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The School

Vol. VI

Toronto

No 4

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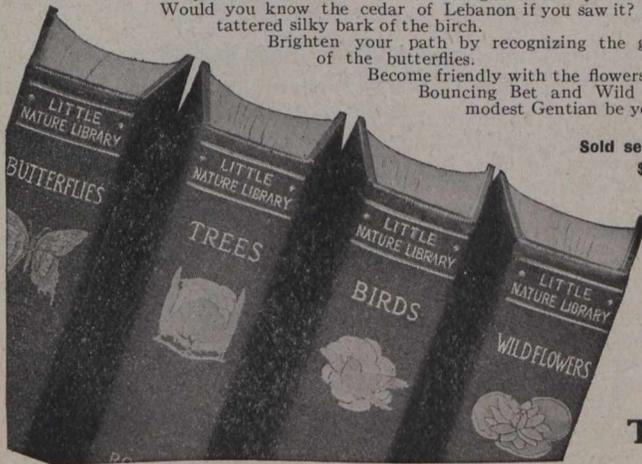
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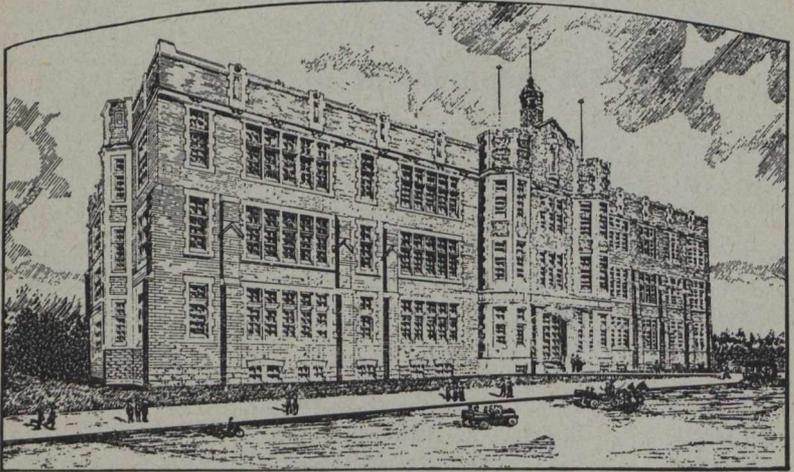
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April.....	15	October.....	23
May.....	22	November.....	22
June.....	20	December.....	15
	120		79
		Total.....	199

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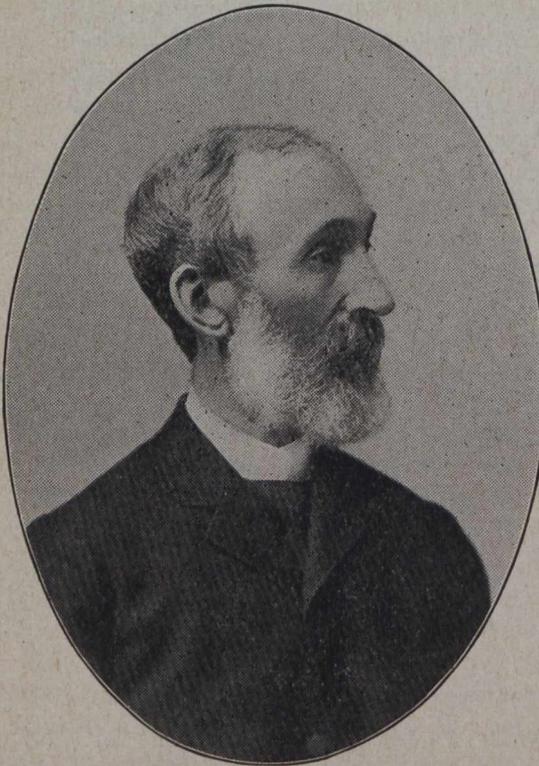
The School

"Recti cultus pectora roborant"

Editorial Notes

**Ave atque
Vale.**

Toronto papers one day last summer probably meant little to most who



DR. H. I. STRANG, Goderich

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The son of a pioneer Presbyterian minister, he was born in Galt in 1841, and was educated under the famous Dr. Tassie at Galt Grammar

School. At the University of Toronto, where he was graduated in 1862, he had as classmates such men as President Loudon, Dr. J. A. McLellan, Rev. Dr. J. Munro Gibson, Dr. R. A. Reeve, J. M. Buchan and Wm. Tytler. In 1864 he was appointed assistant, and in 1868 Principal of the Owen Sound Grammar and Commercial School. In all, seven years were passed in Owen Sound, and it was there that he met the gracious and gentle partner of his life who, with their seven children, is still living.

