ans. 6,328 square feet.

Solution: -10+8+8+6+8=40 in. = width of boards.  $100 \times 16\frac{1}{2} \times \frac{49}{2} = 5500$  sq. ft. in running boards.  $(100 \times 16\frac{1}{2} \div 6) + 1 = 276$ , number of pickets.  $270 \times 4\frac{1}{3} \times \frac{6}{10} = 828$  sq. ft. facing pickets. and 5500 + 828 = 6,328 sq. ft. Answer.

6. How many acres in 46 chains, 64 links of a forty-foot road?
Ans. 2 acres, 3 rods, 12 perches. 8 yards.

acres, 3 rods, 12 perches, 8 yards.

7. Cheese is quoted in Liverpool at 71s. 6d. per cwt.; and sterling exchange at 98; find the price per lb. of choese in cents. Ans. 15,552 cents or a little, or 151 cents per lb.

Solution :-71s. 6d. cy. ×20=\$14.30, and \$14.30 increased by  $\frac{1}{3}$  of \$14.30=\$14.30+1.58\(\frac{2}{3}=\$15.88\frac{1}{3}\times\$1.09\(\frac{2}{3}=\$17,4181944+712\) lbs. (long cut)=151 cents nearly.

8. How many feet of inch lumber in 200 joists 21 feet 6 inches long and  $4\frac{1}{2}$  by 9 inches? Ans.  $14,512\frac{1}{2}$  square feet. Solution:— $200 \times 21\frac{1}{2} \times \frac{9}{12} \times 4\frac{1}{2} = 14,512\frac{1}{2}$  board measure.

9. A farm was known to be 37 rods and 1 yard wide. many chains in length of it will contain 25 acres. Ans. 26,891 chains.

Solution .  $-25 \times 4 \times 40 \times 30 \times 9 = 1,089,000 \text{ sq. ft. in } 25 \text{ acros.}$  $37 \times 16\frac{1}{2} + 3$  ft. = 613\frac{1}{2} ft. width of farm. 7/403+6. =0.53 it. which of farm, 1,089,000÷613 $\frac{1}{2}$  =1775.07÷66=26 ch. 89 $\frac{1}{2}$  links. Ans. Or,  $37\sqrt{1}$ +4=9.29 $\frac{1}{2}$  ch. width of farm, and  $25\times100,000=2,500,000$  square links, and 2,500,000÷9.29 $\frac{1}{2}$ =26.89 $\frac{1}{2}$  chains. Ans.

10. In 1884 there were put into "Pine Grove Cheese Factory" 797,498 lbs. of milk, from this were made 80,170 lbs. of cheese. This cheese was sold for \$8,287.82. The charges for making were 11 cents for each pound of cheese, and the salesman received 1 per cent. for selling. Find what the patrons got per ton for milk? Solution: -80,170 × 14 = \$1002.12 making

\$8237.82 × '001= 82.38 salesman's commission.

\$1084.50 total charges.

 $$8237.82 - $1084.50 = $7153.32 \div 797498 = .0089,697 \text{ lbs.}$  and  $0089,697 \times 2,000 = $17.9394$  per ton. Aus.

11. A meadow was 40 rods long, 25 rods wide. A mowing machine was driven round it 18 times, cutting a swarth 4 ft. 6 inches wide; find how much it cut, and how much was left uncut.

Ans. 3 A, 1 R, 21 P, 23 yds. cut,
2 A, 3 R, 18 P, 6 yds. uncut.
Solution:—18 × 4 × 2=
—182 ft.=92 rods, which the 40 rcds. meadow is decreased in both meadow is decreased in both length and width, leaving a rectangle  $30^\circ$ , rods by  $15^\circ$ , rods  $(40-9)=30^\circ$ , and 25.  $-9^\circ$ ,  $-15^\circ$ , rods), and  $30^\circ$ ,  $\times 15^\circ$ ,  $-40 \div 4 = 2$  A, 3 R, 18 per,  $6^\circ$ , yds.  $30_{11}^2$  rods. 5 2 rods uncut. Remaining uncut-

 $40 \times 25 \div 160 = 6\frac{1}{4}$  Ac=whole

meadow, and 6 A, 1 R. -2A, 3 n, 18 per., 61 vds=3 A, 1 R, 21 P, 23 vds. the quantity cut.
12. On Jan. 25th, 1883, a storekeeper borrowed from a farmer

Solution . \$200 × 08=16.00=int. \$200+\$16=216.00 amt. of \$200 for one year. From Oct. 11 to Jan. 25=106 days, and \$180 × 08 × 106 ÷ 365 = \$4.18 interest on \$180, and \$180+4.18=\$184.18 (credit), and \$216.00 - \$184.18 = \$31.82 Ans.

13. A wood-rack was ordered from a carpenter to contain 11 cords of wood (the wood piled crossways), the load to be 4½ feet high; find the length of the rack 8 ft.  $10\frac{2}{3}$  in.

 $\frac{128 \times 11}{2}$  = 8 ft. 10 $\frac{2}{3}$  in. Ans. Sclution :-

14. On Oct. 12th, 1884, notes to the amount of \$1,308.35 were given at a credit solo with interest at 7 % for 1 year. On the 2nd Find what rate of interest will be made by the moneylender.  $$17_{700}$ %. Solution:  $-$1,39835 \times .07 = $91.58$  int. for 1 year,

and \$1,308.85+91.58=\$1,399.93 amount \$1,399.93 - \$1.250 = \$149.93 = The interest made on \$1,250 from Feb. 2 to Oct. 12=8 m. 10 d., and \$149.93 ÷ (\$1,250 × 8\frac{1}{2} m ÷ 12) =  $17_{100}^{27}$  cents on the \$, or  $17_{100}^{27}$  % Ans.

15. How much lumber will make 500 biscuit boxes 18 in. long, Solution:-46 ch. 61 nnks×66=3.078.24×40=123.129.6=2 15 in. wide, and 6 inches deep, outside measurement, the lumber being half an in. thick 3652% sq. ft.

Solution :—(Pulling lid and bottom outside). Two sides 18 + 1C, and two ends 14 + 14 = 64 in.  $64 \times 8 = 512$  sq. in. in sides and end  $2 \times 18 \times 15 = 540$  sq. in. in bottom and lid. Then (512+540)×500÷144=3652 sq. ft.

