Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below. Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

	Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
	Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
	Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
]	Cartes géographiques en couleur		Showthrough / Transparence
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)	\checkmark	Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur	[]	Includes supplementary materials /
$\overline{\mathcal{A}}$	Bound with other material / Relié avec d'autres documents		Comprend du matériel supplémentaire
	Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une
7	Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.		restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

Additional comments / Commentaires supplémentaires:

.

Continuous pagination.

The Educational Journal

And Practical Teacher

Vol., X.

TORONTO, FEBRUARY 1, 1897.

No. 17

The Educational Journal SEMI-MONTHLY.

▲ JOURNAL DEVOTED TO LITERATURE, SCIENCE, ART AND THE ADVANCEMENT OF THE TEACH-ING PROFESSION IN CANADA.

PUBLISHED BY THE

Educational Publishing Company, 11 RICHMOND ST. W., TORONTO.

J. E. WELLS, M.A., EDITOR.

EVERY SUBSCRIBER SHOULD READ THE FOLLOWING TERMS.

- Price-Yearly subscriptions \$1.50; renewals \$1.50; clubs of three, \$4.25; clubs of five, \$6.75. Larger clubs, in asso-ciations, seut through association officials, \$1.25. To Foreign countries included in the Postal Union, \$2.00; to all others, \$250. Remittances-Cash must accompany each order. Accounts

Remittances - Cash must accompany each order. Accounts for subscriptions to THE EDUCATIONAL JOURNAL are not opened. Remittance-should be made by cheque, reg-istered letter, or postal or express money order. Stamps or currency can be sent, but at the sender's risk. Receipts-Pasted on each copy of THE EDUCATIONAL JOUR-NAL to subscription is paid; thus: SAMUEL WILCOX Dec. '96 That means that Mr. WILCOX's subscription has been paid up to December, 1896. When a subscription has been paid ap to two weeks the date of his label, the length of time paid for. paid for.

- paid 107. Post-Office Address—In renewing, discontinuing, or chang-ing address, always give the full post-office ddress to which THE EDUCATIONAL JOURNAL is sent at time of writing. Without such information the name cannot be fourth on the subscription list
- writing. without such information the name cannot be fourt on the subscription list. Discontinuances.-Sub-criptions are stopped only upon written order. The return of a paper will not secure a discontinuance. Orders to discontinue can be sent in at ary time during the year paid for, and will receive atten-tion at the right time.
- Communications for the editor must not be written on mam - sheet of paper containing matter for the business department.

Address all communications to

The Educational Publishing Co., No. 114 RECHMOND ST. WEST, TORONTO.

ADVERTISING DEPARTMENT.

Rates of advertising will be sent on application to the above address.

Edítorial.

ANNOUNCEMENT.

UR many friends will be surprised to hear that on March 1st, 1897, THE EDUCATIONAL JOURNAL, which has been, in many cases, their companion in school work for the past ten years, will be withdrawn, and that we shall issue in its place

a new paper entitled THE CANADIAN TEACHER.

The new paper will be the same size as this issue of THE EDUCATIONAL JOURNAL, and will be devoted to the various departments of Public School work. The editorial management of THE CANADIAN TEACHER will be placed in the hands of Mr. G. E. Henderson, who has so ably and efficiently conducted the editing and publishing of THE ENTRANCE. In fact, the new departure has been brought about through the amalgamation of THE EDUCATIONAL JOURNAL and THE ENTRANCE. In uniting our forces the interests of both teachers and pupils will, we think, be better served than at present. This, we believe, will be good news, not only to our own subscribers, but also to those of THE ENTRANCE.

Entrance and Public School Leaving work will have special attention, fourteen pages being given to such work. In addition to these fourteen pages there will be several departments specially interesting to teachers. Among these we may mention a two-page department on mathematics-arithmetic and algebra. This will be conducted by a teacher who ranks high among the mathematicians of the Province. Difficult problems which may be met with in Entrance, Public School Leaving, Primary, and Junior Leaving work will be discussed in this department.

The Primary Department, so ably conducted by Rhoda Lee, will be continued. We are confident that when the teachers read the names of those on the staff of the new paper general satisfaction will be felt. We have already secured eight specialists

for the various departments of our journal. Arrangements are also being made for occasional contributions on practical school work from leading teachers of the country. With such a staff to assist us, we hope to send out the best educational paper ever yet placed before the teachers of Canada.

In addition to THE CANADIAN TEACHER, it is the intention to issue two smaller papers for pupils, one of which will be known as THE ENTRANCE and the other THE LEAVING. These pupils' papers will each contain eight pages of matter. Heretofore we have given in our ENTRANCE JOURNAL but seven pages of Entrance work and only four pages of the Leaving work. As stated above, each class will henceforth receive eight pages.

In making these very desirable changes. we had ever before us the needs of both teachers and pupils. We believe, however, from the support we have had from the teachers of the country during the past years, that they will stand by us in this forward movement. Teachers will be pleased to learn that the new paper. though much more complete in the various departments, is to be supplied at the rate of \$1.00 per year. EDUCATIONAL JOURNAL subscribers who have paid in advance will receive the new paper commencing with the issue of March 1st. Subscribers for THE JOURNAL who are in arrears will be billed to March 1st, and will have the privilege of subscribing for the new paper from March 1st to September 1st, 1897, for 25 cents. This will be a trial trip, in which we hope to convince teachers that THE CANADIAN TEACHER is a journal which they cannot afford to be without. By putting the rate at this figure, and sending out such a paper, we hope to keep faith with every teacher on our list. We will send March ist issue to all our subscribers, that they may have the opportunity of examining the new paper before extending their subscription.

EDUCATIONAL PUBLISHING COMPANY,

THOSE EXAMINATIONS.

X/E have long been accustomed to hearing a good deal of unfavorable comment touching the multiplicity and cost of the examinations which mark, like mile-posts, the pupil's course through our Public and High Schools. Attention seems just now to be centred especially upon the latter feature—the additional expense thrown upon pupils, or their parents, by these examinations. It may or it may not be that some or many of these examinations could be dispensed with, without injury, if not with positive benefit, to the educational system. That is a question well worth an exhaustive investigation. That is not, however, our point just now. An impression is abroad, which we confess to having to some extent shared, that for the multiplicity of examinations the present Minister of Education was chiefly responsible. A . recent article in the Globe shows clearly, we think, that this impression is erroneous. The Globe shows, by careful enumeration, that at the time of Mr. Ross' appointment, in 1887 or thereabouts, there were, in all, fifteen examinations conducted by the Education Department, either directly, through the Central Committee, or through local boards of examiners. Of those fifteen examinations ten in all have been abolished during the régime of the Minister of Education. Similarly the Globe article points out that, in connection with the professional training of teachers, important reductions in the number of examinations have been made. To offset these but a few new examinations have been added, notably the Public School Leaving and those for Kindergarten teachers, with the result that the professional examinations of all the teachers of the Province, Public and High Schools included, are fewer in number than those for Public Schools alone in 1887.

The Globe continues as follows :

" It ought to be understood, however, that while examinations are required, and very properly, too, for those who desire to obtain recognition as teachers, there is no examination of any kind required of those who are seeking an education for its own sake. For instance, of the half million of children attending our Public Schools, everyone can complete the Public School course, from the kindergarten to the end of the fifth form, without undergoing a single examination. Of the 24,000 attending our High Schools and Collegiate Institutes, every pupil can complete his course of study to the end of the fourth form (which is almost equal to one year in the University) without taking any examination, departmental or otherwise, excepting the Entrance examination, and for this examination there is no fee unless ordered by the Board of Trustees or the County Council within whose jurisdiction the examination is taken."

This is, to our thinking, an important fact, and one which has not been made so prominent as it should have been. Of course, so far as the courses of study and the methods of teaching in the schools are dominated by the idea that a certain number of the pupils must be prepared for such and such examinations, the criticisms which have been made in previous numbers hold good. The interests of the many should not be sacrificed to those of the few. Almost every teacher will admit that the best, most educative, most stimulative methods of teaching are sadly hampered, if not made quite impossible, when an examination of the ordinary kind has to be kept constantly in view, by both teacher and pupil, as the goal. We say "of the ordinary kind," for, as every teacher knows, there are examinations and examinations. It is quite possible, we believe, to so construct examination questions as not only to free them in large measure from the chief objections, but even to make them positively helpful to

true culture and mental development. There has of late years been a marked improvement in this direction in both the University and the Departmental examinations. Yet examinations are necessary. At least no adequate substitute has, so far as we know, yet been devised for those who are in quest of certificates of efficiency in any given business or pro-The crucial question would fession. seem to be, then, whether it is the right and proper thing, on principle, to undertake the training of students for any special profession or business in the Public Schools-whether, as it is commonly and forcibly put, those who want such training that they may make a livelihood or a fortune by it should not pay for it. Surely no one so favored at the public expense should object to paying at least the cost of his examinations.

DR. SCHURMAN, in a recently published essay, speaks of a class of persons who "consider themselves learned when they have been told a great deal." This may almost rank as an educational aphorism. The truth implied, stated positively would be that there can be no real learning where the information given has not been digested and assimilated by the action of the learner's own mind. This is not an original truth, by any means, but it is one well worth keeping in mind.

"No boy can be really a bad boy when dressed in a true blue suit, with the blue meaning truth, the white stripes purity, and every brass button shining out for courage and bravery."

The above from an article in the Buffalo Evening News, advocating the introduction of military drill and uniforms in the schools of that city, affords a striking sample of the nonsense which sometimes passes current for argument. Yet it is quoted with approval by an educational contemporary.

THERE is a crying need of some better means for the teaching of oral reading in the schools. So far as our observation extends, there is in some of the best of our city schools, perhaps in all, absolutely no provision for effective drill in the art of reading aloud, and no time or place on the programme for any such drill. If we are in error in this statement, we shall be thankful to be corrected. Reading aloud is one of the things in respect to which it is most emphatically true that only by doing can one learn to do. How are our children to be taught correct pronunciation or accent, to say nothing of the still higher qualities of expression and emphasis, without daily drill by competent instructors, and these are, alas! rare, even among those who are, in other respects, excellent teachers? After what has of late appeared in our columns we need not say a word with reference to the supreme importance of the ability to read aloud. We should be glad to hear from teachers in both city and country on this subject.

This is an age of hero-worship. The tendency to it is particularly marked in the United States. The schools, the papers, the magazines, are full of it. Not only so, but it has often seemed to us that many even of the most estimable people among our neighbors, especially ladies, carry constantly about with them, in some prominent compartment of their minds, their own special galleries of heroes, great and small, and that they sometimes unconsciously keep on the lookout for opportunities to exhibit these for the admiration, possibly even for the discouragement and humiliation, of their commonplace friends. It is certainly right to think as well as possible of others, but we have often queried as to the effect on character of the cultivation of this habit. It naturally tends to the disparagement of those about one, when

those at a distance, or in their graves, are thus viewed through a halo which glorifies the most ordinary characteristics. But a still more serious danger is that arising from the tendency to exaggeration, sometimes to an absurd degree, which it fosters. Even such men as Washington and Lincoln, whose memories are entitled to special honor, are often exalted to heights of superhuman excellence which would astonish themselves could they again revisit the scenes of their struggles and triumphs.

An interesting state of affairs has been developed in the United States in connection with the proposed international arbitration treaty with Great Britain. Though the draft treaty has been signed by the official representatives of the two nations, and has received the strongest evidences of approbation by the great body of the people of both, its fate is just now in the hands of the United States Senate. A strong opposition is being offered within that body, prompted, as is generally agreed, by petty partisan spite against President Cleveland and his colleagues, irrational and jingoistic hatred of Great Britain, and other narrow and contemptible motives. The religious and secular papers of the better class are almost a unit in urging the ratification of the treaty as the product of a higher Christian civilization than has hitherto been reached, and as bidding fair to prove an inestimable boon not only to the two nations, but to humanity; and it is, we believe, safe to say that tens of thousands of the best citizens of the great Republic are urging their representatives in the Senate to confirm the treaty without delay. And yet it is extremely doubtful if the Senate will not balk the will of the nation! The United States Senate used to stand very high among the most dignified and honorable deliberative bodies of the world. How has it fallen !

English.

All articles and communications intended for this department should be addressed to the ENGLISH EDITOR EDUCATIONAL JOURNAL, ROOM 5, 114 Richmond Street West, Toronto.

NOTES OF A LITERATURE LESSON GIVEN OCTOBER, 1896.

BY C. CLARKSON, M.A., SEAFORTH.

"THE WELL OF ST. KEYNE."—HIGH SCHOOL READER, P. 209.

METHOD.

A conversational lecture. Questions asked, but no time spent in dealing with answers. Questions only intended to lead on from point to point. Main points written down on blackboard by teacher as the lesson proceeds, and taken down by pupils in their note-books for further study and review.

1. INTRODUCTION.

The poem is read three times, the teacher reading alternate stanzas as a "pattern" for the class 1. Classify this poem. A ballad, written in imitation of an old English ballad. 2. What are the chief points imitated? (a) It tells a story-technical name, "Fable "-in this case a humorous story, one mark of the ancient ballad, which often gave tragical as well as comical stories. (b) It is an outline sketch, brought out by strong, rapid strokes ; no decoration, no elaboration, no minute description, no delicate transitions ; but, instead of these, abrupt, sudden steps from point to point in the story. (c) The metre, uncomplicated, monotonous, adapted to simple music, such as the pipe or harp accompaniment to the voice; one sentence in each stanza, rarely running on to the next (d) Rhythm and movement. Time : stanza. movement slow, deliberate, full of pauses, especially at the end of each line. The rhythm, or "sound effect," varies only one or two notes, requires corresponding monotone and long pauses in reading. (e) Poetic syntax and archaic collocations of words, old pronunciations, dialects, e.g., countree in stanza I ; "at the well to fill," stanza 5.

