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# The School

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Vol. V

Toronto, May, 1917

No. 9

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Editorial Board:—The Staff of the Faculty of Education,  
University of Toronto

Published monthly, except July and August

\$1.25 per annum.

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Remittances should be made payable to The School and must be at par in Toronto.

The School is published monthly, except in July and August, and is printed at the  
UNIVERSITY OF TORONTO PRESS  
TORONTO.

Subscriptions in Canada, \$1.25 per annum; in United States, \$1.50. Single copies, 15 cents.

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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.

In future, however, the Manuals must be purchased by Boards of Trustees and others as follows:—

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TORONTO, September, 1916.



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## Editorial Notes

### Is Art Necessary?

Science and art are to reform and save our industries in the years that follow the war. Science AND ART, not science alone! It will not suffice that the laws of science be discovered, and housed in masses of wood or metal, clay or cloth. They must be housed in artistic forms—in forms that please the eye. Because Germany and France have long recognized this fact German and French garments, tools, glassware, jewelry, optical and even electrical goods overran our markets before the war. If the industries of Canada are to flourish the schools of Canada must train in art as well as science. This should not be forgotten by those who are tempted now and then to question the time and attention given to art in the Public and High Schools of Canada.

### Moving Pictures

An English Commission has been making an inquiry into the cinema, its use and abuse. A decision has not yet been reached and, in view of the conflicting evidence, it will not be clear-cut when it is reached. The moving picture machine or show is a new instrument of instruction and amusement and, like all new instruments, exhibits itself at times in extravagant or unworthy forms. But it has many merits. As an instrument in education it calls the eye to the assistance of the ear. It teaches quickly. It trains the observing powers and stimulates the imagination. As an instrument of amusement it is cheap and makes a universal appeal. It is probable that of all forms of amusement it is the most easily controlled. At its worst it can scarcely arouse honest indignation in a people who have long tolerated the bar-room and the race track. There can be no doubt of the place of the moving picture machine in the school of the future. Some machines have been constructed specially for school use. Some Departments of Education urge their use. Some indeed supply them to schools for use. Some schools in Canada own and use them. The moving picture agent will soon knock at the door of every school. It is the teacher's duty to pause now and decide how he will receive him.

### **Inspectors' Reports**

One finishes the reading of the last Annual Report of the inspectors of the Ottawa Public Schools with the conviction that the schools of Ottawa are progressive and with the further conviction that the Inspectors' Annual Reports are an explanation of the progress. The Report for 1916 like the reports for previous years is a storehouse of information and advice for the ratepayers, who demand a fair dividend on their investment. It tells with admirable clearness what the Ottawa Schools have done during 1916 and what they ought to do in 1917 and thereafter. Too often the reports of inspectors have been masses of statistics and theories, ill-digested and unpractical. But the statistics in the Ottawa report are alive with a message. The discussion of the statistics of registration and attendance will convince the most skeptical that the school boards of Ontario must do something at once for the boys and girls who leave school at 14 years of age and enter the unskilled trades—the blind alleys of the industrial world. And as to educational theories—there are none in this Report. What is said, for instance, under classroom proficiency, is the highest educational practice put into words.

### **Reading Tests**

The Superintendent of Education of New Hampshire has begun a research into the teaching of oral reading in his State. Applying proper reading tests over large areas he has found that while there are marked differences in the ability of individual pupils to read well aloud, the variation does not depend chiefly upon age or the amount of training. Pupils in the third year of the Elementary (Public) School often read better than pupils of the eighth year. This provokes the superintendent to ask why the good readers of the third year should be compelled to continue the training in reading throughout the five succeeding years. What is the profit from the additional training? Or, as one-fifth of the school day is given to reading, what must be the loss to the other subjects?

Canadian schools do not give to reading less time per day than do the American schools. On the other hand, unlike most American schools, they prolong the training in reading into the High Schools. The New Hampshire conclusions give reason to reconsider and probably restate the case for oral reading.

### **Does Education Pay?**

The Department of Education has notified the teachers of Ontario that while it will offer in 1917 as usual a free Summer Session in ONE HALF of the subjects of the Normal Entrance and Faculty Entrance Courses it will conduct examinations at the end of the session in ALL the subjects of those courses.

Will it pay teachers to take Summer Sessions for higher certificates? Does education pay?

The average salary of the male Public School teachers in Ontario who hold Third Class certificates is \$553. The average of those who hold Second Class certificates is \$834 and of those who hold First Class \$1,411. It pays to hold the higher certificate.

A recent study of two groups of Brooklyn citizens revealed the following facts: The boys who withdrew from school at 14 years of age were earning on the average \$475 in their 20th year, and \$688 in their 25th year. The boys who remained at school until their 18th year earned \$750 in their 20th year and \$1,550 in their 25th year. Between the 14th year and the 25th year the one type of boy earned \$5,112.50 and the other type \$7,337.50

A recent study made by the United States Bureau of Education gives the following figures: Illiterate labourers earn \$20,000 in a working life of 40 years or \$500 per year. High School graduates earn \$40,000 in a working life of 40 years. Thus the High School graduate receives \$20,000 as a reward for his 12 years in school!

On the low scale of dollars and cents education pays, and pays generously.

### **Educational Reform in Great Britain**

The people of Great Britain are aroused to the importance of educational reform. They realize that their present educational system is not satisfactory, and that a better one must be evolved after the war, if Great Britain is to keep her place among the great nations. One of the most interesting of the programmes for educational reform has been put forward recently by the Workers' Educational Association, "a missionary organization, working in co-operation with education authorities and working-class organizations", and representing 2,555 separate organizations ranging from trades unions to universities. It would be impossible here to give an adequate outline of this programme, but a few points may be mentioned to illustrate how radical, yet statesmanlike, it is. The Workers' Educational Association evidently believes whole-heartedly in equal educational opportunities for all, and it therefore proposes, not only that all schools and universities shall be free, but that when necessary maintenance allowances shall be granted to needy students. "Full-time attendance at school up to the age of 16, and part-time attendance from 16 to 18, shall be compulsory. The employment of children for profit or wages, outside of school hours, during the compulsory full-time period, shall be prohibited, while during the part-time period the children shall not be employed for more than 25 hours a week. Adequate, up-to-date school

and university accommodation shall be provided for the largely increased number of students inevitable under such a programme, and the remuneration of teachers, in both salaries and pensions, shall be liberal enough to induce the best men and women available to enter and remain in the profession". It might be supposed that a Workers' Association would attach more importance to primary and secondary education than to that given by the universities, but this programme provides for thoroughly efficient, scholarly universities. The following clause illustrates this: "Since an essential part of the work of a university lies in affording facilities for the advancement of knowledge, more adequate provision should be made for scientific and literary research conducted with this object". The whole programme is so democratic, so broad, so enlightened, that it should be studied in detail. It may be found in the February, 1917, number of "The Athenaeum", and copies may be obtained (post free, 1½d.) from The Workers' Educational Association, 14 Red Lion Square, Holborn, W.C.

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## Book Reviews

*The Potato*, by Eugene H. Grubb and W. S. Guilford, 542 pages, 90 illustrations. Published by The Musson Book Co., Toronto. Price \$2.00. The person who wishes to dig up his backyard and grow potatoes will find that this volume gives just the information that he needs: the kind of soil best adapted for potato-growing; the right fertilizers; the most prolific potatoes; the garden tools; the insects and blights along with the methods of combatting them; the time to plant and the time to harvest, as well as the best method of storage. It is a book written by two agriculturists who have had recourse to the government reports of all the countries where potatoes are grown, and who have visited the largest potato farms all over the world. They have discussed their subject from the standpoint of the practical grower. The farms of the United States produce an annual yield of 89.8 bushels per acre; Germany, 197.3 bushels per acre; Britain, 186.4 bushels per acre; Austria, 151.4 bushels per acre; France, 118 bushels per acre; Russia 98.4 bushels per acre. From this comparison they conclude that the growers of potatoes on the North American continent must learn the lesson of "intensive cultivation" from the European potato growers. The scientist will find a chapter on the botany and chemical composition of the potato. The teacher will find useful and interesting material in the history of the potato, and in the comparative tables showing the annual productions of the different countries. The potato grower will find information that will assist him in increasing production to meet the ever increasing consumption of one of our principal foods. The book should be in every library.

J. A. I.

*The Globe Poetry Reader*. Cloth, 190 pages; price 25 cents. The Macmillan Co. of Canada Ltd., Toronto. This reader, which completes the series of the "Globe" Poetry Books—Junior, Intermediate and Senior—is arranged for reading and recitation in the upper forms of Public Schools and junior forms of High School. The editor has made a good selection of short poems or extracts from longer poems by nearly thirty English poets of the last four centuries. The volume will be found very suitable for use in the first and second forms of the High School.

G. M. J.

## Summer Schools in Canada

(Continued from the April number).

### ALBERTA.

J. C. MILLER, M.A., PH.D.

Director of Summer School for Teachers.

**T**HE general policy of providing for the supplementary training of the teaching force of the Province through the medium of the Summer School for Teachers has been more than justified during the past four years. In 1913 the attendance was seventy-five; in 1914, one hundred and fifty-five; in 1915 three hundred and ten; and in 1916, in spite of the exceptional conditions, the attendance was three hundred and twenty.



Summer School students at lunch in the University dining-room at Edmonton. There are more of them dining in the adjoining gymnasium.

Up to the end of the session of 1916, 475 teachers had taken one or more of the courses in agriculture and gardening, 300 one or more of the courses in nature study, 176 the course in art methods, 170 physical training, 151 household science, 148 drawing and painting, 123 elemen-



tary manual arts, 101 design, 87 folk dancing, 74 mechanical drawing, 72 household management, 66 household arts, 65 elementary woodwork, 53 penmanship, 41 botany, 41 zoology, 13 physics, and 11 chemistry. The last two courses mentioned were offered in 1916 only.

The organization of these courses of instruction in intimate relation to the actual instruction which the teachers are expected to give in their schools, and the extent to which the teachers are taking advantage of this opportunity for professional improvement are proving to be important factors in strengthening the work in the schools of the Province. This is becoming more and more noticeable each year.

Each year the policy of the management has been to consider recreation and sociability an integral part of the plans for the Summer School and during the last two summers the students and teachers have been most active in rendering assistance to patriotic organizations. Teachers from every part of the Province, and especially those who have come from points outside of Alberta, have found in the Summer School an opportunity to identify themselves with our educational movements, to meet and to know those responsible for the administration of the provincial school system, and to form many acquaintances and friendships.

The Summer School is more and more becoming the annual gathering together for professional improvement of those who are willing to co-operate in mutual upbuilding in personality, professional spirit, and technical efficiency.

During the coming summer in addition to the courses offered in previous years and to strengthening the courses for High School teachers the Department of Education is offering at the Summer School a short normal course for certificated British teachers and teachers from the United States who hold certificates of sufficiently high grade to be acceptable to the Department. Heretofore this course has been offered immediately after the New Year at one of the Normal Schools. By offering it at the Summer School, congestion at the Normal Schools is avoided and it becomes possible for the teachers concerned to take the required course without breaking into their year's work in their local schools.

This course is designed to prepare such teachers for service in the schools of the Province. It involves an intensive study of Canadian and British history, geography, with particular attention to Canada and the Empire as a whole, Canadian Civics, the School Law and Regulations, and the Course of Study for Alberta.

The Summer School in Alberta has become a definite unit in the educational organization of the Province and the scope of its programme will be extended from year to year to meet the need for the supplementary training of the teaching force.

# Rumania and the War

J. G. WORKMAN, B.A.  
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OF all the nations engaged on either side in the Great War, Rumania is probably the least known to the average Canadian. Yet the events which led to her entry into it in August, 1916, make an exceedingly interesting story. For information regarding the popula-



tion, social condition, early history, and natural resources of Rumania, the student need only consult any standard encyclopedia. In the present sketch the purpose is to review briefly the circumstances which led her finally to join the Allies, and to describe the part she has so far taken in the struggle.

A glance at the map shows Rumania embedded in the centre of south-eastern Europe surrounded by nations engaged in a life-and-death struggle. Along her eastern border stretches the mighty empire of the Czar. On her southern border lies Bulgaria and the ill-fated kingdom of Serbia, while on her western frontier she looks across the Carpathians towards the kingdom of Austria-Hungary. What were her relations with these nations?

Industrially, the Rumanians had become almost dependent on the Central Powers. Their oil and grain found markets in Austria and Germany, rather than among the more primitive nations to the south and east. Moreover the financial assistance necessary to develop their natural resources came largely from the Central Empires. For their railroads, highways, electric plants they were indebted largely to German money and German brains, and most of their manufactured imports came from the factories of Germany. From the standpoint of the business interests of the country, therefore, Rumania's future prosperity seemed closely bound up with the Central Empires. This hold, acquired by the Teutons in the field of finance and commerce, was immensely strengthened by the influence of the Hohenzollern Prince whom they accepted in 1865 as their national leader. A secret defensive treaty entered into by King and Cabinet in 1883 also served to link Rumania to the Teutonic powers. The terms of this treaty were much the same as those of the treaty which made Italy a member of the Triple Alliance.

Politically, the national sympathies have tended in an opposite direction. The Rumanians proudly claim descent from the Roman settlements planted north of the Danube by Emperor Trajan to break the force of the waves of invasion that were threatening to overwhelm the empire of the Caesars. Although the mixture of racial types caused by these invasions makes this a rather precarious claim, there is no doubt that the sentiment has been unusually powerful in giving direction to the political development of the nation. Italy and France, particularly the latter, have always held highest place in the hearts of the educated classes of Rumania. In 1870 Rumanian sympathy was strongly with the French. The complete defeat of the latter, however, made it easier for the newly-arrived Hohenzollern prince to lead his subjects to economic reliance on Germany.

Against her mighty eastern neighbour Rumania cherished a very real grievance. In early times Russia had earned Rumanian gratitude for assistance in shaking off the Turkish yoke. The debt was paid in full, however, in 1877. The Russians were at war with Turkey. The Rumanians offered to join forces, but their offer was somewhat scornfully rejected. As the war progressed, however, the Czar was glad to avail himself of the assistance of the Rumanian army which Prince

Charles had created and carefully trained. This army turned the tide at the taking of Plevna, and played a large part in securing a complete victory. One immediate result was the final achievement of Rumanian independence and the proclamation of Prince Charles as King. But this slight sop to national sentiment was more than offset by the action of Russia in demanding the return to her of Bessarabia, a part of Moldavia which the powers had given back to Rumania after the Crimean War. The "theft" of Bessarabia, as the Rumanians called it, caused deep and lasting resentment. Undoubtedly it chilled Rumanian sentiment toward the cause of the Entente at the beginning of the present war, and probably prevented complete harmony of action with Russia when Rumania finally entered the struggle.

The grievance with Russia, however, was a minor affair when compared with that cherished against her neighbour on the west. Among the diverse races that go to make up the ramshackle empire of Austria-Hungary it happens that nearly 4,000,000 are of Rumanian blood. These live for the most part in the province of Transylvania separated from Rumania by the Carpathians and Transylvanian Alps. They are outnumbered by the Magyars, who, with that racial selfishness which is so hard for Anglo-Saxons to understand, have kept them in abject political servitude. By means of electoral laws, school laws, church laws, and by means outside all law, every effort has been made to destroy the nationality of these Rumanians. Bitter protests passed from Bukarest to Vienna, and sometimes Vienna seemed anxious to make reforms. But Magyar influence was too strong. When Rumania finally drew the sword, the appeal that united her people was that made on behalf of their compatriots in Transylvania.

On the outbreak of war, in August 1914, both sides opened negotiations with Rumania. The Central Powers demanded that she fulfil her obligations entered into in 1883. With this demand the King was, of course, anxious to comply. His sympathies were entirely pro-German and he was supremely confident that Germany was invincible. To his amazement, probably, he found it impossible to induce his government to follow his lead. With regard to their treaty obligations, his advisers raised the same objection as did Italy in like circumstances, namely, that the Central Empires were clearly the aggressors and that therefore they had no right to demand Rumanian co-operation. Even his military advisers utterly refused to side with him. Despite their knowledge of German military preparations and efficiency, they were not certain that Germany and her allies would triumph. Moreover, they argued that their neighbour in the west, Austria-Hungary, was a decadent nation, doomed to disintegration while Russia, even if defeated, would remain a mighty nation whose enmity would assuredly prove a grave menace.

But while the government unhesitatingly declined to join the Central Powers, they were not disposed to join the Entente without positive guarantee of assistance and substantial recompense, and a fair degree of certainty that they were to be on the winning side. Prime Minister Bratiani proclaimed a policy of rigid neutrality. Immediately commenced a most remarkable struggle between those who favoured the opposing nations. German intrigue found a splendid field for its peculiar genius. Newspapers sprang up everywhere recalling Rumania's debt to the Central Powers and spreading news of German achievements and Entente failures. Fortunately, many of the most powerful political leaders were enthusiastic advocates of intervention on the side of the Allies. Their great argument was the opportunity presented to Rumania by the war to free their compatriots in Transylvania.

For two years Prime Minister Bratiani and his Cabinet kept unswervingly on their course of neutrality. At times they had a tremendous task. When the Russian armies advanced into Bukowina in 1915 the interventionists insisted that the hour for action had arrived. Indeed it looked as if the government were leaning in that direction as a British loan of £5,000,000 was announced on January 28th. The great Russian retreat in the following spring, however, caused the government to hesitate. The Central Powers became more active in their efforts to win Rumanian support and are said to have offered to cede Bukowina and to guarantee improved conditions in Transylvania. This pressure by the Central Powers increased as their conquest of Serbia progressed in the autumn. Partly to placate the central nations, as well as to relieve the economic situation, the government permitted the sale of 50,000 wagon loads of wheat to Austria and Germany. In December and January the increase of the Allied forces at Salonica and their apparent intention of moving northward again put heart into the friends of the Allies in Rumania. This was reflected in the sale to Britain of 80,000 loads of grain. Shortly afterwards the balance was maintained by the sale to Austria of an even larger consignment, the delivery of which had not been completed when war broke out. Gradually, however, the strength of the sentiment favouring the Allies was increasing. During the spring huge meetings were held demanding action. Later, the surprising advance of the Russians, the failure of Germany at Verdun and of Austria in Trentino, vastly strengthened the force of this demand. One thing alone, probably, now held back the government and that was the lack of munitions. In July, however, a trainload of munitions arrived from Russia and events began to move rapidly. A convention was called on August 29th by King Ferdinand similar to that summoned by his father in the fateful days just two years previously. The deliberations were brief. The King and almost all the leaders of the nation

declared for immediate action against Austria. A note was immediately despatched to Vienna stating the grievances against the Dual Monarchy and formally declaring war. Rumania would gladly have confined her action to war with her western neighbour but this was not to be. On the following day Germany declared war and a few days later Bulgaria followed her example.