16. A house was worth \$3,600, and was insured for # of its value, at 2%; find the premium paid. Ans. \$18. Solution:  $-\$3600 \times 3 \times 4 \div_{100} = \$18$ . Ans.

17. A drover bought from one farmer 15 sheep for \$70. From another 14 for \$65.25; from a third 21 for \$92.50. Four of them gave out on the road, and he sold them to a farmer for \$6.50. He paid a boy \$4.50 for driving them, and \$30 for a month's pasture.

He then sold them for \$350

Find what he made per cent. on his surveying as practised in the Western States, Manitoba and N.W.

outlay.  $86_{100}^{85}$  per cont. Ans. Solution: -\$70 + \$65.25 + \$92,50 + \$4.60 + \$30 - \$6.50=255.75 the whole outlay, and \$350 - \$255.75 = \$94.25 whole gain, and \$94.25 + \$255.75 =  $36_{100}^{85}$  on \$, or \$36,85%.

18. A young man saved \$150, he could have loaned it at 8%. Instead of doing so he bought a buggy costing \$150, kept it 16 months without using, and sold it for \$120, giving a year's credit without interest; find how much he lost by the transaction? Solution: -\$150 x (18 x 2\frac{1}{3} + \$150 = \$178 - \$120 = \$58 loss.

19. Find the cost of the material necessary for the following fence:—Fence, 80 rods long. The large pickets 6 feet apart, and costing 12 cents each. The slats 3 inches wide, and set 21 inches The large pickets 6 feet apart, and apart, at \$1.50 per 100. The two pieces of scantling to which the slats are nailed (at the top and bottom) being 3 by 4 inches, and costing \$25 per thousand board measure.

Solution:  $-(80 \times 16\frac{1}{2} + 6) + 1 = 221$  pickets at 12c. each \$26.52. ( $80 \times 16\frac{1}{2} \times 12 + 5\frac{1}{2} + 1 = 2$ ,881 slats at  $1\frac{1}{2}$ c. 43.22.  $2 \times 80 \times 16\frac{1}{2} \times \frac{7}{2} \times 3 = 2$ ,640 ft. of lumber at \$25 per M. 66.00. Large pickets . . . . . = \$26.52. Small pickets or slats = 43.22. = \$135.74 Ans. Scantling ..... = 66.00. J

20. Gold was quoted in New York at 108, and sterling exchange 98; find the value in sterling money of \$1,000 American currency (greenbacks.)

Solution :- \$1,000 (Greenbacks) ÷ 108=\$925.92} (Gold.) \$925.92\frac{1}{2} less  $\frac{1}{10}$  of itself = 925.92\frac{1}{2} - \$92.59\frac{1}{2} = \$833.33\frac{1}{2} + 109\frac{1}{2} = \$760.16 = £190.09\frac{1}{2}.

Ans. £190.0.93 sterling,

[Note.—This is the bank method, but not the one given in School Arithmetics.

21. The net proceeds of a sales-account made by a commission merchant in Montreal on behalf of cheese consigned by "Spring-field Cheese factory" were \$1879.58, but the following two mistakes were afterwards found in it :-

3468 lbs. were reckoned at 121c. alb. instead of 101c., and \$74.93 were entered instead of 93.74; find the correct amount of

Solution: -3468 @ 21 (error)=\$78.03 too much returned to cheese factory for cheese and \$93.74—\$74.93=\$18.81 too little to factory, and \$78.03-\$18.81=\$59.85 amount of error in favor of factory, and \$1,879.58-\$53.85=\$1,819.73 Ans.

22. A pile of broken stone was 41 ft. 8 in. long, 29 ft. 9 in. wide, and 2 feet 13 in. high; find how many toise it contained.

 $\frac{29\frac{3}{4} \times 41\frac{3}{8} \times 2\frac{1}{8}}{6 \times 6 \times 6} = 12\frac{1}{2}\frac{49\frac{3}{8}}{3\frac{3}{8}} \text{ or } 12\frac{1}{8} \text{ toise (nearly)}$ 

28. Adopting the saw-mill rule that a round log will only square 3 of its diameter, find the price, when hewn square, of a round log 18 ft. long, and 40 in. in diameter at 20c. per solid ft.

Solution:—3 of 40=263 in. what it will εquare, and 4°×2°2°=888c. ft. ×20c. =\$17.773 Ans.

24. A farmer read in "The Weekly Globe" that the French Government ordered 6,000 kilograms of American pork to be thrown into the sea as it was infected with trichine, and he enquired of his children who were attending school, how many lbs. that was.

Solution:— 15.4328488 grains =1 Gramme 154.323488 ' =1 Dekagray 154.323488 =1 Dekagram " 1543.23488 =1 Hectogram " 15432, \$488 =1 Kilogram 15432,3488×6000+7000=132274 lbs. Ans. Or 1 Kg. =2 $\frac{1}{2}$  lbs. nearly and 6000×2 $\frac{1}{2}$ =13200 lbs. (nearly.)

25. A laborer charges 80c. per cord for sawing ordinary cordwood into stove wood, putting two cuts in each stick-that is each stove-wood 1 ft. 4 in. long-what should he charge for sawing wood 8 ft. long into the same kind of stove-wood.

Solution: -A cord of wood in 8 ft. lengths is only half the ordinary length—that is, is only 4 ft. long, and to saw it into cord-wood is equal to sawing half a cord, or, 20c., which, added to 80c., the charge for sawing a cord of regular cordwood equals \$1; the charge for sawing eight feet lengths into stove-wood 1 ft. 4 in. long.

\$1.00 Ans.

Territory.

The fundamental lines upon which a survey is based are called the principal meridian and base line. The first is a meridian of the earth, and the second is, of course, a parallel of latitude; and their point of intersection is called "The Initial point." Upon these every piece of land has a direct bearing. The selection of the initial point is the first step in the survey of any new district; and some natural landmark is adopted. From this point the principal meridian is rul N. and S. and the Base Line E. and W. Upon these lines sixmile distances are marked for township corners. From each six-mile point on the base line east and west of the "Initial Point" other meridians are run which divides the territory into strips six miles wide lying N. and S., and these strips are called "Ranges." Since meridians converge as they approach the poles, it is evident that townships are not quite square. To arrest the error that would naturally arise from this convergence and keep it within reasonable bounds, lines called "Correction Lines" are run every 24 miles north and 30 miles south of the base Line and parallel to it. Upon these the distances are measured off anew, as on the "Base Line," and they become secondary base lines in their survey. Ranges are numbered east and west of Principal Meridian, and the townships numbered north and south of the Base Line (as T. 2 N.; R. 3 E.)

