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The School

(Registered)

Vol. V

Toronto, April, 1917

No. 8

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Ontario Department of Education

Teaching Days for 1917

High, Continuation, Public and Separate Schools have the following number of teaching days in 1917 :

January.....	21	July.....	
February.....	20	August.....	
March.....	22	Sept.....	19
April.....	15	October.....	23
May.....	22	November.....	22
June.....	20	December.....	15
	120		79
		Total.....	199

DATES OF OPENING AND CLOSING

Open.....	3rd January	Close.....	5th April
Reopen.....	16th April	Close.....	29th June
Reopen.....	4th September	Close.....	21st December

NOTE—Christmas and New Year's holidays (22nd December, 1917, to 2nd January, 1918, inclusive), Easter holidays (6th April to 15th April inclusive), Midsummer holidays [from 30th June to 3rd September, inclusive], all Saturdays and Local Municipal Holidays, Dominion or Provincial Public Fast or Thanksgiving Days, Labour Day [1st Monday (3rd) of Sept.], Victoria Day, the anniversary of Queen Victoria's Birthday (Thursday, 24th May), and the King's Birthday (Monday, 4th June), (3rd June, Sunday), are holidays in the High, Continuation, Public and Separate Schools, and no other days can be deducted from the proper divisor except the days on which the Teachers' Institute is held. The above-named holidays are taken into account in this statement, so far as they apply to 1917, except any Public Fast or Thanksgiving Day, or Local Municipal holiday. Neither Arbor Day nor Empire Day is a holiday.

Ontario Department of Education.

The Minister of Education directs attention to the fact that, when some years ago the Ontario Teachers' School Manuals were first introduced, Boards of School Trustees were furnished with a copy of each, bound in paper, free of charge, to be placed in the School Library. For the same purpose, a copy of the "Golden Rule Books' Manual," was supplied free last September to all Public Schools, and the Manual entitled "Topics and Sub-Topics," has also been supplied free to schools where there are Fifth Forms.

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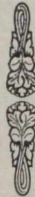
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Editorial Notes

Summer Schools.—Elsewhere in this number of THE SCHOOL will be found references to Summer Schools for teachers. In one form or another all Canadian Provinces maintain these Summer Schools. Their courses of instruction are varied, academic or professional. Generally they are free to teachers. Everywhere they increase in popularity. Soon to attend a summer school will be a customary, if not necessary way, of spending the summer vacation.

Have you chosen your Summer School?

A Promise Kept.—When Dr. Pyne became the Minister of Education for Ontario he promised in behalf of the government to improve the status of the Ontario teacher. The promise has been kept. In Faculties of Education, Normal Schools, and Provincial Model Schools there has been organized a system of training schools for teachers unsurpassed on this continent in completeness and efficiency. Not stopping here the Department of Education has evolved in its free summer schools for teachers a group of agencies which renew and extend the work of the training schools. In the presence of training schools and summer schools the untrained or unprogressive teacher has almost disappeared from Ontario. Better text books have been provided for the teachers, none better and cheaper in the English-speaking world! Also better equipment and better accommodations. In 1914 the Public Schools of Ontario spent \$2 on equipment as against \$1 in 1904, and \$10 on accommodations as against \$1 in 1904. And better salaries have been given to teachers. Between 1904 and 1914 the average salary of the Public School teacher rose, for men, from \$465 to \$875 and, for women, from \$324 to \$604, and the average salary of the High School teacher from \$967 to \$1445. Three years ago the Department proposed to give the teachers of Ontario a superannuation scheme. When this number of THE SCHOOL issues from the press the Superannuation Bill will have become law. Despite the burdens of the great war, the promise has been kept. The Ontario teacher is now an efficient, prosperous, and honoured member of no mean profession.

Inspector J. H. Smith.—The year 1870 was the big year in the educational history of Ontario and in the life-work of Egerton Ryerson. Out of it came Public Schools, High Schools, Collegiate Institutes, and Inspectors as we now know them in Ontario. That year gave a Public School inspector to each county in Ontario. If in the half century that has elapsed the school system of Ontario has won a goodly measure of fame no small part of the credit is due these county inspectors. They moulded educational opinion, they enforced educational laws, they were “guides, counsellors, and friends” to teachers, trustees, and the Department of Education itself.

A special and pathetic interest has always attached to the later appearances and final withdrawal of these first county inspectors. They had lived through big days. They had known Ryerson; they had served under Crooks and Ross; they had worked side by side with George Paxton Young and James A. McLellan. With mingled feelings of affection and reverence the teachers of Ontario have seen them withdraw one by one—Knight, the two Browns, McDiarmid, Platt, McKee, Pearce. And now the last of them, Smith of Wentworth, has withdrawn, full of years and honours.

Throughout his forty-seven years of service Inspector Smith retained in full measure the regard of his official superiors, his colleagues, and his friends. As he withdrew the County Council of Wentworth did itself the honour, an honour unique among the counties of Ontario, of granting him a generous annuity. The teachers and the Farmers' Institutes of the county presented him with addresses and tokens of appreciation. Speaking for his friends throughout the Province, Inspector Ballard and Dr. Morgan, of Hamilton, and Principal Moore of Dundas assured him of their esteem and affection.

Waterloo Historical Society.—Two or three features of the Fourth Annual Report of the Waterloo Historical Society (P. Fisher, secretary-treasurer) should interest every teacher, especially every teacher of history. The Report assures us that the Society for which it speaks has begun “to collect and preserve the history” of the present war so far as it affects the county of Waterloo. Might not every Canadian teacher do this for his own school section? It contains a brief historical sketch of one of the oldest villages in the county. Might not the teacher introduce his pupils to the meaning of history in a similar study of his own locality? The Report contains also an admirable article on the Indian occupation of Southern Ontario by Dr. Coyne of St. Thomas, Ontario. No teacher can read this article without acknowledging that much excellent historical material lies outside the ordinary school books, and that for such additional material a school library is essential.

School Gardens.—Nova Scotia is in earnest about its Production and Thrift campaign. The February number of the *Rural Science Bulletin* of the Truro Normal School reflects this earnestness.

“Gardens on the school grounds are not always popular. One reason for this is that they are not productive. Let us make them so during this war period. Farmers will assist any movement that is worth while. To them, a flower garden is not profitable. If, however, we grow potatoes, they will help.

“How many schools in the Province will plant a good plot of potatoes this year? The farmer who refuses to help with a flower garden will plow ground for potatoes. Try him. If, in the future, we wish to grow something else, the potato crop will have put the ground in good condition. Teachers, won't you talk this matter over with your progressive ratepayers?

“Even with a garden at school, we cannot afford to neglect the garden at home. Make it profitable too. We can all help feed ourselves and feed the world.”

Work for University Women.—The students of the Universities of Canada have already rendered noble service in the Great War. The men have gone off to the front by hundreds, and the women have worked unceasingly for both University Hospitals and Red Cross Societies. And now a new avenue of usefulness has opened up for University women. In January the authorities of the University of Toronto distributed special National Service cards among both men and women students. A very large number signified their willingness to do, during the vacation, such work as would be most useful to the country, and now as a result the fruit growers of the Niagara Peninsula and other districts are seeking the services of the women students for fruit picking and other farm work. In order that these women may have good board and lodging, the Y.W.C.A. authorities have undertaken to house them in some of the unused hotels of the district. By this arrangement there will be secured, not only pleasant living conditions, but congenial companionship, for the women of the different colleges and faculties will go in groups. One is tempted to speculate on the results of this experiment. Will the appearance of the University girls at work in dark bloomers and khaki middies bring about such a revolution in woman's dress on the farm as has already been wrought in the factories of both Canada and Great Britain? Let us hope so, for the women dressed in overalls are far safer around machinery and cleaner in farm work, and moreover look attractive in their new dress, if we may judge by the pictures we see. Will conditions of farm labour be improved? Undoubtedly the fruit growers will find that they have to treat their new “hands” well

in order to keep them, for University girls have ideas concerning the rights of labour. Finally, we are led to wonder whether this kind of work will become customary, not only with University students, but with many other women, perhaps even with teachers. Much will depend on the treatment accorded these new workers during the coming vacation. And if it becomes customary will it affect the point of view of such University women as intend to become teachers? Will it help to solve some of the problems of the rural school?

The General Education Board's Experimental School.—In-surgency in education is rampant. Critics everywhere are ready to tell us what is wrong, but few are able to indicate the remedy. A short time ago Abraham Flexner, in an article entitled "A Modern School", astonished the educational world by making the most slashing indictment of current educational methods and aims that has been made since Spencer's attack in the fifties of last century. Like Spencer, he condemned the classics; unlike Spencer, he condemned Formal Discipline as well. As a result of this and other agitations the General Education (Rockefeller) Board is going to conduct an experiment in modern learning. An experimental school is to be founded in New York under the general direction of Teachers' College, where Flexner's plans will be put into practice and their efficacy tested in a scientific manner. The General Education Board specify the following as the aims of their school:

1. "To establish and conduct a school for . . . constructive work in reorganisation of elementary and secondary education."
2. To give administration by Teachers' College.
3. To have "a careful study of every experiment by the faculty of Teachers' College (Columbia University)."
4. To secure "academic co-operation".
5. "To stress modern languages to see what methods of teaching give the most substantial practical results." (Spanish not mentioned).
6. To try out proposals contained in "Changes Needed in Secondary Education" (29 pp.), by Charles W. Eliot, and "A Modern School" (24 pp.), by Abraham Flexner [free upon application to the General Education Board, 61 Broadway, New York City, with "The Country School of Tomorrow" (15 pp.), by Dr. F. T. Gates and various other reports and occasional papers].
7. To provide "cautious experimentation".
8. To test "suggested improvements in the curriculum so that it may be better adapted to the needs of modern life than the curriculum now in common use".
9. To test new methods of teaching literature.
10. To test new methods of teaching history.
11. To test new methods of teaching civics.
12. "To ascertain whether the important ancient classics can be effectively used in translations."
13. Science will be "prominent".
14. Industry will be "prominent".

15. Domestic arts will be "prominent".
16. Music will receive "increased attention".
17. Drawing will receive "increased attention".
18. Art will receive "increased attention".
19. "Mathematics will receive special consideration in the hope of working out (a) a rational course of study which connects the study of mathematics with its use; 20. (b) "and which also makes adequate provision for those who have special ability or desire for this subject".
21. Organised recreation, play and games
22. Individual class and school excursions
23. Pictures, lantern slides, maps, and charts
24. Shop and laboratory
25. Special reading matter
26. Discussions
27. To "discard frankly that theory of education known as formal discipline".
28. To "search the country" for "able and resourceful instructors in all the fields of secondary and elementary education".

will be "constantly used to give the pupils sufficient contact with their natural, industrial, social, economic, vocational and domestic environment so as to derive the basis of their school work from real situations and thus make school work constantly real to them".

The proposed experiment is causing the widest interest in education circles. Most educators approve of the plan because they believe that careful experiments are safer guides than mere opinions. The *New York Times*, however, makes a vigorous protest. In an editorial it states that "unblushing materialism finds its crowning triumph in the theory of the modern school in the General Education Board's programme". "There is not a trace of anything tending to the development of character". "In the whole plan there is not a spiritual thought". "It is a matter for instant inquiry, for very sober consideration, whether the General Education Board indeed may not with the immense funds at its disposal be able to shape to its will practically all the institutions in which the youth of the country are trained".

But whether we as teachers are hostile or favourable to the plan, we should watch very carefully indeed the results of this unique experiment.

Science in the Schools.—For many years the educationists of Great Britain have been pressing upon the authorities the importance of science as a school subject. The Great War has shown the all-pervading influence of applied science on industry as well as on the successful waging of war. The advocates of "more science in the schools" have now renewed the attack under more propitious circumstances, and already it is admitted by even the most ardent British humanist that the claims of science must be frankly and fully recognized. No considerable movement of the same kind has developed in Ontario, and for a good reason. Ontario has long recognized the claims of science. To-day it is as important a branch of the school studies as mathematics, moderns, or classics. Moreover, Ontario has not been content with

finding a place for science side by side with the other school subjects. It has always taken the keenest interest in the methods of teaching science. It has insisted that, no matter what the cost, the equipment for experimental work shall be adequate. As a result it is probable that in completeness in method and equipment, in rank among the school subjects and on the school time-table, and in the prestige of its teachers science has no superior in the schools of Ontario.

Book Reviews

Songs of Gladness and Growth, by James L. Hughes. Price \$1.00. Wm. Briggs, Toronto. This book contains 200 poems and all are true to the description the title gives. Written by an eminent educationist, they are all of interest to teachers, some particularly so; for example, *Freedom to Grow* and *The Bad Boy*. There is nothing wearisome, nothing tedious, about any of these poems. They are, on the contrary, bright, terse, clear-cut and always cheerful. Each idea is wrapped up in well-chosen words without verbiage, fuss or moralizing. The volume is the work of an optimist and, as such, has a special charm.

W. J. D.

The Adventures of Prince Melonseed, by M. Ella Chaffey; 163 pages; price 75 cents. William Briggs, Toronto. This is a very interesting fairy story for children and one that teaches, by implication, several useful lessons—kindness to animals being one. The book contains another story, *The Adventurous Road*, not a fairy story, but a very charming one. The teacher who is looking for stories to be read to the class in instalments will probably find nothing finer or more interesting for children from the kindergarten to the second book grade. As a prize book for children of these ages it is excellent. In the school library it would be very popular even with older pupils.

The Story of France (1814-1914), by J. L. Beaumont James. 463 pages. Price 3s. 6d. Thomas Nelson & Sons, Toronto. For some reason most of us are more familiar with the events of early history than we are with those of the last hundred years. We are all of us more interested in France now than we were three years ago. This book gives in great detail and in a most interesting manner the history of our great ally since 1814. The reader does not think of it as history but as a "story." As supplementary reading in history for High School students, it should be very valuable.

Elementary Economic Geography, by C. R. Dyer; 415 pages; published by the American Book Company, New York. This is an excellent example of a book that exemplifies the kind of commercial geography that is being taught in American Schools. Unfortunately in the Canadian schools this new influence in commercial geography is little felt and we still use methods and subject matter that are both antiquated. A broad view of the commercial and economic factors that influence man are discussed, and then these principles are applied to interpret the geographical relations in particular regions. Some of the chapter headings such as, Economic Relations, the Study of Home Economics, Natural Foundations of Human Economy, Industry and Trade, indicate the character of the volume. The general geographical principles studied in the first part of the volume are used in the second part to interpret the commercial geography of the United States, and fully two-thirds of the volume is devoted to this latter part. Of course this militates against its value for Canadian teachers; and for teachers in the United States also, for if there is one thing the rising generation in the United States seems to need to realize, it is that the United States is only one of many very important regions in this world. G. A. C.

The High School and the Public Library

An experiment in the Toronto Public Library, Western Branch

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IN recent years the spirit of co-operation has been at work between the High Schools and the Public Libraries. In some schools the teachers have used the library as an additional source for the supply of books for supplementary reading; others have encouraged their pupils to read the papers and periodicals so as to keep in touch with current events; while a few have sent the students to the library for material for oral compositions and debates. Such co-operation has, however, been intermittent and unorganised, occasional rather than general. To Dr. Locke, the chief librarian of the Toronto Public Library, is due the credit for carrying the work a step farther by establishing it on a definite basis in the Western Branch, which was chosen because it is within six minutes' walk of the Humberside Collegiate Institute. In the spring of 1915, Dr. Locke set aside for the use of the students one room which is known as "the High School room". Regarded at first as an experiment, this undertaking has proved so successful that it has become a permanent department of the Western Library, and the librarian regards the work with the High School students as one of the most important and interesting features of her branch.

It may be of interest to know what has been done and what measure of success has been attained. From the shelves of the general library a number of books deemed suitable for the students were transferred to the new room; one section of the shelves was filled with books of reference; a table large enough to accommodate ten or twelve was placed in the centre. The boys and girls were informed that the room had been set aside for them, and they were advised to use it as much as possible. The approach of examinations did not afford much leisure for reading, and it was not until September 1915 that a systematic effort was made on the part of the librarians and teachers to encourage the use of the High School room. Application cards were distributed among the students, who were told how they could make use of the library. A number of new books, chiefly books of reference in science, history, and literature were added. *The National Geographical* and *The Current History* magazines were assigned to this room. In addition the librarian makes a practice of putting on the magazine shelves old copies of these

magazines together with current numbers of *The Graphic*, the *Illustrated London News*, the *Atlantic Monthly*, etc.

In connection with the supplementary reading the library has rendered valuable assistance. Copies of the lists of books for the different classes are given to the librarian, who in turn notifies the teacher of new and suitable books to be added from time to time. Such additions are usually books of travel, popular science and biography, and many a boy has been won from his devotion to the lurid books of adventure by the stimulation of his interest in the romance of popular science and of exploration. Biographies of great inventors and of famous explorers and books of travel are read to a much greater extent by our boys to-day than two years ago.