Since Rumania's strongest motive in entering the war lay across the western border, immediate action was taken in that direction. On the south the mighty Danube, bridged in but few places, was believed to secure the country against attack by Bulgaria. Within a few days all the mountain passes leading into Transylvania were in the hands of the Rumanians and the invaders were soon pouring down into the plains. For a time the rapidity of their advance was amazing. Towns and villages fell into their hands with incredible swiftness. In the month that followed the seizure of the passes, the Rumanian army had succeeded in occupying nearly one-third of Transylvania or nearly 7,000 square miles. Many of the population were of Rumanian blood and, needless to say, they hailed the invaders as deliverers.

Meanwhile the Central Powers were causing unexpected trouble in another region. Mackensen, probably the ablest and certainly the most successful general in the German Army, who was in command of the Teuton forces in the Balkans, had gathered huge forces and supplies south of the Danube. When he saw the Rumanians thoroughly committed to their enterprise in Transylvania, he struck hard at the slender forces defending Dobrudja. His objective was the railroad from Constanza to Cernavoda which crosses the Danube at the latter point. The bridge at Cernavoda—one of the finest in the world—is the only one on the Danube east of Belgrade and is absolutely essential to an invading army moving in either direction. Mackensen's progress was rapid and in spite of occasional checks due to the arrival of strong Russian reinforcements, he captured Constanza on October 23rd, and cut the railroad. A few days later the Rumanians were driven from Cernavoda and, crossing the Danube, they blew up the bridge to halt pursuit.

Sometime before this had happened the Rumanian army in Transylvania had also begun to feel the real weight of German opposition. Near the close of September, a German army, abundantly equipped with heavy artillery, and led by another great leader, Von Falkenhayn, made a formidable attack on the Rumanians near Hermannstadt. The battle lasted three days, and, although the Rumanians sustained their reputation as splendid fighters, they suffered a serious reverse and were compelled to retreat. This battle marked the opening of the tremendous offensive by the Germans. Early in October the Rumanians began to

retreat along their whole line. Soon they were defending the passes they had traversed in triumph such a short time before.

On October 13th, the Germans occupied Torzburg Pass and were on Rumanian soil. It was impossible, however, for the Germans to advance into Rumania until they had captured the other and more important passes and these the Rumanians strove desperately to retain. Finally, however, on October 25th, Von Falkenhayn pushed through Vulkan Pass, defeated the Rumanians in a bloody battle at Targu-Jiu, and on November 21st occupied Craiova. The invasion of Rumania had begun in grim earnest. On November 23rd, Austro-Hungarian and Bulgarian troops recaptured Orsova and pushed forward to Turnu-Severin, the most important Danube port in south-western Rumania. The Rumanians were now everywhere on the defensive. They held a strong line of defence along the Alt River which, flowing almost directly south, may be said to form the eastern border of Little Wallachia. Against this Von Falkenhayn immediately moved. At the same time the armies of Mackensen moved up from the south. Crossing the Danube at Islaiz and Simnitza by means of motor boats, they attacked the left flank of the Rumanian army. The resistance of the latter was soon overcome and by the end of November the entire line was in the hands of the Teuton armies. Meanwhile a movement developed from the north. In late October after the capture of Torzburg Pass a German army had reached Campuling, 20 miles within the Rumanian border, but was later thrown back. This force now moved south and early in December the victorious armies were united. Their advance, though stubbornly contested, was a rapid succession of victories and their efforts were finally crowned on December 6th by the capture of Bukarest.

With the fall of the capital, Rumania ceased to be a factor of very great immediate importance in the world war. It would seem that her entrance into the struggle was a terrible mistake. While it has been of undoubted assistance to the Allies in draining the man-power of the enemy, the immense stores of grain and other food stuffs that must have fallen into the hands of the invaders were probably worth the sacrifice. And the moral effect on the victors of such a swift and complete triumph can hardly be over-estimated.

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"On the one hand," said the teacher, pointing a long and forbidding finger at the map, "we have the far-stretching country of Russia. On the other hand—what do we see on the other hand, Tommy?"

Hazarded the terror-stricken and fore-doomed Tommy: "Warts."

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"Does a college education help a man in after life?"

"Big leaguers seem to think it makes a man quicker on the bases."

## The Russian Offensive of 1916

D. E. HAMILTON, M.A.  
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THE great Austro-German offensive of 1915 (dealt with in an article in *THE SCHOOL* of May, 1916) was halted without having attained its strategic object. Although the Russians had been forced to evacuate the outlying provinces of Lithuania, White Russia, and Poland, they still retained a line which gave them equal advantages with the Central Powers for initiating future operations. The considerable tract of East Galicia still remaining in their hands, with its highly developed net-work of roads and railways, formed a useful base for a future offensive. In the north, the line of the Dvina proved an insuperable barrier to a further German advance. In the region of the Pripet Marshes, the advantage rested with the Russians, as they succeeded in retaining the railway traversing that district. The offensive of the Central Powers, however successful from a territorial standpoint, was entirely unsuccessful strategically, because the Russian front was still unbroken, their armies intact, and the relative positions of the opposing forces remained evenly balanced with regard to the next campaign.

The task facing the Russians at the close of the Teutonic offensive was two-fold; first, to keep intact the advantages which their new line offered for a future offensive; second, to raise, equip, and munition new armies for use the next summer. That they succeeded both in holding an enemy at the height of his power and in raising and munitioning forces in the face of the almost insuperable difficulties arising from the poor economic and industrial organization of their country is a remarkable achievement.

The winter of 1915-1916 was one of stagnation along the Eastern front. Only small local encounters occurred, with the exception of two series of larger operations undertaken by the Russians in Bukowina and Lithuania to forestall an imminent offensive on the part of the enemy. In this they were entirely successful, and for the whole period between the close of the Austro-German offensive in 1915 and the opening of the Russian offensive in 1916 the Central Powers found themselves unable to resume the initiative.

The summer of 1916 found the Russian armies between the Baltic Sea and the Rumanian frontier grouped in three main divisions. In the north, General Kuropatkin with three armies held the Riga-Dvinsk line



against Von Hindenburg. In the centre, General Evert with four armies faced Vilna. General Brusiloff with four armies held the line from south of the Pripet Marshes to Rumania. This latter was the line on which the decisive battles of the opening stages of the Russian offensive were to be fought.

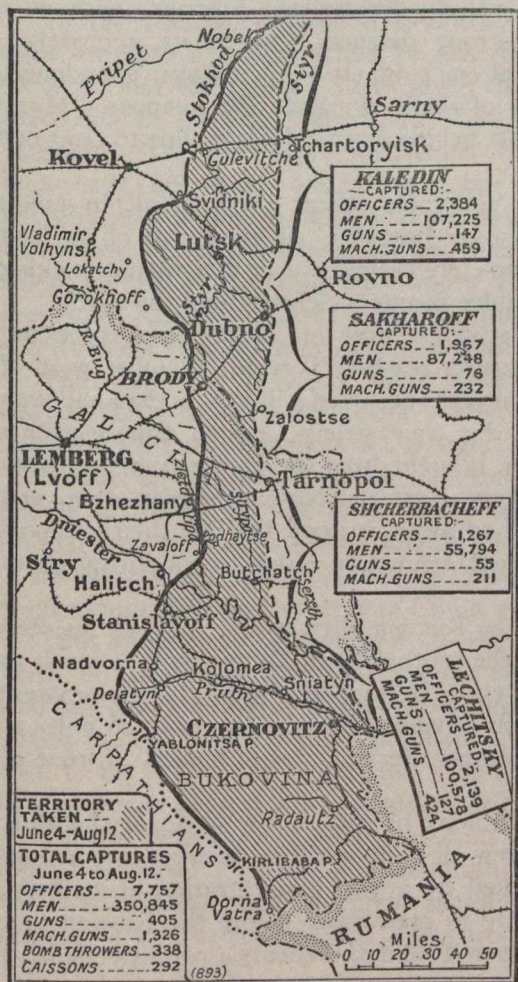
Opposed to Generals Kuropatkin and Evert were Von Hindenburg and Prince Leopold of Bavaria, with some 1,200,000 men, almost all German, at their disposal. South of the Pripet Marshes, Archduke Frederick opposed Brusiloff with approximately equal forces. This sector was held mainly by Austrian troops. But, while the Russians had plenty of reserves to draw upon, the German line was bare of them, because of the continual withdrawal of troops from their reserve bases for use against Verdun. This was the case also with the Austrian line, because of the need for men for use in the Trentino offensive against Italy.

The Austro-German commanders deemed their front impregnable. Every possible device had been adopted to render it so. Everywhere at least five consecutive lines of trenches had been constructed. These were of extraordinary depth, and heavily timbered. Barbed wire was used in vast quantities to build seemingly impossible entanglements. Nowhere was any precaution neglected. Behind the lines, a huge system of roads and field railways was developed to form a most thorough and efficient system of communication.

Three causes combined to render these defences useless. The overconfidence of the Austrian commanders allowed the Russians to catch them napping. An excessive amount of artillery had been withdrawn for use against Italy, and for the same reason no sufficient reserves were available behind the Austrian front. Most important of all, the Russian soldier had established a marked individual superiority over his Austrian opponent in the preceding two years.

In considering the Russian offensive, attention must be directed chiefly to the line extending from the Pripet Marshes to the Rumanian frontier. This line may be divided into four main sectors. (1) The Volhynian sector, extending from the Pripet Marshes to Dubno, and containing the Volhynian triangle of fortresses—Lutsk, Dubno and Rovno. Of these Rovno alone remained in Russian hands at the close of the Austro-German offensive in 1915. Here Generals Lesch and Kaledin were in command of the Russian troops. At the beginning of the offensive Archduke Joseph Ferdinand commanded the armies of the Central Powers, but after the initial Austrian defeats the Prussian general Von Linsingen took charge. (2) The sector facing Brody, from Dubno to Tarnopol. Here General Sakharoff was in command of the Russians, General von Boehm-Ermolli of the Austrians. (3) The Sereth

River positions, from Tarnopol to the Dniester River. These were attacked by General Scherbacheff and defended by Count von Bothmer. (4) The Bukowina, between Galicia and Rumania. Here General Lechitsky conducted the Russian offensive, with General von Pflanze Baltin opposing him.



From *The Times History of the War*

Behind the Austro-German lines lay three centres of vital importance: Kovel, Lemberg and Stanislaw. The capture of Kovel would open up lines of attack on Brest-Litovsk and Warsaw; Lemberg taken would mean the recapture of all Eastern Galicia; Stanislaw was the key to Count von Bothmer's positions along the Sereth. Consequently these were the objectives of the Russian offensive.

On June 4th, 1916, the Russian artillery began to shell the enemy's positions methodically over a front of 250 miles. This artillery preparation lasted from 12 to 30 hours. It was directed with the object of cutting lanes through the wire entanglements rather than against the trenches themselves. Then followed the Russian bayonet attacks. While these were in progress the artillery lifted to throw a curtain of fire in the rear of the

Austrian trenches. The very depth of the trenches proved a disadvantage to their occupants; when the Russians reached them, there was no alternative but death or surrender. By noon of the third day General Brusiloff's armies had captured 900 officers, 40,000 men, 77 guns, 49 trench mortars, and 134 machine guns. These figures bear testimony to the speed and weight of the Russian blows.

The most important victory in the first days of the offensive was the retaking of the fortress of Lutsk. On the first day the Russians breached the enemy's lines and poured cavalry through the gaps. On the second, they advanced 20 miles from their original positions. On June 6th, Russian detachments entered Lutsk, which had been abandoned by the utterly demoralized Austrians without a blow, although enormously strong defences covered its approaches. So hastily did they leave that at one point six 4-in. guns were abandoned, still loaded, with many cases of shells alongside the weapons. Many thousands of wounded were left behind as they had no time to clear out the hospitals.

At the southern end of the Volhynian salient General Kaledin retook the fortress and town of Dubno on June 9th. In the course of the next few days the enemy were completely cleared out of this district, making the salient secure against a sudden counter-offensive from the south.

Meanwhile the Russian advance west of Lutsk was progressing rapidly. On June 12th, Cossacks reached Torchin, 18 miles west of Lutsk. On June 16th, their outposts occupied a line more than half-way to Vladimir Volhynski. By this time strong German reinforcements were making their appearance, brought from the northern area or from France. This indicated a strong German counter-offensive soon, and the Russian command elected to await it upon the line then occupied rather than to push an advance against so strong a concentration of troops.

Thus the first 12 days of the Russian offensive in Volhynia resulted in an advance of 30 miles to the south-west of Dubno, and as much to the north-west of Lutsk. The entire Volhynian triangle of fortresses were again in Russian hands. Their advanced lines were within 25 miles of Kovel and had reached the north-eastern border of Galicia in front of Brody.

Then followed a fortnight of fierce but practically stationary fighting, during which the Germans threw all their available reserves into action. Massed infantry attacks, backed by a vast concentration of artillery, were launched continually, only to melt away before the Russian fire. Nowhere the Russian line wavered, and the enemy's counter-offensive ended in failure.

The exhaustion of the German reserves in this fighting gave the Russians a chance to strike another telling blow. On July 4th General Lesch initiated an advance on the Styr River, just on the southern fringe of the Pripet Marshes. Between the 4th and 8th his troops advanced 25 miles from the Styr to the Stokhod River, took 12,000 prisoners, 45 guns and large quantities of ammunition and other military supplies. The Stokhod was crossed at many points, and the Russians seemed

likely to break the Austro-German defence once more and take Kovel. This proved impossible, as the Germans by great efforts succeeded in concentrating sufficient men and guns to halt the Russian advance. After fierce fighting the Russians retired from their positions across the Stokhod to the east bank, which they hold at present.

In the Bukowina, General Lechitsky had begun his offensive on June 4th with a violent attack on the Austrian positions between the Dniester and the Pruth. After seven days of the fiercest fighting he succeeded in piercing their front. On June 11th, Dobronovtse was captured. The next day Horodenka, the junction of six first-class high-roads, fell to his advancing troops. Full use was made of the advantages won and a rapid advance ensued. On June 13th, Sniatyn was taken. Czernovitz itself fell on June 17th. On the 21st, Russian troops entered Radautz, 30 miles south of the capital. Two days later they took Kimpolung after heavy fighting. In less than three weeks the Russians were again masters of the whole of the Bukowina.

The victorious Russians then turned westward against Galicia. On June 29th, Kolomea was taken. After a month's lull in the fighting, Stanislaw fell to the Russians in the beginning of August.

Further to the north, General Sakharoff opened a new offensive in the middle of July. On the 28th Brody was captured. The Russians pressed their advantage and by August 9th stood within striking distance of the railway leading from Lemberg to Odessa, the most important line of communication for the army of Count von Bothmer.

Thus threatened by Sakharoff to the north and Lechitsky to the south, no course save immediate retreat was left open to Von Bothmer, who had held his original Sereth River lines against all Russian attacks during the ten weeks of their offensive. His forces were withdrawn at once to the line of the Zlota Lipa. This retreat enabled the Russians to establish an approximately straight line from Kolki to the Carpathians.

General Scherbacheff pursued Count von Bothmer's army to the Zlota Lipa River. On the extreme south, his troops broke through the enemy's defences and captured Mariampol on August 13th. Von Bothmer's army then took up a line from Pluhoff to Halicz, with its centre at Bryezany.

On August 29th, the Russians launched new attacks against his front. On September 3rd, the German right was forced to retreat, losing more than 4,000 men in the movement. In the centre, the Russians were not so fortunate. Here picked troops defended Bryezany successfully against their furious attacks. So too in a fierce battle for the positions about Halicz the Austro-Germans held their ground.

Meanwhile, on August 27th, Rumania declared war on Austria-Hungary. The invasion of Transylvania failed completely, and

Rumania itself was entered by strong enemy armies. Gradually the centre of the fighting shifted to the Rumanian front. As Rumania continued to require increasing assistance, the Russian offensive slowed down, and finally came to a complete halt in mid-October.

We may now sum up the results achieved by the Russians in 1916: (1) Their troops advanced from 40 to 60 miles along a 250 mile front, occupying approximately 12,000 square miles of territory previously in enemy hands. (2) In this advance heavy losses were inflicted upon the Teutonic armies. Between June 4th and August 12th, the forces of General Brusiloff captured 7,757 officers, 350,845 men, 405 guns, 1,326 machine guns, 338 bomb-throwers, 292 caissons, and vast quantities of ammunit on and military material. In addition the defeated armies suffered exceedingly heavy losses in killed and wounded. Between August 12th and the end of the year, at least 100,000 more prisoners were taken. These enormous losses meant the virtual annihilation of several Austrian armies, and imposed upon Germany the serious task of filling up the gaps with German troops. (3) Of the three objectives of the Russian offensive, only one was attained. The capture of Stanislaw brought important results. It secured Russia's grip on the Bukowina, and consequently Rumania, knowing that her Moldavian frontier was secure against attack, cast in her lot with the Allies. (4) The advance upon Lemberg and Kovel, while halted before reaching its objectives, gave the Russians improved positions for the campaign of 1917.

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## Book Review

*Mediaeval and Modern Times* by James Harvey Robinson. 777 pages; price \$1.60 Ginn & Co., Boston. This is a thorough revision of Professor Robinson's earlier book *An Introduction to the History of Western Europe*, which many Canadian teachers have used with their senior High School classes. Many changes have been made. The treatment of the mediaeval period is much shorter, but one hundred pages more have been devoted to the history of the nineteenth century, and the record has been brought down to the beginning of the present war. The shortening of the account of the mediaeval period has been judiciously carried out, and all the essentials have been retained. The teacher may, indeed, regret that some things had to be shortened or omitted, but the added material on the nineteenth century, particularly on the period since 1870, has made the new book very much more useful than the older one. Some such fuller treatment of the last century has been made imperative by the outbreak of the present war, for we can no longer stop short of the year 1914 in our treatment of the modern period. Very many new and excellent illustrations have been added. Several of these are in colour and underneath many of them are explanatory legends which make them much more useful. Taken altogether, this new history is a very satisfactory work, and will no doubt be welcomed, especially by those who have already used Professor Robinson's books.

G. M. J.

## The Everlasting Balkans

(Continued from the April number.)

PROFESSOR L. E. HORNING  
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In order to understand the developments in the Balkans since 1913 it is now necessary to turn our attention to the dominant partner in the present Quadruple Alliance, viz., Germany. The net result of the wars of 1864, 1866 and 1870 which led to Prussia's headship of the German Empire, proclaimed at Versailles, January 18th, 1871, was to shift the centre of European politics from Paris to Berlin. Under the guidance of Bismarck, foreign policy was conducted so as to preserve peace, the Triple Alliance of Germany, Austria and Italy was established and the principal care of the government was to build up a strong internal policy. The result was that there began a period of expansion of trade and commerce and of industrial development which was the great wonder of the closing years of the nineteenth century. When the present emperor came to the throne in 1888 he found on every hand an initiative and hopefulness that augured well for the future. Though overgifted with "gab" he still attracted the attention of the whole world by his wonderful energy and by his belief in his Divine Right to rule. It must be acknowledged that he worked very hard, was progressive and in general a very romantic figure. What a fall he has had in the eyes of the world since August, 1914!