## Practical Department.

#### THE BRAVE AND THE FAIR.

For Friday Afternoon.

BY BAYARD TAYLOR.

They lay along the battery's side Beneath the rearing cannon, Brave hearts from Severn and from Clyde, And from the banks of Shannon.

"Give us a song," the soldiers say, "We storm the Forts to-morrow, Sing while we may, another day May bring enough of sorrow."

They sang of love and not of fame, Forgot was Britain's glory; Each heart recalled a different name, But all sang "Annie Laurie."

Voice after voice took up the song, ' Until its tender passion Rose like an anthem rich and strong-Their battle-ere confession.

Beyond the darkening ocean, burned The sunset's bloody embers, And the Crimean valleys learned How English love remembers.

And once again the fires of hell Rained on the Russian quarters, With scream of shot and burst of shell, And bellowing of the mortars.

And Irish Norah's eyes are dim For a singer dumb and gory, And English Mary mourns for him Who sang of "Annie Laurie."

Ho! soldiers to your honored rest, Your love and glory bearing; The bravest are the loveliest, The loving are the daring.

#### TEACHING HISTORY.

We clip the following from an American exchange. We are glad to believe that the methods illustrated have few counterparts in Canada, though we are bound to confess that we have listened to exercises not very dissimilar :-

History teaching is often the narrowest kind of task-work, having in it no element of teaching. The text-book is the only source of information. The lessons are assigned by pages and The daily class exercise is a mere catechetical examination, and most of the questioning violates every educational principle. In one school each pupil was called upon to recite the whole While each one was reciting the others lesson without questions. were studying. In another school, as the pupils hesitated, the teacher gave the first words of the paragraph. Then, losing his place in the book, he remarked, "I don't quite see where you are

In another the following dialogue took place, the subject of the lesson being the Greek philosophers, the pupils a first-year class

and the teacher with open book in hand:—

Teacher to the Class.—" Who was an eminent friend of Pericles and taught mathematics, and astronomy?"

One Pupil.—"Diogenes."

Teacher.—"No, Anaxagoras. Who was Diogenes? Can any one

Serval Pupils.—"He lived in a tub."

Teacher.—"Yes; he was a famous cynic. Who was called 'the laughing philosopher?"

(No Answer). "Democritus, because he treated the follies and vices of mankind with ridicule. He taught that the physical universe consists of atoms, and that nature, space, and motion are eternal.'

I heard a similar exercise by another teacher in the same school. In another school, as I entered the class-room the teacher was eloquently describing her travels in France. Resuming the examination, the subject being the reign of Charles I., she questioned as follows :-

"The Scotch came into the northern part of-" Answer.

"England.

"This is known in history as the-" Answer. "Long Parliament."

"The king ungratefully gave his consent to his-"Execution.

"The king retired amid cries of-Answer. "Privilege."

#### EASY EXPERIMENTS.

BY G. DALLAS LIND, M.D., CENTRAL NORMAL COLLEGE, DANVILLE, IND.

There are some very simple experiments illustrating the phonomena of frictional electricity.

#### EXPERIMENT 20.

Materials used.—A watch or a convex piece of glass, a common stove poker, or a walking-stick, a piece of brown paper.

Manipulation.-Balance the poker or stick on the convex surface of the watch or glass, in the manner of a compass needle. Warm the paper and rub it briskly with a woollen cloth for a few seconds. Bring the paper immediately near the end of the balanced poker.

Result.—The poker or stick will follow the paper as a needle follows a magnet.

Principle.—When any two substances are rubbed together electricity is developed on their surfaces. If the bodies are good conductors, or if the air be very damp, the electricity is conducted

away as fast as produced, but if one of the bodies be a non-conductor and the surrounding air dry, the electricity will accumulate on the non-conductor, manifest its presence by attracting light bodies, or bodies easily moved. Electrical experiments work better in cold weather usually, because the air is more apt to be dry. Water is a conductor of electricity; for this reason the paper should first be warmed to drive off the moisture.

Note.—The required degree of friction may be produced by drawing the paper two or three times between the arm and body, or between the thigh, the clothing being thus substituted for the woollen

#### EXPERIMENT 21.

Materials used. -Glass lamp chimney or rubber comb, some small bits of paper.

Manipulation. -Rub the glass or comb on the coat sleeve vigerously for a minute, then bring near the bits of paper.

Result.—The bits of paper will be attracted and then repelled. Principle. - Same as in experiment 20.

#### EXPERIMENT 22.

Suspend a bit of elder pith or corn-stalk pith by long hair to a support of any kind; rub the comb or lamp-chimney as in Ex. 21, and bring it near the pith ball. The attraction and repulsion will be more marked. -N. Y. School Journal.

#### THE FIFTH LESSON.

(Continued from last week.)

#### GENERAL EXERCISE.

Two days after Lesson Fourth, there comes a pouring rain. This spoils the long recess, and makes time drag a little as the morning session draws to a close.

So after the usual lessons are all finished, and the hour for a general exercise arrives, the teacher calls out cheerily.

"If I could see a room full of nice little people all smiling at me, I might think it best to tell them the rest of the Fox Story.'

This announcement has the effect of a burst of sunshine; all the faces brighten instantly, but the teacher is not satisfied.

"I should be sure to do it, if I could see some rows of orderly-" (every small man and woman hitches into the middle of his seat. with face square to the front directly) "straight children" (each child lifts his figure to its full height), "with hands folded" (every hand is in position) "and eyes looking straight into mine" (all eyes are fixed upon her face). After an instant's smiling contemplation of her attentive audience she begins:

"You know we left the ducks down at the pond, about to go into swim. The papa-duck had just put one foot into the water when there came a-" writes; "Sound," chorus the class; "like this-" (the teacher makes a sort of a barking noise).

"'What's that?' asked the papa-duck, shaking his wet foot at. the baby-ducks to make them keep quiet. 'I don't know,' said the mamma-duck." (The teacher barks louder.)