The history of the school and its headmaster since those early days can scarcely be written without at the same time writing the annals of secondary education in Ontario, annals *quorum pars magna fuit*. He has had his full share in the professional triumphs of the teacher; his pupils have won high distinction in academic life and in the professions; he has been President of the Ontario Educational Association (in 1886); and he has been chosen by his fellow-teachers to represent them in the Senate of the Provincial University. But in this long and honourable career two occasions stand out prominently: occasions which must have been to Mr. Strang no inadequate compensation for all the trials and vexations of a dominie's career. In 1907 the University of Toronto conferred on him the honorary degree of LL.D. in recognition of his great services through many years to the cause of education in this Province. This is probably the only time when the University has conferred this high distinction upon any of the rank and file of the teaching profession; and if in so doing it was in part seeking to honour the teaching profession as a whole, it does not lessen the compliment to Dr. Strang that he should be chosen as the fitting and acceptable representative of his fellow-teachers. And the summer of that same year saw a reunion at Goderich of Dr. Strang's old pupils, many of whom travelled long distances to be present; and many more who could not attend sent messages of affectionate appreciation and esteem and joined in the presentation to Dr. Strang of the sum of \$1,000. This gift his old pupils soon afterwards had the satisfaction of seeing devoted to the purpose they had hoped it would serve—that of enabling Dr. and Mrs. Strang to take a holiday-trip to the Old World.

Dr. Strang has always been singularly alert and receptive to new ideas and methods; he has an enthusiasm, a sympathy, a fresh outlook upon life that many a much younger teacher might well envy; in the spirit he has never grown old; but the lapse of years has robbed him of the vigour of body he so long enjoyed and in 1905, having then served for almost 40 years continuously as a headmaster, he resigned the principalship of the school, but has remained on the staff until this present month as classical master.

Dr. Strang's interests have not been confined to the classics. In his best days he was an unsurpassed teacher of English. For several years (in conjunction with his assistant, the late A. J. Moore, B.A.) he edited the literature selections prescribed for examination; and even better known are his works on English Grammar. Of these his first book was "Exercises in False Syntax", published in 1883 and still used in a revised edition entitled "Common Errors in Speaking and Writing". This was followed at intervals by "Practical Exercises in English Composition", "Grammatical Analysis", and a Public School Grammar which was for several years authorized by the Department of Education for Ontario.

Dr. Strang, too, has loved to mingle with his fellow-teachers. For a generation he has been prominent in the discussions of the Ontario Educational Association, as well as giving himself unstintedly to furthering the success of the Teachers' Institutes in his own County of Huron and the Literary Society of his Collegiate Institute. He has at all times also played no mean part in the varied activities of the community and of the church to which he belongs, and for many years he has been recognized in his home town as its foremost and most distinguished citizen. But his highest distinction is not to be found in the honours he has received, or in the success of his pupils; his noblest memorial is the affectionate homage of his old pupils, who, wherever one meets them, are found to cherish the memory of a teacher who gave them unreservedly of his best and inspired them to their best, of a sympathetic friend who made them feel he had no other aim than to further their progress, and of one who at the same time was so unmistakably more than a teacher—a high-minded Christian gentleman, who somehow left the impress of his personality upon the character as well as upon the minds of those who came under his influence.

Amid all the discouragements that teachers so often feel as they contrast their bright ideals with the gray reality, there is something heartening and inspiring in the contemplation of a career like Dr. Strang's. That a man of no extraordinary capacities, with no exceptional advantages, should by faithful endeavour and single-minded devotion of such powers as he possessed attain a position of such influence in his community and should have so won and kept the affection of his pupils and the esteem of all men—this surely means that the teacher's labour is not in vain.

Dr. Strang in his retirement has the cordial good wishes of all who know him. In the name of the teachers of Ontario, THE SCHOOL expresses the hope that Dr. Strang will have many years of full leisure and quiet usefulness before him, and that great peace may close a life so faithful, so honourable, and so helpful.

**First Class
Public School
Certificates.**

The First Class certificate of Ontario has a long and eventful history. Ryerson instituted it about seventy years ago. It has assumed various forms—a simple First Class certificate, a First Class A, B, or C, or a First Class Public School certificate. It has been issued by various authorities—District Superintendent, County Board of Examiners, Normal School, Council of Public Instruction, Department of Education. And it has had various values. It has been valid in a special District or County or throughout the Province, sometimes in all classes of schools, sometimes only in Public and Separate Schools, and of recent years only in Public, Separate, and Continuation Schools. But always and everywhere its story has been a worthy one. It has never lost its early prestige and it still wears the blue ribbon of Ontario's professional certificates.

The history of the First Class certificate in Ontario gives a new interest to recent amendments to School Regulations which affect that certificate. The academic qualifications for the certificate remain unchanged—an approved University degree or Faculty Entrance standing. But the classification has been changed. Old forms, First Class Grade A and First Class Grade B, have been revived. The professional course for the lower or Grade B certificate has been expanded in length of session and in content, especially on the Public School side, and has been so ordered as to separate it from the course for High School Assistants and to monopolize the full time of the student-in-training. At the same time attendance in the course has become voluntary for candidates who hold Second Class certificates and have taught successfully for three years in Public School. The professional course for the higher or Grade A certificate will now continue throughout an Autumn term and will be open only to students with First Class, First Class Grade B, or High School Assistants' certificates. To those who hold First Class or First Class Grade B certificates, a successful course for the Grade A certificate will carry with it an Elementary Physical Culture certificate. Both grades of First Class certificates are valid anywhere in Ontario, Grade B in Public, Separate, and Grade C Continuation Schools, and Grade A in Public, Separate, Grade C and Grade B Continuation Schools. It is provided further, with reasonable safeguards for vested rights, that the teachers of Fifth Classes and the Principals of schools with four teachers or more must hold First Class certificates. This provision together with the practice of insisting upon the First Class certificates as essential qualifications for Normal School posts and Inspectorships guarantees the status of the new certificates.