Map 8.—The dream of the Southern Slavs,  
"Jugoslavia."

A new policy, or several of them, began to be in evidence, especially after the old pilot, Bismarck, had been dropped in 1890. A colonial policy was developed but not without exciting the suspicions of England and France in Africa, of the United States in regard to Brazil and finally of England in regard to the Asiatic schemes, principally the Bagdad railway. A navy was built up in feverish haste, hopes were held out to the Boers in 1899 and "a place in the sun" was demanded. Crisis after crisis arose in 1905, 1909 and 1911, but as none of them came to anything, most people called the excitement a "case of nerves". But if

the nations were caught unprepared when the real test came, and only England's fleet was ready, there had been some good preparatory work done in diplomacy. To counterbalance the Triple Alliance of 1882 (Austria and Italy were its queer bedfellows) there grew up the Double Entente between France and Russia which later developed into the Triple one with the accession of Great Britain. France and England settled all diplomatic difficulties in 1904 and Russia and England in 1907. As a result friendly concerted action was possible in need. Japan was



Map 9.—Germany's Dream of conquered and allied territories.

England's friend in the East and could do her bit. As was suggested by the writer in January, 1913, Italy proved an unstable member of the Triple Alliance and joined the Allies in May, 1915.

The assassination of Francis Ferdinand of Austria on June 28th, 1914, merely gave the excuse to begin the execution of what we now believe were carefully devised plans for conquest, to make real what seems to have been Germany's dream. Step by step, the wonderful talent for organization, which had been the admiration of the world, has enabled the forehanded leader of the Teutonic forces to arrive very near to its goal. The dream is vast and if it should become reality, the world would see great changes soon. "Greater Germany" is the Imperial dream of a ruler by Divine Right and of a nation completely intoxicated by the wonderful progress of the last forty years. But there have many things happened which make for doubt of success even in a German mind. France and Britain and Russia, who were all so troubled

internally in the summer of 1914, are showing such unity and such recuperative powers that Paris has not been taken, that the submarines have been a failure, that the Zeppelins are comparatively harmless, that all the colonies of each ally are standing with the homeland and that Russia has by no means been brought to its knees.

What was Germany's dream? Since about 1875 there has been a great development of "Imperialism" which is little less than Nationality gone mad and all sorts of "Pan"-ideas have been cherished. Pan-Slavism, Pan-Germanism, Pan-Islam, Pan-Anglo-Saxondom, how could there but be trouble when so many "chosen" people were claiming to be leaders in civilization? The Germans in the last few years have been quietly but assiduously cultivating the Germans in all parts of the world and wherever there was a people or province with any show of German blood *fraternité* was preached. No doctrine has had greater vogue in our commercial age than "nothing succeeds like success". Nor could there be any doubt of Germany's success. Commerce and population had wonderfully increased and their own territory was too small to contain them. So they looked towards kindred Holland, Belgium, some of France, and the Baltic Provinces of Russia, whose landowners were German in origin, though but a small portion of the population, and where the Lutheran religion is very strong. Poland, so ruthlessly partitioned in the eighteenth century by Prussia, Russia and Austria, was to be reunited under Germany's aegis; Austria makes part of the dream; "Greater Bulgaria", under the Bourbon-Hapsburg fox, is to be nominally independent and the Turk has found a "real friend". A through line from Hamburg, via Berlin, Vienna, Buda-Pesth, Belgrade, Nish, Sofia, Constantinople, Konieh and Adana to Bagdad and Koweit on the Persian Gulf will be the linking band of iron. A portentous dream, if realized, to both Russia and Great Britain. It is very near to realization. Even if the linking-up is made, can the combination hold? Will success succeed? If it should this tremendous struggle is but a prelude to a greater one—or will democracy make good and defeat its foe? The writer believes so and believes that the years of quiet which will follow the downfall of absolutism will and ought to be utilized to make such progress towards a more ideal form of democracy that it will be possible to cherish the hope that this will be the last great struggle of armed forces. Are not our hearts, all hearts, heavy with sorrow that the flower of the youth of so many lands should fall to gratify the lust for power of a few and that the minds of men in all countries should be turned to the expenditure of brain-power and of untold wealth to manufacture devilish engines for the destruction of human life which, if turned in the direction of upbuilding and education, would have made this old sad earth ring with paeans of joy, peace and goodwill.



## Notes on the Army Medical Corps

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[The following information has been asked for by several of our readers; perhaps others who are teaching War may find it useful.]

1. The distinguishing badge of the A.M.C. is a red Geneva cross on a white background. This is identical with the emblem of the Red Cross Society.

2. The M.O. (medical officer) of each battalion is provided with three orderlies, a Maltese cart for transport of supplies, and twenty-four stretcher bearers. The latter are not A.M.C. men, but bandsmen or ordinary soldiers. They are expected to render "first-aid" where possible.

3. *Regimental depots* are shell-proof dugouts a short distance back of the lines. Here the less serious "walking cases" are attended to and first-aid is rendered others.

4. The *Advanced Dressing Station* is located at a safer place farther back from the trenches, in a better dug-out, a house or a barn. To each of these stations the wounded from two or three regimental depots are collected.

5. The *Field Ambulance* has accommodation for 150 patients. It collects the wounded from three or four dressing stations. Here operations on the abdomen and chest are performed. The field ambulance is always ready to move when the line moves. Its staff consists of ten medical men and 240 stretcher-bearers.

6. The *Casualty Clearing Station* is the hospital nearest the railway. Nursing sisters get no nearer to the line than this. If a patient is likely to get well within two weeks, he remains here.

7. Serious cases are sent from the casualty clearing stations to stationary, general, or special hospitals. On the western front these are usually situated at or near the French coast.

8. Men who will not be able to return to the trenches for some months are sent to England on hospital steamers. In spite of the worst that German "frightfulness" could do, only one of these ships has so far been mined or torpedoed in the Channel.

9. All sanitary arrangements (drainage, water supply, sewerage) are under the A.M.C. So wonderful has been the work of this branch of the service that (it is said) the ratio of sick in the army is not much more than half the sick per thousand in civil life.

# Primary Department

## Primary Studies in English

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### LESSON—GROUP IX.

#### Section 1. *Fundamental Principles.*

**Aim.**—Development of the child's power to get the gist of what he reads or studies and to express it in a few clear, concise statements.

**Necessary Steps.**—How to enable the child to acquire clearness and conciseness without sacrificing spontaneity is perhaps the most difficult problem that arises in the teaching of English to elementary pupils. From practically every grade come the questions: "Why is it that so many of our pupils, in answer to a question, are prone to answer at length, in many cases in the exact words of the text"? "Why cannot our children express in a few sentences the main points of a simple story"? "Why does the pupil in giving an account of a simple happening use either short, fragmentary sentences or long rambling statements"?

Does not the explanation lie in the fact that our pupils (1) lack power to abstract ideas from the language in which they are clothed, (2) lack suitable ideals of expression, (3) have not formed the habit of correct expression. A brief analysis of these steps may help us to find underlying principles upon which to base effective methods of teaching.

**Analysis of Steps.**—Ability to abstract ideas depends, fundamentally, on the *imaging* power of the child. "Children need more than a knowledge of facts no matter how thrillingly they may be told. Fancy, imagination, ability to see that which is invisible, must be cultivated. Nothing else plays so important a part in everyday life as the imagination. The civil engineer must build the bridge in his mind before he attempts to form any structure of wood or stone; the sculptor must see the image in the marble, or all his wielding of the mallet will be in vain; nothing will be revealed by the chisel that has not already been formed within his own mind. The inventor must dream and fancy and wonder before he can make the first beginnings of his invention". Why should we blame a child for saying that the Sahara desert is the most productive region of the world when the word *desert* calls up to his mental vision no picture of dreary wastes of sand? The

child can abstract ideas only when his imagination is trained to such a degree that the subject-matter presented to him habitually calls up a succession of varying mental pictures. It is evident, therefore, that "no subject-matter involving sense-imagery should be presented to the child unless he has a stock of concepts that will make vivid realization of the content possible".

The average child in the beginning class undoubtedly images quite spontaneously and the primary teacher must know and follow Nature's method if she would properly train this invaluable power.

If definite lessons on mental pictures are given systematically and in *natural sequence*, the language read or heard will leave a mental image of people, conditions and actions, rather than one of mere words, phrases and sentences. The child will thus be able to reproduce in his own thinking the *ideas* of the language he reads or to which he listens.

But "no act of thinking is complete until its product has been set forth in words". The trained master of speech clothes his thoughts at once in suitable language; but the learner is far below such power of speech". We must therefore furnish the child with correct ideals of expression, and lead to their unconscious and habitual use through frequent and varied repetition. The ear avenue should be utilized first. Either at home or at school the child should hear many carefully selected stories before any "readers" are put into his hands. Walter Crane says that the impression made upon children by first books and first pictures is well-nigh ineffaceable. There lies the necessity of choosing the best. But until the child has gained the power to extract thought from language and has conquered the mechanical difficulties of the printed page the "best" in literature can be given only through oral presentation. We must remember, too, that the poem was never meant to appeal to the eye, and if you would have the girls and boys get the full value of poetry, "lend to the rhyme of the poet the beauty of thy voice". The repetition of stories and poems until they become thoroughly familiar gives them their full educative effect.

The speech forms acquired by the child are furnished him through his ear but it is by repeated *use* he fixes them in habit. In this connection we must make a sharp distinction between rational repetition and that which is purely mechanical. It is only when the child is brought frequently to use the correct forms of words and constructions in a natural manner and under varied and interesting conditions that these forms become incorporated into his everyday speech. The short "memorization story" is an excellent means of furnishing lasting ideals of expression. Through frequent oral and written repetition of these stories the child becomes so accustomed to hearing and speaking correct forms that he at once detects incorrect, awkward, or abrupt constructions.

**Outline of Plan.**—"Success in language teaching lies in the union of ideals and practice". We must therefore plan a co-operative group of language lessons. The group must have a definite end in view; and each lesson of the group, while having its own specific aim, must further this broad, larger end—the aim stated at the beginning of the article.

**Stage I.**—Description of mental pictures produced by single concrete words.

Select, first, words that call up a concrete image of sight, as: *robin, rake, garden*. The children think about the word and then tell what they "see". The description is given in the present tense as if the child were actually looking at the thing he is describing.

The very first words may well be chosen from nature lessons as these lessons give the best foundation of clear sense-images and at the same time furnish the child with the necessary vocabulary of words.

Before the children are asked to give this description several preliminary steps are necessary. These are:

(a) Illustrations by the teacher to help the child to grasp the idea of mental picturing. As these illustrations also furnish the child with ideals of expression they must be carefully selected. In this connection the use of a "diary" may be explained and extracts read from the records of children who afterwards became great writers.

(b) Practice in mental picturing; expression through handwork. The teacher describes a flower, animal or object. The pupil visualizes as the teacher talks, subsequently expressing his mental picture through a drawing. The pupil's drawing is then compared with the real object or an artist's picture which, in the meantime, has been hidden.

(c) A nature lesson to give definite sense-images of the object to be pictured.

(d) A language lesson (based on the nature lesson) to give power of expression.

From the beginning pupils should be trained to think a number of thoughts, combine them mentally and express them orally in good form.

(e) The two processes—mental picturing and oral expression—are now united.

Single words that appeal to other senses than merely that of sight may now be introduced. For example, in "The ploughman homeward plods his weary way", note the mental effect of *plods*. Substitute "walks" and the "tired feeling" disappears. While discussing the value of the word *plods*, a mental picture of the *man* has gradually been shaping itself in the mind of the pupil. The line may be dramatized and attention called to the drooping shoulders, and heavy, forced step. This dramatization is followed by oral description.

The word *grated* in "The boat grated on the sand" gives a distinct sense of hearing the sound itself because the word makes such a strong appeal to the same sensation gained through the ear in the past.

Many devices may be used to make this work interesting. Cards may be distributed and each pupil may frame a riddle suggested by the word written on his card.

For example—Edith says, "In our dining room there is a thing about six inches long. It is oblong and is made of silver. It doesn't hold anything, but it is very useful." There are many guesses, but to no avail. Then begin the questions. "Has it a handle?" "Yes, it has a handle." "Has it a top?" "No, it has no top." "Does everyone have it on the table?" "Yes, it is on everyone's table." This is correctly guessed to be a *knife*.

Pupils are encouraged to frame riddles about something mentioned in the poem being studied, and in guessing the pupils may first recite the stanza containing the word on which the riddle has been based.

**Stage II.**—From single words go to words modified by phrases, then complete sentences and finally several sentences with related ideas.

The *Mother Goose Rhymes* furnish excellent material for this stage.

The following game gives suggestions: "All of the children closed their eyes and the command was given, 'Think of one of our Mother Goose friends and see whether we can guess who it is when you describe it.' The child chosen would give a short description on something like the following: 'I see a girl and a boy climbing a steep hill. The boy has on a red cap and sweater and black pants and shoes. The girl wears a blue and white dress, a blue hair ribbon, clean white stockings and black shoes. Her hair is light and her eyes are blue. I can see her hair because she hasn't any hat on her head. Her cheeks are rosy. The boy and girl are carrying a pail between them.' Of course the boy and girl are Jack and Jill and you may be sure that it was not necessary to tell any child to pay attention during the course of the description quoted above."

The rhymes may be recited, then dramatized, and lastly the pictures produced by the dramatization described orally.

**Stage III.**—Paragraphs and stanzas with definite mental pictures are selected from children's readers. The pupils describe the mental pictures produced by reading them.

In these three stages outlined above the subject has been treated from the thought point of view. Next month the fourth stage will be outlined, in which suggestions will be given from the view-point of composition.

Section 2. *Illustrative Lesson-Group.*

**Blackboard Reading.**—AIM:—To prepare pupils for a field excursion.

*The Frog.*

I am going to Smith's pond.

I want to find out how a frog escapes his enemies.

Does he jump in head first or feet first?

When he strikes the bottom what does he do that hides him from his enemies' eyes?

Does he come up at the same place at which he went in? *I wouldn't.*

Does he come up where the water is clear or where plants are growing?

Tom says he breathes without lifting his head out of the water. I shall find out how he does this. I shall watch his cheeks and throat too.

My story-book says the frog's hind feet help him to swim. Why doesn't he use his front feet too?

Why did Tom say: "Hold him *if you can*"?

How does his colour disguise him from his enemies?

I am going to find out how he captures his food. I shall tie a little rag of red flannel to the end of a string on a pole and dangle it slowly in front of the frog.

I shall find out what is meant by "Each thing in its place is best."

**Nature-Study.**—AIM—To supply sense-images: (a) Class-lesson on the *frog*, (b) answers to questions in reading lesson discussed.

**Literature.**—(Extract)—AIMS:—Interpretation; to enrich vocabulary.

*Freckles at the Pool.*

"Before him spread a great, green pool, filled with rotting logs and leaves, and bordered with delicate ferns and grasses. As Freckles leaned, handling the feather and staring first at it and then into the depths of the pool, he once more gave voice to his old query, 'I wonder what it is!'

"Straight across from him, couched in the mosses of a soggy old log, a big green bullfrog, with palpitant throat and batting eyes, lifted his head and bellowed in answer, '*Fin' dout! Fin' dout!*'"

**Poem.**—AIM:—Mental picturing and oral expression.

## FROGS.

"Over in the meadow  
Where the clear pools shine  
Lived a green mother frog  
And her little froggies nine.  
'Croak,' said the mother;  
'We croak!' said the nine;  
So they croaked and they splashed,  
Where the clear pools shine."

Hand-Work and Sand-Table.—See *Educative Handwork* in this issue.

## Educative Handwork

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“**M**AY'S the month that's laughing now”. May, the month of flowers and green leaves, is here. Nature, long dead, lives and smiles again. The celebration of May Day originated in the Roman custom of paying homage to Flora, the goddess of flowers. What were termed floral games began on April 28th and continued for five days, May Day being the chief day. This ancient festival has been continued to modern times. The English custom of gathering flowers and decorating the doors of houses and of dancing around the May pole is still kept in some parts of England. The beautiful spring time flowers are ever a source of delight. There are a number of legends about flowers that may be told and used for a basis of a cutting lesson. The legends of the Anemone, Briar, Rose, Pink Rose Bud, Snowdrop and the Pussy Willow are real classics for children.

Cuttings of flowers or birds may be pasted into a flower or bird book. At the foot of each page write the name, date, and other facts of interest. Among the most common of the flowers to be found are the dandelion, violet, buttercup, horse chestnut, lilac and trillium.

The pretty custom of leaving baskets of flowers at the door on May Day gives scope for the making of many pretty baskets. The fact that the baskets are not only pretty, but will actually hold things, appeals to the child.

1. A basket, so simple that the youngest child may make it, is made by folding a square on its diagonals and cutting on one of the folds from the corner to the centre. This gives four triangles, one of which may be lapped under another to give a three-sided basket like an inverted pyramid. A small hole may be made in each corner and a string tied in to form a handle.

2. Sunflower May basket.—Around a circle draw any number of petals. With a sharp knife make a slit in the end of each petal. Cut out the petals, and fold up the sides. Run a baby ribbon through the slits and tie.

3. Rose basket.—On each side of a square draw a flower pattern (rose, apple blossom, dandelion). Cut out the petals, turn up the sides and tie ribbons to opposite sides for a handle. Colour the blossoms a delicate colour to represent the colour of the flower.

4. Hexagon basket.—Use a hexagon for the bottom of the basket. Draw rose petals outside of each of the six sides. Turn up the petals overlapping each. Run a piece of raffia through small holes punched in each petal. Curl each leaf over a little.

5. Pretty little baskets are made by taking a nut or salad "paper ramekin" for the foundation. Around the outside paste a strip of tissue paper. Fasten a covered wire on for a handle and decorate with tiny flowers made of paper.

Baskets made of reed or raffia make durable baskets. The children may use switches of shrub or tree that will bend easily. Lilac, wild cherry, willow and many others will answer the purpose nicely.

The work of the hand may be further expressed by drawing a May landscape or a calendar decorated with leaves, apple blossoms or May birds, or by cutting borders of different flowers or of birds.

The Singer Sewing Machine Company have sets of birds with the bird's egg belonging to each. These mounted on gray paper make a border that will be of great interest.

Birds, their nests, and their eggs, may be modelled in clay.