"'There it is again; let us go and see.' So they called to the baby-ducks, and then all went up to the fox's hole under the tree. The door was wide open, so they walked in. When they got into the room there was Mr. Fox, and he made them a very polite-" writes; "Bow!" call out the children; "and he said-"writes; "Good-morning," read the class; "'Mr. Dock," adds the teacher, "'and good-morning, Mrs. Duck, and how are all the-" writes; "Little ducks," is the chorus. "And there the fox had the ducks in his hole! What do you think of that?"

"They'd ought to know better," speaks out Bennie,

- "Perhaps they should have known better," corrects the teacher.
- "I think it was too bad!" exclaims Millie.
- "I s'pose he cat 'em right up," remarks Patrick meditatively.
- "What should Patrick have said, Louise?"
- "I suppose he ate them," amends that proper little girl.
- "Yes. Now, Patrick, suppose you try again."
- "I suppose he ate them," repeats the boy, imitating exactly the intonation of his small critic. It being impossible to discover from his perfectly serious countenance, whether this was unconscious or intentional, the teacher concludes to ignore it altogether, which she does by resuming her narrative.
- "Now just about this time the geese thought that they would go down to the pond to get some nice grass; and there was the papagoose and the mamma-goose, and all the little-"writes; "Goslings!" chorus the children.
- "After they had walked along a little way, they thought they heard a queer " writes; "Noise" said the class; "and they stopped to-" writes; "Listen!" pronounce the class; "and they could hear the fox going 'Yow! yow! yow!' and all the ducks going 'Quack! quack! quack!' 'We must go and see about that.' said the papa-goose- So the mamma goose called to the little goslings to follow, and they too all went up the fox's hole."

This announcement creates quite a sensation, one tender-hearted little girl exclaiming "Oh, dear !" as the teacher makes it.

- "But Mr. Fox," resumes the narrator, "was very polite, and bowed to them, and said, 'Good-morning, Mr. Goose; and 'Good morning, Mrs. Goose; and how are all the little goslings? Walk in.' So they went in and sat down and began to-" writes "Talk!" respond the chorus.
- "Very soon the papa-hen and the mamma-hen, und all the little chickens who were out looking for -" writes, "Bugs!" pronounce the children, "heard a queer noise," continues the teacher. "Let's run -" writes, "Home!" Call the children, "says the mamma; hen," goes on the narrator. "'Don't be a coward,' says the papahen. What is a coward, children?"
  - "One who's atraid at nothing."
  - "Anybody that's afraid all the time."
- "Anybody that's afraid when there isn't anything to be afraid
- "I should think so. Now when the papa-hen said 'Don't be a coward,' the mamma-hen said, 'What shall we do?' 'Go and see, answered the papa hen, so they called all the little chickens and down they went, directly into the fox's hols."
- "What a lot !" exclaims a small boy, who is so intensely interested that he speaks his thought unconsciously.
- "But the polite old fox met them at the door, and he said 'Good-morning, Mr. Hen; Good-morning, Mrs. Hen; and how are all the little chickens? Do walk in and take a seat;' and they went in and sat down and began to talk. By and by the turkeys. who were out hunting -" writes; "Grasshoppers," pronounce the children; "happened to come along this way. There was the papa-turkey, and the mamma-turkey, and all the little turkeys, and they heard this curious noise, and they wondered what it could be. and before they knew where they were going, there they were-inside the fox's house. Mr. Fox was just as polite as ever, and held out his-" writing.
- "Paw to shake hands," read the children; "with them," adds the teacher, " saying as he did so, 'Good-morning, Mr. Turkey; Good-morning Mrs. Turkey; and how are all the little turkeys? Take some-" writes; "Seats!" respond the children; "and let us have a little conversation.' What is conversation, Julia?"
  - " Talking."

- geese went 'Cackle! cackle! cackle!' and Mr. Hen went 'Cockadoodle-doo!' and Mrs. H.n went 'Cut-cut-cut-ca-dada!' and the little chickens went, 'Pcop, peop, peop!' and the turkeys went 'Gobble! gobble! gobble!' and the fox went 'Yow! yow! yow! and just think what a noise they made !"
- "Pretty soon the sly Mr. Fox slipped out the-" writes; "Backdoor," read the class; "and went around to the-" writes; "Front-door!" call out the children; "and put a great heavy-" writes; "Stone!" chorus the listeners; "up against it," goes on the narrator, "so that they couldn't get out if they wanted to. Then he came in at the back-door, and locked it, and put the-" writes; "Key in his pocket," read the children hurriedly. Then he went back into the company-room, and told all the ducks and goese and hens and turkeys and their babies that he hoped they would have a-" writing, "Good visit!" read the class; because when it came-" writes: "Dinner time!" breathless exclaim the children; "he should'-slowly and impressively - "pick out some of them to - eat."
  - "Oh! oh!" sigh the children.
  - "Isn't that dreadful!" cries out a little girl.
- "I just wish I had a gan and I'd kill that fox :" blusters an excitable y oungster.
- "I guess they wished they were home then," says a little fellow who has evidently experienced that desire himself when evertaken by trouble.
- "Oh, don't they get away, teacher?" calls out a sympathetic little woman appealingly.
- "We will see. When the old fox had said this, he wont off up-" writes; "Stairs to bed!" read the class; "and they did feel very badly, as you say, and began to-" writes; "Cry!" is the responsive chorus. "Yes, and that made a great noise, and the farmer, up here in his house "pointing toward the sketch,heard it, and came to the door and looked out. See him!" drawing a perpendicular line in the doorway to represent that in-
- "But the noise kept on and even grew louder; then he said, 'That is my poultry in trouble somewhere; I must go and find them." So he took down his gun and called his dog, and started out. He went to the yard, but there wasn't a duck, nor a goose, nor a hen, nor a turkey there, then he went to the pond, but they were'nt to be seen there either, and the noise was very loud and seemed to come from under the tree. So he began to dig.
- "But just then he happened to see the stone," continued the teacher more rapidly, for the excitement is getting to be intense, and most of the children are half out of their seats in their eagerness to hear the denouement; "and he gave it a great pull,-andout came all his ducks, and hens, and turkeys, and geese, and all their babies!"

The little ones are dancing up and down and clapping their hands by this time, so the teacher waits an instant for their joy to subside, then continues deliberately: "Last of all comes Mr. Fox, to see what was happening to his house, when the farmer lifted up his gun and shot him-dead; and that was the end."