" She laid on the water a spell ;"

"The husband of this gifted well."

N.B.—Sense dependent on proper pause. All the words of the Cornishman. N.B.—Pupils find these out.

[Note.—The dress of the poem and in part the nature of the matter have now been projected by the teacher. He has had time to arrest attention,

and if he has used the chalk, and kept the class using their pencils, all has gone well. He now stops lecturing and begins teaching proper.]

PART II. (a) TITLE AND SUBJECT.

When Mr. Southey sat down to write, did he intend to deal with any subject, or question, or narrative? (He meant to tell a story.) What name has he given to the ballad? (Well of St. Keyne.) That is a short title. Does it tell us plainly the subject of the poem? No. Then write down a short sentence or amend this title so as to state the subject explicitly. The Well of St. Keyne, and how a Cornish bride outwitted her husband.

(b) PURPOSE OF THE AUTHOR.

What do you think could induce Mr. Southey to take the trouble to tell this story in this form?

(a) To test his own skill in imitating old ballads he had read.

(b) To create amusement by humorous description and the shock of surprise at the end, and thus blease the reader. Do you think he had no views of his own to advance, nothing that he wished to teach us? E.g., do you think he wants to make us believe in the magical or miraculous power of (No answer.) Into whose mouth St. Keyne? does he put this part of the story? (The Cornishman's.) Do you think Mr. Southey seems anxious to make this man our teacher? No; certainly Well, then, do you suppose he has actually not. taught us anything by this piece, perhaps without really intending to teach at all? One boy: "I do not think he would have been at such pains to imitate the style and music and general effect of a humorous ballad unless he himself had admired that kind of composition." Right. The poet, undoubtedly, tried to choose a pleasing form for his poem, and he has thus given us his authority to study the old English ballads and to try to appre-Now, mention any other ciate their qualities. poet who has done the same thing. Cowper-John Gilpin, Wordsworth-Lucy Gray, etc. Yes, the form of poetry is worthy of study and teaches us the author's conception of beauty in style and expression. The beauty of the ballad is akin to that of a crayon drawing, in which a few strong but very accurate and skilful strokes produce the desired effect.

PART III. METHOD OF DEVELOPMENT.

Well, let us suppose the author has chosen his subject, and also selected the ballad form. He must now go a step further and develop the details. He has to tell us a story. So has Shakespeare in the Trial Scene, lesson 3, p. 49, High School Reader, but he has done it in a different way.

Shakespeare does not say anything himself, he makes the personages on the stage talk. Does Mr. Southey say anything in his own proper person? Yes. Does he nominally utter all these words? No. Then draw a line to divide these two parts. How many stanzas in the first part? Five. How many in the second part? Eight. Look at part second and say what we ought call that sort of composition. It is a dialogue. Yes, and the whole of the Trial Scene is written in that way-the dramatic method. Is there, then, any dramatic element in this ballad? Yes, the second part is developed in dramatic style by means of a reported dialogue or conversation. Now look back at part one. It is descriptive narrative. Then how has the poet developed or presented the details of this poem to our minds? Partly by descriptive narrative, partly by reporting a conversation. Are there any words in part second that are not spoken by the intelligent, educated traveller, nor by the uneducated, sheepish countryman? Yes, "quoth he," "the stranger he made reply," "quoth the Cornishman," etc. Then part two is not purely dramatic, and we describe it by saying that it contains a dramatic element.

Now there is another point about these two parts. Which part do you think is the more lively, vivacious, interesting ? The second part. Then, does the ballad become more entertaining as it goes on, does our interest steadily increase, or does it fall off? The poem goes on increasing in interest and excites more attention as we approach the end. Right, and we say that the composition is developed in *climactic order* from the unemotional description up to the comical ending of the dialogue. Observe that all good composition follows some definite method of development. In other lessons we shall study a variety of such methods. Now write down one or two short statements to define the method by which the writer has worked in composing his poem.

PART IV. THE STROKES OF HUMOR.

Now, there are several things in the application of the method which we might study one by one, in the successive lines and stanzas, if we had time to consider the minuter particulars. We must omit these for the present and go on to the last topic of this lesson. Tell me what is the final effect of this ballad? How do we find ourselves at the end? We are laughing at the Cornishman. Well, why? Has he said anything silly? No. You are right, the humour is not in any particular word; then why do we laugh? One boy. "I think it is at the 'fx' he has got into." Exactly, but you might have expressed it without using slang;

call it the situation. The interest of the poem turns on the humor of situation. Now what is there in the situation to make us laugh? It was a practical joke. But why do we not laugh at the wife, or the traveller? One boy, "They didn't get the surprise party." That is nearly accurate. The contradiction between his plans and their easy frustration by his wife gives the effect of a surprise, which helps to make us laugh. But do you think there is any other comical element? Yes. The solemn authority of the countryman's way of telling about St. Keyne, contrasted with the chop-fallen look he had when he "sheepishly shook his head"? Very good, that is the first part of the surprise to the reader, and the wife's trick is the second part. Do you think of any third part? One boy-" It was a funny thing for a man to run off and leave his bride." Another boy-" It was a funnier thing for the bride to pull a bottle out of her pocket and take a drink out of it." Well, you see the third stroke is left to our imagination. Perhaps Mr. Southey did not wish to laugh at the lady, but the abrupt ending is characteristic of the ballad.

V. CONCLUSION.

We are now prepared to look back over the poem and observe the rather long introduction and the well-managed dialogue. Notice that the introductory part is rather disproportionately long, and that there appears no mark of haste in the conversation. This is all intended to assist the *suspense*, to draw the ballad out to a sufficient length to make the final explosion of merriment sure and effective. Now let us read the whole and try to bring out the humor of the situation by proper time, pitch, and expression.

LOSS OF THE BIRKENHEAD.

A. C. BATTEN, BARRIE.

The following paragraph is quoted from "Gladstone and His Contemporaries," and will probably be of considerable interest in connection with the lesson in the Fourth Reader. The poet undoubtedly uses exaggeration pretty freely throughout the poem. It is doubtful if "Sharks hovered thick along that white sea-brink," for we are not told that large and dangerous sharks are found there. Encyclopædia Britannica says that the Tope species is common on the coast of South Africa, but it is only about six feet long. It is not destructive and troublesome, only in stealing fishermen's baits and driving away other fish. It is apparent, however, that the poet is quite right in the prominence the gives to the courage of the British soldier, the most important part of the poem.

"The Birkenhead was a queen's steamer, and was on her way to Delagoa Bay and Buffalo mouth with troops to reinforce our aimy in Kaffirland. The wreck took place on February 27th, and about 460 were drowned. It was about 2 o'clock in the morning, the sea being smooth and the vessel steaming at the rate of 81/2 knots per hour. She struck on a rock near Point Danger, and it went through her bottom just aft of the foremast. The water rushed in at such a rate that most of the men in the lower troop deck were drowned in their hammocks. The rest of the soldiers, very few of them old hands, came on deck with the officers, who were charged by Major Seaton and Captain Wright to see that discipline was preserved among the men and that silence was maintained. The ship was rolling heavily. About 120 of the men were put to the pumps, and the remainder were gathered together in the poop, so as to ease the forepart of the ship. The horses were pitched out of the port gangway, and the cutter got ready for the women and children. As soon as ever these were safe in the boat the entire bow of the ship broke off at the foremast, and the funnel fell on the side, carrying away the starboard paddle-box and boat. This boat capsized, and the large boat in the middle of the ship could not be got at. About sixty men were crushed by the falling of the funnel, and about sixty were drowned below at the pumps. The vessel then broke in two crosswise, and the stern part filled and went down. A large number of men clung to the rigging of the main mast, and others to driftwood, which the ocean swell carried towards Point Danger. About seventy men got on shore in this way.

" The order and regularity that prevailed on beard from the time the ship struck until she totally disappeared," writes a military survivor, "far exceeded anything that I thought could be effected by the best discipline; and it is the more to be wondered at, seeing that most of the soldiers had been but'a short time in the service. Everyone did as he was directed, and there was not a murmur or a cry among them until the vessel made her final plunge. I could not name any individual officer who did more than another. All received their orders and had them carried out as if the men were embarking instead of going to the bottom. There was only this difference, that I never saw any embarkation conducted with so little noise and confusion. All the women and children were Put safely on board a schooner that was about seven miles off when the steamer was wrecked.

This vessel returned to the wreck at about 3 p.m., and took off forty or fifty men that were clinging to the rigging.

"When the vessel was just going down, the commander called out, 'All those that can swim, jump overboard and make for the boats.' The military officers in charge of the soldiers saw that this was certain to swamp the boat which contained the women and children, and these gentleman bade the soldiers stand still. Not more than three made an attempt to jump over. Of the whole 683 persons who were on board only about 190 were saved."

Mathematics.

CORRESPONDENCE.

C. CAMERON, Dominionville, sends two problems, which will appear in their order.

L. ALGIRE, North Williamsburg, a new subscriber, sends ten problems with solutions, su'table for Fourth Class work.

P.J.B., Prince Edward Island, sends ten problems in arithmetic.

J. IRELAND, Fergus, who began to teach in Canada West in 1844, sends some interesting reminiscences of the early schools of this province. All honor to the pioneer teachers who carried the sacred lamp of learning into the small settlements of this country more than half a century ago ! As he truly says, "the very old ones are scarce, but a few still survive." They are among the best citizens alive; and Ontario should delight to honor them. Other men cleared forests of gigantic trees; they planted the seeds of education with great toil and self-denial; and we are now just beginning to enjoy the fraits of their labor. Many of them had indomitable energy and a passionate love of learning, combined with considerable intellectual force, and they gave out a thousand times as much as they received, either financially or spiritually. About the time Mr. Ireland's first pupils were receiving the impress of his moral and intellectual power, Egerton Ryerson was studying Latin on horseback and preparing himself to become the greatest educationist of his generation. He was a worthy chief and representative of the men, like Mr. Ireland, who, under great difficulties, planted in this fair province the love of education among the first generation of native Canadians, and inspired them with the desire to become full-grown men first of all. Mr. Ireland

says : "I think I got \$7 a month, and I boarded round. Sometimes, if I saw I was welcome, I stayed over the week. This system had some advantages, for it brought the teacher and the people together, and rubbed off some of the asperites by social contact. We had no system, but plenty of methods, for every man had his own. The internal accommodations [of the old skull-cap log schoolhouse] were chiefly a few long, rough benches on four legs, and a large fireplace with stick chimney, plastered with mud. The great back-log had to be carefully looked after in the evening at the close of school, otherwise it might set fire to the 'college' during the night. There were no globes, maps, or blackboards. The teacher was generally engaged for three months, and the frequent changes of teachers retarded progress enormously then as now. For the first ten years of my time I saw scarcely any native teachers of either sex. There were some old soldiers, cashiered clerks, broken-down merchants, and a superabundance of young Americans of both sexes. There was no competing with these ; they were dressy, fluent, mannerly, but often shallow enough in education, for there were no examinations to test their fitness for teaching. The books I had to use were "Cobb's Spelling Book," "Kirkham's Grammar," "Daboll's Arithmetic," and " Morse's Geography." Afterwards the Irish National Series of school books came in. [That must have been after 1848.-ED.] The Fourth Book of that series was, I think, superior in many ways to the present Fourth Reader. I spend my leisure hours nowadays in mathematical research, and I have made some nice d'scoveries, but the CANADA SCHOOL JOURNAL and THE EDUCATIONAL JOURNAL have uniformly rejected them because of their inutility. Was it not because nobody understood them?"

REPLY.—We are much indebted to Mr. Ireland for these notes. Everybody would be glad if he would draw up a concise and systematic account of his long and useful life, showing the conditions under which the present system of education was founded. All such memoirs have a perennial interest, and hold a permanent value when committed carefully to "the immortal custody of the piess." In regard to his supposed discoveries, Mr. Ireland is somewhat mistaken. If he will consult the volumes of The American Journal of Mathematics, The Proceedings of the London Mathematical Society, The American Mathematical Monthly, etc., he will find that other workers have pretty fully investigated the conditions of triangles having rational sides and areas. He deserves immense credit for having mastered the

Calculus and some other branches of higher mathematics under such circumstances and in the face of such d fficulties as our quotation describes. His *example* ought to be an inspiration to every young man in Canada who has a spark of ambition to conquer circumstances and achieve the higher intellectual life in spite of all difficulties and obstacles. All honor to such men, teachers and preachers, who, half a century ago, carried the sacred torch of education and religion into the "Queen's Bush" of Canada West, and taught the first generation of Canadians that man cannot live by bread alone, but must have intellectual and spiritual fcod to satisfy the hunger of his higher nature !

CONSTANT READER, Quebec, repeats the problems sent a few months ago, and respectfully asks for solutions. Will not some of our able and energetic correspondents respond? The questions are in the High School Arithmetic, p. 156, No5-33 and 36; p. 160, Nos. 14, 18, 20; p. 162, No-30; p. 163, Nos. 34, 43, and 44.

A STUDENT sent, some months ago, a request for an outline lesson introducing quadratic equations to a class of beginners. We give a concise report of an actual lesson delivered in a Canadian school.

A. N. MYER, B.A. Dunnville, sends several problems, and also a few remarks on Problem A in the issue of January 1st.

J. W. JOHNSON, F.C.A., principal of Ontario Business College, joint author of "The Canadian Accountant," and present mayor of the city of Belleville, very kindly supplies a further valuable contribution on "Discounting," which will be duly appreciated by hundreds of our readers. All the educationists of Canada are glad to see Mr. Johnson seated in the mayor's chair of Belleville the Beautiful, and they take his elevation to the municipal dignity as a compliment to a faithful and successful teacher, and as showing an intelligent appreciation of the national value of his work. A few years ago the city of Stratford paid a similar compliment to Mr. McGregor, who educated a whole generation in the High School there. About the same time St. Marys elected Mr. J. W. Poole mayor of the town in recognition of his public services as a teacher and a champion of purity and clean-handedness in municipal affairs. Time would fail to tell of the teachers and ex-teachers who have sat in our parliaments, and acquitted themselves with credit. The names of Cockburn, Deroche, Harcourt, Hughes, are only the beginning of the roll of honor. Next !