To make a paper bird fold a 5" square on the diagonal making a triangle. Fold each of the angles at the apex down on opposite sides of the crease which forms the base of the triangle. These two little triangles form the wings of the bird. Spread open the wings and throw the "paper bird" out into the air. It will shoot out in straight lines.

**The Sand Table.**—There is a recognized affinity between children and a sand pile. The sand table or sand pan brings the sand-pile to the child. It is so plastic, so easily moulded, so yielding to the touch, that it is unequalled for a child's use. It is a splendid means for the development of observation, interest and expression. The value of this plastic material to illustrate subjects with construction forms and patterns is recognized by all. The children take an interest in creating a "village", a "garden" or a "mountain", that grows on the sand under the guidance of their own hands.

They gain a clear idea of whatever subject is being taught because they see it in actuality. If worked out with the community spirit, they learn to have consideration for others, to co-operate and to lead or be led as the group plays and works together for a common end.

The preparation for the subject to be illustrated should be planned. The story, the construction work, and the sand should be ready. The sand needs to be thoroughly watered before school, so that it will have a chance to soak in evenly before being used. A group of workers, under the teachers' direction, need to get definite ideas of the various parts to be dug out or built up. The direction of a river, the position for certain objects may be marked while the details may be worked out later by the children. Others may be getting the construction work ready.

Geography, history, story-telling and number work may be vividly pictured on the sand table. For story illustration the sand is unrivalled.



Even the smallest child may produce something that looks like the bowls of the three bears, the haycock under which Boy Blue slept, or the pie which, with its four and twenty blackbirds, was set before the king. The story of the Eskimo, Japanese, Arabian and Dutch may be outlined—the teacher telling many stories of the life and habits of these people and then the children illustrating them in the sand. The sand may be measured by pints and quarts, the construction work by inches and feet. Sketching a suitable background on the blackboard adds to the effectiveness of the work. Sheets of wadding or batting sprinkled with mica or diamond dust make very realistic mountain peaks or glaciers.

In making a park, green blotters for grass and oval mirrors for ponds make it look very real. Table oilcloth may be used for canals or rivers. Long strips of this, dark green in colour, may be folded in open-box shape and sewed at the corner edges. These make long pans which are proof against leakage. Tissue paper has many uses. Circles of it, pinched to represent blossoms and glued to twigs, give us cherry or plum trees. Tissue-paper flowers tied to green sticks furnish flowers. The "Big Sea Water" in Hiawatha may be represented by blue tissue paper placed under a piece of glass. Wooden animals may be whittled out or bought at a store for very little. Spools decorated to resemble jardinières may hold the dwarf trees of Japan or covered with tin foil they serve as milk cans of a Dutch milk cart. Patterns of dolls or animals may be cut out of manilla paper and coloured with crayola. Glue toothpicks on the backs and insert into the sand wherever needed. Many of the objects may be made from construction paper and do duty for several stories.

**Correlation.**—In the poem "Over in the Meadow", mentioned in *Primary Studies in English*, in this number, we have a splendid sand table picture. Make the clear pool as suggested above. In it put cuttings of bullrushes and water lilies. Make the mother frog of green paper and the froggies nine too. Have some of the froggies near the mother, one or two swimming, one sitting on a water-lily leaf. The addition of an old log for the froggies to sit on will add to our picture.

**Recreation.**—Represent a walk in the woods by (a) looking for flowers by running around, (b) picking them by stooping, (c) digging up some roots. Represent butterflies, bees, birds or grasshoppers by suitable actions.

"Hopping Toads" is a very enjoyable game. It is also called "Jump the Shot". The toads form in a circle and join hands. One toad stands in the centre with a rope about the length of the radius of the circle. On the end of this rope is securely tied a bean bag. The centre toad swings the rope in a small circle, first keeping it close to the floor;

he gradually enlarges the circle until the bag comes in line with the feet of the toads in the big circle, who must jump to avoid being hit by the bag. The toad that happens to be hit must exchange places with the centre player.

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## Geographical Nature Study

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**M**AY is the month for special emphasis on nature study. Much of it is agricultural and biological rather than geographical. The central thought of spring is the awakening of new life, and the course of study should be so plastic that all activities emphasize this idea.

Continuing the story of Mother Nature's house-cleaning, we find that much progress has been made. The soft green carpet is laid—the grass with, here and there, a pattern of innumerable clusters of tiny flowers; the hangings are up—the foliage of the trees shutting out the extensive view that lay before our eyes in the winter months; and across the dome flashes an occasional rainbow after the house has been freshly washed and dusted. Visitors have come—many of them—some in gay dresses and so happy with their songs. All the preparations seem to have been worth while.

We may study, as the opportunity is afforded:

1. The grass—its uses around the city home, and as food for animals.
2. The wild flowers as we visit them in their homes:

(a) Down in the valley near the water—fern, marsh marigold, jack-in-the-pulpit.

(b) On the slope—buttercup, daisy, arbutus, violet.

(c) In the meadow—dandelion.

Emphasis will be placed upon their food and shelter which make it possible for the flowers to blossom so early. Even small children can tell something of the interesting adaptation of plants to secure sunlight, food, and water. In connection with the study of wild flowers throughout the month, a flower calendar will record the specimens found, although care will be taken to prevent the children from ruthlessly, "flower thirstily", plucking the wild flowers which are in danger of being exterminated.

3. The trees may be identified by leaf.
4. The colours of the rainbow may be worked out in connection with art.

5. The birds—a few may be identified by song and colouring, and a few of their summer homes may be recognized.

Garden work should furnish the principal interest of the month. The requirements in agriculture, as issued by the Department of Education, will aid each teacher in planning what is best adapted to the locality. But this year each child has an opportunity to forward the nation's cause by doing what he can to make our country produce as much food as possible. The aim in gardening, therefore, is economic, and should be carried into both home and school gardens. What we have formerly regarded as the uses of the garden are not limited on this account, for it is said that "a child who plants a seed is working hand-in-hand with nature". Besides making the problem more definite and inculcating habits of thrift, the garden still provides accessible material in its natural environment for lesson study, and furnishes innumerable correlations.

Some of the work that is related to geography only will be mentioned here.

To plant wisely we must know a little about the needs of the young plant:

1. *Soil*.—How soil is made may be told in connection with little stories gathered from the work of the previous months. What we find in it—sand, clay, pieces of plants.

2. *Moisture*.—Experiment to see what kind of soil lets most moisture in, what kind holds most moisture, and what kind would seem to have the best variety of food for a little plant.

3. *Sunlight*.—The need of warmth, light, etc. Determine what amount of sunlight will be available for the plant at various parts of the garden.

The preparation of the garden will show the need of paths for traffic and convenience, the same as roads and city streets.

If some of the vegetable seeds which were gathered last fall and kept through the winter are planted, unconsciously the class will be impressed with the continuity of life, the cycle of growth, and the study of man in relation to the earth.

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### A Child's Prayer

Agnes M. Brundell.

Hamilton

Sailor, sailor on the deep,  
Guarding me while I'm asleep,  
Don't forget the children pray  
For your safety every day.

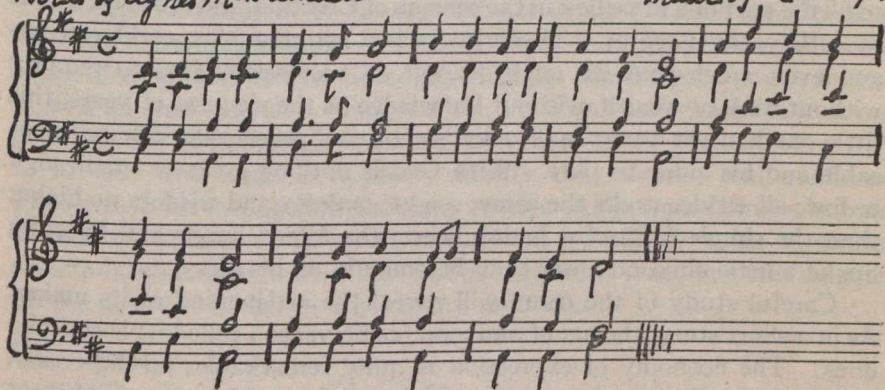
Soldier, who dost fight and die,  
That no danger may come nigh,  
Here another Army stands—  
The little Army of joinèd hands!

Flying man, high up in air,  
 Thank you for your watchful care  
 Shielding me, remember too  
 That my little prayer shields you.

*Sailor, Sailor on the Deep.*

Words by Agnes M. Brundell

Music by M. Troup.



## Book Reviews

*Bird Friends* by Gilbert H. Grafton, 330 pages; published by Houghton Mifflin Company, Boston and New York. Price \$2.00. Considering the great numbers of books of all descriptions that have been written on birds, we are at once led to ask the question—Is there room for another book on birds? The present volume at once gives an emphatic affirmative answer. It occupies a field different from any of the numerous books published, and that field is one most useful for the teacher. This volume wisely does not enter into a description of the various species, but discusses quite fully many topics about such habits of birds as the teacher is anxious to learn in order that he can teach better. The titles of some of the chapters will indicate best the nature of some of these topics: Bird Travellers; Bird Music; Bird Homes; Home Life of Birds; Colours and Plumage of Birds; Enemies of the Birds; their Economic Value; Bird Clubs; Nesting-Boxes, etc. Each topic is discussed quite fully. The volume is beautifully illustrated, many plates being coloured. This book should find a place in the library of every High and Public School.

G. A. C.

*A Child's Book of Holiday Plays* by Frances Gillespy Wickes. 209 pages; price 60 cents. The Macmillan Co. of Canada Ltd., Toronto. Public school teachers who are trying to develop in their pupils the dramatic instinct, present in all normal children, will welcome this volume. The themes are varied and interesting, and yet the plays are short enough to be acted by the children in an ordinary class period. At the end of the volume are very definite practical suggestions for staging, which the teacher will find very useful whether the children do their acting at the front of the class room before their fellow pupils, or perform on a regular stage before a public audience.

G. M. J.

## “The Boy and the Angel”

FRANCIS J. A. MORRIS, M.A.  
Collegiate Institute, Peterborough

I.—**Introduction.**—As the title indicates, the poem is not the story of Theocrite, but the story of how an Angel tried first to cancel and then to fill the part of a little boy in the scheme of Creation, and failed each time to satisfy the Creator. Theocrite lacked all that the world esteems and even much that we might expect an omniscient God to require; without rank or wealth, without knowledge or the ripeness of years, this little one had yet a part in creation's chorus of praise that was indispensable and his alone to play. With God is nothing great or small, high or low; all service ranks the same; might, majesty and wisdom no higher than the simple faith of a loving heart; the folded hands and faltering lips of a little child no lower than Solomon in all his glory.

Careful study of the poem will reveal the artist mind of its maker. As in a short story, the art of omission (as Stevenson called it) is conspicuous. The economy of expression is quite remarkable; no digression, no idle ornament, no comment or explanation, nothing that might not safely be left to the intelligence or the imagination of the reader has gained admission. All this is perhaps obvious, but often it puts even nimble wits a-stretch to keep up with Browning's march of mind, and most of us are content to follow the master at a distance with unequal steps. It may stand us in good stead if we bear in mind throughout the poem some of the principles involved in the so-called Art of Omission, *e.g.*:

- (1) That the whole poem embodies one single main idea.
- (2) That every couplet has a direct bearing on the main idea.
- (3) That every phrase and even word is in some way essential.

### II.—**Synopsis:**

1-10. A never-failing sense of jubilant praise to God has Theocrite, yet he is but a poor unlettered drudge. With all the charm of tender youth, and in the playtime season of life, he yet gives all his hours to unremitting toil, and nothing impairs his cheerfulness or comes between him and his work.

11-20. The good monk Blaise is overjoyed and assures the boy his praises are just as acceptable to God as those of the greatest. But the boy, impulsive and full of the fervour of his orisons, wishing to give sublime proof of his love for God, prays that his life might be summed in one supreme act of adoration, and Gabriel hears his prayer.

21-38. As soon as Theocrite is caught away from his craftsman's cell, God misses his favourite voice of adoration, and Gabriel takes the boy's place, does his work, and sings God's praise. Year in, year out, a simple drudge he lives in human form; and in the natural course his frame, obedient to the laws of time, grows up, matures, and then declines.

39-48. But still God misses the peculiar charm of his human creature's praise, the unquestioning faith of simple love, and Gabriel determines to restore the craftsman to his cell.

49-62. In the hour of his supreme act of adoration, Theocrite has suddenly a burning memory—the first since his boyhood's mortal sickness—of an earlier life that he led, in which he heard a good man's words of wisdom, and uttered a childish wish, felt a sudden sickness that overpowered him and passed into an angelic vision.

63-78. The angel re-appears, admits the miracle, and confirms Theocrite in his feeling that the good monk's words were full of wisdom. Theocrite becomes a craftsman again, and his simple voice of praise rises to heaven once more, while Gabriel takes his place in Peter's dome till the days of his earthly sojourn are numbered.

### III.—Notes.

ll. 1-2. Constant and cheerful in prayer and work alike.

ll. 3-4. Compelled so early to earn his bread by long hours of manual labour, we are to understand that he is unlettered.

ll. 5-8. Of tender years and comely looks, he is yet a wise craftsman, thorough and unrelaxing.

ll. 9-10. His sense of duty is instinctive; the activity of his life gives him keen pleasure; even the rebellious locks that would come between him and his work cast no shadow of gloom or discontent.

ll. 15-18. In the careful explanation of what must have been a well-known custom, as well as in the boy's reception of the monk's words, we are reminded of Theocrite's extreme youth and naïve simplicity.

ll. 17-18. The boy wishes not so much to be Pope as to praise God in a way that could not fail to reach his ear; there is no touch of ambition in the wish, it is well-motived, and the boy would cheerfully resign his life at the granting of it.

l. 20. For many years the craftsman's cell knew him no more. He had not necessarily been transported through space to a great distance, but as Theocrite the craftsman he no longer existed. See ll. 53-60.

ll. 21-2. On the principle that every word and phrase counts, what is the purpose of this couplet? Surely to anticipate a difficulty: Browning's plot requires that God should comment but twice on the effect of Gabriel's miracle, and that these two occasions should be 50 years or more apart; in effect, Gabriel asks God two questions in rapid succession;

the first receives an immediate answer "Nor day nor night Now brings the voice of my delight", the second waits half a century for the response, "I miss my little human praise". Such a thing would be monstrous in a world of time and space, and even these words of explanation must not be pressed beyond the poet's requirements or they may prove too much.

l. 23. "Nor day nor night": this need not mean later than the morning after Theocrite's disappearance; in any case it cannot mean more than a few days or weeks, for when the Angel takes up his abode in the craftsman's cell, it is in the guise of the boy who was gone.

l. 27. "Entered the empty cell" is the original reading; the words "in flesh" improve the form and perhaps remove an ambiguity. The cell is probably a monastic cell. Throughout the poem it is implied that the boy was more or less isolated—alone in the world; details of the boy's relations in life are beside the purpose and would, of course, impair the unity of the poem, but they would also complicate the issue: it would be impossible for the Angel to impersonate a boy living, say, in the bosom of a family; apart from the improbability, this would shock our moral sense as involving deliberate fraud.

ll. 31-34. These lines surely prove that the miracle wrought by Gabriel in no way interferes with the natural lapse of time. We must remember that the Angel while impersonating the craftsman would be under human observation, and further that Theocrite the Pope has to carry on the craftsman's life from the point where Gabriel enters Peter's dome.

ll. 39-44. God not so much inclines his ear to a certain point of space as adjusts his hearing to detect a special note or tone. Hearing, sight, or any other sense (so adjusted) will not be disturbed though the field of sound, vision, etc., be thronging with other objects of the special sense. The hearing is, as it were, keyed to respond to one set of vibrations only, all others will fail to arouse the instant's act of attention necessary to bring them into consciousness. But when the ear so adjusted fails to catch the voice of its delight, then, as a last resort so to speak, it is inclined to the particular point of space from which the "little human praise" had been wont to emerge, and at once detects an alien note among the human choir.

l. 40. i.e. It is not a human voice; I take it to be implied that doubt and fear are qualities present in all human praise, not merely or specially in Theocrite's. The earth (with its sentient life) is neither a new world nor an old world, but in an intermediate stage of ignorance and error.

ll. 41-2. 'old worlds', i.e., worlds that have reached their goal of knowledge and goodness—a millenium or golden age of regeneration.

'new worlds', i.e., still trailing clouds of glory, not yet in entire forgetfulness of God's shaping hand; in a paradise or golden age of primal innocence.

1. 43. 'clearer loves', i.e., loves clearer than the little human praise; punctuation and sense alike point forward, not back, to the second term of the comparison. It is possible to take the 'clearer loves' as denoting superhuman praise from 'newer' or 'older' worlds than the earth, coming to God from the most diverse points in space; but it seems better to refer it to human praise that contains a greater amount of knowledge or wisdom than the little craftsman's; such human voices of love as Theocrite the Scholar and Priest's, Blaise the Monk's, or Theocrite the Pope's.

'other ways' might possibly be taken as a variation for 'otherwise', i.e., having a different quality of sound; but the words gain force, perhaps, when taken in the sense of coming from other points in space or from other parts of the earth.

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## Book Reviews

*Teaching Literature in the Grammar Grades and the High School* by Emma Miller Bolenius. 337 pages; price \$1.35. Houghton, Mifflin & Co., Boston. This is a very suggestive, helpful volume. The lyric, the long poem, the novel and the other forms of literature usually studied in the High School are all dealt with in a very practical way. Miss Bolenius has had a varied experience as a teacher, and succeeds more largely than most writers on methods in literature in giving the young, inexperienced teachers not only suggestions as to the books to be studied and the way they are to be introduced to the class, but definite help with the central part of the lesson, the detailed study of the poem or the piece of prose. In connection with each type of literature she applies her methods to some well-known masterpiece. At the end of each chapter is a very useful list of "helpful readings and other suggestions for vitalizing class work". This volume is particularly helpful for the young teacher, but the older and more experienced teacher will find in it much that is fresh and useful and inspiring. G. M. J.

*The Home and the Family (The Home-Making Series)* by Helen Kinne and Anna M. Cooley. Price, 80 cents. The Macmillan Company of Canada, Toronto. This volume is intended to be used in the elementary schools as a supplementary reader to the two texts, *Food and Health* and *Clothing and Health*. It explains how to furnish each room of a house, how to keep the house clean and in good order, how to care for and feed the baby, and how to keep well.

*Jim and Peggy at Meadowbrook Farm* by W. C. O'Kane. Price 60 cents. The Macmillan Co., Toronto. This is a continuous narrative of 223 pages, giving a description of farm life under ordinary conditions. The book is profusely illustrated. The subject matter emphasizes the fundamentals of farm life: What the rain, the sun, roads, subject matter emphasizes the fundamentals of farm life: What the rain, the sun, roads, fields, distance, fences, neighbours, mean in the country. The various farm duties are described simply and graphically. While the book is intended for town and city children, it presents an opportunity to give children in the country elementary ideas of agriculture in a very agreeable manner. It is a very interesting story throughout.