Three or four features of these changes call for comment. There is some confusion in names between Grade A and Grade B certificates and

Grade A, Grade B, and Grade C Continuation Schools. Time will remove this confusion. It will not be an easy matter to apply the Amendments to candidates who have acquired some rights under former Regulations. But the Amendments show the Department of Education to be quite conscious of the difficulty and anxious to protect all candidates from hardships. On the other hand the three-year exemption clause and the institution of the Grade A certificate are a successful attempt to reward the efforts of teachers to improve their professional status. The extension of the session and the restriction of the students to the one course give opportunity to fill out the First Class course with as much Public School work as is found in the Second Class course. Finally, to compensate the student in attendance at the regular session for the restriction to one certificate, the value of that certificate has been enhanced. Principalships in schools with Fifth Classes and in graded schools of four rooms or more have become the special preserve of the First Class teacher.

Lessons on Community Life.

President Wilson has called upon the Public School of the United States to take a fresh grip of its duties under the war. Democracy has new aims to be understood and national life new problems to be solved. The attempt to conserve food and other resources reveals the "close dependence of individual on individual and nation on nation". The struggle of the social and industrial world to adjust itself to the withdrawal of men for military service and to the appearance of women in their new fields of activity throws into relief the highly complex and specialized character of modern life. The American citizen must appreciate these new conditions, and the American Public School must help him to do so and help him quickly.

To assist the schools in this duty the President has had prepared for the use of teachers and pupils an excellent series of lesson-leaflets. These may be obtained at nominal cost from the United States Food Administrator at Washington, D.C.

History of the United States in Canadian Schools.

Should our Canadian boys and girls know more about the history of the United States? Is our study of Canadian history sufficiently American in the broad sense of that term? Can we continue to ignore as much as we have in our teaching of history, the development of the great republic to our South? These questions have been prompted by the receipt of the following letter from a teacher of history in a large California High School:

"I wish to thank you for the Canadian history which you sent me this summer. Do you know whether we could get from twelve to twenty-five copies for our High School library and how much they would cost? We have practically nothing on Canada in our school library, and I prefer to get a book that is written and prepared in Canada, so as to be sure to get the real Canadian point of view. We have decided that our United States history is too narrow. We want to make it *American*. Any assistance you can give me will be most gratefully received."

School Library Number.

The amount of space devoted in this issue to lists of books, book reviews, and book notices, requires, possibly, some explanation. Books are, in a sense, the tools of the teaching profession. This does not mean that lessons are, or should be, conducted by the old text-book method. But it is from books that the teacher obtains the information which gives "content" to his work; from books he obtains an insight into the educational thought of the day; from books he renews his own fund of knowledge. With an educational magazine, or two, and as many books as he can reasonably afford, the competent teacher equips himself for better work.

Then, too, the school library requires continuous replenishing. Some aver that this department of school work rarely receives its proper share of the teacher's attention. The library can be made a useful supplement, a valuable reinforcement, to the teacher's work. Of course, the choice of book rests largely with the teacher.

For these reasons this issue contains a list of educational books reviewed during 1917, with a very brief description of each. A good many reviews appear under "Hints for the Library". In these reviews the literary editors of *THE SCHOOL* give a description of the book and an unbiassed opinion as to its merits. It is hoped that all this material will be of value to teachers, not only this year but for several years.

This special feature of the December number has made it necessary to "hold over" several articles that were scheduled for publication this month. These will appear in the issue for January.

Educational Expenditures.

In all lands are heard persistent clamourings for reforms in education. In most of the Provinces of Canada the greater reforms will certainly have to await the end of the war. But an insidious danger lies just ahead of us. With the cost of living ever increasing, certain obscurantists are demanding economies in education. "Education can wait; let us win the war", is their cry. It is so easy to reduce expenditures for new buildings, for medical and dental treatment of pupils, even for teaching

staff and equipment. But many of these reductions are not true economies at all; with many of them it will prove to have been a "penny wise and pound foolish" policy. Rather should we spend more money, providing, of course, we get full value for outlay—the only economy in education that is worth while. The children in our schools are not responsible for the war; we are fighting to preserve them from such horrors in the future, and they are still entitled to the best we can give them. Money wisely spent upon education will bring abundant returns. Those upon whom we spend it are citizens, even though of tender years. In a short time they will be directing the affairs of the nation. We must see to it that when they grow up they will be more thoroughly educated, more truly enlightened, than we were before them. Only in this way can democracy be made safe in the world.