DISCOUNTING NOTES BEARING INTEREST.

By J. W. JOHNSON, F.C.A., Principal Ontario Business College, Belleville, Ont.

The subject of discounting was illustrated in my article in THE JOURNAL of January 1st by two notes not bearing interest. At the editor's request, I now deal with the discounting of notes bearing interest, by two examples—one payable at the place at which the discount was obtained, the other having to be sent away for collection at a cost for exchange (bank commission) of $\frac{1}{2}$ of $1\frac{1}{2}$:

I. I hold a note for \$760 against Robert Jones, drawn at ninety days from January 5th, 1897, bearing interest at the rate of 8% per annum, and discount it on the 18th of January at 7%. The first step is to ascertain how much the note will be worth at maturity, that is to say, what sum the holder will be entitled to receive from the maker when it falls due, because that is the amount to be discounted. The interest for a year on \$760 at 8% is \$60.80; the interest for ninety three days (the term of the note) is $\frac{98}{365}$ of 60.80 = 15.49; \$760 (face of note) + \$15 49 (interest on note) = \$775 49,worth of note at maturity. The next step is to ascertain the number of days the note has to run from the date of discounting to the date of maturity. It will be due on April 8th, and was discounted on January 18th. The number of days between January 18th and April 8 h is eighty. Now find the discount on \$775 49 for eighty days, i.e., the amount that will be deducted from \$775.49 for the loan of the money at the time I borrow it, which is the simple interest (bank discount and simple interest being the same) on \$775 49 for eighty days at the rate of 7% per annum. The interest on \$775.-49 for a year at 7% is \$54.28; the interest for eighty days is $\frac{89}{365}$ of \$54.28 = \$11.90. The net proceeds of the note to me is \$763.59.

2. I hold a note against Richard Rowe drawn at three months from June 5th, 1897, for \$560, bearing interest at the rate of 7% per annum, and discount it on July 2nd at the rate of 6%. As it is payable in another town, the bank charges me, in addition to the discount, 1/4 of 1% for collection. The interest for a year on \$560 at 7% is \$39 20; the interest for ninety-five days (the term of the note) is $\frac{95}{365}$ of \$39.20 = \$10.20; \$560 (face of note) +\$10 20 (interest on note) = \$570 20, worth of note at maturity. It will be due on September 8th, and was discounted on July 2nd. The number of days between July 2nd and September 8th is sixty-eight. The interest on \$570 20 for a year at 6% is \$34.21; the interest for sixty eight days is $\frac{68}{365}$ of \$34.21 = \$6.37, and ¼ of 1% for collecting \$570 20=\$1.43; 1.43 + 6.37 = 7.80, total cost for discounting and collecting. The net proceeds of the note to me is \$562.40.

It will be observed in the first example that the note is drawn at ninety days, and has, therefore, ninety-three days to run, including days of grace; and in the second example, that the note is drawn at three months, which makes it necessary to count the actual number of days between the date of the note, June 5th, and the time of maturity, September 8.h, which is ninety-five.

Entrance Department.

CHAT WITH OUR READERS.

Mr. W. H. Baker asks for the analysis of the following :

I. "They hated their general, who treated them harshly." "Who" is here a descriptive relative pronoun, equivalent to "because he"; and the sentence may be read, "They hated their general, because he treated them harshly."

Therefore, "who treated them harshly" is a subordinate adverbial clause. See H.S. Grammar, chap. vi., sec. 48.

2. The leaves are falling, therefore the swallows will soon be gone.

3. The leaves are falling, therefore the trees will soon be bare.

The analysis of these sentences depends on the treatment of "therefore"; is it "co-ordinating causal" or "subordinating"? See H.S. Grammar, chap. xi., sec. 40.

The best test possibly is to ask, does "therefore" imply the cause of the action (if so, it is subordinating), or does it imply the ground of the statement (if so, it is co-ordinating causal)? It will readily be seen that "therefore" in (2) merely implies the ground of the statement, "The swallows will soon be gone," and, therefore, the "swallows will soon be gone" is a principal clause ccordinating causal with "The leaves are falling." But in (3) "therefore" plainly implies the cause of the action in "The trees will soon be bare," and, therefore, "The trees will soon be bare" is a subordinating adverbial clause modifying "are falling."

"Subscriber," Blenheim, and Mr. H. I. Strang, Goderich, write about the use of "like" in issue of December 15th.

In analyzing :

"And then I know the m'st is drawn A lucid veil from coast to coast, And in the dark church, like a ghost, Thy tablet glimmers to the dawn." "Like a ghost" was expanded into a clause, "like a ghost *glimmers*." This makes *like* a coniunction. After careful reading we conclude this to be wrong.

Metcalf's English Grammar, page 257, says: "Near, nigh, next, and like, whether used as adjectives or adverbs, are properly followed by the preposition to before the name of an object. When the to is omitted some grammarians class near, nigh, next, and like as prepositions."

Mason's English Grammar treats *like* as follows :

"Like a ghost" is equivalent to "like 'to' a ghost," when *like* is an adverb modifying "glimmers," and "ghost" the object of the "to" understood.

The Standard Dictionary styles the use of "like" as a conjunction, "colloquial," that is "not used in the best literature," giving the following examples, so that even good authors use "like" as a conjunction:

"I felt like my final hour had come."

-J. S. Mosly, War Reminiscences.

"Through which they put their heads *like* the Gauchos do through their cloaks."—*Chas. Darwin.*

Lastly, let me mention, as a final authority, "An English Grammar in Three Volumes," by Professor Maetzner, of Berlin. In Volume II., page 211, he says :

"An original dative in an obscured form has been but rarely preserved together with other parts of speech than the verb. This is the case with some *adjectives* and *adverbs*, as : *Like*, *unlike*, *nigh*, *near*, nearest, next."

"Thy other daughter will use thee kindly; for though she is as *like* this as a crab is like an apple, yet I can tell what I can tell."—Shaks., Lear, I, 5.

"Man, like the generous vine, supported lives." -- Pope, Essay on Man, 3, 311.

From all of which we would conclude that the best form is to treat *like* as an adverb or adjective, as the case may be, and the word following as a dative case; or supply a preposition, and treat the word following as the object of this preposition.

"Subscriber" also suggests that clause (8),

"And in the dark church, like a ghost,

Thy tablet glimmers to the dawn,"

is not a noun clause object of "know." We are sorry that the printer took liberty with the punctuation, and placed a semicolon after "coast" instead of a comma, as is found in a good edition of "Tennyson." With this change in punctuation, we think there will be no difficulty in recognizing (8) as a noun clause.

Schools are uniformizing the knowledge and the sentiments of the world; men of all creeds, races, ranks, those who differ in anything else, unite in believing in the efficacy of the schools. The modern school is thus in a sense a church universal, and has all that deep consecration of a belief—a love now well-nigh universal.—G. Stanley Hall.

Drawing.

BY A. C. CASSELMAN.

THE CUBE.

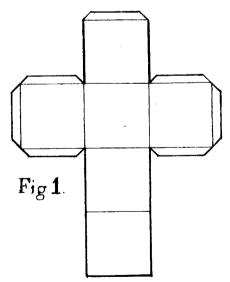
The cube is a type of all objects that have plane faces and straight edges.

The teacher holds the cube in view of the whole class. By questions they are led to compare it with the sphere and the cylinder. What kind of faces has it? How many faces has it? How do they compare with each other in size and shape? What is the shape of each face? How many edges has it? How many corners (solid angles) has it?. How many angles (plane) has it? What kind of angles? What is the position of each face of the cube when it rests on the table? How many edges are vertical? How many are horizontal?

Get from the class a definition of the cube.

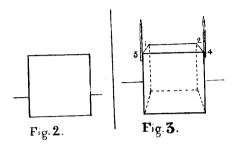
Mould the cube of clay, if that material is in use in the school, as an aid to form study.

One model, the teacher's, is all that is necessary to teach the above facts. To teach the drawing of the cube each pupil must have one. The teacher now gives directions how each member of the class may make a cube of heavy manilla paper or straw board.



Draw Fig. 1 on the blackboard, making the lines light and heavy, as in the figure. Ask the pupils to draw a similar figure at home on the material they are going to make the cube of, making the edge of each square four inches in length. Cut through the paper on the heavy lines, and just through the surface on the light ones. Fold up the figure to form a cube, taking care to have the flaps on the inside. If mucilage or glue is placed on the flaps, and one face at a time is folded and held in position till the glue or mucilage dries, the cube will be quite firm, and will last a long time.

Each pupil now has a model. Review the last lesson. Name some objects like the cube. Write these names down. These objects can be used as drawing exercises on the application of the cube.



Hold the cube so that only one face is visible, and the centre of that face on a level with the eye. Draw the appearance of this face (Fig. 2). Notice particularly the following facts: Edges that are vertical in the object are always drawn vertical in the picture. Edges that are horizontal in the object, and do not recede, are always drawn horizontal in the picture.

Lower the cube until the top face is visible. How many edges are visible now? How many more are visible now than when only one face was visible? What is the real position of each of these edges? How many do not recede? How many do recede?

Draw the front face as before. Draw a line (much longer than is required) to represent the apparent distance the farther edge 12 is above 34. Fig. 3. Now hold two penci's in a vertical position at the corners 3 and 4, as shown in Fig. 3. Does the farther edge appear to extend to the pencils? If not, move the pencils in on the front face, being careful to keep them vertical, till the farther edge appears to touch the pencils. Compare the distance between the pencils now with the top horizontal edge nearer to you. Those two edges should bear the same relation in the drawing. Join 13 and 24. In Fig. 3 the invisible edges are shown by dotted lines. After the pupils have had some practice in drawing the cube, they should be able to draw those invisible edges.

The unceremonious manner in which the great navigator performed the feat of standing an egg upright by breaking one end is familiar to all who have read the anecdote of "Columbus and the Egg."

Grammar.

QUESTIONS TO BE ANSWERED IN OUR NEXT ISSUE.

Some ran to the boat to recover their arms; two discharged their muskets at random; while others, with more self-possession, held their loaded guns ready to shoot any Indian who should approach, and urged their companions not to fire without deliberate aim. For some moments the conflict raged—the Indians being very cautious not to expose themselves, and the Pilgrims sending their bullets with unerring aim wherever they could catch sight of the foe.—John S. C. Abbot.

I. Write the subordinate clauses in full, stating their kind and connection.

2. Select four infinitive verbs, and state how they are used.

3. Parse all the participles fully.

4. Classify and give the relation of all the pronouns found in the extract.

5. Give the function of "arms," "others," "Indians," "Pilgrims," "cautious," and "wherever."

6. Select all the adjectives from the extract, and compare those capable of comparison.

ANSWERS TO QUESTIONS IN OUR LAST ISSUE.

When a mounting skylark sings

In the sunlit summer morn,

I know that beaven is up on high, And on earth are *fields* of corn.

But when a nightingale sings In the moonlit summer even,

I know not if earth is merely earth,

Only that heaven is heaven. —Christina Rossetti.

ANALYSIS.

1. Clause–Stanza I.

Kind-Principal assertive.

2. Clause-- When a mounting skylark sings In the sunlit summer morn.

Kind and connection—Subordinate, adverbial of time, modifying "know."

- Clause—That heaven is up on high. Kind, and connection—Subordinate noun, object of "know."
- 4. Clause And (that) on earth are fields of corn.

Kind and connection-Subordinate noun coordinating, copulative with No. 3, object of "know."

- 5. Clause-Stanza II.
- Kind—Principal assertive, co-ordinating adversative with No. 1.

THE EDUCATIONAL JOURNAL.

- Clause—When a nightingale sings In the moonlit summer even.
 Kind and connection—Subordinate, adverbial of time, modifying "know."
- Clause -- If earth is merely earth not. Kind and connection---Subordinate noun, object of "know."
- Clause—Only that heaven is heaven. Kind and connection—Subordinate noun, coordinating adversative with No. 7, object of "know."

WORDS.

- When. Classification-Subordinating conjunction of time.
 - Function—Joining the clauses the verbs of which are "know" and "sings."
- Mounting. Classification—Imperfect participle, attributive, derivative.

Function—Used as an attributive adjective to modify "skylark."

That. Classification-Subordinating conjunction, substantive.

Function—Joining the clauses the verbs of which are "know" and "is."

- Up. Classification-Adverb of place. Function-Modifying "is."
- Fields. Classification-Noun, common, concrete, simple.

Function-Subject of "are."

But. Classification—Co-ordinating conjunction, adversative.

Function—Joining the clauses, the verbs of which are "know" and "sings."

1/. Classification-Subordinating conjunction.

Function—Joining the clauses, the verbs of which are "know" and "is."

That. Classification-Subordinating conjunction, substantive.

Function—Joining the clauses, the verbs of which are "know" and "is."

Earth. Classification- Noun, common, concrete, simple.

Function — Used predicatively, helping to make the assertion "is earth," and meaning the same as the subject "earth." PHRASES.

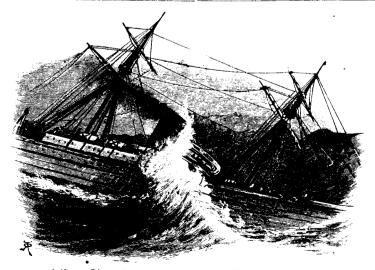
Phrase—Of corn.

- Kind and connection—Adjectiva!, modifying "fields."
- Phrase-In the sunlit summer morn.
- Kind and connection—Adverbial, modifying "sings."
- Phrase-On high.
- Kind and connection—Adverbial, modifying "is."
- Phrase-On earth.
- Kind and connection—Adverbial, modifying "are."
- Phrase-In the moonlit summer even
- Kind and connection—Adverbial, modifying "sings."