#### TEACHING READING.

During the day, at different times and at different places, we heard,—well, perhaps one hundred children read. Not one poor reader among them all! In one case we heard each child in a certain room read. So distinctly were the words spoken that we lost not the sound of one. That the child had a thorough understanding of what he was reading was evident by his placing the emphasis "Yes; so the ducks went 'Quack' quack' quack' and the upon just the word in the sentence which would bring out the

meaning plainest. The inflection was varied, and the voice pleasant throughout.

As the reading was the best we had ever heard from any children, we began to look about for the cause. One lesson which we heard gave us an insight into the method of conducting a reading lesson in one, at least, of these schools. The class numbered twenty. Each child stood beside his deak, in the middle of the visle, facing the teacher, when we entered the room. They had no books, and were repeating some lines which she had given them. To begin with, the teacher was a good reader. She recited the lines, and then asked the class to repeat after her this much,—"Ye bells in the steeple, ring, ring out your changes, how many soever they be." The result was not satisfactory; they were evidently imitating her, parrot-like. Then a short talk ensued about the church and the steeple and the bells, until the idea was fully impressed.

"Now children," said the teacher, "can you see the bolls? Now talk to them "So fully were the imaginations at work that, as they repeated "Ye bells," etc., once more, the eyes were directed upward as though the steeple and the bells were really visible. The result was most happy. The tone was different, the reading more natural in every way. They were not only giving the words of the author, but were actually talking, each to his own imaginary chime of bells.

When this exercise was concluded, the class were directed so sit down and take reading-books. They were to read a piece entitled "The Radiate." Before a word was read the first paragraph was discussed. Upon the desk the teacher had placed some star-fish and other examples of radiate animals. The children were sent to find these and exhibit them to the class, and they were talked of until it was evident the class had a clear idea of the animal they were to read about. Then the hard words in the paragraph were explained, after which the children were told to read the paragraph to themselves and see if they understood it.

Then one child read it, the teacher saying, "Now, Mary, remember you are not reading it to yourself, but to us; we have no book, and you must make us understand it." Each paragraph was taken in the same way.

After hearing this lesson, we concluded that if each teacher in the city, beginning with lowest grade in the primary school, was as careful that her scholars thoroughly understood every sentence which they read as this one had been, it was no wonder that the reading in this city was decidedly superior.—From an account of a visit by some Lowell Teachers to the schools "of a neighboring city."—A. E. Journal of Education.

#### THE WIND.

## For Friday Afternoon.

What way does the Wind come? What way does he go? He rides over the water and over the snow, He tosses about in every bare tree, As, if you look up, you plainly may see, But how he will come, and whither he goes, There's never a scholar in England that knows.

He will suddenly stop in a cunning nook
And ring a sharp 'larum;—out if you should look,
There's nothing to see but a cushion of snow,
Round as a pillow, and whiter than milk,
And softer than if it were covered with silk;
Sometimes he'll hide in the cave of a rock,
Then whistle as shrill as the buzzard cock;
Yet, seek him,—and what shall you find in the place?
Nothing but silence and empty space;
Save, in a corner, a heap of dry leaves,
That he's left for a bed to beggars and thieves.

As soon as 'tis daylight to-morrow, with me You shall go to the orchard, and then you will see That he has been there, and made a great rout, And crackled the branches and strewn them about.

Hark! over the roof he makes a pause,
And growls as if he would fix his claws
Right into the slates, and with a huge scattle
Drive them down, like men in a battle.
But let hun rauge round; he does as no harm—
We build up the fire, we're snug and warm;
He may knock at the door, -we'll not let him in;
May drive at the windows,—we'll laugh at his din;
Let him seek his own home wherever it be;
Here's a cozie warm house for you and for me.
—Wordsworth.

#### RIP VAN WINKLE.

[Prepared for the Canada School Journal by Mr. J. E. Wetherell, M. A., Head Master Strathroy Collegiate Institute.]

#### QUESTIONS.

T.

- 1 What event in American history marked the birth year of Irving?
  - 2. Give an account of Irving's life in Europe.
  - 3. Name the chief events of American history during Irving's
- 4. What honors were conferred upon Irving while he was in England?
  - 5. What literary men of Britain were Irving's friends?
  - 6. What public position did Irving hold?

II.

- 1. Name the three greatest American poets, and the six greatest American prose writers.
- 2. The following writers have been grouped together as "American Humorists".—Washington Irving, Oliver Wendell Holmes, James Russell Lowell, Artemus Ward, Mark Twain, Bret Harte. Arrange these in two classes, and state Irving's place in his class.
- 3. Who called Irving "the first ambassador sent by the New World of Letters to the Old"? Why?
- 4. "In him are germs of American humor since run to seed in buffoonery." Who are the buffoons?
  - 5. Under what pseudonyms did Irving write?
  - 6. Why has he been called "The Goldsmith of the States"?
  - 7. Name Irving's favorite authors.
- 8. What is meant by the statement that Irving is cosmopolitan rather than American?

III.

- 1. Describe Irving's style.
- 2. Name his chief works.
- 3. "Irving was an historian, a biographer, an essayist, and a humorist." Arrange his works in classes.
- 4. "Irving was a free lance in literature." Explain this statement.
- 5. "Irving is objective, not subjective." Defend or disprove this statement.
- 6. There never was any one who so carried the whole of himself in each of his writings." Explain and illustrate.
- 7. Irving has no moral purpose in his writings." What is meant? What purpose has he?
  - 8. Distinguish humor from wit; sarcasm from irony.

IV.

- 1. In what book is the story of Rip Van Winkle to be found?
- 2. What famous literary man aided in introducing this work to the British public?
  - 3. What name was assumed by the author of The Sketch-Book?
- 4. The sketches have been classified as descriptive, humorous, pathetic, narrative, didactic. What of Rip Van Winkle?
  - 5. Name three or four of the best stories of the sketch-book.

- writing of Diedrich Knickerbocker"?
  - 2. What is the origin of the story of "Rip Van Winkle"?
  - 3. Give a resume of the narrative.
  - 4. What is the general character of the story?
  - Where is the scene laid?
- 6. Name the principal persons of the story and their most striking characteristics.

VI.

- 1. What traits of Irving's character are revealed in "Rip Van Winkle.
  - 2. Point out very humorous passages in the story.
  - 3. Are there any line descriptive passages?
  - 4. What historical references in the story?
- 5. Are the manners and customs of the characters peculiar to the age and the place?
  - 6. Examine the language of the story as to purity of style.
- 7. Illustrate from "Rip" the author's "photographic minuteness of detail.
- 8. "Along with his object-painting goes the quaintest choice of adjectives and substantives. 'Illustrate from "Rip."
- 9. "It is not the legend proper that constitutes the charm of Rip Van Winkle" What is it then?