**The N.E.A.
has a Flitting.**

What an upset a change of quarters makes! In private life the removal from one house to another has been the theme of an essay from many a professional humourist's pen. But what shall we say to the following extract in which Mr. Crabtree, the new secretary of the National Educational Association of the United States, voices his woe? He says the N.E.A. wants sympathy and one can quite believe him.

The N.E.A. headquarters are now in Washington. The headquarters were hard to move. It required six weeks for the railroad company to move three car-loads of goods from Ann Arbor to Washington. When the goods arrived the Government was using nearly every able-bodied man, who works, at Fort Meade. The transfer companies doubled their prices for unloading cars and even then forced us to pay \$25.00 demurrage before unloading our cars.

The Government had also employed all stenographers and many others in the new Food and War Departments. The minimum qualification was to be able to read and write. The Government has purchased all typewriting machines. For weeks it was impossible for the N.E.A. to get office help. We now have good help and promise to catch up with the work sometime.

The printers can't get help, hence the delay in getting out the journal, the N.E.A. Bulletin, and other printed matter. The Government needs all bulletin envelopes in Washington and all incoming shipments. Our supply from Baltimore came to-day. We are now ready for the next cause for delay. One janitor was too religious, and the next is now off duty on a drunk, preparing for the drouth which begins November 1.

We have been burning paper and old boxes. Last week we got a jag of coal, but it is about gone now. There is consolation in the fact that Mr. Garfield has only a half ton ahead. It required three weeks for the gas company to turn on the gas.

The purpose of this article is to arouse sympathy and to prepare for the following: Kindly forgive us for all these delays and for other shortcomings.

An Introduction to Loci

W. J. LOUGHEED, M.A.,
University of Toronto Schools.

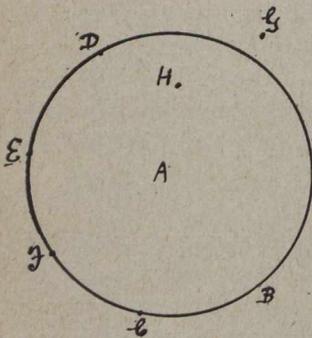


Fig. 1.

I. Mark any point A on the blackboard. Ask the class how we could get a point $1\frac{1}{2}$ inches from A . With one point of the compass at A and a distance between the points of the compass of $1\frac{1}{2}$ inches, mark a point. Call it B . How could we obtain another point at the same distance from A ? In a similar way. Call this point C . How could we get another point to fulfil the same condition? In a similar way. Call it D . Then ask them how we might get a figure on which these points, at the distance of $1\frac{1}{2}$ inches from

A , would lie. The answer would be, "With centre A , and a radius of $1\frac{1}{2}$ inches, describe a circle." What can we say of the location of all points $1\frac{1}{2}$ inches from A ? They all lie on this circumference. If we take any points E and F on this circumference, what can we say of them? They are $1\frac{1}{2}$ inches from A . If we take any point G , $1\frac{3}{4}$ inches from A , what can we say about it? The point G does not lie on the circle. If we take any point H , not on the circle what can we say of it? The point H is not $1\frac{1}{2}$ inches from A . What then can we say of this geometrical figure that we have constructed? All points $1\frac{1}{2}$ inches from A are located on it, and every point on it is $1\frac{1}{2}$ inches from A .

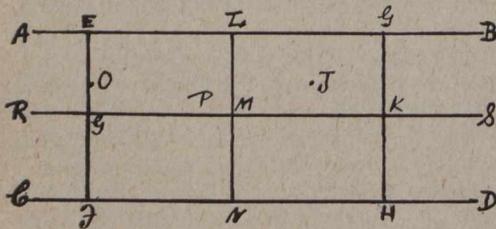


Fig. 2.

II. AB and CD are 2 parallel lines. How could we get a point whose distance from AB and CD is the same? Take any point E on AB and draw $EF \perp AB$. Bisect EF at G . G is equidistant from AB and CD . How could we get another point equidistant from the two lines? In a similar

way, by drawing $GH \perp AB$ and bisecting it at K . In a similar way we could get the point M . How could we get the geometrical figure which would be the location of these points, equidistant from AB

and CD ? By drawing, through G , RGS parallel to AB or CD . What can we say of the location of all points equidistant from AB and CD ? They all lie on RGS . If we take a point P on it, what can we say of it? It is equidistant from AB and CD . If we take a point O , so that OE is not equal to OF , what can we say about the point O ? It does not lie on the line RGS . If we take a point J which is not on the line RGS , what can we say of it? The point J is not equidistant from AB and CD and so does not fulfil the condition required. What then can we say of the geometrical figure RGS ? All points equidistant from AB and CD are located on it, and every point on it is equidistant from AB and CD .