Some of the teachers of English composition have found the library a splendid source of help. In a scrap-book the librarian keeps clippings of articles on topics of current interest, and from her the teacher obtains subjects on which a considerable supply of material has been acquired. Or, if the teacher wishes to assign to the senior pupils special subjects on which some reading will be necessary, she solicits, in advance, the aid of the librarian, who collects all suitable, available material, and puts it on the reference shelves in the High School room. Then on the bulletin boards is posted a list of the subjects, the extent and sources of reference, and the students are able to proceed with their work without further aid. Not the least encouraging sign of the success of the experiment has been the increasing ability of the pupils to look up reference material for themselves.

The method of procedure in oral composition is somewhat similar. This year *The Story of the Iliad* was read in Form I, and a genuine interest was aroused in Greek mythology. The teacher of English composition thought this an excellent opportunity to widen the knowledge of the students in this field, and a programme of oral compositions was made out in which were treated the Greek conception of the origin of the world, of the gods and of men, the adventures of gods and goddesses, and the exploits of the heroes. As a sufficient number of suitable topics could not be found in Greek mythology, the remainder were drawn from Norse, Teutonic, Anglo-Saxon, Japanese, and Indian sources. The librarian was given a list of the subjects, and immediately withdrew from circulation all books containing the required material, and placed them temporarily on the reference shelves.

Nor have the needs of the teachers been neglected in this scheme of co-operation. We have the privilege of borrowing for a period of one month as many as six books, which we may use ourselves, loan to the students, or place among the reference books in the classroom.

It is difficult to ascertain, in terms of the number of books read, the extent to which the pupils are availing themselves of their opportunity. But the original room has proved quite inadequate. In a few months a second table had to be added. Frequently every chair was occupied, and the students stood around the shelves reading the books, or betook themselves to the general reading room. With the opening up of a new children's department in February a room four times as large as the first one became available, and the librarian has now more time to devote to the older students. It is too soon to determine whether the more commodious and more attractive quarters will effect an increase in the attendance.

Perhaps the most conclusive proof of the educational value of this experiment will be found in the following list of titles of books found lying on the table where they had been left by the readers. These observations were made during the first week of the term on two nights only, before any oral or written work had been assigned; hence this may be regarded as purely voluntary reading on the part of the students, and as evidence that they are adding to their store of information rather than merely amusing themselves.

This is the list:—*The Earth, Electricity in Modern Life, The National Flag, Canada at War, War Facts and Figures, The Royal Navy, History of the Union Jack, Goldsmith's Poems, Kingsley's Heroes, The Children's Encyclopedia, Self-Government in Canada, Indoor Games, The Romance of Mining, The Boys' Book of Railways, Discoveries and Inventions of the Twentieth Century, The Fight for Canada, Grand Opera in America, Book of Sports and Pastimes, Pioneers in Canada, Pioneers of France in the New World, Ivanhoe, The Pickwick Papers.*

Their choice of magazines is quite as interesting; they read the *Natural Geographical Magazine* assiduously, and two or three copies of *Current History* have to be recovered every week. On the same days that the above lists of books were obtained the following magazines were found on the tables: *The Children's History of the War*, 8 copies; *The National Geographical* and *Current History* Magazines, 10 or 12 copies of each; *The Graphic*, 4 copies; *Atlantic Monthly*, one copy. It is a pleasure to know that these magazines are proving successful rivals of the *Saturday Evening Post*, *The Red Book*, and *The Cosmopolitan*, so widely read by Canadian boys and girls.

High School and Public Library co-operation offers almost unlimited possibilities for development. Recently the librarian has been making clippings from papers and magazines of pictures covering a wide range of subjects, from European Cathedrals to the scenery depicted in Scott's poems. These are mounted on separate cards and arranged in large envelopes for the use of the teacher in illustrating a period in history or

a novel or poem studied in the class, or for the student in connection with his oral composition.

It would be unfair to conclude this article without referring to the keen interest taken in the work by Miss Miller, the librarian in charge of the western branch, and Miss Stauffer, the children's librarian. They have been untiring in their efforts for the success of the work. Miss Miller spent her vacation last autumn visiting the High School libraries in New York and Brooklyn to see the methods employed in the American schools. Every time I enter the library I get valuable hints from our discussions of policy. A few weeks ago Miss Miller suggested a programme for a lesson in oral composition on "The Use of the Library" under the following heads: The Use of the Dictionary, The Use of the Encyclopedia, The Use of Books of Reference, How to Look up a Quotation, The Parts of a Book. In addition she offered to instruct the students so that they could present the facts to the others in their classes.

The work in the High School room enables us, to some extent, to measure the results of our efforts in the class room, and to determine wherein we fail or succeed. Do we arouse in any of our students the desire "to follow knowledge like a sinking star", to realise the promise of our school motto, *Felix, qui rerum causas cognovit*, or are they satisfied with that dangerous acquisition "a little learning"? Our observations are illuminating and compel us to consider problems pertinent to our purpose. Is our present method of dealing with supplementary reading making this work a means to an end or does it become in fact an end in itself? How can we encourage the girls to read for information as well as entertainment? Does our course in English develop in our students the power to sift the good from the bad in the great volume of fiction poured out almost daily, distinguished chiefly by its utter inanity, its utter vulgarity, and its crudeness of style? In these days of many subjects, overloaded curricula, overworked teachers, and rigid regulations, are we not in danger of failing to see the woods for the trees, of going on blindly, intent on covering the prescribed course, without pausing to see whether we accomplish much of what we set out to do, or to put our house in order? Conscious as we are of how little we accomplish in proportion to what might be done, it is cheering to know that more and more of our students are acquiring the habit of voluntarily pursuing knowledge for its own sake.

Professor at Agricultural School—What kinds of farming are there?
New Student—Extensive, intensive and pretensive.

A Reading of "Love among the Ruins"

(Continued from the March number.)

FRANCIS J. A. MORRIS, M.A.

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V. Commentary on Stanza 7.—As the fifth stanza is the most complex, so the seventh, in its last six lines, is the most difficult. Not that there is much doubt of the general purport, but the language, being exclamatory, indicates the presence of strong passion without explaining either its *exact* nature or the *immediate* cause. There are two main lines of interpretation diverging more or less according to the amount of personal application in the apostrophe; but nearly every phrase has something of ambiguity.

"Oh heart, oh, blood that freezes, blood that burns!" These words seem to paraphrase "breathed joy and woe" and "Lust of glory pricked their hearts up, dread of shame Struck them tame." Do they refer to the living heart of the human race with its alternations of joy and sorrow, hope and fear, no matter what goal it struggles towards? Or do they refer to the individual heart of the speaker? If so, what fitness has the phrase "blood that freezes" to the hour and the man in the poem?

"Earth's returns For whole centuries of folly, noise and sin." What is the meaning of "Earth's returns"? Does it introduce a new image, or serve only to explain an idea of the previous line? Does it mean "the earthly reward (*i.e.* triumphs, glories and the rest) for centuries of ambition"? Or could it possibly mean "the harvest sent up at last on this spot by Mother Earth after all the Centuries' sowing of human ambition"? Could it, in short, mean "the idyll of a simple peasant love set in a pastoral scene of quiet and content"?

"Shut them in—to what word are we to refer "them", to "returns" or to "centuries"? And what is the subject of "shut", is it "heart" (as expressed) or "earth" (as implied) in the previous sentence?

Here are some of the possible views:

(a) "What a marvel and a mystery is the heart of man, now hot with hope, now numb with dread, be love the ideal as mine or worldly success as old Rome's"! (Then, with a final glance over the scene he is traversing) "What a change has Mother Earth wrought in this tract here! Now a quiet pasture, fit scene for peasant love; once a maelstrom of sordid ambition, seething with enmity and strife. Well have you done, Mother Earth, to hide all that welter of Mammon and Power! Poor deluded humanity, after life's fitful fever they sleep well beneath the green sod; Love is best".

(b) "O living heart of man that beats in me and in all, thrust into the background and forget the barren triumphs and vulgar show of worldly ambition; it is a low ideal that brings little satisfaction to kings or their minions, less still to humbler folk; let Love be life's ruling passion."

Or the apostrophe may be to the lover's own heart; and we may regard the words "blood that freezes" either as not having or as having appropriateness to the moment. After the lover's draught, in stanza six, of mingled bliss and oblivion of self and the outer world, he falls back on a consciousness, first of his surroundings, and then of himself; he becomes aware of the fast-beating heart and throbbing pulses:

(c) "O heart that all through life finds room for the most opposite affections, burning now, but knowing in the past the alternation to chill fear and numb despair, and destined to feel these again; the same heart beat in those charioteers of the Roman amphitheatre; but better far that its joy and woe should spring, not from selfish ambition, but from passionate self-forgetting love".

Or lastly, he may be overcome by one of those uncanny revulsions of feeling that we all experience. This would be a natural reaction from the ecstasy of stanza six, a sudden cooling of the emotional fervour that would change the whole temper of his last glance over the scene:

(d) He is passing through the graveyard of a nation; the ruined turret is its very tombstone. The latent sense of change and decay, the thought of mortality, lurking in the background all the time, rises up; its spectral form passes suddenly like a cloud over the brightness and heat of the lover's rhapsody. In the midst of his passion of love, he shivers, and exclaims in one and the same breath, apostrophising his heart, "Oh, blood that freezes, blood that burns!"

One of poetry's most exquisite charms lies in its elusiveness and suggestion. It is therefore with no desire of converting unbelief or of being dogmatic that the writer closes his paper with a confession of faith in the first of these four interpretations. Such personal preference has already been hinted at in the synopsis that opened the article. In favour of it there is no single piece of evidence weighty enough to tip the scale; the thing is cumulative, rather—the outcome of several more or less trivial points. Mere number, of course, cannot lend weight to things imponderable, and it may be (after all) that the matter has been prejudged from the start and confirmation *sought* as well as *found* in a handful of trifles light as air; however, here they are:

(i) The punctuation after "burns" and "sin" seems to suggest that each thought is both distinct from the other and complete in itself.

(ii) "*Whole* centuries" should imply that the "returns" are ridiculously small or quite contrary to expectation; this is well conveyed by (a) which also gives a very natural meaning to the somewhat strange

phrase "Earth's returns". No doubt this phrase might mean "the earthly (*i.e.* mundane) reward"—as in (b), but the sense assigned it in (a) is at least as appropriate.

(iii) To make "heart" the subject of the apostrophe "shut them in" seems a straining of the ordinary use of the words; the natural meaning of a request to the heart to shut in the story of Rome's grandeur is surely not "forget it all," but "treasure it up"; and besides forcing the words to an unusual sense, it overleaps the punctuation. On the other hand, (b) is apparently Prof. Dowden's view and is certainly Mrs. Orr's.

(iv) Stopford Brooke (whose memory live for ever!) objects to the poem—as a love-poem—that its conclusion is *general*: if the thought of the last stanza be carefully weighed, it will all of it prove to be in the nature of a *general* conclusion such as is offered by (a); moreover—

(v) If the kernel of the poem is the contrast between Love among the ruins and Royalty enthroned, and the tower is regarded as the central point of the scene in which these dramas of Love and Ambition are enacted, then stanzas 4-6 constitute a solid core with stanzas 1-3 as a *general* introduction and stanza 7 as a *general* conclusion. To corroborate this,

(vi) If the historical part (the former half) of the last stanza is examined, it will be seen at once that the speaker's thought *has* in fact, harked back from the monarch to the multitude of men, and that the opening half (at least) of stanza 7 forms a pendant not to stanzas 4-6, but to stanzas 1-3. In keeping with which,

(vii) It is surely not Fancy that hears sounded in stanza 3 the notes whose echo we catch in the close of the poem? "Under its carpet of green sod, Earth has embedded all traces of the city (shut them in), where a multitude of men (in one year they sent a million fighters forth) once were swayed by human passion, joy and woe, and felt the heart grow hot with desire and cold with fear (oh, heart! oh, blood that freezes, blood that burns!), while all their deeds of glory (their triumphs and their glories and the rest) and of shame (folly, noise and sin!) the gold (gold, of course) bought and sold."

Inconclusive all this and, if you favour a different view, mere begging the question. The language of imagination and the heart laughs at the nicely calculated less or more of logical reason. You must leave Science at home, when you go courting the Muse. Beware the fate of those 18th century savants who thought with a scalpel to surprise the soul in the pineal gland! What! Have we drawn the cover all in vain, then? By no means; but you mustn't expect to run such a slyboots as a poet's fancy to earth, with never a check, by a mere view-halloo and one sharp burst across the open. No! No! Ours is the quest of a will-o'-the-wisp, and whether at fault or baffled, as we shall be many a time, "to the limit of land" let us follow the gleam.

Summer Schools in Canada

The information asked for regarding Alberta's Summer Schools had not come to hand when this issue went to press. It will be published in the next available number.

—EDITOR.

BRITISH COLUMBIA.

ALEXANDER ROBINSON, LL.D.,
Superintendent of Education

SUMMER schools for teachers have been held in Victoria for two years with great success. Six courses in all were conducted the first year, 1914, as follows: rural science, art, vocal music, manual arts, manual training and household economics. The following year, in addition to the above, courses in English literature and French were given. The total number of teachers in attendance in 1914 was 513, and in 1915, 690. No classes were held in 1916.

As stated in the general announcement, the object of these courses was "to increase the efficiency of the Provincial schools by giving teachers the opportunity to strengthen their grasp on certain subjects and to qualify themselves further along certain special lines of school work." The courses lasted between four and five weeks and were open to all teachers actively engaged in teaching in the Provincial schools.

In addition to the preliminary, or first-year courses, advanced courses were held the second year in rural science, art and household economics.

Teachers were registered in one course only, as it was considered desirable to avoid what seemed like too great a dissipation of the students' time and energy if more than one course were attempted during such a short time. The value of these summer courses is already quite evident in the Province. Besides affording definite preparation for the teaching of some of the newer subjects, these summer schools are helping to stimulate a new interest in the better presentation of all school subjects.

MANITOBA.

S. E. LANG, M.A.,
Inspector of Secondary Schools, Winnipeg

The Manitoba Summer School of Science and Handicrafts offers courses in nature study and school gardening for elementary teachers, in High School science for secondary teachers, and in elementary handicrafts for principals and others who desire to introduce arts and crafts

instruction into their schools. The courses include school and landscape gardening, botany, zoology, ornithology, meteorology, household art and science (textiles, food, etc.) and craftsmanship in wood, iron, clay, and other plastic material, textiles; colour, drawing, and design; music, organised play, and French. These courses serve to fill up gaps in the preparation of teachers who were unable to secure instruction in these branches at High School. They serve also to meet the needs of progressive teachers who wish to improve their efficiency by freshening their knowledge and increasing the range of their professional interests. Voluntary attendance of such teachers shows a very marked increase. Newcomers from abroad with interim standing are required to take the course in science. The summer school here is a connecting link between the conventional academic course of study for teachers and the teachers' training school of the future which must furnish full and adequate preparation in both knowledge and skill along concrete, social and practical lines as well as the more bookish and abstract phases of human knowledge.

NEW BRUNSWICK.

R. P. STEEVES,
Director, Elementary Agricultural Education

A Rural Science School at two stations, Woodstock and Sussex, is held in New Brunswick every summer in July and August (four weeks). It is designed entirely for teachers and seeks to give them instruction and training in nature study, elementary agriculture and related subjects. Considerable time is spent on method teaching in rural schools. The school is under the management of the Elementary Agricultural Education Division of the Department of Agriculture. The Education Department at the Normal School provides instruction in the same subjects to all student teachers. The Rural Science School aims to take up the work undertaken at the Normal School and to strengthen and extend it by special instruction and practice so as to qualify teachers for special effort and to receive special grants. The two departments are working together to secure a larger measure of qualification for the teachers of the Province, particularly those in rural sections. At both stations the students, under competent instructors, lay out and prepare school garden plots and plant and care for them during the session. All enrolled students, are required to take the studies prescribed; there are no options. The full course extends over a period of two years with a winter reading and experimental course to be reported upon before the second year work is commenced. On satisfactory completion of the full course by a teacher a certificate is issued, endorsed by both departments.

NOVA SCOTIA.

A. H. MACKAY, LL.D., F.R.C.S.,
Superintendent of Education

A Summer School is held each year at Truro in connection with the Normal and Agricultural Colleges—members of both faculties constituting the faculty of the Summer School. The session lasts one month. This year the dates are July 11th—August 9th.

Two-year courses are offered in botany, chemistry, physics, geology and mineralogy, plant diseases, entomology, and horticulture. One-year courses are offered in nature study, biology, agriculture, bird study, weather-work, woodwork, brush and cardboard work, and bacteriology. In addition the Department of Militia gives a course in physical training.

About 200 teachers each year attend the School. The only inducement offered generally is travelling expenses. Those showing aptitude for leadership, however, are candidates for cash scholarships amounting to about \$15. In the past, small grants—usually \$25—have been awarded to graduates who taught creditable nature work in their schools. It is now proposed to withdraw these grants, and to offer larger scholarships for attendance at the Summer School. Cash prizes will still be offered, however, to teachers who do noteworthy work in gardening or exhibitions.

The instruction includes lectures, laboratory, and field work. The gardens on the Normal College grounds are cultivated entirely by students. In addition, the model gardens on the Agricultural College farm are used for demonstration purposes.

The aim is to give the teachers a common sense and practical knowledge of "every-day things"; and trust to their initiative to use whatever can be applied in their individual schools.