Composition.

COMPOUND AND COMPLEX SENTENCES.

It is extremely useful for a class to be practised in taking apart compound and complex sentences into the separate simple statements of which they



Study this picture carefully. Give the scene a name. Take this as the theme of your composition and write thirty lines in description of the picture. are made, and in putting together simple statements into combined forms—and this, not with any reference to defining the grammatical character of the sentences, but simply to show the different forms which may be given in expression to what is substantially the same thing, and to impurt a sense of the variety of style in composition. Separate statement :

The boy had been called. He came at once. Combined statement :

1. The boy had been called, and came at once.

2. The boy, when he had been called, came at once.

3. The boy who had been called came at once. Separate statement :

A frog had seen an ox. She wanted to make herself as big as he. She attempted it. She burst asunder.

Combined statement :

I. A frog had seen an ox, and wanted to make herself as big as he; but when she attempted it she burst asunder.

2. A flog that had seen an ox, and wanted to make herself as big as he, burst asunder when she attempted it.

3. When this frog burst asunder, she was wishing and attempting to make herself as big as an ox which she had seen.

4. Because a frog, when she had seen an ox, wanted to make herself as big as he, and attempted it, she burst asunder.

5. It is said that a frog, having seen an ox, wan ed to make herself as big as he, and burst asunder in the attempt.

Literature.

AFTER DEATH IN ARABIA.

QUESTIONS TO BE ANSWERED IN OUR NEXT ISSUE.

I. Give in a single sentence the theme of this poem.

2. Show the plan of the poem by stating the theme or subject of each stanza.

3. Give in your own words the substance of the poem, preserving as nearly as possible the spirit of the original.

4. Suggest any other suitable title for the poem.

5. What relation do the first two lines and the last two lines bear to the rest of the poem?

STANZA I.

" Again." What is meant ?

"Sends this." What?

"It lies." What lies?

"I know." Who knows?

"Ye." Why is this form of the word used?

"Yet I smile." Explain clearly what this means.

"Thing." Why is this word used ?

"It was mine, it is not me." Explain fully. STANZA II.

"What the women lave." Which do you prefer "lave" or " wash " here? Why?

"Last bed of the grave." What figure is here used? Is it pleasing to you? Give reasons.

"Garment no more fitting." What does this mean?

"Falcon." Describe.

"Bars which kept him from the splendid stars." Is this descriptive of the falcon? Explain. Why is the word splendid used?

What comparisons are made in this stanza? Show the appropriateness of each.

STANZA III.

"Be wise." Why does he ask his friends to be wise?

"Straightway." What is the meaning of this? Why is it used ?

"What ye left upon the bier." Explain this. Why is this form of expression used?

"Wistful tear." Explain the meaning of "wistful."

"'Tis an empty sea-shell." What figure of speech is employed here?

Explain it fully, and show what things are compared, and the appropriateness of the comparison. Would oyster-shell do as well as "sea-shell" in this line? Why?

"Pearl has gone." What is meant?

"The shell is broken." How can this be applied to a dead body?

"It lies there." What do you mean by "it" and "there"?

"The pearl, the all, the soul." Show what is very appropriate in the order here observed?

"'Tis an eartnen jar-loved Him." What things are here compared? Show the appropriateness of the comparison?

"Whose Id Allah sealed." Put this in your own words. What is meant by "Allah"?

"The while." What does this mean?

"That treasure of His treasury." Explain this.

"Let it lie." What does "it" mean? What is the connection in sense between "let it lie" and what preceded?

"Staid." Explain. What is there appropriate in its use?

"Be earth's once more." Put this in your own words.

"Gold shines." What is meant? Show the appropriateness in the use of the word "gold."

"His store." Explain.

STANZA IV.

"Now thy world is understood." Put this in your own words.

"Long, long wonder." What was this wonder? Why does the poet say it ends now?

"Erring friends." What is the meaning of erring? Why does he call them "erring friends"?

"Unspoken bliss." What does this mean?

"Instead." Explain fully.

"Lost, 'tis true, by such light as shines on you." Paraphrase this. What do you mean by "lost" and "such light"?

"Light ye cannot see." Why?

"Unfulfilled felicity." What does this mean?

"Enlarging paradise." Explain.

"Lost, 'tis true---that never dies." Paraphrase this.

STANZA V.

"Farewell friends—yet not farewell." Why does the author use this seeming contradiction?

"Where I am ye too shall dwell." What does this mean?

"I am gone before your face." Put this in your own words. What do you mean by "before your face"?

"Where I have stepped." What is the meaning of "stepped"

"Ye will wonder why ye wept." Why?

"By wise love taught." What do you mean by wise love "?

"That here is all and there is naught." Paraphrase this so as to show the meaning of "here" and "there."

"Fain." Give the meaning.

"Sunshine still must follow rain." What is the connection in sense between this line and the context? Show clearly the meaning of "sunshine," "still," and "rain."

"Only not at death." What is the connection in sense of this phrase? Explain fully.

"For death—life centre." Write this in your own words. What figure of speech is here used? Is it pleasing to you? If so, why? Show clearly the meaning of "first breath," "enter life," and "life centre." Why is the first "Life" written with a capital letter and the second "life" with a small letter?

"Be ye certain—Allah's throne above." Paraphrase this. Give the meaning of "viewed" and "Allah's throne."

"Stout of heart." Explain.

"Your home." What is meant?

"La Allah illa Allah." Give this in your own words.

"Thou love alway." What is the meaning of "alway"?

Spelling.

The following words were given at an examination in the State of New York. They will be found useful in testing the Entrance class :

1. tolling,	17.	tranguil,	33.	index,			
2. squire,	18.	issued,	34.	secrete,			
3. achievements	5,19.	pastor,	35.	reflected,			
4. musical,	20.	sleek,	36.	inquiry,			
5. amateur,	2!.	filbert,	37.	tenacious,			
6. rejoicing,	22.	skirts,	38.	obliged,			
7. hounds,	23.	Bible,	39.	ostrich,			
8. curious,	24.	buckles,	40.	warrior,			
9. liable,	25.	enormous,	41.	ancient,			
10. accident,	26.	estate,	42.	nothing,			
11. capricious,	27.	complete,	43.	pretty,			
12. parsonage,	28.	scarcely,	44.	crystallized			
13. coeval,	29.	indefatigable,	45.	loiter,			
14. daunted,			-				
15. apertures,	31.	symmetrical,	47.	musician,			
16. antique,							
11. capricious,27. complete,43. pretty,12. parsonage,28. scarcely,44. crystallized13. coeval,29. indefatigable,45. loiter,14. daunted,30. oblivion,46. anthem,15. apertures,31. symmetrical,47. musician,							

English.

The following will be found useful for "busy work." Have a pupil write one exercise on the board and the Entrance class write the answers while you are busy with the other classes.

Change the construction of each of the following :

(a) Put plants in the window and see how they creep up to the light.

(b) If we take away the light, plants cannot grow.

(c) When a candle is burned, carbonic acid is formed.

(d) It is the sunlight that keeps plants alive.

(e) You will now ask, I expect, "Whence do we derive this information?"

(f) "Support me," he cried to an officer near him, "let not my brave fellows see me drop."

п.

Paraphrase each of the following :

(a) At these coves the rafts are finally bloken up, and from the acres of timber thus accumulated the large ocean-going ships are loaded.

(b) Should any obstacle have been allowed to remain on the roll-way, hundreds of logs may be

arrested and so huddled together as to make their extrication most dangerous.

(c) He rode through the broken ranks, cheered them with his voice, encouraged them by his dauntless bearing, and, aided by a small redoubt, even succeeded in once again presenting a front to bis enemy.

ш.

Combine the following into a paragraph consisting of longer sentences :

Wolfe set off down the river. He had with him about one half of his men. They went in boats. They had neither sails nor oars. It was one o'clock in the morning. The day was the 13th of September. They were in search of the intrenched path. Wolfe had seen it a few days before. They intended to climb the heights by it. They found it. Some of the soldiers ascended by it. Others climbed the steep bank near it. They clung to the roots of the maple, the ash, and the spruce. These trees were growing on the side of the declivity. With a few volleys they dispersed the French picket. This picket was guarding the heights. This took place when they reached the summit.

IV.

In the following, change (a) to indirect narration and (b) to direct narration :

(a) Before I, Charles Beresford, let my story answer the question, "Where was Nemo?" it is expedient that I explain who Nemo is. We were happy enough, but things were too quiet for us.

(b) General Nullus advised us to strike westward across Utopia in the direction of Nusquam. Something worth seeing, he said, was soon to happen there. If we made haste, we should reach the vicinity of Nusquam in time for the engagement.

Physiology.

OUESTIONS TO BE ANSWERED IN OUR NEXT ISSUE.

I. Aside from the pleasure they give, of what use are the senses of taste and smell?

2. How does good ventilation lighten the work of the muscles of respiration?

3. What relation exists between the amount of exercise taken and the quantity of food and fresh air required? Give reason for your answer.

4. Name two substances which are removed from the body through the agency of the lungs.

5. When a ventricle expands, what prevents blood from flowing into it from an artery? From what source is the ventricle filled?

6. Name the principal requirements for maintaining the healthy condition of a muscle.

7. What constituent of air is demanded in respiration? When is a room well ventilated?

Arithmetic.

QUESTIONS TO BE ANSWERED IN OUR NEXT ISSUE.

I. A county map is on a scale of $2\frac{1}{4}$ " to 18 mls.; find number of ac. represented on the map by a square whose side is $\frac{3}{8}$ ".

2. At what time after 2 p.m. will the min. hand first be 15 min. spaces in advance of the hour hand?

3. A man sold $\frac{2}{5}$ of his farm, then $\frac{3}{5}$ of the remainder. The value of what was then left at \$45 an acre was \$1,620. How many acres were in the farm at first?

4. A. can do a work in $\frac{3}{4}$ day, B. in $1\frac{1}{5}$ day. In how many days could both do the work together?

5. A train 264 ft. long passes in 6 sec. a man walking at the rate of 5 mls. an hour in same direction as train is moving; find rate of train in miles per hour.

6. A circular cistern whose area at the bottom is 38 sq. ft. contains 2,375 gallons of water. Find depth of water in cistern (I cub. ft. of water= $6\frac{1}{4}$ gal.)

7. Two chests of tea are lbcught at 23c. a lb The difference in weight between the chests is 10 lbs. Find number of lbs. in each chest if the total cost is \$41.40.

Find cost of carpeting a floor $21'8'' \times 15'2''$, with carpet 27'' wide, @ \$2.25 a yard. Carpet to be laid lengthwise of floor, and last strip not to be cut, but folded under.

9. Make a bill of :

6,077 lbs. wheat @ 75c. a bus.

24 planks $(3'' \times 11'')$ and 14' long @ \$15 per M.

5,470 lbs. hay @ \$7.50 per ton.

10. Find cost of a pile of wood 200 ft. long, 6 ft. high, @ \$2 per cord.

ANSWERS TO QUESTIONS IN OUR LAST ISSUE.

I. (a) 20 %; (b) $\frac{1}{300}$; (c) $\frac{1}{6}$ part; (d) 75 %; (e) .00375.

2. 10³ days.

3. The sum is 1.0011102; the difference is 1.000100; the product is .00100201211+; the quotient is .00005.

4. (a) 10 % gain; (b) 20 % loss.

5. $\frac{4}{15}$ % rate of premium.

6. \$1,866 worth sold.

7. (a)

\$450.00. Toronto, June 19th, 1890.

Three months after date I promise to pay to H. Gibson, or order, the sum of four hundred and fifty dollars, with interest at 7 %, for value received. W. A. SIMPSON.

- (b) Nominally due Sept. 19th. Legally due Sept. 22nd.
- (c) \$458.20, value on day of maturity.
- 8. \$34.80, cost of plastering.
- 9. \$38.88%, cost of excavating cellar.

Canadian History.

We would strongly recommend every teacher to read Dr. Withrow's "History of Canada," published by William Briggs, Toronto. You will find in it a fund of information for your class.

CLERGY RESERVES.

By the Constitutional Act of 1791 one-seventh of the Crown lands, 2,400,000 acres, were set apart for the support of the "Protestant clergy." Although the Act said the lands were to support "Protestant clergy," the Church of England claimed it all, and this led to quarrels with the other denominations, which went on till late in 1854, when an Act was passed which "secularized" the clergy reserves.

ARGUMENTS AGAINST THE "RESERVES."

I. The grant was felt to be too large, 2,400,000 acres.

2. The manner of selecting the land, viz., every seventh lot, retarded the progress of the country, as no one would build roads before, or make improvements on, the "clergy " lots.

3. Their "appropriation for the exclusive advantage of any one denomination was felt to be a practical injustice to all others."

4. It fostered religious jealousies.

HOW IT WAS SETTLED.

I. The prolonged struggle over this "burning question" has been called "The Thirty Years' Religious War of Canada." Egerton Ryerson, then an unknown Methodist minister, took an active part in this long controversy.

2. In 1854 an Act for the "Secularization of the Clergy Reserves" was passed. It provided that :

(a) The lands should be handed over to the various municipalities in proportion to their population, to be used for secular purposes, viz., purposes of education, building bridges, roads, and other public works.

(b) The rights of those then in receipt of income from the "Reserves" should be protected by a provision granting an endowment to them for life.

FAMILY COMPACT.

The "Family Compact" was a name given to an "aristocratic party" who, by their superior social position and greater educational fitness, had almost entirely controlled the executive administration of the province. Its members filled almost every public office, and held the seats in the Legislative and Executive Councils. They ever opposed "responsible government," and were extremely unpopular with the British and American immigrants.

OF WHOM COMPOSED.