III. A and B are any two points. How could we get a point equally distant from A and B ? Bisect AB at C . C is equidistant from A and B . How could we get another point fulfilling the same condition? With centre A and a radius greater than AC describe an arc of a circle. With centre B and the same radius, describe an arc to cut the former arc at D . D is equidistant from A and B . Why? If we join DA and DB , $\triangle DAB$ is isosceles. How could we get another point to fulfil the same condition? With a similar construction, using a different radius, we could obtain the point E . Similarly we could get another point F . How could we get the geometrical figure which would contain all these points, equidistant from A and B ? Join ED and produce it. What can we say of the line EDC ? It is an axis of symmetry of the figure and therefore bisects AB at right angles. It is the right bisector of AB . What can we say of the location of all points equidistant from

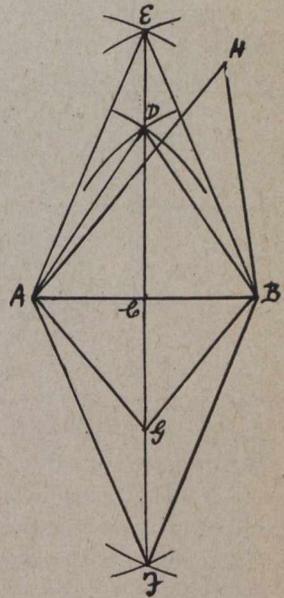


Fig. 3

A and B ? They all lie on the line EDC , the right bisector of AB . If we take any point G , on EDC , the right bisector of AB , what can we prove about it? By joining AG and BG we can prove $AG = BG$, for the \triangle 's ACG and BCG have two sides and the contained angle of the one equal respectively to two sides and the contained angle of the other. If we take any point H not on EDC , what can we prove about it? By joining HA , HC and HB , we can prove HA is not equal to HB , for the \triangle 's HAC and HBC have two sides of one respectively equal to two sides of the other but the contained angle of the one is greater than the contained angle of the other. Then any point, not on EDC , does not fulfil the condition of the problem. What can we say of the geometrical figure EDC ? All

points equidistant from A and B are located on it and all points on it are equidistant from A and B .

What were the characteristics of the geometrical figures which we constructed in figures 1, 2 and 3? Each was such that every point which satisfied the condition stated in the problem was located on it, that every point on it satisfied the condition, and that points not on it did not satisfy the condition.

Tell the class that the geometrical figure which is the location of all points fulfilling a given condition is called a *locus*.

What was the locus in figure 1? The circumference of a circle with centre A and radius $1\frac{1}{2}$ inches. In figure 2? A straight line parallel to the given lines and midway between them. In figure 3? The right bisector of the line joining the two points.

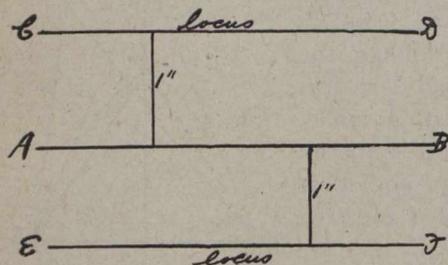


Fig. 4.

IV. Now give the class the following problem: What is the locus of a point one inch distant from a given straight line?

AB is the given straight line and by marking a number of points one inch from AB , the pupils would obtain the two branches of the locus, CD and EF .

These or similar exercises

would now be given:—(a) What is the locus of the tip of the hand of a clock? (b) What is the locus of a man's hand as he works the handle of a common pump? (c) What is the locus of a door-handle as the door opens? (d) A man walks along a straight road, so that he is always equidistant from the two sides of the road. What is his locus? (e) What is the locus of a clock-weight as the clock runs down? (f) What is the

locus of the centre of a circle of given radius which rolls on the outside of a given circle? On the inside of the given circle?

V. This more difficult exercise would now be given:—What is the locus of a point equidistant from two given intersecting straight lines?

If any members of the class have difficulty in finding the locus, proceed as follows:—Tell them to take a point F and suppose it is equidistant from EB and EC . What is the distance of F from EB ? The

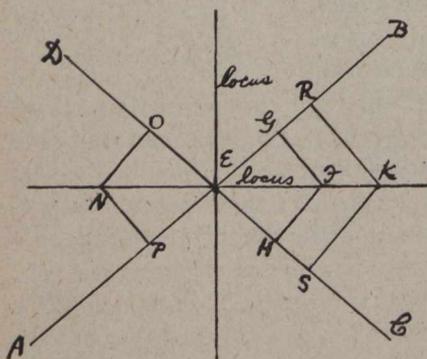


Fig. 5.

$\perp FG$. What is the distance of F from EC ? The $\perp FH$. What do we know of the lengths of FG and FH ? They are supposed equal. What can we say about the angles FGE and FHE ? They are right angles and are therefore equal. If we join FE , what can we say of the Δ 's FGE and FHE ? They are congruent, being right-angled triangles with their hypotenuses equal and a side in one equal to a side in the other. Where does F lie then? On the bisector of the angle BEC . Similarly by taking another point K and assuming it equidistant from EB and EC we could prove that K must lie on the bisector of the $\angle BEC$. What then is the locus required? The bisector of the angle BEC would give one branch of the locus and the bisector of the $\angle DEB$ would give the other branch. Have the students complete the proof by taking another point N on the locus and proving N equidistant from ED and EA .