## Suggestions on Tree Planting

J. F. BOYCE, B.A.  
Calgary.

**Preparation of the Soil.**—If at all possible land intended to be planted should be prepared the year previous to planting. Dig up the earth to the depth of ten inches or more, break the lumps, remove the old roots and work up thoroughly. After the trees are planted cultivate the soil at intervals throughout the first half of the growing season, and year after year, until the size of the trees renders it unnecessary. The reason is obvious. Land well worked up holds the moisture and favours root growth better than dry, hard, baked ground. CULTIVATION IS THE WATCHWORD.

**Selection.**—Small, young, symmetrical trees from the upland should be selected. When lifting them be careful not to disturb the roots very much, and BRING AWAY A LARGE BALL OF EARTH ATTACHED TO EACH. Should any of the larger roots be damaged or broken in transit, remove these portions with a sharp knife to prevent disease. Trees, native, or obtained from western nurseries, are preferable.

**Planting.**—Plant trees as soon after digging as possible, before the roots become dry. Place them five or six feet from the fence and ten or twelve feet apart. If wanted for a hedge or screen or clump they should be planted three or four feet apart. The hole should be at least twice as wide as the root of the tree and 16 or 18 inches deep. Plant the roots at least three or four inches deeper than they were originally. Shake the tree gently up and down while planting to allow the fine earth to come in close contact with the rootlets. When the hole is nearly full, TRAMP THE EARTH FIRMLY. Give the tree plenty of water at the time of planting, after treading, and before the hole is filled. When the water has soaked away, fill in the surface with dry soil, leaving a shallow basin two or three inches in depth around the base of the stem. This prevents evaporation, and cracking of the top soil later on. Give a good drink weekly during dry weather. DO NOT PUT MANURE IN CONTACT WITH ROOTS AT TIME OF PLANTING.

**Pruning.**—Remove any injured branches and keep the top well balanced. All cuts should be clean and close to the stem. Do not leave stumps of branches, when trimming, as they do not readily heal over and thereby allow disease germs to enter. Evergreens require little

or no pruning. Unless you desire a close hedge or a purely artificial form of tree, NEVER UNDER ANY CIRCUMSTANCES REMOVE THE LEADER OR CENTRE GROWTH OF A TREE.

**Time to Plant.**—Early Spring for deciduous trees, *e.g.*, balm, aspen or birch. Evergreens in May.

**Ripening up the Wood.**—When the year's growth is two feet or over, especially in a wet season an inch or two should be cut off the growing shoots. This stops the growth and induces the tree to mature its wood, which thus becomes hard and firm, and capable of withstanding the frosts of winter.

**Trees.**—NATIVE. DECIDUOUS.—Aspen Poplar; Balm of Gilead Poplar; Narrow Leaved Poplar; Birch, white; Birch, black; Cottonwood (native south and east of Lethbridge); Tamarac; Alder. EVERGREEN—White Spruce; Black Spruce; Jack Pine; Balsam; Douglas Fir.

IMPORTED. DECIDUOUS.—Ash (native east of Maple Creek, Sask.); Elm (native east of Lumsden); Cottonwood (not native at Red Deer, but native east and south of Lethbridge); Manitoba Maple (native east of Lethbridge); Russian Poplar—*P. Petrowskiana*, *P. Certinensis*; Russian Willows, Sharp-Leaf (*Acutifolium*) Laurel, Golden; Cut Leaf Birch. EVERGREEN.—Colorado Blue Spruce.

**Shrubs.**—NATIVE—Dogwood; Hazel (two varieties); *Spirea Salicifolia*; *Potentilla Fruiticosa*; Creeping Juniper; Buffalo Berry; Honeysuckle (three varieties); Red Currant; Black Currant; Mountain Ash; Clematis.

IMPORTED.—Siberian Dogwood; *Spirea Van Houttei*; *Spirea Billardii*; *Spirea Arguti*; Lilac, Charles Xth (purple); Lilac, *Villosa* (Japanese); Lilac, *Josikea* (Hungarian); Lilac, White; *Caragana Arborescens*; *Caragana Fruitescens*; *Viburnum Lantana* (Wayfaring Tree); *Viburnum Lentago* (native of Manitoba); Flowering Currant; *Artemisia Tobolskii* (Russian Old Man); *Artemisia Arbrotamus* (sweet southern wood); Tartarian Honeysuckle; Bush Cherry; Virginian Creeper.

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*From a Public School Principal.*—The enclosed letter is an exact copy of a note received by one of my teachers this week. Some people think that foreigners are handicapped in their use of English, but this one has, I think, quite an expansive knowledge of the language. The child in question is in the Second Year and has only lately left the First Year. The father usually refers to her as Miss — but in this letter he has been a little more familiar:—"Miss —: Kindly forgive Tobie — for not being in school this morning, her vast interests abroad coupled with her inadvertent attention to social affairs, make it imperative, so that knowing her absence would be felt, compelled me to give vent to these few words of explanation, and appeal to your kindness and entreaties. Yours truly."

## In the Classroom

FREDERICK H. SPINNEY  
Principal, Alexandra Public School, Montreal

### MORE ADVANCED WORK IN MULTIPLICATION OF FRACTIONS.

(NOTE.—The class of 36 pupils is divided into three groups, ranging from pupils of highest rank in Group III. to those of lowest rank in Group I.)

GROUP I. went to the board.

The teacher held before the pupils a large "card" divided by heavy lines into 15 equal parts.

"Write the name of each part".

The pupils wrote  $\frac{1}{15}$ .

"Multiply it by 5". The teacher pointed to five of the equal parts.

Some of the pupils wrote  $\frac{1}{15} \times 5 = \frac{1}{3}$ ; others wrote  $\frac{1}{15} \times 5 = \frac{5}{15}$ .

Turning to the pupils in their seats, the teacher asked, "How many think Harry's answer is correct"? "Mary's"?

The majority decided in favour of Mary's answer.

"Why is yours correct, Mary"?

"Because  $\frac{1}{3}$  is the *lowest terms*".

It is by means of such devices that this principle is made clear to all the pupils.

The teacher continued the dictation until the majority of the pupils had written correct answers of the following examples:  $\frac{1}{15} \times 10$ ;  $\frac{1}{15} \times 6$ ;  $\frac{1}{15} \times 12$ ;  $\frac{1}{15} \times 3$ ;  $\frac{1}{15} \times 9$ ;  $\frac{1}{15} \times 15$ .

"Now try three *hard ones*:  $\frac{1}{15} \times 45$ ;  $\frac{1}{15} \times 75$ ;  $\frac{1}{15} \times 100$ ."

Only two pupils of the group succeeded in securing the correct answers.

Group II. went to the board.

The teacher held up a "card" divided into 20 equal parts.

"Write the name of the fraction."

The pupils wrote  $\frac{1}{20}$ .

"Multiply it by some number to make  $\frac{1}{2}$ ".

The pupils wrote  $\frac{1}{20} \times 10 = \frac{1}{2}$ .

"Multiply it by some number to make  $\frac{1}{4}$ ;  $\frac{3}{4}$ ;  $\frac{1}{5}$ ;  $\frac{1}{10}$ ; 1; 2; 3; 5".

The pupils found no difficulty in performing those operations.

"Erase your work and try five *hard ones*".

The teacher dictated:  $\frac{1}{12}$ ;  $\frac{1}{24}$ ;  $\frac{1}{60}$ ;  $\frac{1}{20}$ ;  $\frac{1}{32}$ .

"Multiply by numbers that will make each answer  $\frac{3}{4}$ ".

When he announced "time is up", only five pupils of the group had secured the correct results.

Group III. went to the board.

The teacher dictated "cost questions". These were always eagerly welcomed:  $\frac{1}{2}$  lb. tea at 40 cts.;  $\frac{3}{4}$  lb. tea at 60 cts.;  $\frac{1}{8}$  lb. raisins at 16 cts.;  $\frac{7}{8}$  lb. raisins at 16 cts.;  $\frac{1}{3}$  lb. rice at 6 cts.;  $\frac{1}{2}$  lb. sugar at  $8\frac{1}{2}$  cts.;  $\frac{1}{4}$  lb. nails at  $8\frac{1}{2}$  cts.;  $\frac{1}{4}$  lb. of "something" at  $\frac{1}{4}$  ct.

"Erase all your work, and try three hard ones. Do not write the answers until you have written all the statements. When you finish you may take your seats. The pupils of Groups I and II will decide whose answers are correct":  $1\frac{1}{8}$  yards cotton at 16 cts.;  $2\frac{5}{8}$  yards cotton at 16 cts.;  $3\frac{7}{8}$  yards cotton at 16 cts.

Eight pupils of the group secured the correct answers.

"Harry, your work is the neatest, you may find the total cost, and find the change from a \$10 bill."

This device was often used to emphasise the value of *neatness*.

The most successful teacher is the one who best understands the attitude of the child, and who uses that understanding to devise methods of procedure that will draw out the keenest interest and the most earnest endeavour on the part of the children.

When a teacher falls into the proverbial "rut", there is a wide gulf between herself and the pupils, because they are growing too fast to fall into ruts; and that gulf becomes wider with each passing year. It should be the earnest prayer of every teacher to be kept out of a rut.

It is not essential that every pupil of the class should cover the "entire ground" in multiplication of fractions, or in any other principle of arithmetic. What is of the highest importance is that every pupil should put forth his *very best effort* during the entire lesson period. To secure such a desirable condition, the lesson must be presented in such a manner as to arouse his *eager interest*.

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## Book Reviews

*Carpentry*, by I. S. Griffith; 188 pages. Price \$1.00. Manual Arts Press, Peoria. A book intended to be of service to apprentices to the trade, to vocational and trade school students, and to manual training students.

*I Sometimes Think* (sub-title, *Essays for the Young People*), by Stephen Paget. Pp. viii+155. Price \$1.50. The Macmillan Co., Toronto. This book contains nine clever and entertaining essays, all very suitable for High School students' reading. The subjects are:—The World, Myself and Thee; The Beauty of Words; Handwritings; The Way of Science; Moving Pictures; London Pride; Unnatural Selection; *Si Monumentum Requirit*; The Next Few Years. If placed in the school library, these will be read with pleasure and profit.

*Five Hundred Practical Questions in Economics*. By a Special Committee of the New England Teachers' Association. Paper. 58 pages. 25 cents. D. C. Heath & Co., Boston, New York, Chicago.

# Nature Study for May

GRACE CANDLER

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

## THE TURTLE.

This outline of a course of study on the turtle is intended for pupils of the fourth form of a rural Public School. There are very few districts where turtles cannot be obtained by the pupils and brought to school.

### I. Observation by the Pupil.

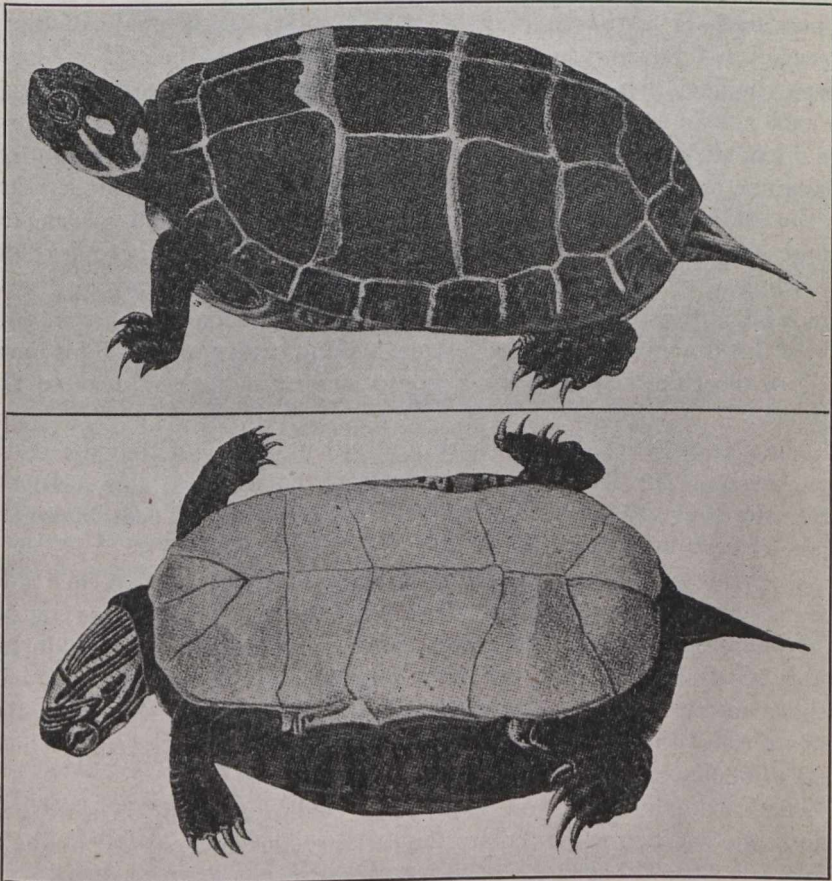
- (1) Where did you find the turtle and was it easy or difficult to catch?
- (2) Does it appear to be more at home on land or in the water?
- (3) How does it defend itself (a) on land, (b) on water?
- (4) Would animals be as likely to seek it for food as they would the fish or the frog? Give a reason for your answer.
- (5) Describe its appearance (i) when frightened, (ii) when undisturbed.
- (6) Observe the colour, form, and hardness of its upper shell. Count the plates and find out whether they are arranged regularly or not.
- (7) Why is it called both the painted turtle and mud turtle? Are these names appropriate?
- (8) Observe the colour, form, and general shape of the lower shell?
- (9) How many plates or sections are there in the lower shell? How are they arranged?
- (10) Are the upper and lower shells connected? Where? How?
- (11) Describe the legs and feet of the turtle in respect to their colour, length, breadth.
- (12) How are the feet adapted to life (i) on land, (ii) in water?
- (13) What is the colour of the neck and head?
- (14) Where are the eyes situated?
- (15) Put some earthworms, beef, or lettuce leaves in a vessel of water near it in order to observe it eat, and endeavour to find out whether it has teeth or not?
- (16) How long is the neck? What happens to it when the head is withdrawn? Have the neck and head of the turtle any resemblance to those of a snake?
- (17) When turtles are placed on their backs are they able to turn over?
- (18) What becomes of the turtle in winter?

### II. Information for the Teacher.

The common painted or mud turtles when full grown are about ten inches long and they live in ponds and wet ditches. During the warm part of the day they come out on land and sun themselves, but when

disturbed they hurry back to the water, dive in head first, and then there is little chance of catching them.

Thus we find they have two methods of locomotion—walking and swimming. They are so heavy in proportion to their size and length of leg that naturally they walk very slowly. But an animal requires speed in two cases only—either to escape from enemies or to pursue its prey. A turtle, however, does not need to run, for, once withdrawn within its



PAINTED TERRAPIN, *Chrysemys picta* (Schneider)  
From Report of the New Jersey State Museum.

shell, it is usually safe from attack. Moreover, the animal cannot easily be starved into surrender as it can fast for weeks with little inconvenience. Although such a slow walker it is a very rapid swimmer and when in the water its general colour also helps it to escape, as it blends in very well with its surroundings. Lastly, there is so little flesh and so much bone that it is not sought as food, as are many other small animals and reptiles.

When the turtle is first brought into the room it is likely to be almost completely withdrawn within its shell. If not disturbed, however, the head, feet, and tail are gradually protruded from between the upper and lower shells, and the pupils can now observe these organs. They can also ascertain how quickly it can withdraw its head, feet, and tail into its shell.

When the pupils have had their curiosity gratified they may begin a brief study of its external characteristics. The hard, greenish-black upper shell or *carapace* may be studied first. It is made of plates arranged as follows: twenty-five small marginal ones, the odd one being above the neck, five central plates and between these two sets is found, on each side, a row of four plates. Thus there are thirty-eight plates in the upper shell. In young turtles each marginal plate bears a bright red triangular mark but this disappears with age. There is a smaller shell on the under side; it is also divided into plates. This shell is orange in colour, changing into red towards the edge but as the turtle becomes older the whole shell becomes darker in colour. There is a medial groove running lengthwise with two triangular plates at each end and on each side of the groove are four other plates, making twelve in all. This lower shell, or plastron, is joined by a bony connection at the sides to the carapace.

The legs are dark, broad, short, and soft looking, but they are really very strong. The feet have five toes, each ending in a claw. In the water the toes are connected by webs. These webbed feet make the turtle a very effective swimmer.

The head is blunt and black, with yellow sulphur spots on each side. The eyes are placed obliquely at the sides of the head. The jaws contain no teeth but are horny. The neck is from one and one-half to two inches long when fully extended, but as it folds up on itself it can easily be withdrawn into the shell. One cannot help noticing the snake-like appearance of the neck and head. If placed on their backs turtles have great difficulty in righting themselves.

Turtles are hatched from firm, white-shelled eggs laid in sand in a sunny spot. When winter comes the turtle settles down in soft mud and appears to sleep till spring.

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#### WONDERFUL CERTAINLY.

The teacher asked her class of little second graders to tell the most wonderful thing they had seen or heard of.

"Please," said a little girl, "father says in keeping the women folks perfectly satisfied."

## The April Competition in Art

IN accordance with suggestions received we have omitted reproductions of Public School and Middle School drawings in this issue, and have inserted a larger number of the stencil designs called for in the Lower School competition. These are arranged for convenience in reproduction, and not according to merit. All these and many others submitted show considerable merit. The prize winners are as follows:—

### A. Forms I and II.

*First Prize*—R. Tedford, Dufferin Public School, Owen Sound.  
Teacher, Miss Kate Bell.

*Second Prize*—Donald Hurd, Frontenac Public School, Kingston.  
Teacher, Miss K. Elliott.

*Third Prize*—Raymond Bricault, St. Ignatius School, Steelton.  
Teacher, Sr. Leontine Marie.

*Honourable Mention for Merit*—Lizzie Rutkie, Ida Surau, Sciserea MacLaine, Harold Dupen, Royal View School, Lethbridge. Norma McCaig, Maud Sinclair, May Lister, Agnes Williamson, Elsie Turner, Frontenac School, Kingston. Valeda Gatien, Delia Gaudreau, Eva Roy, Alice Turmain, St. Ignatius School, Steelton. Marguerite Dumontille, May Baueher, Henry Simard, Albert Tremblay, Louis Theruault, Eugene Bouillion, Daniels Ritchie, Leo Bouillion, Charles Tiviluk, Sacred Heart School, Chappleau. Clarence Biggar, Karl Dougherty, Annie Breadner, Corena Cheer, Tommy Gardner, Maurice Carr, Katie Milson, Gracie Marshall, Uretta Price, Annie Sabiston, Myrtle Thomson, Boston Patterson, Percy Norton, Jennie Parks, Gordon Bredin, Ryerson School, Owen Sound. Percy Lavery, Morrison Reid, Jimmy Clark, Hazel Welsh, Clayton Taylor, Elmer Green, N. Pickell, L. Manning, Evelyn Cathpole, A. Dean, E. Young, A. James, Dufferin School, Owen Sound.