 $\langle a \rangle$ They were chiefly of United Empire Loyalist stock, and regarded the power of the government higher than the rights of the people. They favored the Church of England receiving all the clergy reserves, and thus secured the support of that Church.

(b) The leading members of the "compact" were John Beverley Robinson and Rev. Dr. Strachan.

ITS CHIEF OPPONENTS.

The chief opponents of the "compact" were William Lyon McKenzie, Robert Gourlay, Marshall Bidwell, and Dr. Rolph.

The chief sources of this sketch are Dr. Withrow's "History of Canada," chap. xxvi., and Goldwin Smith's "Canada and the Canadian Question," chap. vi.

Public School Leaving.

GO WHERE GLORY WAITS THEE.

ANSWERS TO QUESTIONS FROM OUR LAST ISSUE.

I. Ireland is represented as pleading with the patriotic Irishmen not to forget their native land.

II. The poem is divided into six parts.

I. Remember me in the hour of thy fame, ll. 1-6, stanza 1.

2. Remember me when surrounded by near friends, ll. 7-13, stanza 1.

3. Remember me during thy evening stroll, ll. 1-6, stanza 2.

4. Remember me at summer's close, ll. 7-13 stanza 2.

5. Remember me when around the fireside in autumn, ll. 1-6, stanza 3.

6. Remember me at night when singing around the fireside, ll. 7-13, stanza 3.

You will also notice the connection between lines 1-3, lines 4-6, and lines 7-13 in each stanza.

In stanz 1, and lines 1-3, the patriot's fame is spoken of, in lines 4 6 the praise which is the direct outcome of that fame, and in lines 7-13 the friends or the more remote result of his fame.

In stanza 2, and lines 1-3, the patriot's stroll is spoken of; in lines 4-6 the return, which is the direct outcome of the stroll; and in lines 7-13 the flowers seen, or more remote result of the stroll.

In stanza 3, and lines 1-3, we have the patriot in autumn time ; in lines 4-6 the blazing hearth, the direct result of the autumn chill'; and in lines 7-13 the music and songs sung, the more remote result of the chilly autumn evening.

You will also notice that in stanza i the patriot is described in his full fame or flush of life, *springtime*; in stanza 2, *summer*; and in stanza 3, *autumn*. That is, he is implored not to forget Ireland in the spring, summer, or autumn of his life.

It is always a most interesting as well as developing study to, in this manner, trace the method that runs through a poem. No poem should be a mere string of rhapsodies without plan or order.

III. A maiden is supposed to be speaking to her lover, who is about to leave her for foreign lands. Under this charming guise the poet represents Ireland (the maiden) as pleading with the Irish patriot (the lover) to be always true to her, no matter where he may go.

Moore wrote this political poem at a time when it would be neither popular nor safe to manifest much partiality to Irish patriots or much regard for Irish patriotism. Moore himself, in his preface to the "Irish Melodies," says of such poems as this : "Though the humble nature of my contributions to this work may exempt them from the rigors of literary criticism, it was not to be expected that those touches of political feeling, those tones of national complaint, would be suffered to pass without censure or alarm. It has been accordingly said that the tendency of these publications is mischievous, and that they are but as vehicles of dangerous politics, as fair and precious vessels from which the wine of error might be administered."

IV. The chief merits of this poem are :

1. Its melody.

(a) Notice how this is secured, the refrain " \check{O} still | remem | ber me" being written in iambic trimeter, and the rest of the poem, "Go where | glory | waits thee," in trochaic trimeter. Notice the effect of the lively, cheerful, sprightly trochaic measure and the stately seriousness of the iambic flow. Read it aloud to your class till they fully appreciate this.

(b) You will also notice the double rhyme, meetest, sweetest, gazing, blazing; this was made necessary by the trochaic metre; the rhyming syllable must receive the accent, and as in the trochaic measure the last syllable is not accented, therefore the second syllable must be the one which rhymes.

2. Its pathos.

What could be more suggestive of deep feeling than the refrain "O then remember me," so

vividly does it call up to us the faithlessness of so many friendships ?

3. Its figurativeness.

(a) We have already noticed that the whole poem is an *allegory* (saying another thing), that is " a form of composition in which the real differs from the apparent meaning."

(b) You will also notice the *metonymy*, an exchange of names between things and their properties, in "By the *star* thou lovest."

STANZA I.

"Go where glory waits thee." A maiden is supposed to be speaking, as you see from :

"Think of her who wove them,

Her who made thee love them."

"Thee" stands for the maiden lover. You will of course remember that the maiden represents Ireland and the lover an Irish patriot.

The verse in prose would read, "Go where you may win glory."

" Fame elates thee." While stimulated by fame "Meetest." Deservest.

STANZA II.

"Rovest." "Rove" means to move without definite aim; "stray" to go in a somewhat purposeless way aside from the regular path or usual limits; usually with unfavorable implication, as "one strays from the path of virtue." "Ramble" in its figurative use is always somewhat contemptuous, as a rambling talk. You will also notice the full rich sound of the rolling "r" followed by the broad "o."

"Star thou lovest." An exile in a foreign country, everything appears strange, the stars he recognizes as old friends.

"Bright we've seen it burning." This is introduced to show how vividly the associations, the pleasant meetings and evening strolls, which the star recalled were brought up in the mind by seeing the same star in this distant land.

"Summer closes." The end of summer.

"Lingering roses." This is a personal metaphor; the roses are given the attributes of a person, and "linger" from their own choice, after all the other roses are gone. How much more beautiful and forcible it is to us when we regard the roses as living and thinking and acting as persons.

You will notice also that "lingering" is an "ornamental epithet." You may leave it out without changing the sense. Notice also the fulness and strength of the "connotation" of the word, that is, the associations it calls up. How much more we appreciate the last lingering rose.

"Her who wove them." The reference is to wreaths of roses woven by the maiden for her lover. The roses he sees in the land of exile will, by association, remind him of the flowery dales of green Erin.

STANZA III.

"Gay hearth." "Gay" is an example of "transferred epithet"; the people around the hearth were filled with gaiety, and this is transferred to the hearth. See "noisy mansion."

"Music, stealing all the soul of feeling." This means that the music completely absorbed all the listener's feelings; he was completely enraptured by the music.

" Draw one tear from thee." Probably the music was the singing of "Irish melodies," and by calling up old memories of Ireland would cause him to shed tears. Or, more poetically, the elevated feeling called up by music and by an appreciation of its beauty would cause the sensitive person to shed tears. See "And yet mine eyes are filled with tears," Highland Girl.

"Strains." Songs.

ARITHMETIC.

Below will be found five questions suitable for a test examination. Answers in our next issue.

1. A. and B. are partners, A.'s capital being $\frac{3}{3}$ of B.'s. At the end of 5 months A. withdraws f of his capital, and at the end of 9 months B. withdraws $\frac{1}{3}$ of his. How should they divide a gain of \$4,222.33 at the end of the year

2. From a list price of a line of goods a purchaser is allowed a trade discount of 20 %; a further discount of 121/2 % off the trade price for taking a quantity, and a still further discount of 10 %off his bill for cash. Find the gain per cent. by selling at 10 % less than the list price.

3. What is the value of a 70 day draft on Chicago for \$5,090 at 1/4 % premium, and interest 6 % ?

4. can buy flour at \$3.19 a bbl. and 4 months' credit ; at \$3.04 and 2 months' credit, or at \$3.01 cash. What is the cost of 350 barrels bought on the most advantageous of these terms, money being worth 8 % per annum ?

5. If a train 88 yards long overtake a person walking at the rate of 4 miles an hour along the railway, and pass him in 8 seconds, what is the rate of the train in miles per hour?

SOLUTIONS TO PROBLEMS IN OUR LAST ISSUE.

I.
$$\left\{2\frac{1}{2} \times 4.75 \div \frac{9}{2} \text{ of } \left(4\frac{3}{4} - 3\frac{25}{56} + \frac{1.75}{3\frac{1}{2}} + \frac{4\frac{3}{10} \times 2\frac{7}{10}}{21.5 \times 13\frac{1}{2} \div .25}\right\}$$

of $(3\frac{4}{9} \times \frac{9}{82} \div .9)$ of £5 16s. 8d. $= \{\frac{5}{2} \times \frac{4}{5}, \frac{5}{5} \div \frac{3}{2} \text{ of } \frac{3}{5}, \frac{1}{5} + \frac{1}{5}, \frac{5}{5} \times \frac{3}{5} + \frac{1}{5}, \frac{5}{5} \times \frac{3}{5}, \frac{5}{5} \times \frac{3}{5} \times \frac{3}{5}, \frac{5}{5} \times \frac{3}{5} \times \frac{3}{5}, \frac{5}{5} \times \frac{3}{5} \times \frac{3}{5}$ $\times \frac{25}{100} >$

of $\left(\frac{31}{9} \times \frac{9}{62} \times \frac{9}{9}\right)$ of 1400d.

 $=(\frac{5}{2}+\frac{1}{2}+\frac{1}{100})$ of $\frac{1}{2}$ of 1400d.

 $=\frac{301}{100}$ of $\frac{1}{2}$ of 1400d.

== 2107d.

= £.8 15s. 7d.

2. \$200 is the total commission

... \$2400 - \$200 = \$2200 invested in tea.

For \$100 invested in tea the commission is \$4.

For \$2,200 invested the commission is \$88.

200-888=112 is the commission for selling wheat.

On \$2,400 the commission is \$112.

On \$100 the commission is $4\frac{2}{3}$, or $4\frac{2}{3}$ %.

3. Let \$100 be amount invested.

Then \$40 is invested in $3\frac{1}{2}$ % at 90.

And \$60 is invested in 4 % at 95.

But \$90 invested in 31 % gives \$31 income.

: \$40 invested in $3\frac{1}{2}$ % gives $\frac{7 \times 40}{2 \times 90} = \$^{14}_{9}$ income

And \$95 invested in 4 % gives \$4 income.

: \$60 invested in 4 % gives $\frac{4 \times 60}{95} = \$\frac{48}{19}$ income

 \therefore $\$^{\frac{14}{9}} + \$^{\frac{48}{5}} = \$^{\frac{689}{171}}$ the total income.

 $\frac{5689}{171}$ is the total income when \$100 is invested

100 × 171 × 1745 \$1,745 is the total income when

680

= \$42,750, the amount invested.

4. Apples cost $200 \times 3.75 = 750$.

To cover all loss the owner must receive \$750 + \$75 = \$825 from insurance company.

But goods worth 99_{10}^{1} must be insured for \$100 to cover all loss.

... goods worth \$825 must be insured for $\frac{100 \times 825}{9910} = \$832 \ 49.$

5. Drawn April 20th at 90 days, it is nominally due on July 19th; adding 3 days' grace, it is legally due on July 22nd.

Interest on \$876 for 93 days at 6 % is

 $\frac{93}{365} \times \frac{6}{100} \times \frac{8}{100} \times \frac{10}{100} = 13 39.$

\$876 + \$13.39 = \$889 39, amount to be discounted. Discounted on May 10th.

From May 10th to July 22nd is 73 days.

The discount on \$889 39 for 73 days at 7 % is $\frac{73}{365} \times \frac{7}{100} \times \frac{\$889.39}{1} = \$12.45.$

... the proceeds are \$889.39 - \$12.45 = \$876.9

BOOKKEEPING.

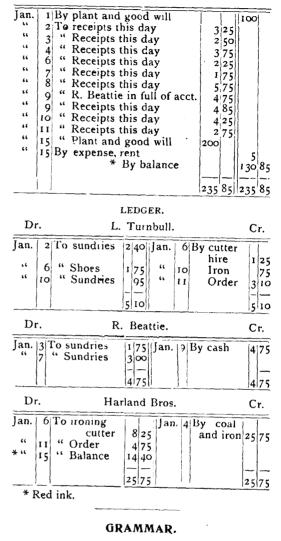
š

ANSWERS TO QUESTIONS IN OUR LAST ISSUE.

DAY BOOK.

Toronto, January 1st, 1896.

			_			<u> </u>
Student has this day rented shop of C. Tedford at \$10 month, and commenced busin	per	1				
	Dr.	10 25 25		40 75 25	2	40
	Dr.	25 75	1	0 0 75	I	75
Harland Bros., By coal and iron as per invoid	Cr. ce				25	75
	Dr.				8	25
L. Turnbull, To 7 new shoes	Dr.	25			I	75
L. Turnbull, By horse and cutter hire	Cr.				1	25
R. Beattie, To reputring cutter " range	Dr.		2	25 75	3	00
R. Beattie, By cash in full of acct.	Cr.				4	75
	Dr.	10 25		70 25		95
L. Turnbull, By old iron	Cr.					75
	Cr.				3	10
	Dr.				3	10
•	Dr.	10 25		70 25		95
•	Cr.					75
L. Turnbull, By order on Harland Bros.	Cr.				3	10
••	Dr.					



CASH BOOK.

QUESTIONS TO BE ANSWERED IN OUR NEXT ISSUE.

Sunset and evening star,

And one clear call for me !

And may there be no *moaning* of the bar When I put out to sea.

But such a tide as moving seems asleep, Too full for sound and foam,

When that which drew from, out the boundless deep

Turns again home.

Twilight and evening bell,

And after that the dark !

And may there be no sadness of farewell When I embark. Cr.

Dr.

For the' from out our bourne of time and place The flood may bear me ar,

I hope to see my Pilot face to face

When I have crost the bar.

-Alfred Tennyson,

I. Select, classify, and give the relation of each subordinate clause.

2. Select each participle and infinitive, and give the function of each.

3. Parse the italicized words.

4. Write a sentence containing :

(a) An infinitive used as the object of a verb.

(b) An infinitive used as a predicate noun.

(c) An adjective clause introduced by where.

(d) A clause used in apposition with a noun.

(e) A clause used as subject of a verb.

ANSWERS TO QUESTIONS IN OUR LAST ISSUE.