With this exercise, as with the others, make clear the characteristics of a locus and after a review of the definition of a locus, "The locus is the geometrical figure such that every point which satisfies the conditions lies on it and also that every point on it satisfies the conditions", ask the class to write the answers to the following fundamental theorems in loci:—(a) What is the locus of all points at a given distance from a fixed point? (b) What is the locus of all points equidistant from two given parallel lines? (c) What is the locus of all points equidistant from two given points? (d) What is the locus of all points equally distant from a given line? (e) What is the locus of all points equally distant from two given intersecting straight lines?

Book Reviews

The Microscope. By Simon Henry Gage. (Published by the Comstock Publishing Company. Ithaca. \$3.00.) This is a plain and complete account of that all-important instrument in school work. For High School work only the simpler uses of the microscope are necessary. Nevertheless it is of great importance that every science teacher should know the capabilities of the microscope. The book under review will furnish him with just the information he will require. Not only does the volume discuss the structure and uses of the microscope, but also many other topics such as, drawing with the microscope, photography with the microscope, preparation of material for use with the microscope, including fixing, imbedding, sectioning, and staining. The book can be strongly recommended to all teachers of science in Canada.

G. A. C.

Human Physiology. By Percy Goldthwait Stiles. (Published by W. B. Saunders Company. Philadelphia. \$1.50). This text-book of 400 pages gives the essential facts of human physiology in a straight-forward manner. There are no diversions, but the author always adheres to those facts which are most important. As the author is a professor in Harvard College, his facts can be accepted as exact. In a province like Ontario where the teacher throughout his whole course of study in the schools never receives a thorough course in the subject of physiology, such a book should prove very useful.

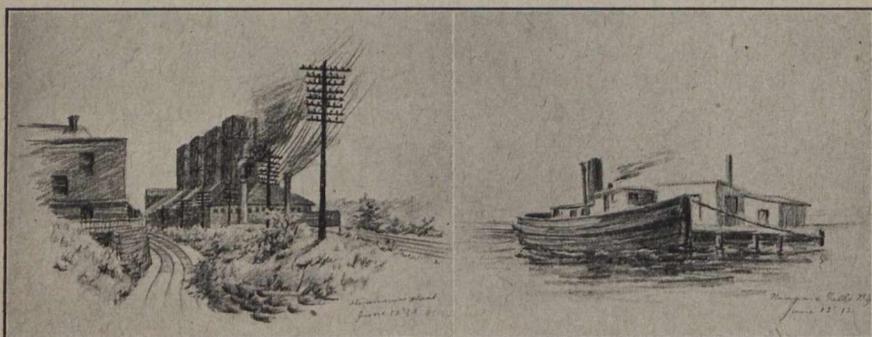
G. A. C.

Out-door Sketching

H. E. BICKNELL, A.O.C.A.
Parkdale Collegiate Institute, Toronto

THERE is, perhaps, no branch of our Art work more interesting and instructive than out-door sketching. It opens to both the teacher and the pupil a field of ever-changing interest and untold possibility. As an introduction to landscape painting—the only wholly creative art—preliminary out-door sketching is absolutely necessary.

Very few materials are required for a beginning. In fact the pupil is advised to limit the number to as few as possible. At first a 3B pencil and a small loose leaf pencil sketch book are sufficient for almost any exercise. Some of Nature's effects are very transient and have to be noted immediately. There may be no time to unpack an elaborate



kit before starting to work; and yet there are some who would not think of noting an effect unless provided with the regulation camp stool, easel, and sunshade. When the student becomes proficient in handling the pencil, crayon or pastel and, later, water-colours might be substituted.

The student should be able to adapt himself to a new condition at a moment's notice. Every interesting effect should be noted. If the sketch book is not handy a piece of wrapping paper or the back of an envelope will serve the purpose. It is said that Reynolds carried home on his thumb nail the sketch for his first oil painting.

Out-door sketches may, for the sake of convenience, be divided into two classes, sketches of details and sketches of compositions. Detail sketches are made for the purpose of gaining facility in the use of the

medium at hand and for the purpose of providing a store of valuable material and information for future use. Out-door compositions are purely creative. They provide suggestions and subjects for pictures which may be "worked up" later in the studio or school room.

The best time for the student to begin the study of out-door effects is on a bright sunny day when there are well-defined shadows. Later the more sombre effects of a grey day or twilight may be attempted.

The student who works out of doors should never be at a loss for a subject. He will find beauty and interest at every hand. A slight change in position or a change in the character or position of the light will suggest new possibilities and never-ending subjects. Following is a list of subjects which may suggest some of the things to look for.



The list is by no means exhaustive and is intended merely to open up the possibilities of out-door work. Only *one* subject should be selected for each sketch.

1. TREES.—Trees with and without foliage, groups of trees, branches, tree trunks, tree stumps, logs.

In sketching trees the student should aim to note the characteristic shape, the masses of light and shade, the tone relations and the general effect rather than details..