### B. Forms III and IV.

*First Prize*—C. MacTavish, Ryerson Public School, Owen Sound.  
Teacher, W. Douglass.

*Second Prize*—E. McDonagh, Dufferin Public School, Owen Sound.  
Teacher, Miss Helen Smith.

*Third Prize*—John Dore, St. Patrick's School, Hamilton. Teacher,  
Sr. M. Inez.

*Special Prizes*—1. H. Ellis, Ryerson Public School, Owen Sound.  
Teacher, W. Douglass.

2. Ora Ellis, Ryerson Public School, Owen Sound.  
Teacher, W. Douglass.



*Honourable Mention for Merit*—Lilly Dupen, Charlie Rutkie, Gertrude Surau, Tory Dupen, Willie Surau, August Surau, Royal View School, Lethbridge. George Parent, Notre Dame School, Ford. Eva Perfetto, Hilda Burch, Lizzie Brunette, Angeline Bucciarelli, Agnes Hortopan, Corinn Brunette, Aline Petrowsky, Blanche Martin, Andre Burns, Zita Downey, Ida Mulligan, Clara Martin, Victoria Stadnisky, Sacred Heart School, Chapeau. Irene Barss, Charlie Banks, May Ramsay, F. McMurchy,



Stencil Designs for wall paper borders by students of the Lower School of ten different High Schools and Collegiate Institutes.

Vera Milson, May Petty, Neil Campbell, Ryerson Public School, Owen Sound. Clare Vick, P. McKenzie, Jack McInnis, Ada Robertson, Gladys Middlebro', Janet Gilchrist, Beatrice Trotter, Ethel Hill, Harry Barnard, Etta Flanagan, Vera Miller, Jeanette Metcalfe, Gladys Craig, Wilbur McCullough, E. Tucker, Isabel McQuay, Edith McDonagh, Dufferin Public School, Owen Sound. Robbie Shroeder, Verna Eydt, Elmer Wendorf, Hanover Public School. Alice Brown, Central School, Hamilton. Clare Maclean, West Ward School, Napanee. Myrtle Tasker, Seaforth Public School. Patricia Dwyex, Ethelreda Ryan, Thomas Keanney, Mary Ryan, Alphonsas O'Driscoll, Eganville Separate School. Reginald Doan, Florence Neff, Arthur Berg, Lydia Branscombe, Olive Neff, Marjorie Cuthbert, John Houser, Myrtle Neff, Public School, Humberstone. Marguerite Johnston,

Beatrice Smith, Salvatore Padrohe, John Kurdziel, Jack Mathews, Jenny Symczyk, John Dowler, Victoria Hoida, St. Ann's School, Hamilton. Josephine Rogers, Ethel Gamer, Kathleen Cunningham, Viola Broad, Cathedral School, Hamilton. E.

Venator, Nellie Sharp, Mabel Gurry, St. Lawrence School, Hamilton. Joseph Mathews, Ethelreda Palmer, Kathleen Callaghan. Andrew Frasier, Frank Casey, Irene Tyson, Paul Dore, K. Blatz, St. Patrick's School, Hamilton.

### C. Lower School.

*First Prize*—Ella Herbert, Loretto Day School, Toronto. Teacher, Sr. Constantia.

*Second Prize*—Alice Smith, Collegiate Institute, Owen Sound. Teacher, Miss Edith Stollery.

*Third Prize*—Hazel Bodkin, Collegiate Institute, London. Teacher, Miss Bessie McCamus.

*Honourable Mention for Merit*—Alma Euckson, Mabel Shaw, Continuation School, Keewatin. Annie Langhran, Helen Sheridan, Dorothy Ryerson, Leonora Monahan, Helen Meehan, Ellen Ryan, Valeria Johnston, Vera Glynn, Helen Kearns, Rita Nightingale, Evelyn O'Neill, Gertie Connell, Marguerite Gelinis, Helen O'Donnell, Rita Harrison, Patricia Egan, Eileen Caughlin, Mary Dobell, Hilda Burk, Ethel Hicks, St. Joseph's School, Toronto. Mary Lougheed, Dorothy Mair, Collingwood Collegiate Institute. Florence Lawrence, William Milne, J. Lawrence, Durham High School. Wesley Brangley, D. MacNeil, Strathroy Collegiate Institute. Tiny Stenback, Katie McArthur, Marjorie Symes, Roy Grant, Jean Cameron, Bertha Fontaine, Queenie Noith, Joe Burn, Winnie Jones, Fort William Collegiate Institute. Ethel Curry, Betty Oswald, Ruby O'Neill, Gertrude Vickery, Lindsay Collegiate Institute. L. L. Smith, D. Dobson, E. Smith, D. Nelson, Frances Milne, M. Smith, J. Milne, M. Ellison, Helen Gage, J. Turnbull, M. Kent, S. Pyper, R. Hendershott, A. F. Thompson, J. Dickson, G. Voaden, G. Bartman, Marjorie MacFarlane, F. Cameron, G. McConnell, C. Meinke, Hamilton Collegiate Institute. Margaret Fawcett, Continuation School, St. Andrew's West. Anna Halpin, Angela Regan, Sadie McPhee, Bertha Carbert, Catherine Kemp, Louise Longeway, Mary Gount, Nellie De Courey, Marguerite Keating, Mary Walsh, Constance Kemp, Eugenia Ducharme, Margaret Walsh, Loretto Convent, Stratford. Muriel Lea, Eileen Gibson, Helen O'Leary, Eileen Dunningan, Teresa Howell, May Kearns, Kathleen Bannou, Lily Hynes, Cecelia Fitzpatrick, Laura Guay, Florence Cherrier, Edna Rosar, Madeline Barthelmes, Mary Harkins, Essie Taylor, Marcella Murrode, Loretto Day School, Toronto. Elizabeth Cole, Keitha Batchelor, Mildred Lendon, High School, Leamington. Marie Doyle, Marguerite Bush, Kathleen Dunbar, Agnes Cassin, Loretto Convent, Guelph. Irene Millward, Emma Camps, Continuation School, Winona. Aileen Hazelwood, Mary McClellan, Bowmanville High School. Marion Willis, London Collegiate Institute. Carl Tumelty, Robert Demille, J. Barrons, Minnie O'Hara, Kenneth Connor, Alma Houser, Alice Harston, Mabel Comerford, Bert Gunter, Geraldine Pyne, Lorna Dyer, M. McGhee, Madoc High School. Gladys Hammond, John Scott, Jack Russell, Marion Gardner, Fred Matthews, Jim McClanahan, Tillie Hird, Joseph Collins, Fergus High School. Emma Fisher, Isobel Waugh, Winona Kime, Madeline Smith, Marion Bravener, Effie Adamson, Margaret O'Connor, Josie Lang, Marjorie James, Hazel Norfolk, Amy Hislop, Whitby High School. R. Harkness, Anna Gabler, P. Jamieson, Fraser Slater, Helen Ficher, Marjorie Kerr, Sarnia Collegiate Institute. Beatrice Peacock, D. Beattie, Retta Brown, E. Pearsall, May Robertson, G. Thompson, Isobel Walker, Gladys Hichsburh, Madeline Forster, Margaret McCuaig, Barrie Collegiate Institute. Mary Ryan, Cathedral School, Hamilton.

**D. Middle School.**

*First Prize*—Edmond Willis, Aurora High School. Teacher, Miss Ferguson.

*Second Prize*—Majorie Goldring, Whitby High School. Teacher, Miss Sailsbury.

*Third Prize*—Annie Atkins, Collingwood Collegiate Institute. Teacher, Miss L. A. Sanderson.

*Honourable Mention for Merit*—Stewart Allen, Aurora High School. Lena McDermid, Reta Glover, Collingwood Collegiate Institute. Hazel Sullivan, Jeanet Taylor, Celia Fisher, Strathroy Collegiate Institute. Jessie Noland, Eva Parker, Eleanor Channen, G. McMackon, M. Banting, Barrie Collegiate Institute. Hilda Fritz, Grace Lievellan, Sarnia Collegiate Institute. Geo. Robertson, Whitby High School.

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## Book Reviews

*Regiment of Women* by Clemence Dane. *A Soldier of Life* by High de Sélincourt. The price of each of these is \$1.50. Both are published by the Macmillan Co., Toronto. Now that we are on the "home stretch" and vacation begins to make its proximity felt, most teachers look forward to reading a few books of fiction, something aside from the beaten path, something that will provide relaxation and enjoyment. The two titles mentioned here will provide these desiderata. In the first case the word *regiment* has not its ordinary meaning, but is used as John Knox used it in his "First Blast of the Trumpet against the Monstrous Regiment of Women". The story is one of two extremely opposite personalities. Clare Hartill and Alwynne Durand are teachers in a girls' school; the former is 35, clever, efficient, selfish, unscrupulous; the latter is 19, enthusiastic, inexperienced. An intense attachment grows up; a clash of wills results. The theme is built around a series of very vivid and very real incidents which are the direct outgrowth of the influence of these two opposing characters upon the faculty and the students. The climax is averted by the resourcefulness of a 'mere man'. *A Soldier of Life* is the story of an officer who returns from the front crippled and with nerves shattered; it is the story of the after effects of war. As a result of his nervous condition, James Wood has a tremendous struggle against impending insanity. The narrative of this struggle, of his love affair, of the peculiar experiences he undergoes, of the recurrence of memories of the scenes of war is powerfully told by the author. It is a novel of real thought and one in which the "human interest" is always at its height. W. J. D.

*The Soldier's First Aid* by R. C. Wood, Q.M.S., A.M.C. Price 35 cents. The Macmillan Co., Toronto. Though there are many books on "first aid", this one is really a manual, written in simple, direct language. "Improvisation is the special feature dwelt upon, showing the best and most efficient use that may be made of the material at hand. A careful study of this book should make the reader competent to render skilled assistance to his comrades in the hour of need."

*Practical Drawing*, by Harry W. Temple, Crane Technical High School, Chicago. Cloth; 141 pages; \$1.50. D. C. Heath & Co., Boston, New York, Chicago.

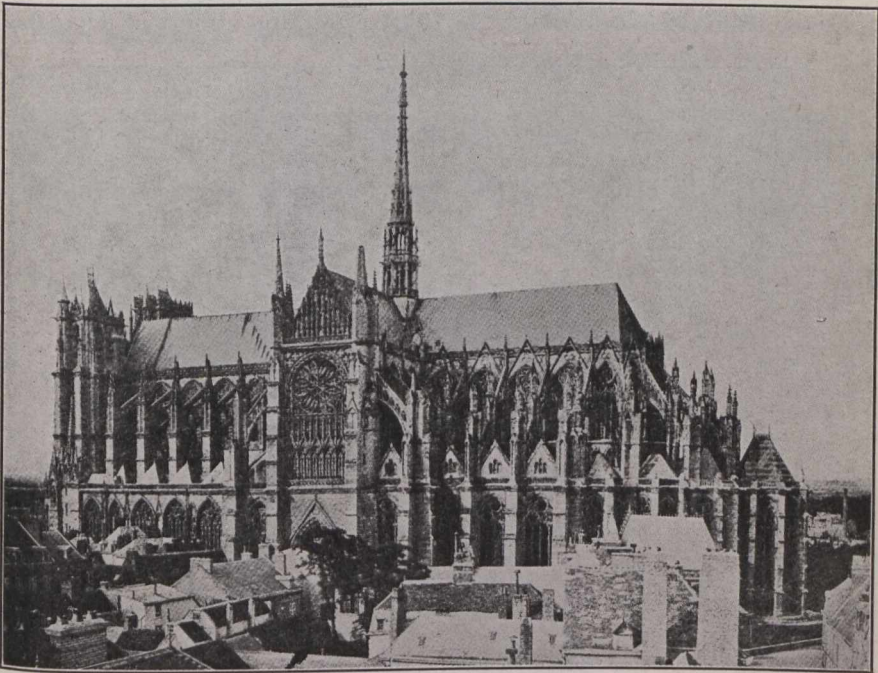
*Exercises in Spanish Composition* by S. M. Waxman. Price 1s. 6d. *Der Wilddieb* by R. Myers. Price 1s. 8d. George G. Harrap & Co., London. D. C. Heath & Co., New York. These are two volumes of *Heath's Modern Language Series*.

# Amiens Cathedral

S. W. PERRY, B.A.

Faculty of Education, University of Toronto

[This article has been written in response to a request for information to assist in understanding one of the pictures connected with the Strathcona gift to schools].



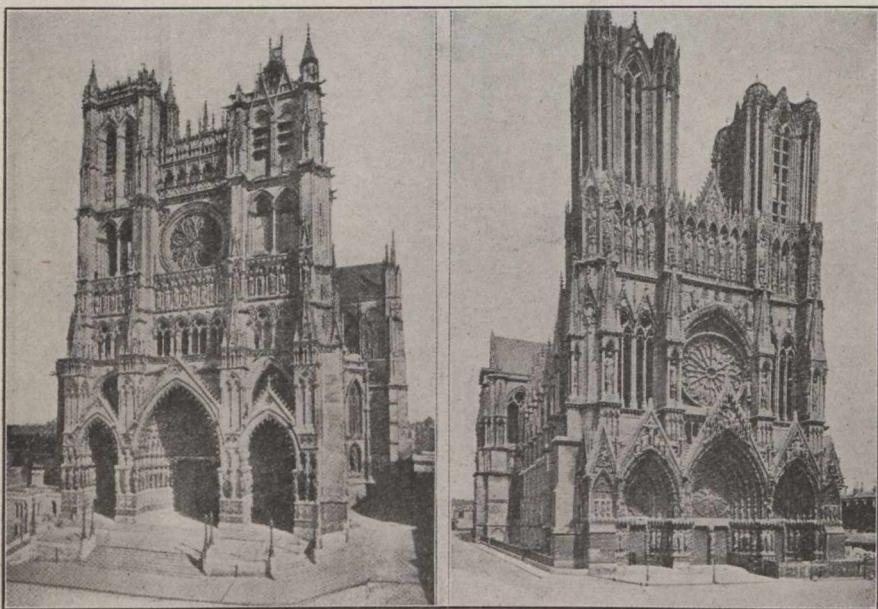
AMIENS CATHEDRAL.  
South Side.

**A**LL buildings are interesting as the result of man's efforts to provide a place in which he may dwell, work, or worship. In all lands and in every age the temples which he has erected for the shrines of his gods mark the acme of his genius for building. But the Gothic cathedrals of mediaeval western Europe, as the product of Christian inspiration, are the crowning efforts of his skill in masterly structure, suitable decoration in sculpture and painting, and honest and enduring workmanship.

The Gothic cathedral is characterized by height and lightness. Without, its pointed arches, flying buttresses, gables, pinnacles, and

steeple, or steeples, purpose to carry the eye and thought heavenward; within, its lofty nave, pillars and ribbed vaulting produce the same effect.

An examination of the accompanying engravings of Amiens Cathedral illustrate the principal features of Gothic structure. The plan, (fig. D), following that of a Romanesque church, is cruciform. Entering by the centre portal of the west end we proceed along the central part, or nave, to the place where to right and left the wings, or transepts, project. We are now beneath the spire. Beyond is the choir surrounded by bays. On either side of nave and transepts and choir are the aisles, and, outside of these again, between projecting buttresses, are numerous chapels.



AMIENS CATHEDRAL.

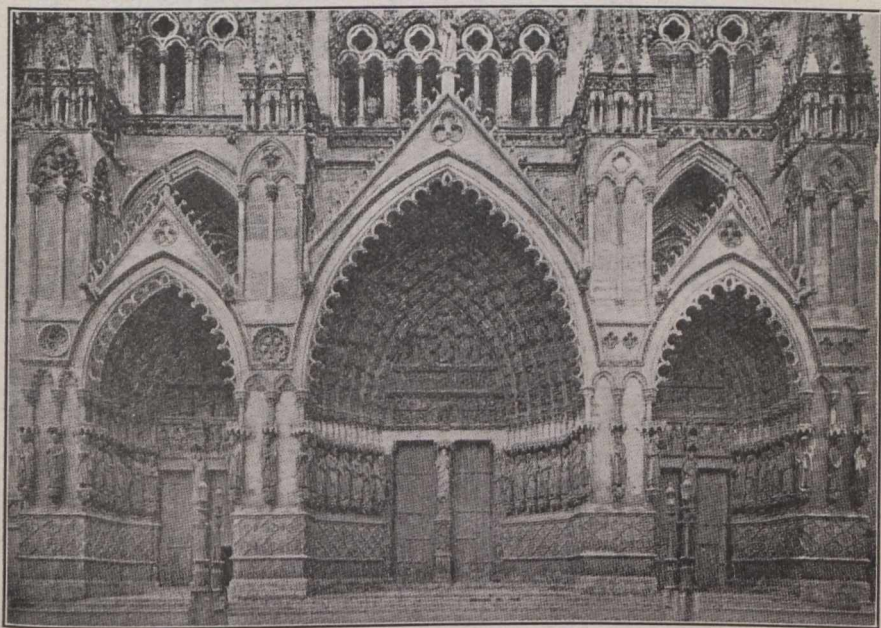
West Facade.

RHEIMS CATHEDRAL.

Around us stands a forest of lofty pillars, branching like trees to support the weight of the vaulting above. The cross section, (fig. E), explains the need and construction of the flying buttresses. The high walls, weakened by numerous windows, and sustaining the outward thrust of the roof and vaults, have a tendency to fall outward. Hence they are reinforced by solid masses of masonry called buttresses, raised against them from the outside between the openings. Arches, known as flying buttresses, spring from these over the roof of the aisles to meet the lateral thrust of the vaults of the nave, or highest part of the building. The south side, (fig. A), not only shows how strength has been imparted to the structure by duplicating arches, or flying buttresses, but gives an excellent view of

roof and spire, and chapels, and of the *apse*, or semi-circular structure for the altar at the east end of the cathedral.

Amiens is the largest, and one of the most beautiful, of the French cathedrals. It is the "Parthenon of Gothic architecture". The building was commenced in 1220 and finished in 1375. The sister cathedral at Rheims (fig. B) was in process of building during the same period. So skilfully adjusted were the various supports, so accurately calculated were the conditions of equilibrium, and with such honest workmanship were these structures completed that, without resort to further building or strengthening of walls, they have stood unmoved for over 600 years. During the war the irreverent Hun has succeeded in



AMIENS CATHEDRAL.  
Main Entrance—West Facade.