" Thus to Time

The task was left to whittle thee away With his sly scythe, whose ever-nibbling edge, Noiseless, an atom, and an atom more, Disjoining from the rest, has, unobserved, Achieved a labor which had, far and wide, By man performed, made all the forest ring." —Cowper, addressed to Yardly Oak.

L ANALYSIS.

I. Clause—The whole extract. Kind and connection—Principal assertive.

- Clause-Whose ever-nibbling edge, noiseless, an atom, and an atom more, disjoining from the rest, has, unobserved, achieved a labor, which had, far and wide, by man performed, made all the forest ring.
 - Kind and connection-Subordinate adjective descriptive, describing "scythe."
- 3. Clause—Which had, far and wide, by man performed, made all the forest ring.
 - Kind and connection-Subordinate adjective restrictive, modifying "labor."

II. PHRASES.

J. Phrase-To time.

Classification and relation-Prepositional, adverb al of manner, modifying " was left."

2. Phrase-To whittle thee away--forest ring.

Classification and relation—Adjectival, restrictive, modifying "task."

 Phrase—With his sly scythe—forest ring. Classification and relation—Prepositional, adverbial of manner, modifying "to whittle."

 Phrase—From the rest. Classification and relation—Prepositional, adverbial of manner, modifying "disjoining."

5. Phrase-By man.

Classification and relation—Prepositional, adverbial of manner, modifying "performed."

III. PARSING.

1. Noiseless. Classification-Adverb of manner. Relation-Modifying "disjoining."

Some might treat "noiseless" as an appositive adjective, modifying "edge."

- More. Classification -- An adjective, appositive. Relation-- Modifying "atom."
- Disjoining. Classification—An imperfect par.iciple.

Relation -- Modifying " edge."

4. Unobserved. Classification—A perfect participle.

Relation-Modifying "edge."

- 5. Wide. Classification—An adverb of place. Relation—Modifying "had made ring."
- 6. Performed. Classification—Aperfectparticiple. Relation—Modifying "which."
- 7. Ring, or (to ring). Classification-A root infinitive.

Relation-Object direct of "had made."

IV.

"Had made" is a verb in the indicative mood. See H.S. Grammar, chap. viii., secs. 21, 22, and 23.

"Had made the forest ring" is regarded in the writer's mind as a fact on the condition of "being performed by man." See H.S. Grammar, "If he were to do so, I would despise him." You will note that the test of the subjunctive mood is not whether the connect on between the subject and the predicate represents a real fact, present, past, or future; but the test is how is this connection regarded by the speaker, as actual or not. Mr. Seath's test of the foregoing sentence is its expression thus:

"His doing so (conceived as a possibility) is a condition that would determine me to despise him." Similarly our sentence, "Its being performed by man" (conceived as a possibility) is the condition under which all the forest would ring. The part that is regarded as a possibility, then, is "by man performed," and then " which had made all the forest ring" is regarded, "*in the writer's mind*," as a fact, and is thus indicative mood.

IV.

Forest is the indirect object of "had made," and "(to) ring " is the direct object. But "forest" is also in a sense the subject of the action expressed in (to) ring, in which it is concerned. For full treatment and numerous examples, see H S. Grammar, chap. xv., sec. 14.

SIGHT LITERATURE.

ANSWERS TO QUESTIONS IN OUR LAST ISSUE.

1. The subject of the extract is :

"An evening sail on Lake Leman, and the poet's reflections on the contrast between its placid waters and his own wild life."

2. The circumstances of time, place, and mood as revealed by the extract are :

Time.—In the evening, while sailing down the lake.

" It is the hush of night and all between

Thy margin and the mountains dusk, yet clear, Mellowed and mingling, yet distinctly seen, Save darkened Jura."

"Or chirps the grasshopper one good-night carol more."

" But that is fancy, for the starlit dews All silently their tears of love instil."

Place.—The Lake Leman.

"Clear, placid Leman ! thy contrasted lake, etc."

Mood.-A meditative, reflective mood :

- "Clear, placid Leman ! thy contrasted lake, With the wild world I dwelt in, is a thing
 - Which warns me, with its stillness, to forsake Earth's troubled waters or a purer spring."
- "Once I loved torn ocean's roar, but thy soft murmuring

Sounds sweet as if a sister's voice reproved."

3. The extract itself reveals that the author led a wild life of pleasure, but also that he could see his faults when he felt himself surrounded by what was peaceful, calm, and pure. Stanza I.

It also reveals that the poet was a lover of the beauties of nature. Stanza II. and :

"There seems a floating whisper on the hill,

But that is fancy, for the starlight dews

All silently their tears of love instil,

Weeping themselves away, till they infuse

Deep into Nature's breast the spirit of her hues."

4. This opinion of Byron's being a true classic poet, and at the same time a vivid descriler of nature, is established by this poem.

Because there is correct versification in the poem, each stanza containing eight iambic pentameter verses followed by one iambic hexameter; and there is a vivid description of tature as beheld on Lake Leman during an evening sail, the poet being a minute observer of nature, as is seen in his mention of :

(1) The fragrance of the budding flowers.

(2) The dripping of the water from the oars.

- (3) The chirp of the grasshopper.
- (4) And the song of the bird.

5. Byron is intensely subjective in this extract, because he wrote it more with the purpose of expressing his own feelings and thought than of describing Lake Leman; as shown by his making known in the poem that he had been leading a wild life and wished for a quiet and peaceful one. Stanza I.:

6. "Which warns me, with its stillness, to forsake earth's troubled waters for a purer spring," as changed nto prose is:

The quietness of the placid lake prompted the poet to forsake his wild life of pleasure for a higher one of purity and peace.

7. The explanations of the given expressions are as follows :

"Capt heights." Likely the highest pirts of the mountain were clothed with snow, hence "capt heights."

"Breathes a living fragrance." Sweet odors were wafted from the shore by the gentle breeze which is said to breathe from the shore the fragrance of the land; living because the fragrance came from living flowers.

"Flowers yet fresh with childhood." They were likely budding flowers that had just opened; hence they were young, "fresh with childhood."

"Starts into voice a moment." The bird sings but for a short time, and then hushed by the peace of nature falls asleep.

"Floating whisper." It was a message of nature to the poet.

"Tears of love." These were the shining drops of dew which appear to love nature as they silently fall and kiss the earth.

"Nature's breast." The earth over which nature spreads all her beauties.

8. The whisper spoken of in "the floating whisper" was the message of nature to the poet.

The connection between "For the starlit dews — of her hues," and "There seems a floating whisper— fancy," is :

The poet at first thinks he hears nature speaking to him in "a floating whisper," but he immediately concludes that "this is but a fancy," because nature's work goes on in silence, "all silently their tears of love instil."

To do as much as you can healthily and happily do each day, in a well-determined direction, with a view to far-off results, and with present enjoyment of one's work, is the only proper, the only essentially profitable way.—John Ruskin.

Intermediate P.S. Department.

Designed specially for teachers of Second and Third Classes.

THE STORY OF ABOU-BEN-ADHEM.---LEICH HUNT.

M.A.W.

Ian Maclaren, in "The Mind of the Master," refers to this poem in the following paragraph :

"The kingdom Jesus imagined is wider even than the sphere of Christendom, and extends where men have owed nothing to the subtle strain of Christian heredity. In that great Mogul Emperor, Akbar, who in the sixteenth century had discovered the principles of religious toleration; in those Moslemsaints whose fine charity is embodied in the legend of Abou-Ben-Adhem; in the renunciation of Buddha, the light of Asia; in that Roman Emperor whom the young men called 'Marcus my father,' the old men 'Marcus my son,' the men of middle life 'Marcus my brother' --in such lives one recognizes the distinctive qualities of the kingdom."

The author of this poem was Leigh Hunt (1784 to 1859) a schoolmate of Charles Lamb, and afterwards a friend of Moore and Byron and their contemporaries. His works were light, graceful, and picturesque in their style, but are now little read, with the exception of this poem and some of his smaller sketches. The reading of the poem will be its best introduction, the teacher particularizing the chief changes in the scene as she reads. Abou-Ben-Adhem, (ben meaning the son of) is sleeping, "a deep dream of peace" is the fine expression used; he awakes and sees a strange vision. The scene, with the moonlight flooding the room, but "within the moonlight" a radiant being, who makes the room rich and fragrant and glorious and pure, "like a lily in bloom," can be depicted so that the children may see it in their vivid imaginations. There, on a low couch, is Abou, his head raised as he leans on his elbow and looks at the angel "writing in a book of gold." What is his expression ? Not one of fear, but of delighted pleasure and wonder. Abou has had so much peace he is not afraid, he is "bold" in its good sense, and he speaks "to the presence in the room ;" he asks a question and receives an answer. It is the question of the fearless, and he follows it up with the question which the world has been asking for ages, "Is my name on your book?" Alas, the answer is in the negative, "Nay, not so," replied the angel.

Abou's expression is less confident, and his voice is lower, but he asks that if his name is not

on as one who loves God, will the angel put it on a sone who loves his fellow-men. This was done and the angel disappeared.

1

Ser.

Constant of

The day came and went, and again Abou retired to rest. Again he is awakened, "by a great wakening light," and the angel shows his book, where the Lord has authorized him to write Abou-Ben-Adhem's name at the head of the list of those who loved the Lord. What lesson does this teach us? It may be necessary to explain why Abou's name should be on at all, and especially why at the head. It will not do to think the children have grasped the connection between the two parts of the poem; they may have not the faintest idea of why Abou was so honored. Ask questions and let them ask questions until the thought of the connection between love of God and love of man be plainly seen.

Again I feel like quoting from Maclaren: "When Jesus gave His doctrine of love in its final form, one is struck by a startling omission. He laid on His disciples the repeated charge of love to one another. He did not once command them to love God." "Our Master accepted the solidarity of sin, that no one could injure a a fellow-creature without hurting God." "As St, John has it, with an echo of past words, 'Beloved, let us love another ' for love is of God, and every one that loveth is born of God.'" "Love is the law of life."

Having introduced the poem, find out the words that are obscure to the children, and explain them clearly. Point out the Eastern expression of approval (may his tribe increase), and translate it into Canadian language. Read the poem again, and let the best readers read it, keeping the thought above the words. If the reading sinks into monotony, the poem will be spoiled in its æsthetic value; therefore do not keep up the reading too long. Try to secure memorization by a division into three parts; the first four lines, then the rest to "vanished," and finally the last three lines.

A transposition of the peem would form a useful exercise. But the worth of the lesson will lie in the heart-appreciation of the teachings of the poet, and in the storing in the memory of this gem, laudatory of love to man and God. A practical turn may be given in districts where the poor are plentiful by collecting from the wealthier children the clothing which is out-grown, mending it, and giving it in a loving way to the needy; also by encouraging a spirit of kindliness in the school-room and on the play-ground. If "God so loved the world that he gave his only begotten Son" for it, we ought, having more light than Abou-ben-Adhem, to exceed him in our love to the world.

RAPIDITY AND ACCURACY IN JUNIOR ARITHMETIC.

MISS M. SCOTT, SWINTON PARK.

"Thegreat object to be attained in number teaching is to train the child to observe closely and to think logically"; but rapidity in performing the fundamental operations is also a desirable attainment.

In order to secure accuracy and rapidity in dealing with numbers, the child must first have a clear insight into the meaning of all numbers and combinations with which he has to deal. This insight can be obtained only by a thorough investigation of the numbers. This being obtained, he must have the processes firmly fixed in his mind by systematic drill.

In teaching the combinations the processes must be made visible by means of number-pictures or objects such as splints, balls, beans, or marbles. Let the combinations (at least up to ten) be taught as related parts of a united whole. When the children can represent six as a whole by means of number-pictures, splints, counters, etc., let them divide it into groups of 3+3, 4+2, 5+1, and then, re-combining the parts, let them form six in as many ways as possible, and so with all the numbers up to ten. Give many and varied exercises on the combinations of each number. Let them vary the number-forms, and re-arrange the splints and balls in as many ways as possible, having them state either orally or in writing what combination each form represents. Give numerous simple problems, involving the combinations being taught, and encourage the pupils to form similar ones. Columns for addition may also be given, consisting of three or four numbers, which involve only the combinations already learned. Drill on all the combinations up to ten until the child can readily picture them with dots and objects, or give them from memory.

When adding columns, the child should be taught from the beginning to read, not spell, his addition. As soon as the combination is put down in the form of common addition, instead of saying 4 and 2 are 6, as the teacher points, have him say 4, 6. Do not let a pupil attempt to add a line until he has mastered all the combinations in it, for either he will become disappointed by his failure, and lose interest in the work, or he will resort to counting, and thus deal a death-blow to rapidity in adding.

When the combinations up to ten have been

learned, if notation has also been learned up to fifty or one hundred, the combinations may be reviewed for the purpose of teaching the endings. Begin with any combination, as 4 and 1 are 5. Then, placing one ten with the four units, lead the pupils to see that the sum still ends in 5, the 4 and I remaining unchanged; the only change has been made in the adding of one ten, thus making 14 and I are 15. Similarly with a number of examples— 24 and I are 25, 44 and I are 45—until the pupils can deduce the generalization that 4 and I always ends in 5. At this period it is well to *hasten slowly*, as the process of reasoning involved requires a greater power of generalization than has yet been exercised.

The combinations from ten to twenty may be taught in the same manner as those from one to ten, and as soon as the combinations of eleven are learned have the pupils apply them to the higher combinations. Have them add *one* to all the *tens* up to one hundred, IO + I, 2O + I, etc. ; add two to all numbers ending in nine, up to one hundred, IO + 2, 2O + 2, 3O + 2, always exhibiting the higher number as composed of so many tens and units. Deal in similar manner with all the combinations up to twenty. After the combinations up to ten have been taught the method of teaching the combination by addition tables is sometimes followed, and, as in the foregoing method, its success depends mainly on the amount and character of the drill.