2. ARCHITECTURAL DETAILS.—Houses, factory buildings, small buildings, parts of buildings, shops, woodsheds, drive sheds, hen coops, dog kennels, pigeon and bird houses, log huts, tents, towers, chimneys, spires, belfreys, gables, roofs, dormer windows, windows, porches,

verandas, archways, barn doors, store fronts, ruins, panoramic views, street scenes.

Very little difficulty should be experienced in making sketches of this nature if the horizon line and vanishing points are first determined and marked on the paper. In fact very little can be done unless this is attended to at the very beginning.

3. BARNYARD DETAILS.—Wagons, carts, wheel-barrows, farm implements, sap kettles, wood piles, fences, gates, watering troughs, pumps, wind mills.

Drawings of this nature should be very carefully constructed. It may often be necessary to make several sketches from different viewpoints to show the construction of an article. Details like these are often very useful in making landscape compositions.



4. STREET DETAILS. Letter boxes, lamp posts, stone walls, water fountains, monuments, hydrants, street cars, automobiles.

These often present interesting perspective problems.

5. WATERSCAPE DETAILS.—Rocks, bridges, docks, boats, row-boats, canoes, sail boats, tugs, light-houses, reflections.

6. RAILROAD SCENES.—Trains, stations, trucks, signals, switches.

7. SKIES.—Sunsets, cloud effects, moonlights.

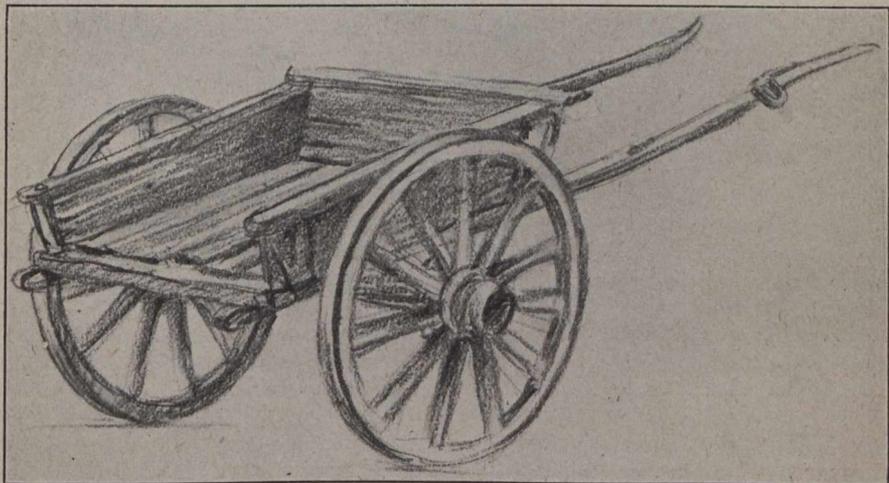
Sketches of this nature are better worked up in colour. Enough of the ground or of the objects below the sky line should

be put in to show the relation in value between the sky and ground and to give added interest and emphasis to the sketch. Moonlight studies should be carefully observed and if possible outlined in pencil. They may then be worked up in colour the next morning. Colour work should never be attempted in artificial light.

After the preliminary training in drawing details from Nature the student should be ready to try his hand at out-door composition. A knowledge of the principles of composition will be essential for work of this kind. Landscape composition is the arrangement of the material presented by Nature. The aim is to make an interesting pattern of

contrasted lights and darks. Topographical accuracy is seldom possible.

A "finder" will now be necessary in selecting a subject. The use of this instrument seems to be very little understood and perhaps it might not be out of place to explain its construction and use. A piece of dark opaque paper with a central rectangular opening about $\frac{1}{2}$ inch wide by $\frac{3}{4}$ inches long is all that is necessary. It is held close to the eye and is used for selecting a subject. *Finders should never be used for paring down a composition.* The student who has to resort to such a practice will never learn to produce a successful composition. If a finder is not handy a small circular opening made by the thumb and first finger of the hand will serve to cut off the light and limit the view and thus aid in the selection of a subject. A prominent Toronto artist wears an old hat



with a small hole in the crown when he goes out sketching. When it is pulled over the face it not only serves as a finder but also serves to shut off all distracting light.

The best time for the student to commence colour composition is in the winter. There is very little detail then to bother him, and he has one of the best opportunities to see pure colour. It will not be long until he will be able to represent the soft creamy colour of the snow in sunshine, and the crisp pinky-blue shadows.

If a suitable view cannot be obtained from a window, the student is strongly urged to wrap up warmly and work outside. Of course it will not be very comfortable. The water-colours will freeze, the fingers will get cold and one will feel like giving the whole thing up. Perhaps there may be a few who will persevere.

The student who works out of doors in the winter should make short rapid sketches, and never remain in one place for very long at a time. A woollen sock with a small hole in it is one of the best things to protect the hand. The brush and pencil may be handled through the hole with a minimum of inconvenience.