#### Educational Aotes and Actus.

Tara possesses a new brick school house with four rooms.

22nd inst., and that of Elgin at St. Thomas on the 22nd and 23rd ment will probably ensue on the return of the writ.

tion in the principles of pennanship, with much success, and ex emplifies these principles on a blackboard having six lines with curves and angles painted on it in imitation of the copy book.

The children attending Ayr Public School are learning vocal music under the instruction of Rev. J. Thomson, Presbyteran munister of that village. They have attained considerable proficiency, and their singing at a school concert recently given, was highly are affectory. The system used is the tonic sol-fa, and one feature that elicited the greatest commendation at the concert was the accuracy and readiness with which the pupils sang some exercises, the notes of which were indicated by manual signs. A visitor, who lately was present at one of Mr. Thomson's lessons, wrote on the blackboard the notes of a melody in soprano and alto, and the children sang it at sight accurately. Such results are rarely attained in our public schools with the five-line system.

#### NOVA SCOTIA.

From our own Correspondent.

The annual Convocation of Dalhousie College for the purpose of conferring degrees, bestowing prizes, etc., was held in the Academy of Music, Halifax, on the 29th ult. The attendance was very large, crowding the spacious auditorium, though a fierce south-east gale was raging pitilessly without. The following degrees were conferred:-

Bachelors of Arts.—Wm. Aiton, Sussex, N. B.; F. Stewart Coffin, Mt. Stewart, P.E.I.; Huam Fuzpatrick, Scotsburn, Picton County; Isaac Gammell, Upper Stewiacke; Robert McD. Lau-America.
gille, River John, Pictou; Robert T. Locke, Lockeport; Arthur Mr. Ruskin has resig
McKenzie, Darmouth, John M. McLeod, Valleyfield, P.E.I.; the Oxford University. Kenneth Martin, Belfast, P.E.I.; Margaret Newcombo, West Cornwallis; George Robinson, Charlottetown, P.E.I.; Alfred W. Thompson, Durham, Picton County; Wm. M. Tufts, Haifax.

Bachelors of Science. - George G. Campbell, Truro; John J. Miller, Halifax.

Bachelors of Lan. Albert W. Bennett, Hopewell, N.B., H. Rovised Now Testament.

6. When was the sketch-book published?

V.

1. What is meant by the sub title of the story—" A Posthumous riting of Diedrich Knielerhoeker"?

W. Conroy Boak, Halifax; Walter S. Doull, B.A., Halifax; Molecular Charles Morse, — , J. A. Sedgewick, B.A., Halifax; Win. Wallace, Halifax; \*Altred Whitman, B.A., Annapolis.

Honors and medals were awarded as follows:-Classics-First Rank—Aiton, W. Mathematics and Physics—Second Rank—Mackenzie, A. S.; Robinson, G. E.; Martin, K. J. Mental and Moral Philosophy—Second Rank—Langille, R. M.; Fitzpatrick, H. H. K. English Literature and History-First Rank-Gammell, I. Second Rank—Newcombe, Margaret F.; Thompson, A. W. The Governor-General's Gold Medal—Aiton, W. The Young Gold Medal—Mackenzie, A. S. The Governor General's Silver Medal—Langille, R. M. The DeMill Gold Medal—Genmell, I.

The ceremonies accompanying the conferring of degrees were as usual, brilliant and imposing. The customary University prizes were announced, and presented by the various Professors in the two Faculties of Arts and Law. Much colat was given to the occasion by the presence of the graduating class in law. Mr. I. Gammell, who graduated with First Class Honors in History and English Literature, delivered the valedictory oration in behalf of the This was generally regarded as an exceedingly meritorstudents. ious production.

After the conclusion of the regular exercises, an address specially designed for the students in law, was delivered by that eminent lawyer and jurisconsult, David Dudley Field, of New York. The subject of Mr. Field's masterly paper was "The Comparative Jurisprudence of the English-Speaking People." An interesting historical review of the development of our great legal system was followed by an earnest plea for simplification, condensation and codification, objects to which Mr. Field has devoted the labors of a life time.

The Supreme Court with one judge dissenting, has decided to issue a mandamus, ordering the Governor of King's College to re-instate Professor Wilson in the Chair of Classics and Classical 

Two measures passed by the Legislature at its late session are de-Mr. T. H. McGuirl was appointed last February, teacher of writing, book-keeping, botany and juntor mathematics in Sarnia Hig t School. He is using Grge's No. 3 Copy Book, as a foundaring county academies, though institutions under that name tion in the principles of neuranship with much success and an experimental process of the academic Academic Education, importantly modifies existing Legislation regarding county academies, though institutions under that name are to be continued under new conditions. The Act provides for a High School in each county town, to be conducted under Provincial regulations, with a grant from the public transury, conditioned on the number of qualified masters and duly certified pupils. maximum grant obtainable by any academy is \$1,720. All the academies in the Province, other than those of a denominational character, are brought under the operation of the A t. The other measure referred to, entitled "An Act to Encourage Agricultural Education," provides for the appointment of a lecturer on agriculture in connection with the Provincial Normal School. The design of this newly created chair is not simply to instruct the pupil-teachers in Agricultural Chemistry and the sciences bearing on agriculture, but particularly to train a limited number of teachers for service in special schools, for the establishment of which in agricultural districts the Act makes provision.

> \*Allowed to graduate without passing their final examinations on account of their being engaged as volunteers in active service in the North-West at the date of the examinations-

## Literary Chit-Chat.

Professor Huxley, the English scientist, has just celebrated his sixtieth birthday.

Mr. Matthew Arnold is preparing for his approaching visit to

Mr. Ruskin has resigned the State Professorship of Fine Arts at

Jean Ingelow has j st published in London a new volume of "L.r.cs." This charming verse-in-ker is now fif-y-five years old.

Harper Bros. will issue an edition of the Revised Old Testament in four octavo volumes, uniform with their edition of the "The New York Shakespeare Society" has been incorporated under the laws of New York, for the purpose "of promoting the know edge and study of the works of William Shakespeare and the Shakespearean and Edzabethan drama."