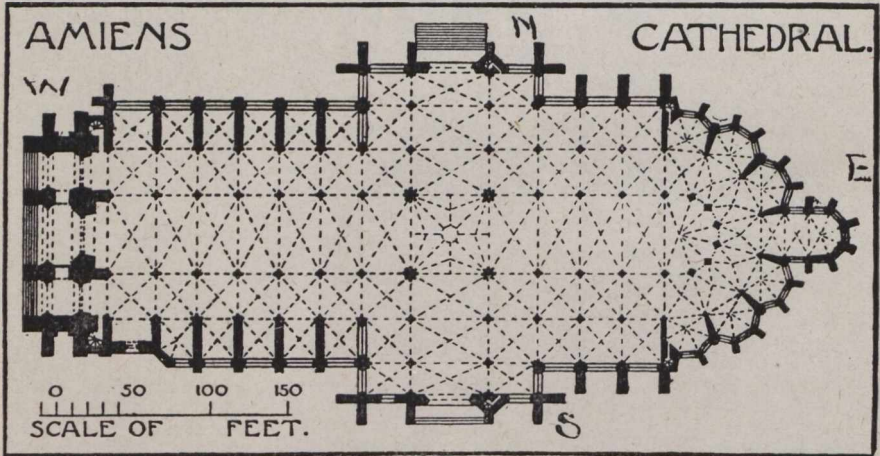
almost destroying Rheims but fortunately has never got near enough to mar the beauty of Amiens.

Amiens Cathedral is built of stone taken from the banks of the Somme. The majesty of the structure may be inferred from the following dimensions:

Width of nave.....	48 ft.
Total width of western area inclusive of nave, aisles and transepts.....	152 ft.
Total width across the transepts from north to south.....	199 ft.
Length of nave.....	185 ft.

Total length from west to east.....	449 ft.
Height from pavement to ridge of vault.....	140 ft.
Height of steeple from ground.....	422 ft.

To many, the most interesting part of a great cathedral is its decoration. Reinach says: "The Gothic cathedral is a perfect encyclopædia of human knowledge. It contains scenes from the Scriptures and the legends of the saints; motives from the animal and vegetable kingdoms; representations of the seasons, of agricultural labour, of the arts and sciences and crafts, and finally moral allegories as, for instance, ingenious personifications of the virtues and the vices". The aim of the builders was to teach the people by the sculpture, and, as the people had to pass through the portals to worship within the churches, it was above and on either side of the doorways that they placed their carved history where it might catch the eye and arrest the attention of



PLAN OF AMIENS CATHEDRAL.

those who entered. "Thus their church doorways became veritable books with open pages written in characters which the most unlearned might understand". Within the cathedral in the choir-stalls and in the galleries, by reliefs and statues, and in the stained glass of the windows, lessons of religion and morality were taught.

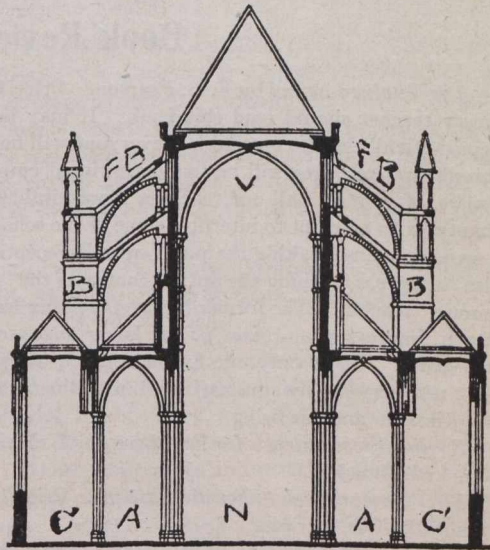
The richly decorated western façade was designed to hide the pitch of the central roof and the aisle roofs. If we closely examine this front, we notice that the lower part has three vast doorways surmounted by gables. Each doorway is divided into two openings by a central stone pillar on which stands a statue of the person to whom the porch is dedicated, on either side of each doorway stands a row of statues. Beneath the statues there runs a double band of quatrefoil medallions, with carvings in relief, illustrating, in each medallion of the upper row, a virtue, and immediately below this, the opposite vice.

Over the doorways, the *tympanum*, or arched part, is ornamented with carvings in relief. And the four buttresses show, in sets of three figures each, representations of the twelve minor prophets.

Above these porches runs a beautiful arcaded gallery. Above this again, is a row of statues—22 in all—of the kings of Judah. And above these a gallery runs in front of a large rose window 33 feet in diameter, and decorated with flamboyant tracery, and stained glass to represent “Earth and Air”.

It would require a volume to identify each of the figures in this façade alone. The student is referred to Bell's *Handbooks on Continental Churches* for fuller information. From this last we give a brief summary

which will help us to understand why Ruskin called this cathedral “The Bible of Amiens”. The central porch was dedicated to King David and his “Greater Son”. Hence on the *trumeau*, or pillar dividing the doorway, is a statue of King David and below him one of the Christ. On the north side of the porch there are representations of St. Paul, St. James (the Bishop), St. Philip, St. Bartholomew, St. Thomas, St. Jude. On the south side of the porch are other figures of St. Peter, St. Andrew, St. James, St. John, St. Matthew, St. Simon. On either side of the doors are representations of the wise and foolish virgins. In the tympanum above the doorway are carved scenes from the “Last Judgment”.



AMIENS.

CROSS SECTION OF AMIENS CATHEDRAL.

The porch to the right was dedicated to the Virgin, who is represented holding the child Jesus in her arms, by a statue on the *trumeau*. On the north side of the entry are statues of the wise men, and Herod, and Solomon; on the south side, of Gabriel, St. Elizabeth, St. Simeon, the Virgin of the Presentation, etc.

The porch to the left was dedicated to St. Firman, the martyred first bishop of Amiens. His statue appears on the *trumeau*, and on either side of the doorway are figures of angels and saints, and medallions representing the seasons and signs of the zodiac.



We may note here the close alliance existing between beauty and utility in the mediaeval cathedral. Out of man's need for a place of worship grew the imposing Gothic structure with its soaring lines. Out of man's need for religious and moral information in a bookless age grew the cathedral's adornments in sculpture and painted glass. The intimate relationship which existed between the people and their beloved cathedral is seen in the close crowding of their homes about it.

The writer is indebted for illustrations to *A History of Architectural Development* by F. M. Simpson; Longmans, Green & Co., New York.

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## Book Reviews

*The Vitalized School* by F. B. Pearson. Price \$1.25. The Macmillan Co., Toronto. Every teacher should read this book. It may be, perhaps, that not everyone would agree with all that it contains but everyone will find many helpful suggestions in it; and throughout its pages will be found continual emphasis on the necessity, which we all realize, of giving to all our teaching more vitality, more "life", more reality. Every chapter is an attempt to interpret some of the school processes in terms of life processes; a protest against making the pupil entirely receptive rather than active. In making a plea for *intense* teaching the author contrasts the "ten-minute" teacher and the "thirty-minute" teacher. The former has prepared her lesson *thoroughly*, throws all her energy into it, impresses, and *fixes it*; the latter *talks*, scolds, repeats answers, digresses, and still *talks*. This is only one example taken at random from about the middle of the book and very briefly summarized, but it illustrates the general idea. The whole book is optimistic and inspiring.

W. J. D.

*English Prose Extracts for Repetition*, by E. H. Blakeney, M.A. Price 8d. Blackie & Son, Ltd., London.

*First German Book (Phonetic Edition)*. Price 1s. 6d. A. & C. Black, London. The Macmillan Co., Toronto.

*Individual Occupations (The Teacher's Book of)*. 1s. 9d. postpaid. Evans Bros., Ltd., London. To quote from the preface:—"This volume aims at presenting a carefully thought-out method of application of the Montessori principle of individual or auto-education to the ordinary formal subjects of reading, writing and number, and to the varied occupation work of the infants' school". So many people are enquiring how far the Montessori principles can be applied in large classes to the ordinary subjects that this book should be a solution of a good many difficulties.

*Roman Life and Customs*. A Latin Reader. Price 2s. Blackie & Son, Ltd., London.

*Aide-Mémoire* of everyday French Words and Phrases. By Basil Readman. Price 3s. net. Blackie & Son, Limited, London. The object of this book is to provide a permanent French notebook for students. Words not known in the course of school reading are to be written on the pages which are left blank. There is also space provided for grammatical notes. An immense number of words and phrases in common use is given.

*Demonstrations in Woodwork*, by C. S. Van Deusen. Price \$1.15. The Manual Arts Press, Peoria, Ill.

*Woodwork for Beginners*, by I. S. Griffith. 78 pages. Price 50 cents. The Manual Art Press, Peoria.

## Hints for the Library

*How Man Makes Markets*, by W. B. Werthner, in *Everychild's Series*, published by the Macmillan Co., Toronto. Price 40 cents. Why has a particular place developed into a commercial centre; what places will still develop? It is designed for the pupil of the third or fourth book; it is well written and well illustrated; and will surely help to an appreciation of the principles involved. E. L. D.

*History of England Series*, for Public School classes, published by George G. Harrap & Co., London. *The Cave Boy*, by M. A. McIntyre. *Days Before History*, by H. R. Hall. Price 30 cents each. Embodied in a tale is subject-matter suitable for second and third book classes. "This story transplants the child to an epoch where men and women are themselves children".—Professor Findlay. E. L. D.

*The Dawn of British History* (300 B.C.—450 A.D.), by Alice Corkran; *The Birth of England* (450—1066), by Estelle Ross; *From Conquest to Charter* (1066—1215), by Estelle Ross; others in preparation. Average pages 250. Price 40 cents each. Suitable for fourth book classes. One of the chief objects of history study is to induce an appreciation of our heritage. The ordinary text takes short-cut methods to this, is generally lacking in detail and consequently in reality and vitality. Each of these books, the result of evident effort, has a wealth of detail that makes the children feel their truth. E. L. D.

*A Brief Account of Radio-Activity*, by Francis P. Venable, Professor in the University of North Carolina. Cloth, illustrated, 60 pages. Price 50 cents. D. C. Heath & Co., New York.

*Chemistry for Rural Schools* by Ernest Jones and J. Jones Griffith. 184 pages. Published by Blackie & Son., Limited, London. Price 2s. 6d. This little volume covers the usual field of an elementary text-book in chemistry, as it deals with the common non-metallic elements and their best known compounds. But in dealing with each element it pays particular attention to those compounds and reactions that are related to farm life. The nitrates and ammonium compounds are thoroughly treated because they play an important part in fertilizers. Again, it discusses such important substances as the starches and sugars and such important processes as fermentation. It is a very useful book. G. A. C.

*Geological and Topographical Maps* by Arthur R. Derryhouse; 133 pages; published by Edward Arnold, London. Price 4s. 6d. The methods used in Ontario and other parts of Canada of teaching physical geography are decidedly antiquated. In the United States and England it has become a laboratory subject like physics or chemistry, while in Ontario we still go on teaching it by question and answer and by recitation. The chief material used in the laboratory is the map; and, for the lands, the topographical map is largely used. There may have been some excuse in the past, as good Canadian topographical maps were lacking, but now—thanks to the work of the Department of Militia and Defence—we have topographical maps of many parts of Ontario that excel any issued by the United States, and still further surpass those issued by the Ordnance Survey of Britain. It is high time Canadian teachers learned how to use these maps. The book under review gives an excellent description of the topographical map, what it means, and how it is made. Teachers in Canada who are interested in physical geography would do well to look into this volume. G. A. C.

*Text-book of Elementary Chemistry*, by F. M. Perkin and E. M. Jagers, 384 pages. Constable & Company, London. Price 3s. This small volume is a combined text and laboratory manual. It covers the usual elementary course in chemistry. After describing the non-metals, one chapter is devoted to the metals and one to technical processes. It has no outstanding characteristics and is an ordinary book of fair merit.

G. A. C.

*Seat Weaving* by L. Day Perry. Price, postpaid, \$1.00. The Manual Arts Press, Peoria. This book tells how to cane chairs and how to reseat chairs, with all the operations involved.

*Nelson's History of the War*, Vol. XV, by John Buchan. Price 30 cents. The volume under consideration contains a review of the operations of the second year of the Great War, and a detailed account of the campaigns from the beginning of Brusiloff's offensive to the intervention of Rumania. John Buchan has a facile pen, a wide knowledge of history, and a clear and lucid style. Vol. XV adds to an already great reputation. With the possible exception of John Masefield's *Gallipoli* no account of the War, in my opinion, equals Buchan's in merit. After saying this we leave the rest to our readers.

P. S.

*Bill's School and Mine* by W. S. Franklin; Franklin, Macnutt and Charles, South Bethlehem, 1917. Pp. 102. Price \$1.00. It is difficult to evaluate the work under review. It is a collection of essays dealing with the education of the great out-of-doors. The author's boyhood swimming-hole is described and a semi-diary record of a grand trek through the Colorado Rockies is given. The thread that runs throughout the whole work is the plea for a saner education, less artificial and formal in character than that which most city boys have to put up with now-a-days. It gave the reviewer an hour's interesting reading although the scrappiness of its arrangement proved a source of constant annoyance.

P. S.

*How We Learn: A short primer of Scientific Method for Boys* by W. H. S. Jones. Cambridge University Press, 1916. J. M. Dent & Sons, Toronto. Pp. viii+64. Price 1s. 6d. This is an excellent little book and should be read by literary as well as scientifically inclined people. The common errors in reasoning are indicated and the importance of precision in language insisted upon. The writer has, however, preserved the logical division between induction and deduction. Psychologically speaking they are part of one process—that of reasoning.

P. S.

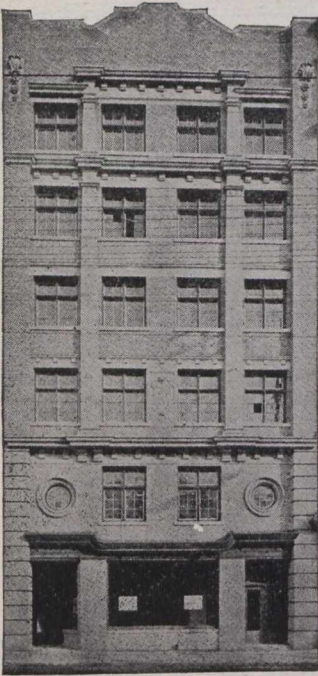
*Be A Man* (A Word in Season to Junior Boys) by H. Bucknell. Price 2s. 6d. net. George G. Harrap & Co., London. The author of this book is a schoolmaster. He knows boys. And in the eleven chapters of this book he shows them how to avoid the various temptations which surround them, how to avoid being failures, how to become successful men. The book should prove an inspiration to every boy of from 10 or 12 to 16 years of age. It is an excellent book for the school library.

W. J. D.

*Handwriting in the Light of Present-Day Requirements* by G. C. Jarvis. Price 1s. net. *Free-Arm Writing Book* containing instructions and practical examples to accompany the former. Price 6d. net. George Philip & Son, London. Both of these books should be examined by those teaching the subject.

*Inorganic Chemistry for Colleges*, by Lyman C. Newell. Cloth. Illustrated. 595 pages. Price \$2.00. D. C. Heath & Co., Boston. This is a revision and extension of Professor Newell's *Inorganic Chemistry*. More extended treatment has been given to the theory of chemistry.

*The Days of Alcibiades*, by C. E. Robinson. 301 pages; illustrated. Price 5s. net. Edward Arnold, London. This book will make an excellent addition to the High School library. It is interesting and well written. The binding, type and paper are such as to give a real good appearance to the volume. The present reviewer recommends it to the attention of teachers of ancient history.



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## Notes and News

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

J. H. W. McRoberts, B.A., formerly of London, Ont., is now Principal of the Model School at Port Arthur and Supervising Principal of the Public Schools of that city.

Miss Edith M. Murray, formerly of North Buxton, is now teaching the senior room in Hillsdale Public School.

Miss Luella M. Rorke of Tamworth has been appointed to the staff of Albert College, Belleville.

The Ontario Department of Education will provide examinations for teachers on Parts A and B of the Middle School Normal Entrance Course and on Parts A, B, C, and D of the Upper School Faculty Entrance Course at the close of the summer session in August. This announcement will be of interest to teachers who are taking these courses. Although *instruction* will be given in only some of the subjects, in accordance with the arrangement already announced, *examinations* are to be held in *all* of the subjects. Teachers requiring further information should write the Deputy Minister, Department of Education, Parliament Buildings, Toronto.

Two graduates of the Faculty of Education, Queen's University, 1914-15, have enlisted for overseas service in the Cobourg Heavy battery: H. Vernon Clarke, Vice-Principal, Queen Victoria Public School, Belleville; and Victor E. Bullock, Vice-Principal of Queen Alexandra Public School, Belleville.

Miss St. George Yarwood, M.A. (F.O.E. Toronto, '09) is teaching French in St. Alban's School, Brockville.

Norman L. Burnette, who had charge last year of the classes for the non-English in Port Arthur, has been appointed Principal of the Vocational Training School at Whitby.

A copy of *The Prevo* reached us this month. *The Prevo* is a school paper edited, printed, and published by the pupils of Victoria Prevocational School, Calgary. It is in every respect a very creditable publication and is filled with very interesting items regarding the school. THE SCHOOL wishes *The Prevo* every success in the journalistic world and takes the liberty of clipping from it the following paragraph which some of our readers may not have seen:

### WAR IN A NUTSHELL.

Here is a Chinese student's summary of the war's causes, as published in the Shanghai paper:—"Now there is a great battle in Europe. This began because the prince of Austria went to Serbia with his wife. One man of Serbia killed him. Austria was angry and so write Serbia. Germany write a letter to Austria, 'I will help you.' Russia

*Continued on page 586.*

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write a letter to Serbia, 'I will help you.' France did not want to fight, but they got ready their soldiers. Germany write a letter to France, 'You don't get ready or I fight you in nine hours.' Germany, to fight them, pass Belgium. Belgium say, 'I am a country, not a road.' And Belgium write a letter to England about Germany, to help him. So England help Belgium."

Ontario Departmental Examinations for 1917:

Middle and Upper Schools

TIME TABLE

A.M. Examination Sessions, 9-11.30.

P.M. Examination Sessions, 1.30-4.00.