ONTARIO—QUEEN'S UNIVERSITY.

PROFESSOR W. T. MACCLEMENT,
Director, Summer School

There are now many indications in the educational field of a growing recognition of the value of continuous and organised home and summer study for teachers. In some parts of America this work has been urged by educational authorities with almost cruel pressure, so convinced are they that it is the best available method of improvement, when it is under competent direction.

A gratifying number of Ontario's best teachers are completing courses in arts in Queen's, and this summer we expect an increased attendance.

The Arts subjects offered this year are English, French, German, Latin, history, mathematics, physics, chemistry, animal biology, and botany. The most difficult parts of the work of both the first and second years, in these subjects, are dealt with by members of the regular staff of the University.

The Faculty of Education offers courses in the science and the history of education to aid teachers preparing for the degrees in pedagogy. For those who have passed the Entrance to Faculty examination, and are exempt from attendance, courses are given in the work required for First Class and High School Assistants' certificates.

The Strathcona Physical Training Course will be given again this year, if arrangements can be made with the Department of Militia.

Besides the regular class work the general lectures twice a week are open to all students. These will be on subjects of timely and general interest. The Summer School fee in arts is \$20. The fee in education is \$10. No fee is charged registered students for the physical training course.

ONTARIO—THE UNIVERSITY OF TORONTO.

The Secretary of University Extension

The University of Toronto, in co-operation with the Department of Education, announces for the Summer Session of 1917 the usual courses in Normal Entrance, Faculty Entrance, household science, manual training, vocal music, physical culture and commercial subjects. The number of teachers who are taking advantage of the opportunities offered at the Summer Session grows from year to year and the University hopes to continue the work of the past twelve years in meeting the needs of the teachers as they arise.

The course leading to the degree of Bachelor of Arts, which was begun by the University last Summer Session, has been continued throughout the year in Correspondence Courses and special classes. The second, third, and fourth years may be completed in five years by attendance at the Summer Session and enrolment in the correspondence courses. For teachers residing in Toronto, special classes are provided during the winter. Those who have been unable to attend the regular session of the University welcome this course as a means to attain the intellectual stimulus received from study and contact with the teachers and professors of the University and incidentally raise their status as teachers.

Teachers of French will be interested to know that the course in French pronunciation and conversation, which was received last year with such enthusiasm, will be repeated this summer. Greater efficiency in pronunciation, fluency of conversation, and a better appre-

ciation of the French—their characteristics, institutions, history, etc.—may be attained without the usual examination at the end to detract from the real enjoyment of the course.

PRINCE EDWARD ISLAND.

J. E. MCLARTY, B.S.A.,

Rural Science Department, Prince of Wales College, Charlottetown

The introduction of agriculture and nature study as a regular subject on the Public School curriculum of this Province led to the necessity for some special training for the teachers who were to undertake this work. The Rural Science Summer School has been adopted to meet this demand.

On account of the short summer holiday allowed rural school teachers, the summer school session has been made short, in the past two years lasting for only two weeks. In conjunction with the course last year was held the first Rural Life Conference for Prince Edward Island. At these meetings were represented the clergy and ratepayers, as well as the teachers. Some noted outside speakers were present and added materially to the success of the conference.

During the regular lecture periods stress was laid upon the "how" rather than the "what" to teach. It is the aim of those in charge to give the teachers an inspiration of the possibilities which lie round about them in their country schools rather than to load them down with a great many facts pertaining to agricultural education.

Play, as a necessary part of school life, was encouraged and concluded with a very successful "field day" at the close of the session.

The Provincial Teachers' Convention was held immediately at the close of the course, thus allowing all teachers present at the summer school to attend.

The value to be derived by the teachers from their meeting together as a body for these short sessions cannot be overestimated. They go back to their schools with an apparently new purpose and succeed in doing much better work.

QUEBEC.

SINCLAIR LAIRD, M.A., B.PHIL.,

Dean of the School for Teachers, Macdonald College

The only summer schools held last year in the Province of Quebec were a summer course in nature study and elementary agriculture held at Macdonald College for teachers who had not previously had an opportunity for training in these subjects.

Owing to the restrictions only thirty-three students were accepted. It is the intention, however, of the Provincial authorities to continue the course again next summer, and allow all certificated teachers resident in the Province to apply for the course which lasts four weeks during the month of August.

In Montreal there was also held a teachers' training course in French during the month of July. This course was specially planned to give teachers of French instruction and practice in the best methods. All the classes were conducted in French, and special tests were given to those who were admitted to the class. Bursaries of \$25 were given by the Provincial Government to successful candidates, and the Protestant School Commissioners of Montreal likewise gave a bonus of \$15 to teachers in their employment who completed the course successfully. Special certificates were also awarded, either provisional or permanent. This course has done much to improve the teaching of French in the Province along practical lines. In the French class last year thirty-one attended the summer school.

The usual course in drawing for teachers was not held, owing to the insufficient number of candidates.

These three courses will again be offered during the summer of 1917. All of them are intended to supplement the courses taken during the year of regular training, and are intended to improve the teaching of these special subjects which are being emphasized at the present time.

SASKATCHEWAN.

A. W. COCKS, B.SC.,
Director of School Agriculture

For the past three years a summer school for the training of teachers in special subjects has been held in the Province of Saskatchewan. In 1914 a special course in agriculture and nature study, lasting for three weeks, was conducted at the University of Saskatchewan, Saskatoon, with 57 teachers in attendance. The next year an attempt was made to include other subjects and therefore special training for four weeks was provided in agriculture, elementary science, household science, music and physical training. Over 100 teachers took advantage of the courses in 1915. Last year similar courses were held in connection with the summer school at the University and were attended by over 130 teachers.

The work is made as practical as possible and is so arranged that it will be of the greatest benefit to teachers responsible for instruction in the several subjects. Special attention is paid by the lecturers to the needs of the rural school teacher.

During the courses the teachers were provided with accommodation in the University residence at the rate of \$1.00 per day, while their return railway fares were paid by the Department of Education.

The summer school has been very successful and many teachers have requested that the course be lengthened and that more advanced work be undertaken. It is quite probable that in order that this demand may be met, the University authorities will take charge of all summer school work in the Province and so arrange the courses that those who complete them satisfactorily may receive credit in the degree courses of the University.

Book Reviews

Nature Study Lessons, by J. B. Philip. Cambridge University Press, London; J. M. Dent & Sons, Toronto. This is a volume of the *Cambridge Nature Study Series*, several of which have been reviewed in THE SCHOOL already. This retains the high standard set by its predecessors in the series. It consists of a set of lessons for each of the four seasons. The studies are all of plants, and the materials required for teaching the lessons are mostly quite accessible to teachers in Canada. Such topics as the apple, dispersal of seeds, the cabbage, and the dandelion are selected. The treatment of each topic is exceedingly good and very helpful for the teacher. The book can be highly recommended to teachers in this Dominion.

G. A. C.

Crowley's Hygiene of School Life, by G. W. Hutt; published by Methuen & Co., London; 427 pages; price 3s. 6d. net. This new edition of the well-known school hygiene by Mr. Crowley is excellent and brings the rapidly expanding information regarding the subject well up to date. This volume is not a text-book for the schools, but is a book to assist the teacher in understanding the conditions around a school that tend to improve the health and comfort of both pupils and teachers. Such topics as the physical condition of the child, the mentally deficient child, school meals, school baths, and open-air education are thoroughly treated. The book is well worth the careful study of the thoughtful teacher.

G. A. C.

Introduction to Modern Inorganic Chemistry, by J. W. Mellor; 684 pages; published by Longmans, Green and Co., New York. Price \$1.50. A few years ago when Mr. Mellor published his *Modern Inorganic Chemistry*, it was at once recognized that a book of outstanding merit had been produced. The volume lacked all the stereotyped characteristics of the ordinary text-book, and possessed many touches giving it a human interest. Any topic discussed was treated in sufficient detail to give the reader a clear knowledge of the facts. Moreover, many personal and historical details made the volume a fascinating one to read. While it is an excellent reference book for the science teacher—and no science teacher should be without it—it is too large to be used as a text-book by the pupils of the High Schools of Ontario pursuing Upper School chemistry. The present book is an abridgment of the *Modern Inorganic Chemistry* and retains all the excellent features of the larger volume. As it is very much smaller, it should make an excellent text-book in chemistry for the Upper School pupils; in fact the reviewer knows of no superior book for this purpose.

G. A. C.

Primary Department

Geographical Nature Study

EDITH V. PHILLIPS, B.A.
Normal Model School, Ottawa

A little spring came dripping
The moss and ferns among,
A silver rill went tripping
And singing sweet along,
And calling others to its side
Until it rolled—a river's tide.

WITH Spring here again, we hope to answer other calls besides that of the school-bell and do more of our work outside the school-room. As much depends upon the condition of the weather and on the distances it will be necessary to travel for our observations, it is clearly impossible to state any exact sequence of lessons.

The following suggestions are merely one teacher's preparation to co-operate with her class in interpreting the inevitable charm of the most interesting material in the whole course of Geographical Nature Study—a brook. In the first place, the teacher herself, by most careful and accurate observations and by wide reading, must have a deep appreciation of the life of a brook. Henry Van Dyke, in *Little Rivers*, says: "For real company and friendship, there is nothing outside of the animal kingdom that is comparable to a river . . . The personality of a river is not to be found in its water, nor in its bed, nor in its shore. Either of these elements, by itself, would be nothing. . . . The life of a river, like that of a human being, consists in the union of soul and body, the water and the banks. They belong together. They act and react upon each other". Books such as the one from which this quotation was taken are well worth reading, not for their pedagogical information, but for wholesome appreciation which may be transmitted, in part, to the child.

After each April shower, we need not go beyond the school-yard or the street corner to begin observations of the work of running water. Later the rivulet, which last September made its way among the stones, will present many surprises and comparisons for our visit. At the end of the month, a little conception of the power and force of water may be gained from directed observations of the Rideau and Ottawa Rivers, and the Chaudière Falls.

That the brook is a great worker may be illustrated from a miniature stream better than by a river; however, it will be seen that larger rivers, because of their size and volume, do more work than small ones.

1. A great amount of soil-making. A miller grinding stones.

2. "New life, new hope, new strength

To all on earth I give."—To the flowers, birds, animals, and man.

3. Harnessed for work. The horse draws a wagon; the wind makes the mill pump water; the water at a ditch or waterfall may turn a toy water-wheel.

4. Its little channel bed becomes a valley in time.

5. It is like a moving railway train that carries passengers and freight.

6. It is a ready-made road for our boats.

On the excursions, be they in the school-yard or beside the big river, the aim of the teacher is to direct the investigations. This can be accomplished best through questions which are asked, not for the sake of the answers, but as problems which will lead the children to see and think, and for which the best solution may result from a diversity of answers.

1. Where has it come from? This may emphasize the humble beginnings a river may have. Probable conclusions—the rain brought it, melting snow, the clouds, the sides of the hill, a spring.

2. Where is it going?—Into the pond, into the river, into the ground, into the air.

3. In what direction does it flow?—Down hill, towards the north, follows the valley.

4. Why does it make its bed there?—The lowest part of the valley, the bottom of the slope.

5. Why do we find a pool in parts of the brook?

6. How do we know what land a brook drains?

7. How many slopes has every stream?

A child loves a brook partly because it lends itself to so many interesting experiments.

1. The presence of currents. Throw twigs into the water and watch them travel, now quickly, now slowly. Allow children to run beside them, and notice that the speed varies.

2. Where is the current swiftest? Throw a twig at the centre, another at the side of the stream, and observe which wins the race.

3. Why does it bend? Probably the roots of a big tree are in the way, or the earth full of stones. Throw something in its way in one part of the stream and watch it wander from side to side as it picks out an easy path.

4. The banks are not equally steep. Measure them. Around which bank is the water running more swiftly?

5. Why is there much fine material on the sloping inner side? Fill a jar with water. The sediment will deposit when the water is still as in the inner edge.

6. When and where is the water most muddy?

7. Down what kind of slope will it carry most sediment?

8. Have the class compare pebbles as to their shape, and advance simple theories as explanations.

Many technical terms may be learned unconsciously as they are needed to express what is being done. For example, river basin. This may be seen in the school-yard in the mud or sand. The small streams are like the veins of a maple leaf toward the stem, or like the tracks of a railway-yard all connected with the tracks of a main line. Others—source, mouth, bed, waterfall, divide, current, sediment, etc.

As co-relation, many avenues are open from this study.

1. Tell the story of a pebble. The teacher might aid by suggestive memory work, e.g.:

Round meadow and under bridges,
Past wood and glen and cave,
Its corners sharp were rubbed away
By arch and stone and wave.

2. Tell the story of the stream—where it comes from, where it is going, why it goes there, etc.

3. Sketch pleasant valleys with crayons.

4. Construct a water-wheel.

Many of these suggestions are beyond the comprehension of a small child if they were merely to be talked about abstractly in a school-room. The actual contact with a brook in its natural environment makes the work practicable.

Primary Studies in English

ISABELLE RICHARDSON,
Normal Model School, Toronto.

LESSON—GROUP VII.

Historical Stories.

Section 1. *Introduction.*

All right use of life, and the one secret of life

Is to pave ways for the firmer footing of those who succeed us.

—George Meredith.

THE work in history in the primary grade should consist largely in the oral presentation of facts and incidents which will form a basis of intelligent interest and study later on. But while recognizing and keeping in mind this remote aim it is perhaps the immediate

practical value that appeals more strongly to the elementary teacher. For through these stories "wide-reaching connections are established which carry us a long step toward correlation and concentration of studies" and furnish an illustration of "how rich will be the fruitage of our educational effort if we consider first the highest needs and interests of the children and allow the formal arts to drop into their proper subordination".

Section 2. *History.*

SUNRISE LAND.

If I could but visit the sunrise land
That lies away over the sea,
Perhaps I could very well understand
Some things that seem strange to me.

"It has come to be one of the commonplaces of educational literature that the individual of to-day must pass through the same stages of evolution as the human race as a whole". In the above stanza we find but another indication of the kinship of child life with race life. The simple folk who dwelt in the long ago thought the earth a strange place, for so many puzzling things were constantly happening around them. Lacking wise men and books to explain the "things that seemed strange" to them they imagined explanations as well as they could. Thus it is that "far back in the morning twilights of the world" people began to tell stories. There were so many mysteries that gradually hundreds of these stories came into being, many of them very poetical and beautiful. These wonder-stories are called *myths*.

The origin of the myth—the racial love of mystery leading to a desire for expression—is very suggestive to the teacher who is seeking effective modes of presentation.

The introduction to the study of "Sunrise Land" may be one of these legends of mystery, which, since the beginning of things, has been a starting point: "Long, long ago—much longer ago than 'once upon a time', there were people living on the earth. One thing that especially interested these people was a great yellow object that every morning came up out of the sea in the east, broke through the clouds with a flash of colour, climbed the steep arch of the sky, then descended on the farther side and went slowly out of sight leaving dark night behind.

"After a while they came to believe that this strange object was a chariot drawn by four beautiful horses. This chariot, they said, had axles of gold and gold wheels with silver spokes. All about the edge were diamonds and other precious stones that sparkled like shooting flames of fire. It was believed that this chariot was driven by a powerful but very graceful and beautiful sun-god who had a splendid palace on

a high mountain in the Land of the Sunrise." (Show Guido Reni's *Aurora*).

When the myth has been discussed and interpreted by the children, the stanza at the beginning of this section may be recited by the teacher and used as the basis of a conversation.

Discuss the title. Compare the Sunrise Land of the myth with the real Sunrise Land. (Give general notions only). To which land does the poem refer? How do you know? Who is speaking? Why does the child wish to visit Sunrise Land? If he has not visited Japan how does he know of these "strange things"? Let the pupils tell of the strange things about which they have learned through pictures, stories, or visits to Japanese shops.

These are but a few suggestions. The *aim* is to arouse the interest and curiosity of the pupils to such an extent that they will be eager to visit in imagination this beautiful "Island Paradise", the "Land of the Gods".

In preparing the story of the imaginary trip the teacher should read several accounts and select the facts adapted to the class. Apt words, expressions, descriptions, should also be noted. Then outline the facts in a logical way. Arrange in sequence pictures and drawings from various sources. Make a collection of Japanese objects of interest.

1. *The Voyage*. The picture *The Breaking Wave* is placed in full view of the children while the teacher recites:

I'm on the sea! I'm on the sea!
I am where I would ever be;
With the blue above and the blue below,
And silence wheresoe'er I go;
If a storm should come and awake the deep,
What matter? I shall ride and sleep.

The following are illustrative extracts (adapted):

"Forgotten in a moment the two weeks of imprisonment on the palace of the deep, forgotten the little unpleasant incidents of our long voyage in the joy of the beautiful awakening".

"A group of islands rises out of the blue Pacific Ocean like a beautiful water-lily, each petal an island, and we involuntarily exclaim: 'This is indeed the flower of the ocean'!"

"We should not be human did we fail to go into raptures over the gold-tinted waters, the pearly sands of the sea-shore, the little lighthouse at the point of land, its flying flag, the hills in the background decked out in their suit of eastern pines; above these the 'mountain of the golden flower', and over all the matchless sky of an afternoon in the Far East. We have seen Japan!"