Dr. Philip Schaff, a very high authority, declares in *The Century* for May, that the "Teaching of the Twelve Apostles," discovered by Bishop Bryennios, has no authority whatever in matters of doctrine or discipline, and that its value is historical and historical only.

Mr. Swinburne's next production will be a poem entitled "Marino Faliero." It will be long and elaborate, and will not only deal with career of the old Doge, but will also present some new features of Venetian life in the twelfth century, Mr. Swinburne having obtained some fresh information from unpublished records.—The Current.

It is said that Lord Tennyson received from Messrs. Moxon, the publishers, an average of £1,500 a year, in royalties, during his connection with that firm, that when Messrs. Strahan & Co. became his publishers they paid him £5,000 for his books then existing, with a separate account for new works, and that Messrs. King & Co. engaged to pay him £4,000 a year, with a separate account for new works.

"How shall women dress?" is a question that one would hardly expect to be discussed in so grave an organ of opinion as the North American Review, and yet in its June number this interesting topic is to be treated in a symposium, by five eminent writers who have given the subject much attention, viz., Charles Dudley Warner, Elizabeth Suart Phelps, Dr. William A. Hammond, Mrs. E. M. King, and Dr. Kate J. Jackson.

The Fortnightly Index and the Educational News have been consolidated in The University. The prospectus says that, "While the paper has no official connection with any institution of learning, it is under the edutorial control of University professors, and aims to reflect the maturest thought of American scholars upon the vital issues of the day. In the true university spirit its columns are open to the earnest discussion of questions uppermost in the minds of thoughtful me. and women, in politics, religion, education, science, literature and art in all their various bearings."

## Miscellancous.

#### A PROFITABLE CONVICTION.

A recent article in an English periodical remarks that "the sport of shooting peachers, which comes in toward Christmas, is now in full swing; some capital sport has already been obtained, and there appears to be a plentiful supply of human game on hand." The peacher's lot in England is certainly a hard one, and for some reason it is impossible to look at his misdemeanors with the severity felt toward other law breakers. When, as in the anecdote below, the offender came out ahead of the law, one is inclined to smile rather than grieve:—

"Some years ago, owing to the serious depredations of the ratcatchers on the banks of the Thames, the authorities were compelled to issue notice-boards offering a reward of five pounds for information, payable on conviction of the culprit. Not many days after the notice appeared, an Irishman was caught, and, being brought before the magistrate, was ordered to pay a fine and costs amounting altogether to two pounds, or undergo one month's imprisonment in default. Not having the needful, Pat went into retirement at the expense of the country. The next morning, however, another son of Erin appeared at the prison, and, paying the fine, liberated his friend. The governor having been in court on the previous day, recognized the liberator as the principal nitness and informant against the accused. This puzzled him, and he asked for an explanation, 'Well,' said Pat; it's loike this, sorr. Tun and meself wor hard up, and seeing the notice, Tim agreed to be caught. I give information agin him, and this morning I drawed the reward, and, now ye're paid, we've three pounds left to start the world wid; and, begorra, I hope the board'll stop up a bit longer."-Exchange.

#### THE BRIDGE OF PRAYER.

The bridge of prayer, from heavenly heights suspended Unites the earth with spirit realms in space, The interests of these separate worlds are blended For those whose feet are turned towards that place.

In troubled nights of sorrow and repining,
When joy and hope seem sunk in dark despair,
We still may see above the shadows shining,
The gleaning archway of the bridge of prayer.

From that fair height our souls may lean and listen
To sounds of music from the farther shore,
And through the vapors sometimes dear eyes glisten
Of loved ones wto had hastened on before.

And angels come from their celestial city
And meet us half way on the bridge of prayer,
God sends them forth full of divinest pity,
To strengthen us for burdens we must bear.

Oh, you, whose feet walk in some shadowed by-way
Far from the scenes of pleasure and delight,
Still free for you hangs this celestial highway,
Where heavenly glories dawn upon the sight.

And common paths glow with a grace supernal And happiness waits hand in hand with care, And faith becomes a knowledge fixed, eternal, For those who often seek the bridge of prayer.

-Ella Wheeler.

#### DANIEL WEBSTER.

As an infant Webster is described as a crying baby who worm I his parents considerably. He grew up to boyhood pale, weak, and sickly; as he himself often told me, he was the slimmest in the family. And yet, by doing a boy's work on his father's farm, by indulging a propensity for outdoor sports, by leading a temperate and frugal life, he succeeded in building up a robust constitution: On arriving at manhood he had a physical frame which seemed made to last a hundred years. It was an iron frame, large and stately, with a great mountain of a head upon it.

When Thorwaldsen, the Danish sculptor, saw his head in Powers' studio in Rome, he exclaimed: "Ah! a design for Jupiter, I see." He would not believe that it was a living American. Parker describes him as "a man of large mold, a great body and a great brain." \* \* Since Socrates, there has seldom been a head so massive, huge. Its cubic capacity surpassed all former measurements of mind. A large man, decorous in dress, dignified in deportment, he walked as if he felt himself a king.

"Men from the country who knew him not stared at him as he passed through our streets. The coal-heavers and porters of London looked at him as one of the great forces of the globe. They recognized in him a native king." Carlyle called him a magnificent specimen whom, as a logic fencer or parliamentary Hercules, one would incline to back at sight against all the world." And S. leney Smith said he was "a living lie, because no man on earth could be so great as he looked."—The Century.

## HOW GLOBES ARE BUILT.

This heading has no astronomical meaning; it refers to mechanical manipulation. Our library and school educational globes have, perhaps, been a puzzle to many an inquisitive mind, they being so light, so easily turned on their axes, and so smooth as to appear more like natural exact productions than mechanical constructions. The material of a globe is a thick, pulpy paper, like soit straw-board, and this is formed into two hemispheres from disks. A flat disk is