Before Candidates at any Examination or Part of Examination begin writing on their first paper, the Presiding Officer (at 8.45-9.00 A.M. or 1.15-1.30 P.M.) shall read and explain to them the "Instructions to Candidates."—*Instructions No. 5.*

Date	Hour of Examination	Middle School Entrance into Normal Schools	Upper School Entrance into Fac'ties of Educat'n.	Pass Matriculation	Honour and Scholarship Matriculat'n. (See Note 4 below)
7th June p.m.	1.30-4.00	.....	Mineralogy.....	.....	.....
8th a.m.	9.00-11.30	.....	Zoology.....	.....	Zoology.....
June p.m.	1.30-4.00	.....	Botany.....	.....	Botany.....
11th a.m.	9.00-11.30	.....	German Authors... ..	German Authors... ..	German Authors... ..
June p.m.	1.30-4.00	.....	German Comp.....	German Comp.....	German Comp.....
12th a.m.	9.00-11.30	.....	Trigonometry.....	Arithmetic.....	Trigonometry.....
June p.m.	1.30-4.00	.....	History (1st Course)	English Grammar..	Hist. (Mediaeval)..
13th a.m.	9.00-11.30	.....	French Authors....	French Authors....	French Authors....
June p.m.	1.30-4.00	.....	French Comp.....	French Comp.....	French Comp.....
19th a.m.	9.00-11.30	Latin Authors.....	Latin Auth., or Spec English Litt're... ..	Latin Auth' Vir... ..	Latin Authors.....
June p.m.	1.30-4.00	Latin Composition..	Latin Comp. or Spec History of Lit....	etc..... Lat. Comp. Caesar, etc.....	Latin Composition..
20th a.m.	9.00-11.30	.....	.....	.....	Problems.....
June p.m.	1.30-4.00	.....	.....	.....	.....
25th a.m.	9.00-11.30	History (Ancient)...	.....	History (Ancient)...	.....
June p.m.	1.30-4.00	Chemistry.....	Chemistry.....	Chemistry.....	Chemistry.....
26th a.m.	9.00-11.30	Algebra.....	Algebra.....	Algebra.....	Algebra.....
June p.m.	1.30-4.00	English Comp.....	Eng. Comp. and Rhetoric.....	English Comp.....	English Comp.....
27th a.m.	9.00-11.30	Physics.....	Physics.....	Physics.....	Physics.....
June p.m.	1.30-4.00	Hist. (Br. and Can).	History(2nd Course)	History(Br. & Can.)	History (Modern)..
28th a.m.	9.00-11.30	Geometry.....	Geometry.....	Geometry.....	Geometry.....
June p.m.	1.30-4.00	Eng. Literature... ..	Eng. Literature... ..	Eng. Literature... ..	Eng. Literature... ..
29th a.m.	9.00-11.30	Art (1st paper) or Agri.	Greek Authors....	Greek Authors....	Greek Authors....
June p.m.	1.30-4.00	Art (2nd paper) or Agri.	Greek Comp.....	Greek Accidence,&c.	Greek Comp.....

NOTES.

1. At all examinations in Mathematics candidates should provide themselves with a ruler (showing millimetres and sixteenths of an inch), a pair of compasses and a protractor.
2. For the examination in Art candidates should come supplied with pencils, rulers, compasses, erasers, pens, water-colours, and brushes. They will also need water-pans and a convenient supply of water.
3. At the examination in Botany and Zoology, Honour Matriculants and Scholarship candidates will have practical work in these subjects.
4. Candidates for admission to a Faculty of Education who are also candidates for scholarships at the Honour Matriculation examination may substitute for one or more of the examination papers in the following subjects of the Scholarship examination: Mathematics (Algebra, Geometry, and Trigonometry) English (Literature, and Composition and Rhetoric), History (Mediaeval and Modern), Physics, Chemistry, Biology (Zoology and Botany), Latin, Greek, French, and German.
5. The Presiding Officer, at the close of the examinations, will forward the answer papers *at once to the Department.*

(Continued on page 588)

## Fundamental Text and Reference Books

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Miss Estella Wood, who recently graduated from Regina Normal School, is teaching Union S.D. 582, Wordsworth, Sask.

Some of the recent graduates of the Normal School at Yorkton have positions as follows: V. R. Hill is teaching at Zelma, Sask.; Leslie V. Barnes is in charge of the school at Stornoway Station; Miss Margaret Stiles is at Barvas; Miss Lulu Dodd is at Ebenezer; Miss E. Crossley is at Stornoway Station.

Ontario Department Examinations for 1917:

## Lower School

### TIME TABLE

Before candidates at any examination begin writing on their first paper the Presiding Officer (at 8.45-9.00 a.m. or 1.15-1.30 p.m.) shall read and explain to them the "Instructions to Candidates."—*Instructions No. 5.*

Date	Hour of Examination	Lower School For Entrance into Normal Schools and Faculties of Education	Model Entrance and Senior Public School Graduation	Senior High School Entrance	English-French Model Entrance
12th June	a.m. 9.00-11.30 p.m. 1.30-4.00	.....	English Comp.....	German..... English Comp.....	.....
13th June	a.m. 9.00-11.30 p.m. 1.30-4.00	.....	Algebra & Geo'try.. English Literature..	Algebra & Geo'try.. English Literature..	.....
14th June	a.m. 9.00-11.30 p.m. 1.30-4.00	Arithmetic..... Geography.....	Arithmetic..... Geography.....	Arithmetic..... Geography.....	.....
15th June	a.m. 9.00-11.30 p.m. 1.20-3.50 p.m. 4.00-4.40	English Grammar... Art..... Spelling.....	English Grammar... Art..... Spelling.....	English Grammar... Art..... Spelling.....	Manual Training or Household Sce... Agriculture & Hort.
18th June	a.m. 9.00-11.30 p.m. 1.30-4.00	Elementary Science. Br. & Can. History.	Elementary Science. Br. & Can. History.	Elementary Science. Br. & Can. History.	Book-keeping and Writing.....
19th June	a.m. 9.00-11.30 p.m. 1.30-4.00	Manual Training, or Household Science. Agriculture & Hort.	Manual Training, or Household Science. Agriculture & Hort.	Manual Training, or Household Science. Agriculture & Hort.	Elementary Science Canadian History...
20th June	a.m. 9.00-11.30 p.m. 1.30-4.00	Book-keeping and Writing.....	Book-keeping and Writing..... Shorthand & Type-writing..... (Graduation only)	Book-keeping and Writing..... French.....	Algebra..... English Composit'n.
21st June	a.m. 9.00-11.30 p.m. 1.30-4.00	.....	.....	Latin.....	Arithmetic..... English Literature..
22nd June	a.m. 9.00-11.30 p.m. 11.40-12.30 p.m. 1.30-4.00	.....	.....	.....	English Grammar... Spelling..... Geography.....
25th June	a.m. 9.00-11.30 p.m. 1.30-4.00	.....	.....	.....	French Grammar... French Comp.....

### NOTES.

1. For the examinations in Geometry and Manual Training candidates should provide themselves with a ruler (showing millimetres and sixteenths of an inch), a pair of compasses, and a protractor. For Manual Training a drawing board, tee-square, and two set squares will also be required.
2. For the examination in Art candidates should come supplied with pencils, rulers, compasses, erasers, pens, water-colours and brushes. They will also need water-pans and a convenient supply of water.
3. For the examination in Book-keeping and Writing candidates should come supplied with rulers.
4. The examination in Reading may be taken between 11.30 and 12 a.m., or between 4 and 5 p.m., or at such other times as will cause least inconvenience to the candidates.
5. The Presiding Officer at the close of the above examinations will forward the answer papers at once to the Department.

(Continued on page 590).

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DATE	HOUR OF EXAMINATION.		JUNIOR HIGH SCHOOL ENTRANCE.	JUNIOR PUBLIC SCHOOL GRADUATION.
15th June	a.m.	9.00-11.30	.....	Manual Training or Household Science..
	p.m.	1.30- 4.00	.....	Agriculture or Shorthand and Type-writing.....
18th June	a.m.	9.00-11.30	.....	Book-keeping and Writing.....
	p.m.	1.30- 4.00	.....	Art.....
19th June	a.m.	9.00-11.30	.....	Elementary Science.....
	p.m.	1.30- 4.00	.....	Canadian History.....
20th June	a.m.	9.00-11.30	.....	Algebra.....
	p.m.	1.30- 3.30	Composition.....	.....
	p.m.	1.30- 4.00	.....	Composition.....
	p.m.	3.40- 4.25	Spelling.....	.....
21st June	a.m.	9.00-11.30	Arithmetic.....	Arithmetic.....
	p.m.	1.30- 4.00	Literature.....	Literature.....
22nd June	a.m.	9.00-11.00	English Grammar.....	.....
		9.00-11.30	.....	English Grammar.....
	p.m.	11.00-12.00	Writing.....	.....
		11.40-12.30	.....	Spelling.....
		1.30- 3.30	Geography.....	.....
	1.30- 4.00	.....	Geography.....	

NOTES.

1. For the examination in Book-keeping and Writing, candidates should provide themselves with rulers.
2. For the examination in Art, candidates should come supplied with rulers, pencils, compasses, erasers, pens, water-colours, and brushes. They will also need water-pans and a convenient supply of water.
3. For the examination in Manual Training, candidates should provide themselves with drawing boards, tee squares, set squares, rulers, compasses, and erasers.
4. The examinations in Oral Reading may be taken either from 4 to 5 p.m. on any day of the examination or at such other times as will cause least inconvenience to the candidates. The examiner is reminded that the examination in reading at the Junior Public School Graduation examination shall include questions on the principles based on the passages read. Of the 50 marks for Reading a maximum of 15 marks shall be assigned to this. See Public School Regulation 6 (2), page 111.
5. For the examination in Book-keeping ruled sheets for Journal and Ledger may be supplied to the candidates at the discretion of the High School Entrance Board.

Miss Tena Martyn of Ripley is now teaching in Strathroy.

Of the class of 1915-16 in the Faculty of Education, Toronto, the following news has recently been received: Miss Helen M. Williams, B.A., is assistant principal of Carlyle High School, Sask.; C. E. Henley is on the staff of Regal Road Public School, Toronto; Miss Hazel M. Hogarth is teaching at Princeton; Frank Ward is at Waterdown; Janet S. Govenlock is at Coboconk; Miss Amelia A. McLennan, B.A., is at Three Hills, Alta.; Miss Mary Kelly, B.A., is at Markdale; Miss Elizabeth A. Krug is at Desboro; S. J. Mathers is teaching the Londesboro School, R.R. No. 1, Blyth; Miss Colina M. Clark is at Blyth; C. C. Sparling is teaching at R.R. No. 5, Chatsworth; Miss Elizabeth D. Ferguson is at R.R. No. 4, Brussels.

Miss Edith Dick, a graduate of Camrose Normal School, is teaching at Bismark, Alberta.

News of the class of 1915-16 in the Normal School, Ottawa, is as follows: Miss Marjorie Loney is teaching at R.R. No. 2, Woodlawn; Miss Katherine Owens and Miss Jessie MacGregor are at Hawkesbury; Miss Claretta Mitchell is at Rankin; Miss Laura Meredith and Miss

*Continued on page 592.*

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The Macmillan Company of Canada has recently issued a new and revised list of books for supplementary reading for all grades. The prices of these books range from 5 cents to 15 cents, and include a number of excellent series such as, *The Home and World*, *The Homemaking Series*, *The Health Series*, *Progress to Literature*, *Progress to Geography*, *Progress to History*, *Stories of Here and There*, *Stories of Then and Now*, *Stories of How and Why* and others. The catalogue contains a detailed description of each book mentioned. Teachers who contemplate adding to the school library will be well advised to consult this catalogue. Several of the books in the list have been favourably reviewed in THE SCHOOL.

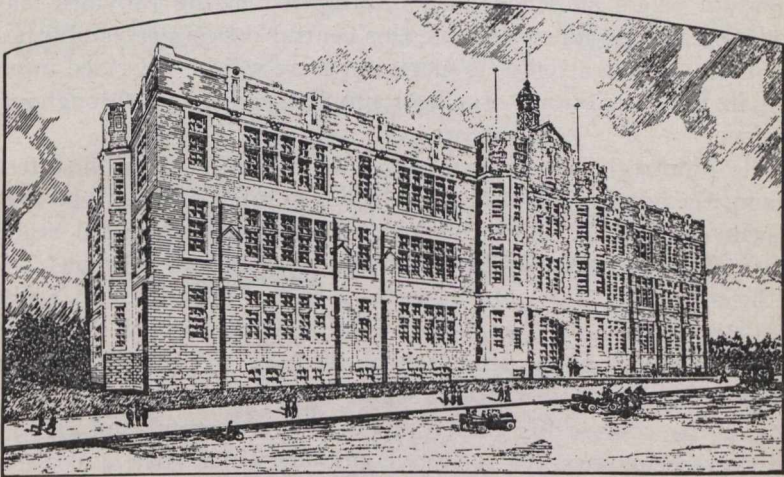
#### QUEBEC.

An Act was passed at the last Legislature making it compulsory for school municipalities which purchase prize books to devote half of the money used for this purpose for the purchase of books of Canadian authors. This Act is effective only after concurrence of the two committees of the Council of Public Instruction, and as both the Catholic and Protestant Committees declined to bind themselves by taking definite steps to ratify the Act, it will remain a dead letter.

The National Commission for relief in Belgium has sent an application asking for assistance for destitute Belgian children. Proceeds of concerts, sports, and school entertainments will likely provide the contributions, and steps have been taken to enable Quebec children to show sympathy with the poor of Belgium.

The total amount available this year for distribution to poor municipalities is \$14,306.40, which is somewhat less than the amount available last year. Five municipalities were recommended for the first time and grants have been refused to 19 municipalities which participated heretofore, because the grant is no longer required or the need does not exist any longer. During the year 25 school boards in poor municipalities have increased their rate of taxation while six have lowered it. In the latter case the grants were either reduced or withdrawn.

*Continued on page 594.*



Faculty of Education Building, University of Toronto.

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An effort is being made at the present time to arrange for a central emporium where all school books authorized in the Province may be purchased. It is hoped to have this central depository established by July 1919. If the attempt is successful there will be a decided improvement in the distribution of school supplies and books throughout the Province.

The Montreal Schools Swimming Association held the first test for boys for the advanced certificate, which is granted to those who are able to swim 440 yards. The following schools had successful students: Montreal High School, 10 boys; Lasalle Road School (Verdun) 3 boys; Berthelet School, 1 boy; Strathearn, 2 boys; William Lunn School, 3 boys; Argyle School (Westmount) 3 boys; Kings School (Westmount) 2 boys; and Westmount High School, 26 boys. Five of the successful candidates swam the distance in slightly over six minutes.

A similar contest for girls resulted in first, second and third class certificates being awarded to twelve girls and three boys in Westmount High School, two girls and six boys in Argyle School and two boys in Queen's School.

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## Book Reviews

*Abraham Lincoln*, by Edith L. Elias. Price 1s. 3d. *Travel through the British Empire and Adventures in Polar Seas*, by David W. Oates. Price 1s. 3d. George G. Harrap & Co., London. These are excellent books for the school library; the last two mentioned will serve as good supplementary readers in history and geography.

*Natural Freehand Writing*, by John H. Haaren, Associate Superintendent of Schools, City of New York. Six Manuals, 32 pages each. Per dozen, 96 cents. D. C. Heath & Co., Boston, New York, Chicago.

*Laboratory Manual for General Science*, by Lewis Elhuff. Cloth. 96 pages. 48 cents. D. C. Heath & Co., Boston, New York, Chicago.

*War Maps* published by Geo. Philip & Son, Ltd., London. Price 2s. 6d. each. No. 4. *The Balkans*. This is a large-scale strategical map, showing fortresses, airship depots, wireless stations, railways, main roads, forests in green, hills in brown and other important details. *Mesopotamia and Asia Minor*. Size 36 in. by 27 in. Scale 40 miles to the inch. Coloured politically and marking clearly international boundaries, forts, fortresses, railways, and roads.

*Food Study* (a textbook in home economics for High Schools), by Mabel T. Wellman. 324 pages. Price \$1.00. Little, Brown & Co., Boston. An excellent book for the teacher of household science.

*The Contemporary Short Story*, by Harry T. Baker. 271 pages. Price \$1.25. D. C. Heath & Co., New York. This volume gives expert advice on how to write stories that will be marketable as well as artistic.

*Cymbeline* in "The Granta Shakespeare" series. 1s. net. Cambridge-University Press, London. J. M. Dent & Sons, Toronto. This is a very convenient text for the use of High School students. A good introduction, copious notes, and a glossary add to its value. The type is particularly clear and readable.

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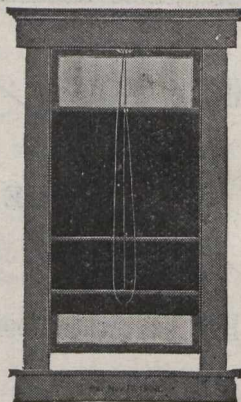
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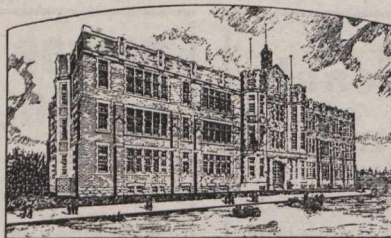
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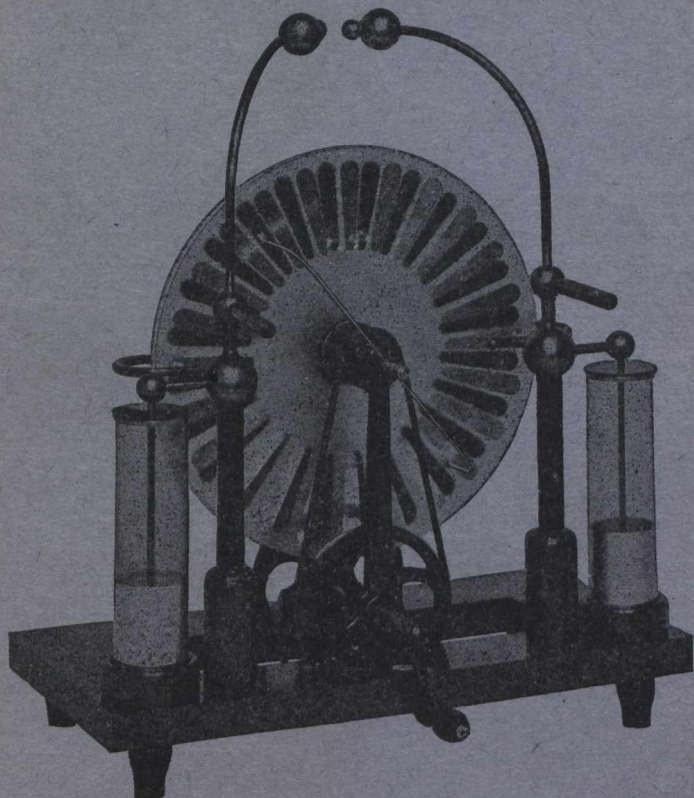
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