2. Home, home-life, home customs; visits to the temple, country, toyshops, festivals; journey up the "Peerless Mountain"; child's party. (For list of books see Ontario History Manual). Emphasise the Japanese children's politeness to each other and obedience to authority.

Arouse the interest and curiosity of the pupils by telling the story up to a certain point; then present a *picture* from which the pupils "read" the remainder of the story themselves. No verbal description, however graphic, is sure of furnishing truthful mental pictures of things not already seen.

"It is needless to say that where descriptions accompany the picture, the picture should be carefully observed first since the clear visual images formed from these will help the child in the interpretation and give zest and life to its reading".

When the picture is first presented, the child should be permitted to point out "the things that seem strange" to him, and be encouraged to attempt to account for them. In many instances a few judicious questions will enable him to do this if the pictures have been presented in proper sequence. For example, after a visit to the temple, the pupils can readily tell why men are hired to act as scarecrows in the tea plantations. The use of the wooden block which serves as a pillow can readily be developed if previous to this the children have watched the professional hair-dresser at work.

After this preliminary work, the story of the picture should be developed step by step, each detail being given in its proper order. At this stage emphasise thought-getting and interpretation.

At a later period the teacher should give a lesson whose object will be to overcome common errors in sentence-structure. The child should be required to express his ideas clearly in a limited number of short, concise, consecutive statements.

Following the oral presentation of a picture, sentences forming the picture-story, and written on slips of paper may be distributed, then each sentence is read in proper order to form the story. Stories from textbooks and other sources should also supplement the oral work. *In Tea Land*, Ontario First Reader, will have a new interest if the teacher has previously read from Browne's *Japan* the fascinating story of O-Matsu, the beautiful child of a humble fisherman. In thought, picture-making, power to produce a mood, diction, this legend of the hallowed pine on the banks of the Takasago is unsurpassed.

In connection with the above story-telling and picture-study use as many as possible of the Japanese educational dolls. These dolls represent "every trade, craft, and calling, civil and military, historical and legendary", and are most valuable aids in giving correct ideas of the customs and costumes of Japan.

Section 3. *Nature Study.*

In connection with nature study *A Peep into a Japanese Primary School* will prove not only interesting but suggestive to both pupils and teacher. This is the title of an article by Maude W. Madden in *Primary Education*. The following is an extract:

One day the reading lesson was the two words, "dove," "beans" (*hato* — *ma'me*). Beans are a favorite food of doves in Japan. The children have a sweet little one-stanza song about feeding beans to the doves which fly from the temple roof to feed. This morning when the picture chart was exposed some of the children began to sing softly, "*Hato, po-po, Hato, po-po*" — "Yes, that's *the* song, isn't it"? said the teacher smiling at them—"but we'll not sing it just now." After chatting with them awhile about doves and the picture, he said, "In another part of the school yard, not where we play, is a great cage — how many have noticed it"? Only a few had. "What is in it"? Various were the guesses of those who had not seen. Then one who had was called on to tell. "Yes, it's a cage of doves — let's go and see them". So with a one, two, three, the whole grade of expectant youngsters was soon marching into the hall. Here they marked time a minute, then followed Teacher out into the yard to the great cage of doves, where the lesson was fully illustrated and the children were given beans to feed to the doves. Teacher talked pleasantly about the doves, telling something of their habits, calling attention to their beauty and to their peculiar feet.

Imaginary visits should be made to the rice fields, tea plantations, and groves of mulberry trees. Interesting descriptions and pictures may be found in Browne's *Japan*. The Japanese are the great silk makers of the world. For suggestive hints on the study of the silkworm and its product see Ontario Nature Study Manual.

Section 4. *Literature.*

JAPANESE LULLABY,

Sleep little pigeon and fold your wings,—
 Little blue pigeon with velvet eyes;
 Sleep to the singing of mother-bird swinging,
 Swinging the nest where her little one lies.

Away out yonder I see a star,—
 Silvery star with a tinkling song;
 To the soft dew falling I hear it calling—
 Calling and tinkling the night along.

In through the window a moonbean comes,—
 Little gold moonbean with misty wings;
 All silently creeping, it asks, "Is he sleeping—
 Sleeping and dreaming while mother sings"?

—EUGENE FIELD.

Japanese Myths and Fairy Tales.

1. *The Ashes that made Trees Bloom*—the story of a pet dog: "Japan" (Griffis).
2. *The Tongue-Cut Sparrow* and *The Stone Cutter: For the Children's Hour* (Bailey).

"These myths teach us much of the people who lived in the days before there was any written history, and, therefore, they are highly valued by learned students. They are so beautiful that they are loved by the poets; and they are so interesting and so different from other tales that no one can help liking to read them; and maybe that is the best use of them after all, simply to read them and enjoy them and be glad that we have them."—E. M. Tappan.

Section 5. *Language.*

A JAPANESE SONG.

In the land of Japan o'er the seas
Lives the wise little Japanese,
He waves a large fan as he gracefully can
And reads backward his A B C's.

They sit on the floor instead of a chair,
With both their feet under them curled.
They make not a bit of a noise anywhere,
That's the hardest thing in the world.

Together the children all love to recite
And brothers and sisters will play
With the dear little babies from morning till night,
And so they are happy all day.

Their houses are made of clean yellow straw,
And they leave their shoes outside the door,
For never a mark or a spot is the law
That keeps bright the beautiful floor.

1. Story-telling from word-pictures; each pupil limited to two sentences. For examples, "The Japanese boy sits on the floor. He curls both feet under him".

2. Dramatization; description. "You were a Japanese girl reading your A, B, C's backward."

3. A list of words referring to Japan may be so arranged that the oral sentences given form a complete story.

4. The *co-operative* story gives the child scope for expression and is an excellent test of the fund of knowledge acquired. (Answers in complete statements). "Two children are going to spend the day at the home of an aunt who lives several miles out in the country. What are their names? (Toyo, Matsu, etc.). How are they to get there? (Jinrikishas). The children spend at least five minutes bidding their mother a proper good-bye. Why? Then off they go down the street. Its name? (Dog, Turtle, etc.). Who is that man dancing in the street? What does he say? What does Toyo want this man to "blow" for him? (A stork with wings outspread, a candy dog, etc.). A few minutes later

the children are out in the beautiful country. See that man running about making hideous noises! Is he crazy? At last Uncle Ato's rice plantation is reached. What do you see? Children make statements describing the house, gardens, pet animals and birds.

5. Word study:

In this queer little house are *no* walls and *no* doors—
No scarfs on the tables, *no* carpets on floors—
No fireplaces, bedsteads, nor chairs can you see,
 Yet the children are happy and warm as can be.

Why does Toyo never sit on a chair? Fall out of bed? Upset the ink? Why does Matsu's kitten never play with its tail? (It has no tail.)

The children are now ready to express through handwork the thoughts gained in this series of lessons. For valuable suggestions in Art, Construction and Sandboard illustration see *Educative Handwork* in this issue.

Educative Handwork

M. ISABEL WILSON

Ryerson Critic Staff, Faculty of Education, University of Toronto.

THE SUNRISE MONTH.

O joy, O joy, a robin sings,
 A crocus lifts its cup—
 Sweet *April*, you're the Sunrise Month
 When everything wakes up.

EVERY day in April brings a new delight. Swelling buds, returning birds and new hopes are springing up on every side. Magic is everywhere. No miracle exceeds the marvel of the spring birth-time. The warm, enticing days of Spring are here. The sun, the air, the sky, the awakening life bid us come out and partake of them. To bring this spirit and feeling of Spring into our April work should be our aim.

Our forefathers celebrated the advent of Spring by a festival in her honour. The Christian celebration takes the place of this ancient festival. Easter means life and therefore as emblems of Easter we may use anything containing life within itself. Flowers are appropriate because there is life in the bud which bursts forth into the beautiful flower. Eggs are used as symbols of life. Patterns of eggs may be traced around and cut out. Colour with bright crayons and make them spotted, dotted, or with pictures on them. The twigs of different trees are interesting. The pussy willow fascinates the child. He likes to

watch the pussies develop on the twig. Make drawings of the twigs as they progress from day to day.

The proverbial April weather—smiles and tears—may be illustrated by sunshine and rainy pictures.

One of the first evidences of Spring is the falling of the rain. Longfellow's "Rain in Summer" and R. L. Stevenson's "Rain" form pictures that may be illustrated by paper cutting. The children enjoy the funny little poem, "Who likes the Rain" by Clara Doty Bates.

In connection with the study of Rosetti's poem "The Rainbow" and Millet's picture of the rainbow, the colours of the rainbow may be emphasised by looking at a prism, by collecting coloured worsted or by arranging coloured papers. Have the children sketch a "rainbow" arch with coloured crayons. Distribute drawing paper to each child; upon these put as much pulverized crayon as can be taken upon the end of the blade of a pen-knife of the colours, blue and yellow—red and yellow—red and blue. With a bit of soft cloth or of tissue paper over the forefinger the colours may be blended to make green—orange—violet. Or paste tissue paper over the window panes where the light is good—blue with yellow—red with yellow—red with blue.

After the story period the following stories may be illustrated by drawings and cuttings: *The Poplar Tree Myth*, *The Pine tree who had her wish*, *The Walnut tree that wanted to bear tulips*, *How Daphne became a Tree*, *Philemon and Baucis*, *Sleeping Beauty*. The song *The Raindrops' Ride* found in *The Educational Music Course* gives the story of the rain.

Now is the time to plan for our garden. After the study of the preparation of the soil and seed have them cut out and draw the tools used. Have them cut from seed catalogues the pictures of vegetables. On a large sheet paste these pictures in a systematic way, thus planning their garden.

CORRELATION.—To correlate with *Primary Studies in English* in this issue make a collection of Japanese postcards and pictures. Mount these on large sheets or in a book. A realistic Japanese home may be made of the strawboard packing that comes around bottles. A simple screen—a necessary part of a Japanese home—may be made by folding a square of paper into four oblongs. To make a better one, fold and cut four oblongs from heavy manilla paper. Fasten together by paper straps acting as hinges. To beautify the screen paint flowers, birds, etc. To make the home comfortable make raphia mats and tuft pieces of silk for a mattress and a quilt. To make a Japanese doll to occupy the house, use a clothes-pin. Draw eyes, nose and mouth on the round top. Paste on ravelled shoe string or yarn for hair. For shoes use sealing wax, clay, or plasticine. Cut paper $\frac{1}{2}$ " by 4" for arms. Paste the centre of the paper to the middle of the back of the pin.

To dress the doll make a kimono-shaped slip, made of drawing paper, and paint in oriental colours. The kimono is cut double, like a paper doll's dress with a hole for the neck and long flowing sleeves. To make a parasol for the doll take half a small cork and dip it into the ink-well. After it is dry insert into it eight wooden tooth picks like the spokes in the hub of a wheel, but letting them slant down a little like the ribs of an open umbrella. Now tie the end of a long piece of bright worsted to one toothpick as near to the cork as possible. Weave the cover of the parasol by winding the worsted around each stick in turn, working round and round as a spider spins a web. Sew the end of the worsted in firmly. For the handle use a larger toothpick. A simpler one may be made by cutting a circle. Cut out a small section and lap one edge over the other. If decoration is desired, paint any simple Japanese unit. For a handle use a toothpick.

BAG KNOTTING is the topic for the special handwork of this month. The sponge bag is made with the button-hole stitch and the overhand knot. Use a brass ring for the bottom of the bag and button-hole as many strands of raphia on it as possible, having the ends of each piece the same length. Then tie them together in pairs at the same distance from the ring all around. Repeat this until there are three rows of knots and small meshes all of the same size. Arrange to have a row of large meshes next and small ones in the centre of the bag. Another row of larger ones above and finish with small ones at the top. The button-hole stitch is one of the most useful. Pass a loop of the working strand through the ring and draw both ends through it, pull down firmly, then repeat, passing the single end of raphia through the loop. The overhand knot is made by passing both ends through the loop and tying. Arrange just where the knot is to be before drawing tight. A square knotted bag is made by cutting from seventeen to thirty strands of twine, raphia, ropetine, or shoe laces from $1\frac{1}{2}$ yards to 2 yards long. Tie about $\frac{1}{2}$ " apart on a ruler. The raphia is doubled and the middle part tied around the ruler in an ordinary hard knot very close to the ruler. Two ends hang down below each knot. Beginning at the left take the inside strand belonging to the first knot and a strand of the next and tie in the same tight knot. Tie in this way all the way across and then begin on the next row, always beginning with the inside strand or leaving one loose strand. There will also be a loose strand at the right of each row. Tie 10 rows of knots. There will be fewer knots in each row. Now slip out the ruler and pin the bag to the knee and knot the loose strands at each end together, thus securing the square effect. The first row has two strands to be knotted, the next will have four loose strands, the next six and so on to the lowest row. Now tie the two sides together at the end, knot to knot, to form the bottom, or tie one string around all the

loose ends, thus forming a tassel. Drawing strings may be run through the top loops. More elaborate bags may be made by combining knots.

RECREATION.—Japanese tag is a jolly game. One player is chaser, or "It", and tries to touch or tag all of the other players, the one tagged then becoming chaser. In this form of the game, however, whenever a player is touched or tagged, he must place his left hand on the *spot* touched, whether it be his back, knee, elbow, ankle, or any other part of the body, and in that position must chase the other players. He is relieved of this position only when he succeeds in tagging someone else.

Japanese crab race is another game full of fun. The players are lined up behind a starting line in two or more single files, each containing the same number. Opposite each file, at a distance of from 25 to 40 feet, a circle three feet in diameter should be drawn. The game consists in a race run backwards on feet and hands (or "all fours") to the circles. To start, the first player in each file gets in position, with his heels on the starting line and his back to the circle for which he is to run; all start together at a signal, the player who first reaches his circle scoring one point for his file. Others follow in turn. Until one has tried this, it is difficult to realize how thoroughly the sense of direction and the power to guide one's movements are lost while running in such a position.

A SONG OF HATE.

(Army Remounts.)

I 'ates the British army, an'
I 'ates the army boots.
I 'ates the sight o' rifles, guns,
An' other things wot shoots—

I 'ates the sight o' khaki now:
It puts me orf my feed.
But more than all the bloomin' lot
I 'ates the Centipede.

'E's mine, 'e is, to wash an' comb,
An clean 'is bally teeth;
An' go an' seek 'im w'en 'e strays
Acrorst the flowery 'eath.

I wakes 'im in the mornin', say
At 'arf pars' five or six.
From then until 'e goes to bed
'E's at 'is narsty tricks.

I feeds 'im wiv a ten-foot fork—
I grooms 'im wiv a mop.
'Is 'orrid eye is allus turned
To ketch me on the 'op.

Per'aps I 'its 'im not too 'ard—
The Sergint's sure to shout:
"Stop bullyin' that pore dumb mule,
You gutter-lickin' lout!"

'E kicks out w'en I grooms 'im, an'
'E kicks out on the lead.
It's cause 'e 'as a 'undred 'oofs
I calls 'im "Centipede."

I 'ates 'im in 'is stables, an'
'Is saddle, and 'is cart;
I 'ates 'im everlastin's from
The bottom of my 'eart!

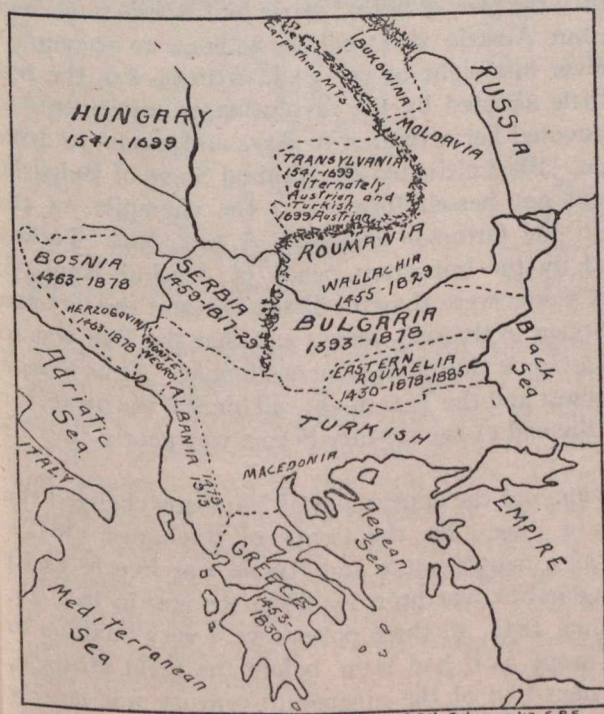
—*Westminster Gazette.*

The Everlasting Balkans

(Continued from the March number).

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But to return to our "muttons" (Turks). Fear of Tamerlane's conquests in Asia Minor delayed them for a time in Europe, but they had crushed the Serbs at Kossovo (1389), thus giving notice to Western Christendom of the terrible conflict before it, and before the end of the fifteenth century had conquered most of what is now called the Balkan peninsula and especially had taken Constantinople in 1453. The importance of this has already been pointed out. Under the great ruler, Suleiman I (1520-66), the dominion of the Turks in Europe was further extended. In the accompanying map the effort is made to show the times of the Turkish conquest, and also of loss, of the various parts of South East Europe



Map 3.—Turkish Empire. The first is that of acquisition, the second of loss (in each case).