cut in gores, or radical pieces, from center to circumference, half of the gores being removed and the others brought together, forming a hemispherical cup. These disks are gored under a cutting Falls, was elected president by acclamation, and Miss Brown, of Port press the disk of which are a count to the second countries. press, the dies of which are so exact that the gores come together at their edges to make a perfect hemisphere. The formation is also done by a press with hemispherical mold and die, the edges of the dies of the than routine and business, was then followed through. gores being covered with glue. Two of these hemispheres are then and the state of t in a moist state. After drying the rough-paper globe is rasped down to a surface by course sand-paper, followed by finer paper, and then receives a coat of paint or enamel that will take a clean, smooth finish. The instructive portion is a map of the world printed in twelve sections, each of lozenge shape, the points extending from pole to pole, exactly as though the peel of an orange was cut from stem to bud in twelve equal divisions. These maps are obtained in Scotland, generally, alth ugh there are two or three establishments elsewhere which produce them. The paper of these establishments elsewhere which produce them. The paper of these maps is very thin, but tenacious, and is held to the globe by glue. +D maps is very turn, but tenacious, and is held to the globe by glue. D. Macdonald, B.A., Pastor Presbyterian Church, Thorold. The operator generally a woman—begins at one pole, pasting with Relation of Teacher to his Work.—Mr. Tilley. the left hand and laying the sheet with the right, working along one edge to the north or other pole, coaxing the edge of the paper | deal of interest was manifes ed in the proceedings. over the curvature of the globe with an ivory spatula, and working down the entire paper to an absolutely smooth surface. As there are no laps to these lozenge sections the edges must absolute's meet, else there would be a mixed-up mess, especially among the islands of some of the great archipelagoes and in the arbitrary political borders of the nations. This is probably the most exact work in globe-making, and yet it appears to be easy, because the operator is so expert in coaxing down the fulnesses and in expanding scanty, portions, all the time keeping absolute relation and perfect joining with the other sections and to their edges. The metallic work-the equators, meridians, and stands is finished by machinery. coat of transparent variash over the paper surface completes the work, and thus a globe is built. - Sountific American.

#### THE LONDON POST OFFICE.

The London postoffice is a great institution. the two departments, one occupied by the business of letters and i papers, the other with telegraphing. In Britian telegraphing is part of the regular post office system. The general postoffice build, irregularly. Parents often keep their children home needlessly. ing is an imposing edifice of the Ionic order. It is 400 feet long, 130 wide, and 64 feet high. The best time to see the outside rush. is just before 6 pm, at which hour the night mad closes. The rush is something tremendous. Errand boys, hatless clerks, business men, everybody jams forward to get his bundle of letters into the long zinc edged or copper-faced opening before the hour strikes. Exactly at the minute the office closes, and all letters that are in haste must have an extra stamp on them if they are to go that night. The extra stamp business lasts for an hour. It is a sight to see the stampers at work. The stamper counts the letters, and the last stamp on a long sheet of name? It is a sight to see the stamped fifty he hits his stamp on a long sheet of name? when he has stamped fifty he hits his stamp on a long sheet of paper | tions. Stamper in the London office can stamp about 6,000 letters an hour.

The Association before closing discussed the subject of "Arbor Day."

All felt that the setting apart of this day was a step in the right direction, and were agreed that its proper observance for a few years would postoffice. It is 286 feet by 144 feet, and S4 feet from pavement to the control of the setting apart of the attractiveness of the school of the school of the setting apart of the subject of "Arbor Day."

All felt that the setting apart of this day was a step in the right direction, and were agreed that its proper observance for a few years would be subject to a few years would be subject of "Arbor Day." postoffice It is 286 feet by 144 feet, and 84 feet from pavement to have a cornice. On the first floor are the offices of the postmaster general grounds. and the accountant general. On the next floor are the secretaries; pointed by the non arrival of Dr. McLellan, to deliver his expected and staff, and in the two upper stories is the telegraph department. lecturer on "This Canada of Ours." The Rev. A. Grant was called to The instrument room is 125 by 80 feet. Fifteen million messages the chair, and a good programme of singing, reading and recitations was a year pass through it. The building is connected with the district | gone through with very successfully. telegraph offices of London by pneumatic tubes, and messages come through literally with the speed of the wind. Four engines in the basement furnish the wind.

## Ceachers' Associations.

At the business meeting on Thursday afternoon a strange and prob-

Thursday Afternoon. - Devotional Service. - Conducted by Rev. John

Afternoon. Should Temperance be Taught in Our Schools?-Rev. C.

About seventy teachers were present at the Convention, and a good

The Educational Journals were represented at the meeting. The large addition made to the Subscription list of the Canada School JOURNAL, afforded a gratifying proof of appreciation of our efforts to give teachers a first class practical paper.

HALDIMAND. - The Teachers' Convention of the County of Haldimand met in Hagersville on Friday and Saturday last. The attendance was large and the meeting unusually interesting. The programme for the day sessions consisted of papers and discussions bearing directly on school work. The President, Mr. Egbert, read a paper on "Physical Exercise" His paper, as well as the discussion which followed, advocated between the control backty of real healths out to be a control of the contro cated plenty of good healthy out door exercise. He also suggested some extension movements for the school room when the weather would not admit of going outside. Mr. Elliott, of Caledonia, took up the subject of "Mensuration." He threw out some valuable suggestions on this subject in showing how he would teach a lesson to a class beginning the study. He gave a few good rules or formulæ for finding the area of triangles, circles, &c. Mr. Hamilton, of Cayuga, read a paper on "Our Profession." This paper was well received, and the writer was requested by the convention to give it to the Newspapers of the County for publication Mr. Hume, Dunville, took up the subject of "Irregular Attendance." He showed a number of reasons why pupils attended to the state of the least the state of the least the large medically. They allow them to remain at home on account of what he termed 9 o'clock head aches. School is often made so unpleasant that boys don't care to

At the Public meeting on Friday evening, the audience were disap-

NORTH ESSEX. A local convention of the teachers of North Essex, was held at School No. 7, Sandwich East, near Madistone. Thirty-four teachers were present. Theo. Girardot Esq., I.P.S., occupied the chan. The forenoon was spent in illustrating, with suitable classes, the methods of teaching geography, writing, primary reading, language lessons, literature and composition. In the afternoon a very profitable discussion Welland.—Annual Meeting of Welland Teachers' Association. The was held on the several methods, and many practical plans were sugarnal convention of the Teachers' Association for the country of Well and was held in the high school building of that town on Thursday 30th April, and Friday 1st of May. The convention opened in due form the presidency of Mr. Ball, the public school suspector for the country.

Interacture and composition. In the atternoon a very profitable discussion was held on the several methods, and many practical plans were sugars.

Resolutions were adopted approving of only one text-look on each subject taught in the Public Schools, and of the appointment of Directors of Institutes. It was agreed to invite the teachers of South April, and Friday 1st of May. The convention opened in due form the local convention will be held at Woodslee, June 1st, 1885.