Beginning with the combinations with two, let the class work out the table with objects. One of the pupils may put down on the table two counters, another two more. They then give the result, which the teacher writes on the board-2 and 2 are 4, and so on, with 4 and 2 are 6, 6 and 2 are 8. Then, with the objects still in view, have them count by twos-2, 4, 6, 8, and so with the other series-1, 3, 5, 7, 9. Exhibit the addition in various ways, and have each pupil make out the table for himself, picturing each combination. Drill work for this table may consist of counting by 2's, both backwards and forwards, adding 2 to all numbers up to 100 ending in 2, 4, 6, 8, etc., or the teacher may give two or three terms of a series of numbers, and have the pupils complete the series and form other series with similar endings, as 3, 5, 7, 9, 11; 13, 15, 17, 19, 21; 43, 45, 47, 49, 51, etc.; 4, 6, 8, 10, 12; 24, 26, 28, 30, 32, etc.

The higher tables may be dealt with in a similar manner, but as the child acquires mental strength a little more difficult work may be required for drill. The teacher may write on the board a vertical column of 7's or 8's (whatever combination the class is studying). Then, putting a different

figure at the beginning of the line, Endings. Endings. ask one of the class to try to give the endings as quickly as the 78 81 teacher can write them. Then rub 71 83 out the endings and have another 85 74 pupil add without the endings; or 77 87 the drill may assume the form of 70 89 time questions, the pupils writing 73 81 the columns on slates and putting 7⁶ 83 down all the endings and the final 0 5 result, if obtained in a given time. 61

Mental adding is one of the most valuable forms of drilling, and should be practised from the earliest stages. In this, however, the child may not be able to add quite as rapidly as in written addition, for in this he has two distinct mental operations to perform : in the first place, a memory operation, to carry in his mind the numbers given ; and, in the second place, to combine them.

(Concluded in next number.)

BEGINNING MENSURATION.

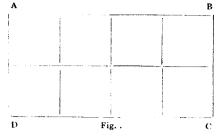
ву с. в. к.

Before taking up the subject of areas I thought it would not be impertinent for me to make a few general remarks respecting errors frequently made by pupils in the 'ourth grade. One very common error is "The area equals the length multiplied by the width." This is essentially wrong. A pupil readily perceives the obvious ridiculousness when the teacher asks him whether one lead pencil multiplied by another will give him a square lead pencil?

After I adopted the plan detailed below I never permitted a boy to make use of the expression quoted above; for, considered from a logical stand point, his conclusions were inconsequential, and it never afforded him a thorough comprehension of the unit of measure. I always sought to impress upon his mind that the product must be of the same denomination as the multiplicand.

The first thing I did when the subject of surfaces was discussed was to ascertain if every boy knew what a surface was. Then I proceeded to surface measure, asking various questions and requesting different boys to go to the board and draw square inches, square feet, and square yards, with a view to fixing permanently in the pupils' minds what a square inch, a square foot, or a square yard, etc., was. After that was compre-hended I had papers 4x2 inches distributed. I took up my paper and requested the boys to follow my directions :

Hold your papers lengthwise ; fold them so that the long edges meet. Now fold them so that the short edges meet. Fold them again until the short edges meet the opposite fold. Crease and open them.



How many squares have you on your paper lackson? "I have eight squares."

How long is each square? "Each square is one inch long." How wide? "One inch wide."

Then what kind of an inch is each square? "It is a square inch." How many such square inches have you? "I have eight such square inches."

How many times is a little square (tearing off a square inch and holding it up) like this contained in the surface of your paper? "It is contained in the surface eight times." What was the unit of measure in this case? "The unit of measure was a square inch."

Then the number of times the unit of measure (in this case a square inch) is contained in the entire surface gives us the area of that surface.

What is the area of the surface of your paper, lordan? "The area is eight square inches."

Make boys eternally keep in mind that they find area, not of objects, but of the surfaces of those objects. If teachers adhere to this point they will always keep alive the fact that the unit of measure is a square.

Boys, look at your papers again. How many square inches have you in one row, Williams? "I have four square inches in one row."

How many rows on your paper? "Two rows." If you have four square inches in one row, how many square inches will you have in two rows? "I shall have eight square inches in two rows."

Suppose I had a paper seven inches long and one inch wide, how many square inches could you draw on it, Milman? "I could draw seven square inches."

How many rows of square inches would you have? "I should have one row."

How many square inches in this one row? "Seven square inches."

If the paper were seven inches long and two inches wide how many rows of square inches would you have, Bosky? "I should have two rows."

How many square inches in one row? "Seven square inches in one row."

" In two rows ? " Fourteen square inches."

If the paper were three inches wide how many rows would you have, Leitz? "I should have three rows."

How many square inches in three rows? "There would be twenty-one square inches in three rows."

If I had a paper twenty inches long and seven inches wide, how many rows of square inches could I draw on it, McCready? "You could draw on it seven rows.'

How many squares in one row? "Seven square inches in one row"

What would be the area of the surface of that paper? "Its area would be 140 square inches."

And the length? "The length gives us the number of square inches in one row."

Suppose I have a board 8x6 feet. What would be the unit of measure if I desired to find the area of its surface, Cohen? "The unit of measure would be a square foot."

How wide is the board? "The board is six feet wide."

How many rows of square feet in its surface? "Six rows."

How many :quare feet in one row? "Eight square feet in one row."

What is the area of its surface? "Forty-eight square feet."

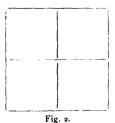
I then gave some problems with yards, rods, etc., to bring out the different units of measure.

Teachers need not be deterred from adopting this plan because of the presence of fractions in problems.

By the same process of questioning answers can be elicited (and if necessary proved by actually cutting out on paper) which will remove any doubts entertained respecting their comprehension of the subject-matter.

On a subsequent day I had papers, rulers and lead pencils distributed. I requested every boy to draw on his paper a square containing four square inches and a four-inch square. The boys were then required to cut both out and fold each in accordance with my instructions. I need not here detail the method of folding.

The smaller square was folded and creased so that four square inches could be seen; and the larger one was folded and creased so that sixteen square inches could be seen and counted. The following diagrams will show how many square inches in each.



We shall now compare the two surfaces. How many square inches in the surface ot the smaller square, Kretan? "Four square inches." How many square inches in the surface of the four-inch square? "Sixteen square inches."

What is the difference in

faces? "The four-inch square contains twelve square inches more."

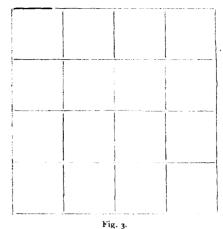
What do I mean when I say I have a piece of paper four inches square, Davidson? "You mean a piece of paper four inches long and four inches wide."

I have here a piece of paper five inches long and five inches wide (holding it up before the class). What kind of a figure do you see, Frank? "I see a square."

How many inches square is it? "It is five inches square."

What is its area? "Its area is twenty-five square inches."

Whenever I speak of an object as being so many inches square, what kind of figure must you immediately thing of, Prelhoitz? I must think of a square."



When I say to the class this paper is five inches square, what do I mean, Jacobs? "You mean a five-inch square."

And its area would be what? "Twenty-five square inches."

I have here (holding it up) a piece of paper seven inches square, what is the area of its surface, Abrahams? "Its area is forty-nine square inches."

What is the difference in area between the surfaces of two papers, one containing eight square inches and the other being eight inches square, Yohalem? "The difference is fifty-two square inches."

In favor of which ? "In favor of the eight-inch square."

I then gave problems for finding the differences between five feet square and five square feet, eight yards square and eight square yards, etc.

To assure myself of the comprehension by every boy of the points dwelt on, I required each and every boy to bring in the next day two papers, one to contain nine square inches and the other to be nine inches square. The returns were highly satisfactory.

I happened to be in possession of several varieties of tiles, some four inches square, others 3x2 inches, and others again two inches square. I was then prepared to proceed to problems for finding the number of tiles required to cover hall floors.

The very basis of fitness for teaching, so far as it can be gained from study, is a broad and accurate scholarship. To be a teacher, one must first of all be a scholar. So much stress is now placed on method, and the theory of teaching, that there is great danger of forgetting the supreme importance of scholarship and culture. For these there is no substitute; and any scheme of professional study that is pursued at the expense of scholarship and culture, is essentially bad. To be openminded, and magnanimous; to have a love for the scholarly vocation, and a wide and easy range of intellectual vision, are of infinitely greater worth to the teacher than any authorized set of technical rules and principles.—Page.

Primary Department.

A CURE FOR LATENESS.

RHODA LEE.

Almost every one has more or less trouble with lateness. In general it is the fault of the children, but not always, and I would never blame a pupil for this until I had made sure of the cause of his delay. Great injustice is sometimes unintentionally done a child by "scolding" him before the class for that which was wholly beyond his control. Mothers are sometimes careless about getting the children ready in time, or send them on errands that detain them beyond the hour. However, when the children inform their parents regarding the record of lateness that is being kept at school, most mothers will do all in their power to aid the teacher. A method I employed once, and with great success, was that of placing a banner at the head of each row in which there were no "lates" during the preceding week. I made four little banners, embroidering on each in bright colors the words "On Time." Needless to say, they were most eagerly sought after. Indeed, so surely did the device cure the late-comers that the banners soon became fixtures, and very rarely had to be removed.

SINGING.

Among the "tried recipes" for happiness and good work in primary classes none finds greater favor with me than singing. I wish every teacher of little ones could thoroughly appreciate the assistance it affords. There is nothing more refreshing and restful after a period of steady work than a song. The effect is sometimes magical. Pencils are placed by tire 1 little hands that look as though they could go no farther. But look again a minute or two later. Fingers are moving as rapidly as muscles can make them, as the snow comes "falling down so pure and white." The music and motions put new life into the children.

Languor and lassitude fly before a bright song, and often when a spirit of unrest and disorder seems to possess the class it disappears entirely when the regular work is stopped for five minutes and a song substituted.

Children love singing. There is no doubt about this, and when we add to that fact the other, that it is of the greatest assistance in preserving good order, we should be convinced of the desirability of giving it a place in our programme. I would have every grade up to the highest sing, and sing frequently. Time is not lost, but rather saved, by it.

HELPING.

RHODA LEE.

The idea of "helping" is one that gives children great pleasure. It is a much-coveted honor to be allowed to help collect the pencils, books, and papers, to water the flowers, clean the board, and do other little kindnesses of a like nature. Of course, it is always understood that it is from the best workers and most trustworthy pupils that the helper is chosen. It is a wonderful incentive to work at any time when I sav, "I shall want some good worker to do something for me by and by."

Besides helping their teacher, the pupils of the highest class may be entrusted occasionally with the work of helping the little ones with their writing, figures, drawing, and work of that kind. I once had a remarkably thoughtful and clever boy in my highest class who could help the backward ones with their reading. He was so patient, and at the same time put so much enthusiasm into the work that they could not help trying. To have Claude's help was considered a great treat by the "babies."

Whatever we can do to foster a spirit of true kindliness among the children is worth doing. Every little act and word leaves its impress. Let us, therefore, watch, and even make opportunities for the exercise of kindly and generous actions, one toward another. Teach these lines this week :

"How many deeds of kindness, A little child can do, Although he has but little strength, And little wisdom, too.

It wants a loving spirit, Much more than strength, to prove How many things a child may do For others by his love."

TO THE CHILDREN.

Children, who read my lay, Thus much I have to say : Each day and every day Do what is right ! Right things, in great and small ! Then, though the sky should fall, Sun, moon and stars and all, You should have light.

This, further, I would say : Be you tempted as you may, Each day and every day, Speak what is true ! True things, in great and small ! Then, though the sky should fall, Sun, moon, and stars and all, Heaven would show through.

Life's journey, through and through, Speaking what's just and true, Doing what's tight to do Unto one and all, When you work and when you play, Each day and every day; Then peace shall gild your way Though the sky should fall.

-Alice Cary.

SCHOOLROOM ETIQUETTE.

MINNIE WAIT ROZELELE.

My DEAR MARJORIE,—Friday evening, rest, and a chance to talk to you. Last week brought me so pleasant a schoolroom experience I have been longing to pour it into your appreciative ear:

The bell had only just rung in the morning when there came a rap at the door, and, answering it, I looked up into the eyes of a stately lady, who greeted me pleasantly while I was coaxing the breath back into my body. If I had taught longer, perhaps my horror of company would not be so great as it is, but I cannot repress a mental shiver whenever a visitor is announced. However, to use a Kiplingism, "that is another story."

This visitor, in picturesque hat and gown, seated herself before the school, and beamed upon the children in so happy a manner that the fifty faces before her reflected the sweetness and cheer in her own. I "remembered my manners" in time to introduce her to the children, and it comforted me not a little to hear her ready response to their good morning.

The veins in my temples throbbed with less fury, and my temperature became less torrid, as I noticed her watching the advanced class, who are so loyal no amount of company turns them from the path of duty.

But the Beginners' Awkward Squad! Blessed be Miss Vere forever for ignoring their helplessness and clumsy attempts to move quietly!

The children sang blithely, and, when they had finished repeating a sunshine poem, she said, "Children, I like that so well that I hope you will say it for me again before I go away." Pride hung a

banner out upon each little face, and I am sure the bit of flattery had much to do with the quiet handling of slates and pencils which followed.

While the beginners were trying to find the way to the front of the room for recitation, I glanced apprehensively at Miss Vere, but her serene face showed no sign of disgust or weariness.

I dislike apologies on the part of the teacher, so I refrained from telling her that the class before her had been in school but a few days. Little Maaja, at once the despair and darling of my heart, stood nearest Miss Vere, and as I saw her interested survey of Maaja's quaint, long dress, and plaid shawl folded demurely about her shoulders, I said in an undertone, "Maaja is our little girl from over the sea. She came from Holland, and speaks very little English."