Suleiman was a worthy compeer of Charles V of Spain and Germany, of Francis I of France and of Henry VIII of England. During his reign France and Russia entered into diplomatic relations with the Turks and in 1581 Elizabeth of England sent our first ambassador, William Harebone. It was also in Suleiman's reign that Vienna was first attacked by the Turks (1529). After the death of Suleiman the forces of inner decay and of outward compulsion began to

tell. Venice, Austria, Poland and Russia were continually engaged on the offensive and Turkey's embroilment with Mohammedan countries in the East helped on the dismemberment. Turkey's history in the latter half of the sixteenth century is a record of almost yearly treaties with some one or other of its opponents. After the long war of 1593-1606 the peace of Sitvatorok in 1606 marks the end of the Turk's era of conquest in Europe with the single exception of Podolia.

The seventeenth century was fateful for the Turk. The long war with Venice (1644-69) weakened her greatly and Russia and Poland were aggressive. A momentary flash in the pan was the siege of Vienna in 1683 but, under the leadership of John Sobieski of Poland, the Christian forces inflicted a crushing defeat. Coalitions against the Turks became very common and in 1699 the peace of Karlowitz was signed, marking the end of the Turk's power of offence and the first dismemberment of his empire.

The next stage of the everlasting Balkan question was: how long before the Turkish empire will fall to pieces? As events have proved, a good long time, and the issue is still in the balance. From the beginning of the eighteenth century the eyes of both Austria and Russia have been upon Constantinople, but Austria was too busy at home to accomplish much although she never lost sight of her goal. Russia was the real aggressor. She was little affected by the revolutionary movements of western Europe, but devoted her attention to ways and means to drive the Turks from Europe. She cultivated the kindred Slavs of Bulgaria, Bosnia and Servia, and put herself forward as the champion of the Orthodox Christians in the Ottoman Empire. A war with Turkey (1768-74) was followed by the important peace of Kuchuk-Kainarji, of which the important points were that the Black Sea and the Grecian Archipelago were to be open to Russia's vessels and that the Tsar was to have the right to build a Greek church at Constantinople. Thus Russia was made a Black Sea power and the Tsar might call himself the protector of the Christians. At the end of the century Serbia was nearly ripe for revolt.

The French Revolution and the appearance of Napoleon changed the current of thought for a time. By the treaty of Bucharest (1812), Turkey was preserved as a neutral state and Russia was free to assist Austria, Prussia and England to overthrow Napoleon's power in 1813-15. At the congress of Vienna, 1815, all these powers were very anxious to preserve the state of Europe as it had been before the great struggle, and the history of the next half of the nineteenth century was largely the undoing of the policy of reaction then inaugurated. Revolutions broke out in neglected Turkey, in Serbia in 1804, ending in freedom in 1817 and in Greece in 1820, ending successfully in 1829. The Danu-

bian principalities, the present Roumania, became practically independent in 1829 and Egypt under Mehemet Ali moved against Syria. The important treaty of Unkiar Skelessi (1833) closed the Dardanelles to all *foreign* war vessels and seemed to make Turkey quite dependent upon Russia. In 1841 Mehemet Ali was made hereditary pasha of Egypt and the Dardanelles closed to *all* warships.

Russia deemed the time ripe to deal effectively with the "Sick Man" and made proposals in 1844 and again in 1853 that England should receive Crete and Egypt, Constantinople be made a free city and the Balkan states put under the protection of Russia. The proposal was rejected and the Eastern Question slumbered.

In 1850 arose the dispute about "Holy Places" between France and Russia and the Crimean war resulted between Russia, and the Allies, France, England and Sardinia. There now began that series of revolu-



Map 4.—The Balkan States as proposed by the treaty of San Stefano, March 3, 1878.



Map 5.—The Balkan States according to the treaty of Berlin, July 13, 1878.

tions and movements which in the next two decades or a little more was to change thoroughly the face of Europe. In 1861 the Danubian principalities were christened Roumania and in 1866 elected a Hohenzollern as ruler. Greece drove Otto out in 1862. Italy expelled the Austrians and achieved unity in 1866 and 1870. Germany, or rather Prussia, fought its way to its present unity in the war with Denmark in 1864, Austria and Hanover in 1866 and France in 1870-71. Thus in two directions Austria's expansion was made impossible and only the road to Constantinople seemed open. In 1875 Bosnia and Herzegovina revolted against the Turk and Bulgaria followed suit. Russia's Slav and Orthodox sympathies caused her to attack Turkey. Except in the defence of Shipka Pass and of Plevna the campaign was brief and the treaty of San Stefano (March 1878) provided for the independence of Roumania, Servia and Montenegro, for an autonomous Bulgaria to

include Eastern Roumelia, an indemnity and various other points. England opposed and the Treaty of Berlin (July, 1878) re-arranged matters. By it Bosnia and Herzegovina became wards of Austria. But no one was satisfied and the arrangement was short-lived. Roumania became a kingdom in 1881. Bulgaria annexed Eastern Roumelia in 1885, elected Alexander of Battenberg ruler who stayed only two years, to give place in 1887 to the present Tsar, Ferdinand. The careers of Milan and Alexander of Serbia were very discreditable, but King Peter has regained the esteem of the world. In 1882 England was compelled to assume a protectorate over Egypt, France took charge of Tunis in addition to Algiers and in 1911-12 Italy took possession of Tripoli. The Turk was out of Africa.

In 1908 the Young Turks came to power in Constantinople and hopes were high for some measure of constitutional government and some



Map 6.—The Balkan States, October 1, 1912.



Map 7.—The Balkan States according to the treaty of Bucharest, 1913.

decency in affairs. Vanity of Vanities. Austria moved one step nearer Constantinople in 1908 by annexing Bosnia and Herzegovina, protected by Germany "in shining armor" and Russia, lamed by Japan in 1904, had to acquiesce.

The sudden declaration of war against Turkey by the Balkan allies October 3rd, 1913, and their lightning campaign made it look as if the Turk would be cast out of Europe now. One thing came out clearly in the negotiations at London in December and January, 1913-14, Austria would not consent to Serbia retaining Northern Albania and thus obtaining access to the sea. The consequence was that Serbia insisted on a larger portion of Macedonia than had been agreed upon with Bulgaria before the commencement of the war. A fratricidal contest between Bulgaria on the one side and Greece and Serbia on the other, backed up by the mobilization of Roumania made Bulgaria, by the

treaty of Bucharest, 1913, lose most of her vantage-points and left the map of the Balkans quite different from what had been intended. It is said that Bulgaria had two years ago a secret treaty with Germany in regard to the Balkans, and the present developments lend some colour to the statement. At any rate Bulgaria was very sorely disappointed in 1913 and ready for revenge. Austria, too, was greatly exercised by Serbia's progress and what began to look like a shutting of the door of Constantinople. Her hopes for the control of that important city and waterway had been growing since 1699 (Karlowitz) and she could not lightly give them up. If we are to credit the Italian statesman, Giolitti, she was prepared to declare war against Serbia in the fall of 1913 to further her ends and to prevent her own dismemberment. Bosnia, Herzegovina, Croatia, Slavonia were all looking to Serbia and were cherishing the Yugoslav dream. It was generally said that Austria-Hungary was the next Sick Man of Europe, and certain it is from the writer's personal knowledge that Germany, a few years ago, was looking for a break up of the sister Empire as soon as the aged ruler should pass to his fathers.

(To be continued)

Some Naval Devices

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MINE-LAYING.

THE submarine-mine is primarily the defence of the weaker naval power, and therefore a fleet acting on the defensive, either temporarily or permanently, requires more mine-layers than minesweepers, but the reverse is the case of the fleet acting on the offensive. Yet the latter employs counter mines as one way of destroying an enemy's mine field. Even the strongest fleet cannot guard every portion of a long coast line with many exposed harbours. Judicious laying of mine fields will often prevent raids by hostile submarines and torpedo-boats. Submarine-mines can be laid by any vessel. The British have converted some second class cruisers of 3,400-3,600 tons constructed in 1891-2 to this use. These boats have a speed of about 15 knots and an armament of four 4.7 inch quick-firing guns. A crew of 150 officers and men man the ship. The mines can be automatically lowered into the water as the vessel steams along.

The Western Front: Battle of the Somme

(Continued from the March number)

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Second Phase: Clearing the Heights.—The Allied programme of the second phase was filled with work north of the Somme, except one effort of the French southward from Estrées. Just south of the Somme the French line formed a dangerous pocket, running from Biaches to the outskirts of Barleux and then abruptly turning westward to Estrées. This pocket must be enlarged southward. The purpose was completely achieved during the next week; about 3,000 Germans were made prisoners and the line now stretched on from Barleux in the direction of Lihons.

North of the Somme a most difficult task was presented. The third line could not be attacked through the three-mile opening in the second line; the gains must be extended west of Bazentin-le-Petit and east of Longueval. Especially in the latter direction for a second reason; the salient at Longueval was positively dangerous. The British and French line south to the Somme must be swung up in line with the main front west to east, and the whole of the second German defence captured. This completion of the capture of the second system of trenches, together with the clearance of the plateau, comprises the second phase of the operations of the Somme.

From the Somme north-eastward runs a valley through the ridge above mentioned. In this valley is the small town of Combles, and at the far end, on the north and south sides of the valley are the villages of Morval and Saily-Saillisel, respectively. The former was designated as the ultimate British objective; and the latter as that of the French. The line of demarcation between their spheres of action lay down the centre of the valley. This would necessitate the capture by the British of Guillemont and Ginchy, and Lenze and Bouleaux Woods. The French must take in turn Maurepas, Le Forest, Raucourt, and Fregicourt. Combles, it was considered, would be rendered untenable by this movement up each side.

So much for the plans that were being made during the second half of July. In actual fighting the struggle for this same period was centred farther west, at Pozieres. This section was defended by the Prussian Guards most stubbornly. Some of their regiments were almost annihilated. But Pozieres was taken and the line moved near Thiepval.

Throughout August the British battled vainly to the west of Combles; Guillemont was taken and lost time after time. Nor did the French, fighting south of Combles, fare much better, gaining Maurepas alone. The Germans were stiffening their defence; their strong fortifications had given them the necessary time to send up reinforcements.

During the first half of September, however, the Allies renewed their efforts in a general assault on the whole front. The British stormed Guillemont and, later, Ginchy also. The French moved on too, capturing Le Forest south of Combles and Clery on the Somme.

Morval and Saily-Saillisel to the east and Thiepval to the west presented two very difficult problems; each of these parts of the front commanded all the ground round it, and there was no sheltered way of approach. The only solution was to push on in the British centre. Accordingly on September 15, an attack was made over this sector. It met with almost immediate success; by September 18, Flers, (the occasion of the first use of the "tanks"), and ground to the south-east toward Morval, together with Martinpuich and Courcellette to the west, fell to the British. (It was at the latter place that the Canadians acquitted themselves so commendably). This fine drive is comparable to the work of the first days of July. In a similar drive a week later the British carried Morval, Lesboeuvs and Guendecourt. The French, acting jointly in this latter attack, carried the villages of Raucourt and Fregicourt east of Combles. And as a result of these successes the enemy evacuated Combles.

The ridge was now practically cleared. Only Thiepval on the western end held out. This position may fairly be described as being as nearly impregnable as nature, science, and the unstinted labour of nearly two years could make it. Here were the oft-heard-of redoubts—Zollern, Stuff, Schwaben, and Mouquet Farm—as well as the village itself. But an attack was launched in such magnitude as to guarantee success, and so quickly that the enemy had had no time to recover from the blow farther east. The whole position was stormed on September 26.

Thus was the second phase, of clearing the heights, brought to a close. The French were still battling for the narrow and most difficult country around Saily-Saillisel. Otherwise the Allies had complete control. During the seven weeks, July 15th to September 2nd, it was a closely-contested struggle, a real test of the courage and endurance of the two opposing forces. But by September 3rd, in the capture of Guillemont, the Allied forces had established a fighting superiority. The number of prisoners and guns captured during the September part of the second phase, compares quite favourably with the records of the first phase up to July 18th.

Third Phase: Down Hill.—In the direction of Bapaume nothing formidable seemed to present itself against a successful drive down the northern slope—the hopeful third phase of the Allied offensive. Though the enemy had been feverishly constructing defences, nothing like the former ones could be prepared in the time afforded. But it was desirable that no time should be lost in dealing the blow.

Eaucourt and Le Sars were taken during the first week of October, and all promised well for the future. Unfortunately at this juncture very unfavourable weather set in and continued with scarcely a break during the remainder of October and the early part of November. It was during this period that the fierce fighting around the Butte de Warlencourt took place; it was stormed and lost time and again, and finally rested in the enemy's hands. The French captured the village of Sailly-Saillisel in mid-October, but the moment for decisive action was rapidly passing away, while the weather showed no signs of improving. By this time, too, the ground had already become so bad that nothing less than a prolonged period of drying weather, which at that season of the year was most unlikely to occur, would suit the Allied purpose. All that could be done under the circumstances must necessarily be in the form of local readjustments and improvements, awaiting more favourable conditions.

The weather cleared about November 10th and General Haig improved the occasion by a brilliant attack on the salient north of Thiepval. In the course of these operations more than 7,000 prisoners were taken; strongly fortified positions were reduced; the heights on each side of the Ancre were secured. This latter advantage was considerable, as bad weather was again upon them, and largely put an end to the conflict.

General Results.—In spite of the fact that the heavy autumn rains prevented full advantage being taken of the favourable situation created by the Allied advance, yet the three main objects had already been achieved. Verdun had been relieved; the main German forces had been held on the Western Front; and the enemy's strength had been very considerably worn down.

Concerning the last of these, General Haig declares that fully half the enemy forces engaged on the western front suffered defeat; he states that the morale of many of the divisions was perceptibly lowered; he estimates their losses in men and material as considerably higher than those of the Allies. The trophies of victory amounted to 130 heavy guns, 173 field guns, 981 machine-guns, 215 trench-mortars, and 73,000 officers and men. A little over half of these captures are credited to the British.

And in the case of the British it is to be remembered that these splendid results were obtained by the new armies, most of the men of which had first taken up a rifle within the last 18 months. These soldiers showed they could carry drives or could endure the toilsome gruelling. The balance of the credit can be placed in improvement along three particular lines—efficient staff work, superior aircraft service, and the wonderful co-operation of artillery and infantry.

Operations Elsewhere than on the Somme.—While required to give precedence in all respects to the Somme armies, the Allied forces on the other parts of the front were not without their allotted tasks. Theirs was the duty of protecting the Allied line at every point, of keeping the enemy in front of them engaged, and of learning of his dispositions through the medium of trench raids. All these duties were splendidly met.

As the year drew to a close the French at Verdun carried out a brilliant piece of work to the north-east of that fortress. The Germans had felt safe in weakening the line east of the Meuse where the fighting of the Spring had taken place. In a grand assault on December 15th, and three days following, an important sector of the ground was recovered to the north-east of Verdun—a region six miles wide and over two miles deep. Included in this area were Vacherauville, Hardaumont, and Pepper Ridge. The captures netted 115 cannon, 44 bomb-throwers, 107 machine-guns, and 11,383 prisoners. The aggressive Nivelle, shortly to become the Commander-in-Chief of the French, assisted by General Petain, planned and executed this coup that so fittingly and advantageously ended the 1916 campaign, the earnest of an even more successful campaign in 1917.

A PERPLEXING QUESTION.

Prof. C. F. Marvin, head of the United States Weather Bureau, tells in *Lippincott's Magazine* the story of an expedition from the University of Pennsylvania, that was sent to one of the Southern States, some years ago, to observe a solar eclipse.

The day before the event, one of the professors said to an old coloured man who was employed in the household where the astronomer was quartered:

"Sam, if you will watch your chickens to-morrow morning, you will find that they'll all go to roost at eleven o'clock."

Sam, as might be expected, was skeptical, but at the appointed hour the heavens were darkened, and the chickens, as foretold, retired to roost. At this the old negro's amazement knew no bounds, and he sought out the man of science.

"Perfessor," said he, "how long ago did you know dem chickens would go to roost?"

"About a year ago," said the professor, with a faint smile.

"Well, ef dat don't beat all!" was Sam's perplexed reply. "Why, perfessor, a year ago dem chickens wa'n't even hatched!"

Italy's Part in the War

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The Scene of Conflict

Take your map of Italy or of Austria and observe closely the boundary which separates these countries from each other. You will then see how the Alps sweep in a great semi-circle from the French frontier on the Mediterranean to the Austrian frontier on the Adriatic, then south in a range known as the Carso. This mighty succession of rocky peaks forms a natural bulwark for Italy, cutting it off from the nations on the north. But in two places this natural sweep of the Alps is dented towards the south, in the Trentino region in the west and in the Trieste region of the upper Adriatic. Austria, by stretching down at these two points, has firmly established her sway over populations which are largely of Italian origin. Her control of the Trentino dates from the time of Napoleon and of the Trieste region from the war of 1866. These two regions form what is known to the Italian people as "Italia irredenta" or Italy unredeemed.

The Austrian Plans

When war was declared between the two countries on May 23rd, 1915, Austria was more prepared for the struggle than her rival. Possessing the passes and ranges to the farthest south, she had fortified these natural strongholds by the mounting of heavy guns in such a way as to dominate the plains of Lombardy and their approaches to the north and east. The army of Italy was still in process of formation and resources in munitions were meagre. The delay of the Giolitti ministry in deciding on a policy and the presence of a strong pro-German element in the governing class caused dissensions which injured the plans of the Italian military staff. All these things were well known to the Austrians, whose chief strategic plan involved a swift descent on the plains and a campaign against Lombardy and Venetia which would emulate in frightfulness that of the German army in Belgium. By land, sea, and air the attack would be made and Italy would soon be brought to her knees to sue for peace. For this end an army of 300,000 was concentrated on the Italian frontiers.

General Cadorna's Stroke

But General Cadorna struck first. The Italian troops began to move, as soon as war was declared, with a celerity and strategy which made up for the inferiority in guns and munitions. The western army operating against the Trentino was composed of 400,000 and a second army of 600,000

began an advance against the great seaport of Trieste. This rich prize is only about ten days' march from the frontier, by a route following the sea-coast over a comparatively level stretch of country. To take the city would not have been a difficult task; to hold it would have been well-nigh impossible. Back of Trieste, in semi-circular shape, sweep the Carso mountains on every crest of which the Austrians had posted heavy batteries which commanded the whole plain.

Along the Isonzo Front

The Italian commanders decided therefore that it was a military necessity first to control all the approaches and mountain defences circling about Trieste. To this end an attack was made against the positions along the Isonzo river, with the town of Gorizia as the main objective. Anticipating this, the Austrians had destroyed the bridges and by the breaking of a dam had swollen the river, already high with the spring floods. The Italians, by exerting great skill and persistence, finally succeeded in effecting a crossing and captured the town of Monfalcone on June 9th. This gave them a foothold on the sea-shore and farther north an attack was begun against Tolmino on the other side of Gorizia. Then began the slow and tedious process of gaining control of the elevated positions. This required the movement of troops along mountain roads, narrow, winding, and precipitous; the placing of heavy guns on great heights by means of special machinery devised by Italian engineers; and the fortifying of the mountain sides. Nowhere have the armies of the Allies had to contend with difficulties greater than those which faced the brave troops of Italy. In these operations the Alpini, or mountain troops, distinguished themselves by their wonderful bravery and endurance.

Summary of the 1915 Campaign

Meanwhile the mobilisation of the nation's forces was going on apace. But the army was using ammunition much faster than the country could produce it. Added to this the winter was coming on, whose severity in the Alps would make offensive warfare almost impossible. It was deemed wise to have recourse to trench warfare and to hold what had been gained. But in this short campaign of a few months much had been accomplished. At the close of 1915 Italy was in possession of all the important heights and passes. In the west the army had advanced about twenty miles along the whole frontier and had captured the town of Rovereto, half way to the city of Trent, as well as numerous lesser towns and strategic positions. In the west the army had advanced twenty-five miles on the way to Trieste and captured twelve important towns, including Monfalcone, Gradisca, Grado, San Pietro and other important posts.

The Great Austrian Drive of 1916

In the month of May, 1916, the Austrians began their great offensive in the Trentino. It was preceded by intense trench fighting on the Isonzo, a ruse commonly adopted by the enemy when concentrating on another front. Superior in cannon and in men which had been drawn in great part from the Russian front, they suddenly swept down on the Italian trenches with irresistible force and poured into the valley of the Adige and of the Brenta. The object was two-fold, to plunder the plains of Lombardy and Venetia and to drive a wedge between the Italian armies. It was a bold stroke and if successful would have ended in a great disaster for the Italian nation. But Cadorna's men, though driven back as far as historic Veneto, held stubbornly to the task. The important towns of Asiago and Arsiero were practically destroyed by the enemy. In the beginning of June, the Italians, reinforced in men and guns, resumed the offensive, driving the Austrians back with great losses in soldiers and guns. The end of the month saw the enemy completely foiled in his attempt, having lost 160,000 men in the struggle.

The Fall of Gorizia

Having defeated the Austrians' plans in the Trentino, the Italian military staff concentrated their resources for an Isonzo offensive. On August 7th the Austrian strongholds on the lower Isonzo and the bridgehead of Gorizia were taken. Two days later the city itself was captured after a battle in which the Italian forces distinguished themselves by their bravery and skill in attack. Besides great quantities of material abandoned in hasty flight, the Italians took in the three days' fighting over 18,000 prisoners.

The Carso Campaign

The autumn of 1916 witnessed the beginning of operations against the positions on the Carso plains and the heights which give access to the city of Trieste. By the middle of October the drive was in full swing and had already brought the fierce-fighting Italians within a few miles of the coveted and "unredeemed" seaport which commands the upper Adriatic. But the advent of winter has brought a cessation of strong offensive action and it will be in the spring that Italy will, in all probability, complete the conquest of both the Trentino and the Carso.

Work of the Navy

The navy of Italy, under the command of the Duke of the Abruzzi, has done signal service to the cause of the Allies in the Mediterranean. At the beginning of hostilities, co-operating with the land forces, the navy took the ports of Grado and Porto Buso at the head of the Adriatic. Later

it succeeded in bottling up the main Austrian fleet in the harbour of Pola. Several minor engagements have taken place, with the honours resting with the Italian fleet, which has captured or sunk several submarines and transports. The navy has assisted materially in lessening the submarine danger to the transports and merchant vessels of the Allies. It also made possible the escape of the main part of Serbia's defeated army and acted as convoy for the Italian forces which are now in the Balkans to assist the armies of General Sarrail.

Some Naval Offensive and Defensive Devices

TORPEDOES.

A modern torpedo varies in length from 14 to 19 feet and weighs up to half a ton. It has an extreme range of 4,000 yards, or just over 2.25 miles. The latest pattern Whitehead torpedo is propelled by compressed air stored in that section of the weapon known as the air-chamber. The air on being released is heated and expanded in a tiny three or four cylinder engine which operates twin screws. The war head contains about two hundred pounds of wet gun-cotton which is exploded on the torpedo striking an object. It maintains a speed of 42 knots for 1000 yards, which gradually decreases until it would average about 28 knots for 4,000 yards. Thus if discharged at a distance of half a mile it reaches its object in about 45 seconds. They are fired into the sea from surface or submerged tubes, and on striking the water are propelled by their own engines in an absolutely straight course towards the target. The accuracy is automatically controlled by a rotating wheel, the gyroscope. When fired from the surface the torpedo sinks immediately to a depth of about ten to fourteen feet and maintains this depth until it strikes its object. This extent of submersion makes it almost impossible to destroy an approaching torpedo by gun-fire.

MOSQUITO-FLEET—"SEA WASPS".

A very effective submarine chaser recently employed by the hundreds is a motor boat some eighty feet in length which draws only four and a half feet of water. As a torpedo travels at a depth of from twice to three times this, it is free from any possibility of such an attack. These "wasps" have a speed of twenty knots, which is greater than most submarines. Each "chaser" is armed with a three-inch rapid-fire gun mounted on the forward deck. A submarine is very vulnerable to such a weapon.

The Submarine Blockade

[Some points of interest in connection with the German submarine blockade of Great Britain gathered from various reliable sources for class use.]

JOHN B. BRENNAN, B.A.

Principal, Queen Victoria Public School, Toronto

IT appears to have been the ancient practice of belligerents at the outset of a war to forbid by proclamation all trade on the part of neutrals with the enemy and to treat as enemies all those who disregarded this proclamation. Early in the 17th century, however, the validity of such a practice came into question, because it was felt that it imposed on the commerce of neutrals an inconvenience not justified by any adequate necessity on the part of the warring nations. The practice has since fallen into disuse.

Belligerents have still maintained, and neutrals have never questioned their right, the practice of intercepting supplies going overseas to an enemy under certain conditions, viz., when a belligerent has invested an enemy's ports with the intention of reducing the enemy to surrender from the failure of supplies, and for that object a stoppage of all supplies to such ports has become a necessary operation of war. When the ports of a nation have been so invested as to prevent any ships from entering or leaving its harbours, such nation is said to be under blockade.

As a blockade seriously interferes with the ordinary commercial right of trading with every place, international law carefully limits its operation. The general principle laid down is this: belligerents are not entitled to do anything likely to incommode neutrals more than it benefits themselves. Neutrals are therefore entitled to disregard a blockade except it be effective, that is, unless the country blockaded be invested by a fleet sufficient to prevent the ingress and egress of vessels to or from its ports. It is also recognized that notification of a blockade should be formally given before it is enforced, and that neutral vessels be granted permission to depart, carrying with them any cargo which they may already have on board. When a blockade has been declared, any one running it does so at his own peril. The blockade runner's own government cannot by international law protect him from forfeiting his vessel, its cargo, and his liberty, if he be captured by the blockading fleet.

The laws relative to the use of the seas in war time by neutral nations have from time to time been determined by a conference of the nations. The last conference of the powers was held at London in 1908 for the purpose of settling the rights of belligerents to interfere with neutrals'

traders. The discussions which took place and the resolutions which resulted are comprised under four heads:

- I. What articles shall be deemed contraband.
- II. The doctrine of the continuous voyage.
- III. The destruction of neutral prizes at sea.
- IV. The rules regarding blockade.

I.—Regarding contraband it was finally decided to recognize three classes of goods: (*a*) absolute contraband—munitions or articles used exclusively in war; (*b*) conditional contraband, including such articles as clothing and foodstuffs; (*c*) a free list, consisting of such articles as cotton, wool, jute, rubber, hides—in short all things used for industrial purposes.

II.—The doctrine of the continuous voyage aroused much discussion, but it was finally decided “that absolute contraband is always subject to seizure when being conveyed to a belligerent nation, whether the voyage be direct or indirect, and that ultimate destination alone justifies seizure of contraband”, but the doctrine was not made to apply to conditional contraband. It will readily be seen from the experiences of the present war that this decision was greatly to the disadvantage of Great Britain on account of her isolated position. A country like Germany, for instance, bordered by neutrals, could import all the foodstuffs and other conditional contraband she needed through neutral ports with the greatest possible ease, while every cargo of such goods bound for the island ports of Great Britain would be liable to stoppage and seizure. The British, having every confidence in the ability of their navy to protect neutral commerce as well as their own, did not offer much opposition to this resolution.

III.—When the question of the treatment of captured neutral vessels came to be considered, Britain, Spain and Holland were opposed to the destruction of captured neutrals under any circumstances. The United States wished to make provision for the sinking of a neutral in extreme cases such as the presence of plague or of unseaworthiness. Germany stood out for the right of a belligerent to destroy a neutral if the captor considered himself or the success of his operations endangered by preserving the neutral. Ultimately it was decided by Article 48, “that a neutral vessel that had been captured may not be destroyed by the captor; she must be taken into such port as is proper for the determination there of all questions concerning the validity of the prize.”

While this was intended to be the general method of procedure in dealing with captured neutrals, an exception to the general rule was allowed by Article 49 which permitted the belligerent to destroy a

neutral which would be liable to condemnation if preserving her involved danger to the safety of the warship or the success of the operations in which she is engaged at the time. It was provided also that in such a case all persons on board the vessel to be destroyed must be placed in safety, and that the ship's papers and all documents needed to prove the validity of the capture must be taken on board the warship. Stress was laid on the point that such destruction was to be an exceptional case, and was lawful only if the vessel was liable to condemnation upon the facts of the case.

IV.—The old doctrine of blockade demanded that it should be maintained by an encircling line of stationary warships a certain distance off the blockaded coast, but the conference recognized that with modern mine-laying operations, the use of the wireless and the changed conditions of naval warfare, the old rule required a readjustment. It was therefore decided that the essential condition of a blockade should be that it be effective, and that it must be maintained by a force really sufficient to prevent access to the enemy coast-line. The question of whether a blockade was effective or not was "a question of fact". It was also determined that a blockade must not extend beyond the ports and coasts of the enemy nor bar access to neutral ports or coasts.

The foregoing are some of the resolutions of the conference. The decisions arrived at are known as the Declaration of London. The Declaration was duly signed by the representatives of the powers. It had been the intention to establish an International Prize Court at the Hague, which court would be governed in its findings by the terms of the Declaration of London, but the Declaration was never ratified by the governments concerned. However, it stood in international law as a document representing the consent of the powers as to what should be law if a competent court were established to enforce its terms and was therefore morally binding on all the nations whose representatives had signed it.

A nation's conduct must be judged by her actions in war time no less than by her action in time of peace. From the very outset of the present war, Germany has shown a ruthless disregard not only for international law, but for the laws of humanity. Her unwarranted and treacherous invasion of Belgium and Luxemburg, and her inhuman treatment of the population in the districts she was by force of arms able to occupy, indicated only too clearly that Germany was determined to be a law unto herself. At once, too, she began to lay mines of a forbidden type around the English coasts. This was illegal, in so much as it endangered peaceful shipping. To meet this Britain removed copper, metallic ore, rubber and other things from the free list and made them conditional contraband, but on Germany's insistence on illegal methods, she finally

made them absolute contraband and included in the list such articles as nickel, aluminum and wire. This action on the part of Great Britain diminished Germany's supplies to so great an extent that in January of last year the German government placed all foodstuffs under its control. So effectually did the British and French navies do their duty that in desperation Germany proclaimed a war-zone for the operation of submarines. Her navy, bottled up as it was in the Kiel canal, could not enable her to declare a blockade under recognized rules. Nevertheless she declared a blockade by establishing a war zone which included the whole of Great Britain and Ireland and part of the French coast and within which she proclaimed her intention of operating with submarines not only against war vessels as hitherto, but against merchant ships and neutrals presumed to be carrying contraband. In fact all neutrals, irrespective of cargo or destination, were warned that they approached the British coasts within this zone at their peril. To this Britain and France replied by declaring that all goods of German destination, origin, or ownership, were to be treated as contraband, and neutral vessels suspected of carrying such goods were liable to be detained and taken into port for examination when on their way to the ports of countries adjacent to Germany.

The culmination of these measures of reprisal came on February 1st, 1917, when Germany, in her endeavour to starve Great Britain, as she herself has been starved, declared her intention of extending her submarine warfare. She proclaimed that on and after that date all vessels entering the zone marked out for the operation of her submarines would be sunk without warning. By this diabolical measure she hopes to annihilate British commerce. She is staking all on her submarines and if her expectation of sinking a million tons of shipping per month should be realized, the effect would be very weakening to the arms of Great Britain and France.

The question at present uppermost is—Will the vaunted undersea terrors of Germany succeed in their aim? If we have any doubt of Great Britain's ability to cope with this new danger it is because we have not fully realized the magnitude of the task Germany has undertaken, or because we have not thoughtfully considered the immensity of the shipping resources and the port facilities of Great Britain.

In this connection, the *National Geographic Magazine* points out the following interesting facts: In the coastline of the British Isles (1,600 nautical miles measured from headland to headland) there are 119 ports, 80 of which are, even at low tide, open to vessels drawing 14 feet of water. There are more bays and navigable indentations than in any other coast line of equal length in the world. In an ordinary peace year an average of 214 ships from foreign ports and 780 ships engaged in coast trade

arrive at the ports of the British Isles *every day* in the year. The tonnage of the British merchant marine is greater in the aggregate than those of all other nations combined. It includes 12,000 ships, of which number about 2,800 sailing vessels and 5,300 steamships are engaged in the home trade. About 4,000 ships, averaging 2,500 tons net, sail between British and foreign ports. Four hundred and sixty-five steam vessels (aggregate capacity 1,788,000 tons) were under construction in British shipyards at the end of 1916.

Even if the Germans have 500 submarines for use in the blockade, this is an average of about four for each of the 119 ports of the United Kingdom. But a submarine, being dependent upon a base or a "mother ship" cannot be on duty continuously. Hence an average of two per port would be a reasonable estimate on the basis of the German claims. "Two submarines to a port could hardly maintain a blockade in the condition which the ordinary interpretation of international law has required to give it recognition among neutrals".

Although the U-boat is at present a real menace its effectiveness as a war machine is being diminished daily. Up to the present (February 26th) the submarine warfare is falling far behind the schedule laid out for it, and from the first of February last when Germany's murderous scheme became operative the daily average toll has been steadily diminishing. It has been stated by Lord Curzon and Admiral Beresford that Great Britain had 15,850,000 tons of shipping on February 1st. At the daily average rate maintained by the submarines since then (11,839 tons per day) it would take 1,338 days for the submarines to sink all British ships, even provided that the shipyards of Great Britain remained idle while the submarines were operating.

The following stories contain a moral sufficiently clear to student-teachers and others who are required to "develop" the obvious, and to "teach" twelve-year-olds matter which an eight-year-old should remember with one "telling."

Alice came home from school in a high state of enthusiasm. "O, mother, we had a nature study lesson on the pumpkin. We learned that though the seed is yellow the vine will be green."

"Yes, dear, and what colour will the flower be?"

"I don't know," replied Alice. "O, yes, you do; we have pumpkin flowers in our garden. Just think."