"May I speak to her?" she questioned, lifting the child to her knee, and softly touching the flaxen curls that ran riot about the winsome face and strayed down into her blue eyes.

"Where do you live, Maaja?"

Maaja answered bravely, "Ofer on Logust straat."

"Are you a good girl, dear?"

"Yaas. I been to a bicnic and yoost had a dandy time," responded Maaja, with delightful disregard for logical sequence. I felt mortified, but Miss Vere's eyes danced with merriment.

The lesson being over, I asked Miss Vere if she cared to look at the work of the pupils. "I was hoping you would ask me," she said brightly, "for I always like to see which children are trying." An expression of dismay crossed lazy Don's face at her words, and her silent glance at his slate filled his small soul with remorse for the wasted time.

I think I first fell on metaphorical knees before Miss Vere's shrine when she paused beside Margaret's seat and smiled tenderly down into the vacant little face lifted to hers. There is in my heart so great a pity for the little maid whose clouded intellect will never waken to the rare beauty of the world about her that I have more than once tried to shield her from the glances of the stranger within our gates.

Looking at Miss Vere's sweet, compas-

sionate face, I was reminded of the reward a very old Book promises those who serve one of His little ones. After that scene I had no further fear of her. The charity which blinded her to Margaret's failure would cover my mistakes, and the morning work moved forward as smoothly and cheerily as if no strange eyes were fastened upon us.

The recreation time came, and our visitor's store of grace still held out. Master Jerry, passing her in the line of march, put out a soiled hand and touched the jewelled setting of a ring on her finger.

"It's so pretty," he apologized, as he hung his head. There was a wonderful story to be told about the stone, and its home in a far western cave, and while Miss Vere told the story, shame-faced little Jerry felt the touch of her arm about his shoulder.

They made a pretty picture in the morning sunshine. Miss Vere, her widerimmed hat shading her fine dark eyes, and Jerry, keen-eyed, freckled, and ragged, drinking in every word she said.

She went away very soon after, and, if you can credit the assertion, I was loth to say good-bye. Her presence was like a benediction, and the children talked of her visit for days.

I am glad I met her as I did, because what Miss Vere is by nature I can become by patient effort, and "some sweet day" I should like to carry Miss Vere's visiting gospel to some other frightened, trembling, new teacher who will appreciate it as I did.

[There is a whole sermon in this for teachers as well as visitors.]—ED.—Primary Educator.

Book Hotices.

Anv book reviewed in this column may be obtained by addressing The Educational Publishing Co., Richmond Chambers, Toronto.

THE METRIC SYSTEM OF WEIGHTS AND MEAS-URES. By W. H. Wagstaff, M.A., professor at Gresham College. Whittaker & Co., London and New York. Pp. 125, 1s. 6d.

This little book is full of information and interest.

THE PROBLEM OF ELEMENTARY COMPOSITION. By Elizabeth Spaulding. Boston : D. C. Heath & Co.

This is a most excellent work for the senior

classes in our Public Schools. If you would have your class enjoy composition buy this little book and use it. P.

PRACTICAL TRIGONOMETRY. For the use of engineers, architects, and surveyors. By Henry Adams, professor of engineering at the City of London College. Whittaker & Co.: London and New York. Pp. 53, 28. 6d.

This is not a mathematical text-book, but simply a short, practical aid to the use of trigonometry by professional men. It will be found useful as a resume of results, and contains a variety of applications worked out.

CUTHBERT'S PRIMARY NUMBER WORK. Price 25c. Toronto : Copp, Clark Co.

This little book is intended as a guide to the teacher in the use of Cuthbert's Common Sense Arithmetical Calculator. The calculator combines all the useful points of the ordinary "Ball Frame," the "Picture" or Number-Forms, and the "Automatic Numeral Frame." To see it is to be convinced of its usefulness. The little "Companion" shows exactly how it is to be used, and how by its use a clear perception of number may be given, the observing and reasoning faculties developed, the memory cultivated and the intellect sharpened.

ELEMENTS OF PLANE AND SPHERICAL TRIGO-NOMETRY. By E. S. Crawley, Ph.D., Professor of Mathematics, University of Pennsylvania. Pp. 178.

This is the second and enlarged edition of the text-book here noticed in 1890. It is about the best supplementary book that can be recommended to accompany any prescribed text-book, and for the private student it has a large number of exercises worked to illustrate the best methods of reduction and analysis. Of the United States trigonometries that have come into our hands, this one bears the palm for clearness, neatness, and helpfulness to the beginner.

ALDEN'S LIVING TOPICS CYCLOPÆDIA. New York: John B. Alden. Subscription price, 50c. per 500 pages until complete.

The aim of this work is to supplement all highclass cyclopædias by the adequate treatment of new topics, and by bringing the treatment of older topics up the latest possible date. Every user of a cyclopædia will at once recognize how desirable this will be; for are not all more interested in the occurrences of the past three years than in the combined events of the preceding three centuries? How often you have shut the cyclorædia disgusted when you consulted it regarding some tecent thing only to find it "conspicuous by its absence." The first number reaches from "ab" to "boy." We are sure this work will prove indispensable to every person who wishes to keep abreast of the times. W.

STUDIES IN STRUCTURE AND STYLE. By W. T. Brewster, A.M. Price \$1.10. Toronto: Copp. Which would you rather trust? An old, true friend of twenty years, or a stranger? You may have little health left. Will you risk it with a stranger? If you have a cough, are losing flesh, if weak and pale, if consumption stares you in the face, lean on Scott's Emulsion. It has been a friend to thousands for more than twenty years. They trust it and you can trust it.

Let us send you a book telling you all about it. Free for the asking.

SCOTT & BOWNE, Belleville, Ont.

Clark Co. ; New York and London : Macmillan & Co.

The book is designed to supplement, by a systematic analysis of seven selections from standard English authors, the work of Professor Carpenter on rhetoric and English composition. The structure of each selection is treated under the following heads: (1) Purpose of the selection; (2) Principles of structure; (3) Plan of selection. The style of each is discussed as follows': (1) Purpose of the style; (2) Technique of the style; (3) Summary and suggestions. Each selection is analyzed carefully and clearly, its excellencies and defects pointed out, and many fields of enquiry opened up by the suggestive treatment of the matter in hand. No teacher of higher English can afford to be without this book, which marks a decided step in advance in the teaching of English, and furnishes an aid of the highest value to the students of our mother tongue.

"EXERCISES IN RHETORIC AND ENGLISH COM-POSITION." By G. R. Carpenter. Price 75c. Toronto: Copp, Clark Co.; New York and Loncon: Macmillan & Co.

We strongly recommend all educationists to examine the book. Words are treated under the heads: barbarisms, improprieties, vocabulary, number of words, long words and short words, Anglo-Saxon words and Latin words, fine writing and euphemisms; sentences under the heads: punctuation, solecisms, long sentences and short sentences, periodic sentences and loose sentences. The principles of the composition, cf sentences, paragraphs, and whole compositions are treated under the heads : unity, emphasis, coherence ; the qualities of style under the heads : clearness, force, elegance. A book from the teacher, for the teacher, in which all the principles of rhetoric are stated and explained with that clearness and force which leaves nothing to be desired, can hardly fail of being duly recognized and appreciated by the profession in Canada. The book furnishes an abundance of exercises for the student to study and analyze, and in so doing gives him the very best possible assistance. W.

SCAIFE'S COMPARATIVE SYNOPTICAL CHART OF CANADIAN HISTORY. Toronto : R. H. Jarvis, 77 Victoria street. Price, student's size, \$1.

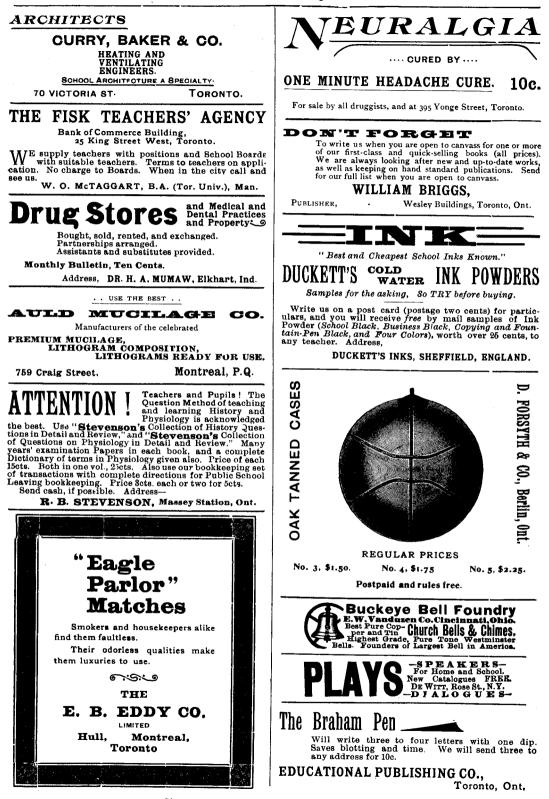
It is with pleasure we mention this chart in immediate connection with Dr. Bourinot's work. What the doctor has done for us descriptively this chart does for us through the eye. This is truly an exemplification of "Through the Eye to the Heatt."

The plan of work is to arrange all the important facts of our history chronologically on the chart insuch a way that their space-distance would accurately represent their distance apart in time; thus, at a glance, is revealed the relative distance in time between the important events in the annals of our country. Also, by a look at this chart you are able to see at once the century in which an event occurred, the sovereign, English or French, ruling at the time, the Governor-General or Premier then in power, and every important contemporaneous event and personage. We strongly recommend it to our readers as a device that will make Canadian history easy of acquisition, and secure retention. of the bistorical facts in the pupils' minds. P.

Literary Botes.

Yet another book of poems, and one that promises much, if we may judge from the many exquisite things from the writer's pen that have from time to time appeared in the magazines, is an-nounced for early issue by William Briggs. "At Minas Basin and Other Poems" is the title given to the collection by the author, Theodore H. Rand, D.C.L., of McMaster University, Toronto, Dr. Rand, as is generally known, hails from the Maritime Provinces, those seagirt sections of Canada that have given us, besides, Roberts, Bliss Carman, Pastor Felix, Francis Sherman, and other bards of made or making fame. It is now some twelve years since Dr. Rand resigned the superintendency of the schools of New Brunswick to a ... cept his onerous duties in connection with Mc-Master University. Most of the poems of this book are inspired by the romance-haunted land of Evangeline, within sight and sound of the "murmuring ocean," of stately Blomidon, and of the smiling valleys of storied Acadia. One wonders not that the soul of the poet was stirred to the creation of images of poetic beauty by the weird and mighty waters of the Bay of Fundy. This bay has long been waiting for its singer.

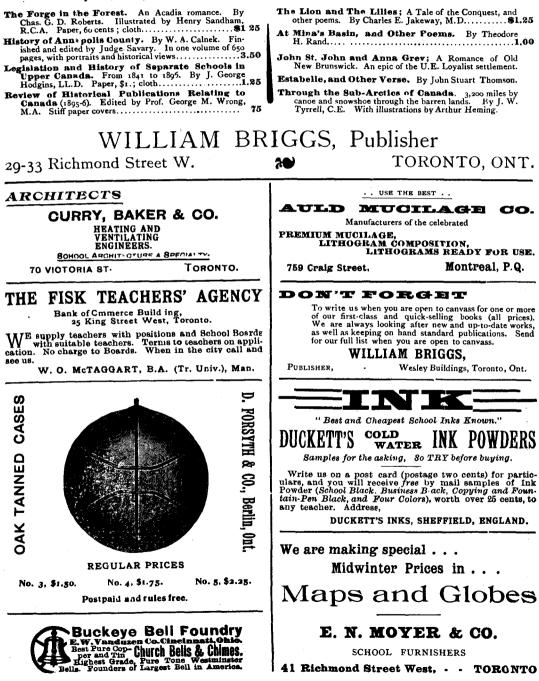
THF EDUCATIONAL JOURNAL.



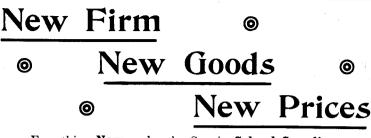
Please mention this paper when writing to advertisers.

An encouraging response

Comes from the teachers to whom, in recent numbers of THE EDUCATIONAL JOURNAL, we appealed to acquaint themselves with Canadian authors and their works. Many requests came for our illustrated catalogue, and we hope for many more. Here are some of the more important of the books we have now in press, all by Canadian authors.



I lease mention this paper when writing to advertisers.



Everything New under the Sun in School Supplies. Increased Facilities for furnishing a school with the best.

Our Stock....

Consists of the most modern and thoroughly up-to-date Maps, Globes, Charts, and Atlases, Physiological Charts, Botanical Charts, Celestial Charts, Charts on Geographical Definitions; Physical, Chemical, and Biological Laboratory Apparatus; Slate Blackboards; Slated Cloth; Desks.

This cut shows our HINGED CABINET, which goes FREE with our 8, 9, and 12 inch Globes, together with a Manual treating on Globes.

SEND TO US FOR OUR NEW PRICE LIST.

STEINBERGER, HENDRY & CO.,

SUCCESSORS TO FRED. G. STEINBERGER & CO.

37 Richmond Street West, TORONTO, ONTARIO.

Important Announcement.

EDUCATIONAL JOURNAL subscribers will please consult the label on the outside of the wrapper, and, if the subscription is in arrears, kindly remit the amount due to date, adding 25 cents if they desire the new paper,

The Canadian Teacher

from March 1st until September 1st. Please do not neglect this, as THE EDUCATIONAL JOURNAL books must close on March 1st, and all outstanding accounts be placed for collection.

All "Journal" subscribers whose subscriptions have not expired will receive "The Canadian Teacher" until expiration of said subscription.

Educational Publishing Company,

11 1/2 Richmond Street West, Toronto.