"We're not supposed to know what colour it will be till we're teached," said Alice indignantly.

To the same end points this story vouched for by a graduate of Geneseo (N.Y.) Normal School.

A class was brought in from the Model School and an unfortunate student appointed to experiment upon it for the benefit of the teachers-in-training. But she failed dismally to get one of the answers necessary to the proper "development" of the lesson. At last a small boy raised his hand and said, "Please I know the answer you want, but that question won't bring it."—*A Toronto Teacher.*

Nature Study for April

E. ALICE FENWICK, B.A.

Teacher-in-training, Faculty of Education, University of Toronto

THE BLUEBIRD.

Winged lute that we call a bluebird,
You blend in a silver strain
The sound of the laughing waters,
The patter of Spring's sweet rain;
The voice of the winds, the sunshine,
And fragrance of blossoming things.
Ah! you are an April poem,
That God has dowered with wings.

—*The Bluebird*, Rexford.

Introduction.—The range of our common bluebird is from Newfoundland to Eastern Manitoba, but it is especially abundant in Western Quebec and in Ontario. The bird is as beneficial as it is beautiful, for during its entire life it is a great friend to man. Accordingly, apart from the enjoyment which a study of the bluebird would give, we should study the bird and its habits and learn how we can aid and protect it in every way.

The observations for the lesson on the bluebird should be made, if possible, in the fields by the pupils, and each pupil should be given a set of questions which he is expected to answer after having carefully observed the bluebird.

Observations to be made by the Pupils.—1. When does the bluebird come north to Ontario?

2. What is the size of the bluebird? Are all its feathers of one colour? Why is the shade of blue so suitable? Is there any difference between the colouring of the male bird and that of the female? Under what conditions can you see most plainly the colours of the bluebird? Why?

3. Describe the song of the bluebird. Does he sing all summer?

4. Where do you see the bluebirds? What are they doing?

5. Where do bluebirds make their nests? Of what material are the nests composed? What is the size and shape of the nest?

6. What is the colour of the eggs of the bluebird? How many eggs are in a nest? During one season how many broods are hatched in one nest? Describe the appearance of the young bluebird.

7. Describe the way in which the bluebird obtains its food. What does it eat?

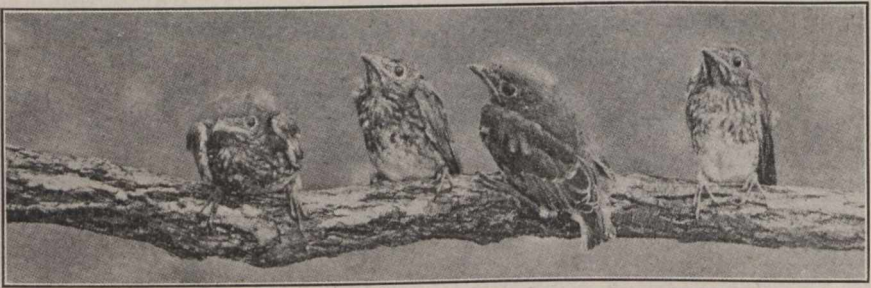
8. Name the chief enemies of the bluebird? Why should we protect it? How can we accomplish this?

9. When do the bluebirds migrate to the south? Where do they spend the winter?

10. Are there any points of similarity between the bluebird and the robin? What are the resemblances? What are the differences?

Information for the Teacher.—1. The bluebirds usually come north a short time before the robins. They arrive in Ontario about the middle of March, and their soft, rich notes announce the coming spring.

2. The bluebird is about seven inches long. The upper part of the bird—its head, back, wings, and the top of its tail—are bright blue. The blue feathers are smooth and shiny and among leaf shadows, or even among bare trees, they blend with the surroundings and make the bird less noticeable. The throat, breast, and sides of the body are reddish



YOUNG BLUEBIRDS

From *Birds of New York*.

Published by the University of the State of New York.

Photo by L. S. Horton.

chestnut, while the under part of the body and the lower tail-coverts are whitish. The female is paler than the male, being grayish-blue above and having only a tinge of chestnut on the breast. The blue colours of the feathers can be most plainly seen when the bird is in the sunshine, and when it is on the wing.

3. The bluebird's song is soft and rich and sounds as if he were singing, "tru-al-ly, tru-al-ly." In spring the song is cheery and joyous but in autumn one seems to detect in it a note of sadness. In April, when the bluebirds are hard at work feeding the nestlings, they cease singing; but in June before the second brood is hatched they sing again.

4. The favourite haunts and breeding-grounds of the bluebirds are open woods, fields, gardens, orchards and farms. They flit about in companies of three or four until they finally select their mates.

5. The bluebird's nest is usually built in a hole in a tree or post, in a box, or in a birdhouse. A hollow apple tree is a favourite nesting site. The nest is generally made of soft grass, and is placed from six to fifteen

feet above the ground. The cavities in which the bluebirds make their nests are, on an average, ten inches deep, six inches high and six inches wide.

6. The five eggs of the bluebird's nest are light blue. Two broods are hatched each summer. The young birds in their first feathers are spotted on the back and have whitish breasts mottled with brown.

7. While feeding, the bluebird usually sits on a low branch and keeps a keen eye on the ground below. Now and then it drops suddenly upon an unsuspecting insect and then returns to its perch. It does not remain on the ground hunting for food as does the robin. The food of the nestlings is almost entirely insects, while that of the adults is only three-fourths insects, the remainder being wild berries and wild fruits. Since



BLUEBIRD AT NEST

From *Birds of New York*.

Photo by James H. Miller.

Published by the University of the State of New York.

the bluebird does not eat our cultivated fruits, but makes a specialty of injurious beetles, caterpillars, and grasshoppers, it assists rather than injures the garden or orchard.

8. The chief enemies of the bluebird are cats, squirrels, and English sparrows. Bluebirds are good friends to man, and they rid our plants and trees of many injurious insects. We can assist them by making out of old boards or sections of tree-trunks, boxes for their nests. These should be of the same colour as the surroundings so as not to be noticeable and they should be placed from six to fifteen feet above the ground. If barbed wire is wound around the post or tree below the box, the bluebird will not be molested by cats or squirrels. There should be no threshold or ledge on the box for it is of no use to the bluebird, and if present, sparrows will alight on it and dispute with the bluebird the possession of the nest.

9. The bluebirds migrate in flocks during autumn, but in a leisurely manner and with frequent stops where food is plentiful. Usually, however, all the bluebirds have disappeared from Ontario by the first of October. They winter in the Gulf States, for the most part, and have been heard singing in southern Mississippi in midwinter. They are probably the only birds that sing while at their winter resorts.

10. As a review exercise, the pupils might be asked to compare the robin and the bluebird. The chestnut breast of the bluebird is the only point of resemblance to the robin, although both the young bluebird and young robin are spotted, showing thrush colours. The robin is larger than the bluebird and hunts for its food on the ground. The robin's song is more complex and assertive than the soft rich song of the bluebird, but there is a family resemblance in the voices of the two birds, for both are members of the thrush family, the members of which are noted for their exquisite song.

Naval Offensive and Defensive Devices

MINE SWEEPERS.

For cleaning away mines dropped by an enemy, special vessels are employed. Each is fitted on both sides with a curious contrivance known as the "picking-up gear". This apparatus is lowered into the water, and "picks up" any mines which may lie in the path of an oncoming fleet. When a mine field is discovered by either destroyers or seaplanes these vessels are immediately dispatched to destroy it; and they are aided by a large flotilla of steam trawlers. Many of these auxiliary vessels are not fitted with picking-up gear, but go to work in pairs, connected together by a long wire rope weighted in the middle to keep it submerged. Ranging themselves on each side of a mine field, they steam ahead in a parallel line, sweeping up the mines floating between them. It often happens during sweeping operations that mines are brought into contact with each other and violent explosions occur. Sometimes the vessels engaged in this hazardous task will themselves strike one of the mines, but it is more often the searching flotillas of destroyers which meet with sudden disaster in this way. Seaplanes make the best searchers. Fully equipped mine sweepers usually precede a fleet of battleships and big cruisers. The British employ obsolete torpedo gunboats specially fitted out for the work of mine-sweeping.

The March Competition in Art

OWING to lack of space we are reproducing fewer prize drawings in this issue. Very creditable designs for a curtain border were submitted in the Lower School competition. The copies of Historic Ornament entered for competition by Middle School students were not so well done as in most instances.

The committee wishes to emphasise again condition 4—namely, that drawings *must* be original, and not copied. Quite frequently drawings are received showing greater mathematical precision and exactness than could reasonably be expected from the pupils of Forms I and II, Public School, in making original drawings. In the higher forms, drawings are received which bear clear evidence that they were not made from any actual scene or object. Such drawings cannot be considered.

The following are the names of prize-winners from Public and Separate Schools:—

A. Forms I and II.

First Prize—Helen Dunbar, Ryerson Public School, Owen Sound.
Teacher, Miss M. Taylor.

Second Prize—Thomas Couling, Frontenac Public School, Kingston.
Teacher, Miss K. Elliott.

Third Prize—Leo Bouillon, Sacred Heart School, Chapleau. Teacher,
Miss Berna Downey.

Honourable Mention for Merit—Irene Berhalter, Georgette Michaud, Leo Lynch, Edmond Michaud, Jean Berry, Willie Ambrosia, Doris Glynn, St. Joseph's School, Thorold. Herbert Saunders, Matilda Wart, Maud Sinclair, Bessie Coulter, Pearl Peters, Frontenac Public School, Kingston. Evelyn Catchpole, Rhoda McFarlane, Elmer Green, Jimmy Jones, Percy Lavery, Clayton Taylor, Hazel Manning, M. Harton, Cora Stewart, Olga McQuade, Dufferin Public School, Owen Sound. Elva Bonnell, Corena Cheer, Donelda Cunningham, Joe Ramsey, Agnes Ward, Ernie Long, Cecil Biggar, Jennie Parks, Gordon Bredin, Clifford Goldsmith, Marie Johnston, Boston Patterson, Ruby Ramsey, Jack Sutherland, Ryerson Public School, Owen Sound. May Boucher, Henry Simard, Louis Therriault, Marguerite Dumontelle, Harvey Martin, Charles Tiviluk, Therese Martin, Gilbert Boucher, Sacred Heart School, Chapleau. Lauretta Hamel, Delia Gaudreau, Valeda Gatien, St. Ignatius School, Steelton. Lawrence Campbell, St. Patrick's School, Hamilton.

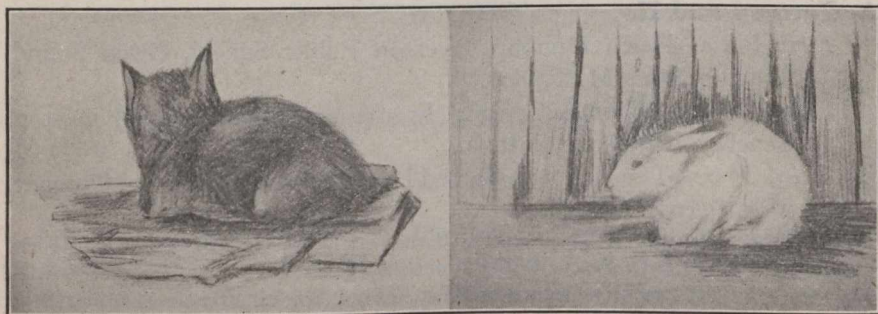
B. Forms III and IV.

First Prize—Jean McDonald, Ryerson Public School, Owen Sound.
Teacher, W. Douglass.

Second Prize—Mabel Potts, Dufferin Public School, Owen Sound.
Teacher, T. A. Reid.

Third Prize—Viola Secord, S.S. No. 16, Nanticoke. Teacher, E. W. Glennie.

Honourable Mention for Merit—Gordon Meredith, Arthur W. Lane, Gibraltar Public School, Limehouse. Eldon Tiffin, Leone Simpson, Tupperville Public School. M. Barrie, Candles Public School. George Parent, Notre Dame School, Ford. Gordon Cyr, George Sinnet, Patrick Muzzo, Allen Sinnet, Wilfrid Urlocker, St. Joseph's School, Thorold. Mildred A. Downey, Frontenac Public School, Kingston. Edith Moon, Clare Gurnett, Ruby Parker, Louis Campbell, Jean Fraser, Clare Vick, Janet Gilchrist, Beatrice MacAllister, Dufferin Public School, Owen Sound. Charlie Banks, Madelean Cooke, Kenneth Davis, Kenneth Nelson, Maude MacPhater, Vera Milson, Olive English, Isabel Richard, H. L. Banks, Ilma Allison, M. Kindree, E. Kennedy, H. Ellis, Janet Smith, Ora Ellis, Harry Bonnell, Ryerson Public School, Owen Sound. Hilda Sampson, Blanche Martin, Clara Martin, Delia Martin, Angeline Bucciarelli, Andie Burns, Victoria Stadnisky, Aline Petrowsky, Lizzie Brunette, Sacred Heart School, Chapleau. Myrtle Tasker, Seaforth Public School, Seaforth. James McClellan, South Central Public School, Peterboro'. Harvey Montgomery, S.S. No. 3, Grantham, St. Catharines. Hazel Taylor, Daisybelle Blake, Irene Oullette, Agnes Gelinis, S.S. No. 5, Sandwich East. Nellie Fess, Humberstone Public School. Tommy Kearney, Willie Goulet, Ethelreda Ryan, Mary Ryan, Eganville Separate School. W. Brennan, John Kurdzul, Eileen Hamilton, James Valley, Geraldine Kew, Jenny Symezk, St. Ann's Public School, Hamilton. Vera Haynes, Helen Stuart, J. Dou, Phyllis Tyson, St. Patrick's Public School, Hamilton. Ethel Garner, Cathedral School, Hamilton.



JEAN McDONALD—First Prize.

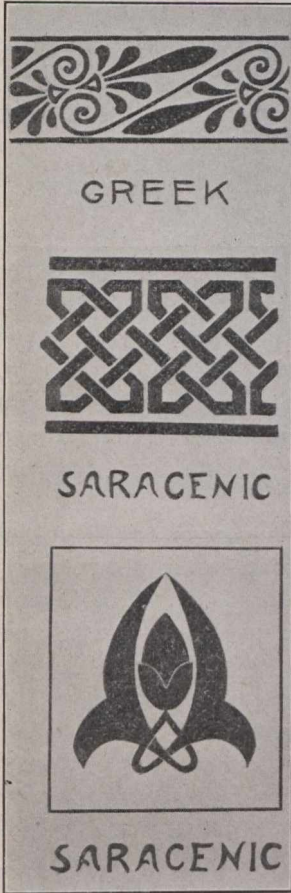
C. Lower School.

First Prize—Susie MacLaurin, Collegiate Institute, Fort William. Teacher, Miss E. M. Shepherd.

Second Prize—Muriel Lea, Loretto Day School, Toronto. Teacher, Sister M. Constantia.

Third Prize—Myrtle J. Card, Continuation School, Odessa. Teacher, Miss P. M. Austin.

Honourable Mention for Merit—D. Nelson, Erich Bartman, A. Johnson, Tom Walsh, L. Colefeb, Norman Bethune, R. Ogilvy, Collegiate Institute, Hamilton. Mary Dobell, Evelyn O'Neill, Rita Harrison, Eileen Coughlin, Gertie Connell, Mary Byce, Dorothy Dennis, Hilda Burke, Helen O'Donnell, Antoinette Paradis, Marguerite Gelinis, Annie Laughlin, Leonora Monahan, Dorothy Chalue, Helen Cadd, Helen Kearns, St. Joseph's High School, Toronto. Margaret Althouse, Continuation School, Winona. Jessie Bell, Bessie Begg, Rae Aronald, Kincardine High School. William Milne, Durham High School. Alberta Mayhew, Percival P. Young, Marjory Taylor, Huntsville Continuation School. Eulah Stevenson, Hilda Muir, Florence Wood, Jeanie Garland,



Nellie Gardiner, Marian Gardiner, Tillie Hird, Fergus High School. Lily Hynes, Irene Young, Marguerite Pegg, Madeline Barthelmew, Teresa Howell, Eileen Dunnigan, Theresa Macnab, Mary McCarthy, Edna Rosar, Kathleen McNamara, May Kearns, Helen O'Leary, Loretto Abbey Day School, Toronto. Essie Taylor, Ruth Quinlan, Loretto McGrath, Tessie Vantha, Ada Sullivan, Margaret Moran, Frances Owen, Kathleen Lee, Loretto Abbey, Toronto. John Lamber-tus, John Tait, Frances Bulger, Carmel Godin, R.C. Continuation School, Eganville. Catherine Callan, Lottie Bergerson, Katheryn McCann, Eustette Bene-teau, Louise Le May, Hazel Coyle, Eliza Bezaire, Ruth Brown, Julia Beneteau, St. Rose's School, Amherstburg. Joe Ruttle, Reffa Hood, Rose Burrows, Tupperville High School. Theresa Cunningham, Arn-prior High School. Lorine Archambault, Madeline O'Heron, Leonard McDonald, Harold Henry, Florence McManus, Eleanor Garden, Lizzie Phelan, Florence Murray, Anna Bowie, Jeannie D'Arc Gerard, St. Peter's School, Peterboro'. Dorothy Gardiner, Lucy Cook, Margaret Macklin, P. Jamieson, Sarnia Collegiate Institute. Ora G. Wickware, Bert Gunter, Minnie O'Hara, Mabel Comerford, Jennie Brown, Jennie Jones, Bert Simmons, Geraldine Pyne, H. G. Bullud, Madoc High School. Marjory McDonald, Alice Smith, Owen Sound Collegiate Institute. Kathleen Dunbar, Agnes Cassin, Marguerite Bush, Marie Doyle, Josephine Melligan, Loretto Flynn, Loretto Convent, Guelph. M. Olliver, M. Smith, J. Patterson, A. Johnson, V. Dodson, G. McConnell, Frances Milne, Maud Johnston, R. Corman, H. Birely, H. Burrows, J. Turnbull, H. Smith, L. L. Smith, Collegiate Insti-tute, Hamilton. Margaret Scagel, Bertha Fontaine, Winnie Jones, Allison Nienaber, Edythe Brock, Olive Coles, Jean Cameron, Collegiate Institute, Fort William. Elsie Cameron, Marjorie McDairmid, Laura Evoy, Carleton High School.

ETHEL ROBERTSON—1st Prize—
Greek Honeysuckle Ornament.
MARJORIE GOLDRING—
Saracenic Ornament.
GEORGE ROBERTSON—
Saracenic Ornament.
(All of Whitby H.S.)

D. Middle School.

First Prize—Ethel Robertson, Whitby High School. Teacher, Miss O. Sailsbury.

Second Prize—C. E. Olmsted, Hamilton Collegiate Institute. Teacher, Geo. L. Johnston, B.A

Third Prize—Eaila Browne, Madoc High School. Teacher, Miss L. A. Gillard.

Honourable Mention for Merit—Elsie Collins, Lena Sharpe, Mary Minns, Margaret Empey, Alice Bateman, Edna Bremner, Hattie Empey, Mary McGrath, Madoc High School. Marjorie Goldring, George Robertson, Whitby High School. Edna Thomas, Hilda Fritz, Sarnia Collegiate Institute. C. E. Houison, Margaret Jones, Jennie Blanshard, Nancy Henwood, Hamilton Collegiate Institute.

“Protection”

An Appreciation by VIOLET I. DICKENS, B.A.

FINE art demands above everything else feeling or soul. If this quality of fine feeling is present in the artist it must be reflected in his work and the mind of the beholder will recognize it. This fact is stated very simply by Emerson. “If you make a picture or a statue it sets the beholder in that state of mind you had when you made it.”

In a sculptural work, called “Protection”, which appeals strongly on account of its present human interest, Mr. Alfred Howell exemplifies Emerson’s statement.

The group consists of two figures, a warrior standing in an attitude of protection beside a woman in a posture suggesting extreme exhaustion. The unaffected dignity and strength of the man who represents Britain is finely contrasted with the dependence and weakness of the woman who symbolizes Belgium. The unique relations of Britain and Belgium are beautifully expressed.

One is conscious of repose but a repose which is momentary. We feel that the warrior’s work is not done. He still keeps his sword, for he hears the din of war and soon he must go on to finish his fight. The woman for a moment rests, feeling the strong hand of her protector on her shoulder. It is not death but exhaustion which comes from too much suffering. Her spirit, the victim of ruthless attack, is recovering under the kind guardianship of the courageous spirit of Britain.

But the sublime moment which the artist has caught is merely arrested action. To think of this situation as finishing or being the end of all is to lose the thought of the artist.

This form of art needs no explanation. The artist has made his appeal; he will receive his answer in the understanding heart of the people. Simplicity which is the watchword of sculpture has been observed in the modelling—broad and simple rendering with no trifling details to detract from the beauty of the whole.

Mr. Howell is the Director of the Art Department in the Central Technical School, Toronto. His “Protection” has been accomplished in the spare hours of his busy life. Mr. Howell believes in hard work, and considers genius or gifts of secondary importance. He comes from a hard-working family and he has kept up the family tradition. In his student days at Birmingham he worked six days and six nights a week. His reward was a scholarship and four years’ at the Royal College of Art, South Kensington. At the end of his course, Mr. Howell was granted A.R.C.A., and was also made an associate in sculpture. In the latter part of September, 1913, the young artist came to Canada and took charge of the Art Department of the new Technical School.



Notes and News

[Readers are requested to send in news items for this department].

Mr. J. H. Smith, Inspector of Public Schools for Wentworth County, has resigned, having been inspector for 47 years and eight months. The teachers of the county presented him with a gold casket, containing \$100 in gold, and a beautifully engrossed address. The presentation took place in the County Council Chamber, Hamilton, Principal W. F. Moore, of Dundas, presiding. Addresses of a very complimentary nature were made by Senator E. D. Smith, Warden Stenabaugh, Dr. Morgan of Hamilton Normal School, Inspector W. H. Ballard and others. The Farmers' Institutes of the County at the same time presented him with a very complimentary address and gold-mounted walking stick. The County Council granted him an annuity for life of \$700. Mr. Smith left a few days afterwards for Florida to spend the remainder of the winter.

Miss Gladys G. Campbell, B.A., formerly of Chesley, is on the staff of Mount Royal College, Calgary.

George H. McKee, who has been teaching at R.R. No. 3, Durham, is taking a special course in dentistry in order to qualify as a dental sergeant for overseas service.

Oscar Martin, formerly of Port Greville, is now Principal of the High School at Louisburg, C.B.


H. L. Freeman of Agassiz, B.C., is on overseas service in France.

J. B. Robinson, B.A., B.Pæd., has been appointed Inspector of Public Schools, Wentworth County—vice J. H. Smith, resigned. Mr. Robinson is a graduate of Queen's University, and is a specialist in English and History. He was Principal of the Hamilton Model School for seven years. For the last six years he has been teaching Moderns, English and history in the Hamilton Collegiate. His inspector's certificate was obtained in 1912. Mr. Robinson's wide experience in graded and ungraded Public Schools well qualifies him to be an efficient inspector.

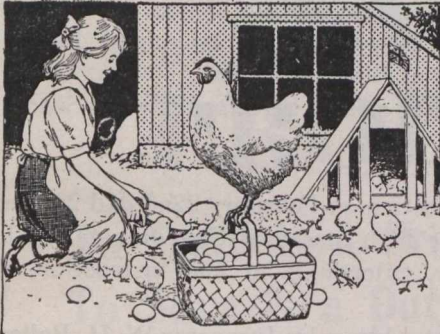
L. P. Menzies, B.A., formerly of Petrolia, is now science master in Fergus High School.

Miss Cordelia Wensley, a recent graduate of Regina Normal School, is teaching at Langenburg, Sask.

Further news of last year's class in the Faculty of Education, University of Toronto, is as follows: Miss Grace Harrington is on the occasional staff of the Toronto Public Schools; Wm. G. Hammond is teaching at West Monkton; Miss Elsie Tighe, B.A., is teaching classics in Newmarket High School; Miss Vera B. Kenny, B.A., is on the staff of Bradford High School; T. E. Johns is Principal of Decewsville Public School; Miss

 *To City, Town and Village Dwellers in Ontario*

Keep hens this year



EGG and poultry prices, the like of which have seldom or never been experienced, certainly make it worth anyone's while to start keeping hens. By doing so you have fresh eggs at the most trifling cost. At the same time you have the splendid satisfaction of knowing that you are doing something towards helping Britain, Canada and the Allies achieve victory this year.

Increased production of food helps not only to lower the high cost of living, but it helps to increase the urgently needed surplus of Canada's food for export. It saves money otherwise spent for eggs and poultry at high prices, and saves the labor of others whose effort is needed for more vital war work.

The Ontario Department of Agriculture will give every possible assistance by affording information about poultry keeping. Write for free bulletin which tells how to keep hens (address below).

A vegetable garden for every home

Nothing should be overlooked in this vital year of the war. The Department earnestly invites everyone to help increase production by growing vegetables. Even the smallest plot of ground, when properly cultivated, produces a surprising amount of vegetables. Experience is not essential.

On request the Department of Agriculture will send valuable literature, free of charge, giving complete directions for preparing soil, planting, cultivation, etc. A plan of a vegetable garden, indicating suitable crop to grow, best varieties and their arrangement in the garden, will be sent free to any address.

Address letters to "Vegetable Campaign," Department of Agriculture, Parliament Buildings, Toronto.

Ontario Department of Agriculture

W. H. Hearst, Minister of Agriculture

Parliament Buildings

Toronto

Gladys M. Cousins is teaching at Northport; James E. Stephens is at R.R. No. 1, Springfield; Miss Elsie Barrans has been appointed to the staff of Earl Grey Public School, Toronto; Miss May L. Fortier is teaching at Creighton Mines.

Miss Minnie B. Scharf of last year's class in Ottawa Normal School is teaching at Burnt River.

Recent news of graduates of Camrose Normal School is as follows: Miss Mary Cochrane is teaching at Rosebeg; Miss Vivienne M. Kennedy at Oxville; Miss Margaret Gourley at Black Diamond

Miss F. Evelyn Mott of last year's class in Stratford Normal School is teaching at R.R. No. 1, Iroquois.

The Hamilton Teachers' Convention on February 22nd and 23rd was a revelation to all present of the high standard Canadian talent has attained. In music and oratory, entertainment and instruction, the programme was unsurpassed.

It was opened with an excellent address by Inspector W. H. Ballard, M.A., who traced the growth of the Public School system in Hamilton during the past thirty years. The great questions of the day, "Thrift", by Professor M. A. MacKenzie; "War and the Future", by Professor O. D. Ske ton; "Agricultural Education", by Dr. Dandeno; "Technical Education and the great need of it" by G. L. Sprague, were dealt with very forcibly.

In contrast with these tense topics of discussion, "that touch of nature" presented by Dr. Robert Johnston of the American Presbyterian Church, Montreal, through his grand personality, his beauty of thought and eloquence of expression, made his address on "The Romance of the St. Lawrence", so wonderfully illustrated by magnificent slides, the greatest treat it has been the good fortune of a Hamilton audience to enjoy for some time.—*Reported by the Secretary.*

"The Romance of History" was the subject of an exceptionally interesting address by W. K. Foucar, M.A., of the Department of English, Hamilton Collegiate Institute, to the Hamilton Scientific Association last evening. The evolution of the sturdy Anglo-Saxon was brilliantly pictured from the days of King Alfred the Great down to the present time. The lecture was very tastefully illustrated by some fine lantern slides, which portrayed the historic scenes of old England, including pictures of battles and the evolution of the military costume. Mr. Foucar illustrated every phase of the nation's story with suitable verse and found in each succeeding crisis a modern application, proving that history does but repeat itself.—*Hamilton Herald, March 3rd.*

Continued on page 524.

SERVE SAVE PRODUCE

To Serve is a Privilege;
To Save is a Duty;
To Produce is a Vital Necessity.

“No Matter what Difficulties May Face Us,
The Supreme Duty of Every Man on the Land
is to Use Every Thought and Every Energy in
the Direction of Producing More and Still More”.

MARTIN BURRELL,
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Teachers may render National Service by
encouraging children to plant vegetable gardens,
raise chickens, and to help on the Farm.

For information on any subject connected with
Farm or Garden, write,

INFORMATION BUREAU,
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CIRCULAR TO INSPECTORS AND TEACHERS
INCREASED FOOD PRODUCTION.

In order to assist in meeting the shortage of foodstuffs, due to war conditions and the unfavourable season of 1916, those teachers who are now giving instruction in agriculture and horticulture in the Provincial schools should arrange as far as practicable to grow plants of food value in school gardens and to reduce correspondingly the space hitherto devoted to flowers and decorative shrubs. With the same object in view, the home garden projects should be enlarged and modified and extensive use made of vacant lots and other unoccupied areas. In this way advantage might be taken of the potential labour of boys and girls from eight to fifteen or sixteen, much of which in the ordinary course of events is not utilized.

Inspectors might also take advantage of present conditions to enlarge the scope of agricultural education in Ontario and to demonstrate more fully the important bearing which agriculture has upon the welfare of the people, by using their influence to induce School Boards which have not yet established classes in agriculture to undertake this work and to utilize the school garden or home garden as recommended above.

If, indeed, the urban municipalities in Ontario having a population of from 1,000 to 9,000 would double the present production of their gardens and poultry yards, and use, as recommended above, the vacant lots and other unoccupied areas, it would increase the food products of Ontario by \$10,000,000 at a very conservative calculation.

Boys and girls cannot be expected to fight, but by assisting in increasing the supply of foodstuffs, they also can be of service.

R. A. PYNE,

Department of Education,
Toronto, January 15th, 1917.

Minister of Education.

New Brunswick.

Dr. W. S. Carter, Chief Superintendent of Education, recently returned from Ottawa, where he and Director R. P. Steeves represented New Brunswick at the meeting of the Dominion Education Association. Dr. Carter was honoured by being elected President for the current year.

The Board of Education has authorized the following regulation: "Third, Second, First, and the next higher class of Normal trained teachers of Nova Scotia, certified by an Inspector as competent and by the Superintendent in Nova Scotia as in good standing, and holding Dominion Physical Training Certificates of Grade B.,

Continued on page 526.

The Special War Edition

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It provides material for lesson outlines on every phase of the war.

It has been recommended by the Ontario Department of Education.

It covers every topic in the course on this subject outlined in the Departmental circular issued in November, 1916.

It contains causes, remote and immediate; articles on the British Empire as a maritime power, the colonies' part in the war, the naval campaign, the western campaign, the eastern campaign, the Balkan campaign, questions for examinations, etc.—151 pages of reading matter.

A special feature is a *Diary of the War*, giving the events for every day from the beginning, with important events in italics.

It is a reprint of the "war" articles published in this journal during 1915 and 1916.

It is really a text book on this important subject.

The material is continued in each issue of **The School** this year and is kept up to date.

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may be admitted promptly for the corresponding classes of licence by the Chief Superintendent in New Brunswick, for one year, on condition that such teacher or teachers engage to pass the examination in School Law and Civics required for the class for which application is made. If a candidate makes not less than 50 per cent. on this examination, a permanent license of the appropriate class will be issued accordingly, to take effect at the beginning of the next school year”.

The Council of Public Instruction of Nova Scotia has passed a similar regulation, authorizing New Brunswick teachers to teach in Nova Scotia.

The New Brunswick Board also adopted the following regulation:—

“Teachers who may devote the full hours of school time to the teaching of music in the public schools, and who shall attest to the same, shall receive a government grant at the rate of One Hundred Dollars per year. Licensed teachers shall be paid according to the class of licence held, but in no case shall the grant exceed that of a First Class teacher”.

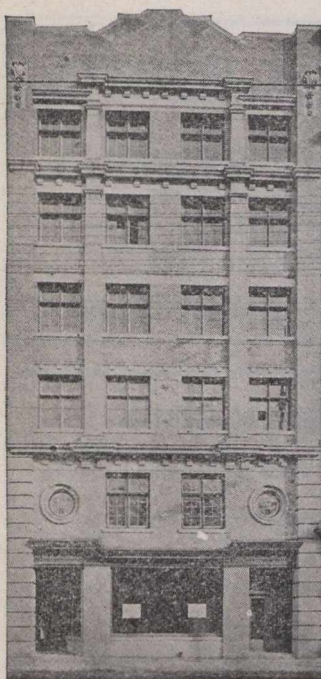
“All teachers of music in the public schools shall furnish such certificates of qualification as may be approved, or undergo such examination in that subject as may be required by the Board of Education”.

Quebec.

The school boards in the Province of Quebec are arranging to have a Provincial Association of School Boards for the whole Province as well as local associations for various districts. Already three of these associations have been organized. One for the Ottawa Valley with Lachute as the centre, of which Mr. Johnson of Brownsberg is the President. Another association has been formed for the district of St. Francis with Sherbrooke as the centre, and a third has been formed for the district of Bedford, of which Dr. D. A. Roger of Cowansville is President; Principal W. P. Percival of Cowansville Academy is Secretary-Treasurer.

There are three vice-presidents, one for each of the surrounding counties of Missisquoi, Shefford and Brome. These local associations are formed to deal with the problems of the immediate vicinity, and an annual convention will be held in the city of Montreal in the month of October each year to consider matters of Provincial interest.

Already much useful work has been accomplished by these associations, and in particular the business of consolidation, which is so necessary a policy for Protestant schools in Quebec, is occupying the attention of the association for the district of Bedford. As a result it is likely that the various school boards concerned will amalgamate and erect a new building in Cowansville which will be organised as a High School and take over the education of children in the surrounding district schools.



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The Department has organized a branch which gives exclusive attention to correspondence with teachers desiring positions and school boards requiring the services of teachers. By this means teachers who have had their standing recognized by the Alberta Department of Education will be advised, free of charge, regarding available positions.

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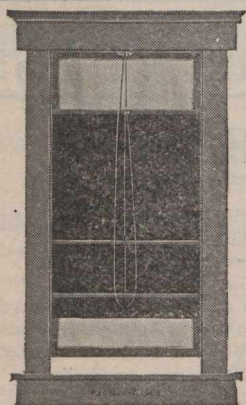
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