It would be impossible to attempt a list of subjects for out-door compositions. Subjects will suggest themselves to the student. He should never have to look far for something to do. If he is interested in pure landscape he may study the endless variety of effects of masses of foliage, water, sand, hills and valleys and the ever-changing sky in summer, winter, spring and autumn, by sunlight, moonlight and twilight. If he is interested in animals the zoo or the farmyard will present life-time studies. If people are the source of interest, then children at play or men and women at work will be the subjects to represent. Building, excavating, pile driving, lumbering, harvesting, dredging, mining, and other operations will suggest interesting subjects.

Book Reviews

Experimental Building Science. By J. L. Mason. (Cambridge University Press. J. M. Dent & Sons, Toronto. 6 shillings). This is a technical book that deals with all the scientific principles underlying the building trade. By a study of it an intelligent artisan would be able to do his work in a more successful and pleasurable manner. It deals with all matters in a very simple manner, only an elementary knowledge of mathematics being necessary in order to follow it readily. As modern science teaching deals so largely with the practical applications of science, there is much in this volume for the science teacher.

G. A. C.

The World we Live in. Edited by Graeme Williams. 3 volumes. (Published by the Waverley Book Company, London). Up to the present time three volumes of this important work in geography have appeared. It is an endeavour to prepare an account of the geography of the world in popular form, and it is very successful. It is not intended to be a text-book for schools, indeed it is written in a much more attractive way than the usual text. But it is an excellent book to have in the school library, for boys and girls will delight to look at the beautiful pictures and to read the interesting chapters. The illustrations are a special feature, and they are truly magnificent. Many of them are full-page and in colour. The work has been written by a number of authors, most of them noted men in their departments. Accordingly, it can be accepted with a good deal of confidence. The first volume deals with those general principles of geography that it is necessary to understand in order to interpret in an intelligent way the geography of the different regions of the world. This includes the principal facts of physical and of economic geography. A good deal of space is devoted to the distribution of animals. Volume 2 deals with the islands of the Pacific Ocean, New Zealand, Australia, and Africa. Volume 3 deals with Antarctica and North and South America. A large amount of space is devoted to Canada, and some excellent illustrations of Canadian scenes are given. These volumes should be an important and attractive acquisition to the Public or High School library.

G. A. C.

Primary Department



S.S. No. 20, ENNISKILLEN.

Send in a "snapshot" of your school for reproduction on this page.

Answers to Correspondents

[As many questions as possible will be answered briefly in each issue. Should immediate reply be desired, stamped, addressed envelope must be sent. It is hoped that teachers who can furnish different answers or better answers than are here given will send them in.]

1. *What phases of the war should be taught to children in primary grades?* Circular No. 27, "The War and the Schools", issued by the Ontario Department of Education, contains on page 5 this instruction: "In Forms I and II (Public and Separate Schools), the teacher should content himself with stories and the reproduction of stories of persons, places, and peoples made prominent by the war". It would, perhaps, not be difficult to teach primary children something of the British flag, its symbolism, its construction. Stories of the heroic deeds of Canadian soldiers, sailors, and airmen may be told in such a way as to be understood and appreciated by little children. These stories should be made realistic by means of pictures of aeroplanes, submarines, tanks, ships, and armies. On page 151 of the *Special War Edition* of THE SCHOOL further suggestions will be found. For stories of the war, read *The Post of Honour* (25 cents), J. M. Dent & Sons, Toronto.

2. *How should history be taught to primary classes?* By means of stories. The teacher tells the story; the pupils reproduce it. For suit-

Time Table

	Primer	Second	Third	Fourth
7.00-7.05	5	Opening Exercises		
7.05-7.15	10	Arithmetic A	Work problems	Working problems
7.15-7.30	15	B.C.	from both A. & B.	from both
7.30-7.45	20	least work	Arithmetic	" " "
7.45-7.50	25	optional least work	" " "	" " "
7.50-8.00	30	Reading A.B.C.	" " "	" " "
8.00-8.10	35	Writing lesson	Arith. Reading (Fri)	" " "
8.10-8.20	40	Busy work	least work	Arith. "
8.20-8.30	45	Prepares reading	" " "	" " "
8.30-8.45	50	Intermission		
8.45-9.00	55	Reading A.B.C.	Prepares Reading	Prepares Reading
9.00-9.15	60	Busy work	Reading	Composition (Fri. 30)
9.15-9.30	65	Writing lesson	Reading	Hygiene (Fri. 30)
9.30-9.45	70	" " "	Writing lesson	Reading
9.45-10.00	75	Noon		
10.00-10.15	80	Reading A.	Exercise from B.B.	least work
10.15-10.30	85	Reading B.	" " "	Exercise from both
10.30-10.45	90	Reading C.	" " "	" " "
10.45-11.00	95	least work	" " "	" " "
11.00-11.15	100	Language (Mon. Wed)	" " "	Examination (Friday)
11.15-11.30	105	Geography (Tues. Thurs)	" " "	" " "
11.30-11.45	110	Writing	Language (Mon. Wed)	" " "
11.45-12.00	115	Optional	Geography (Tues. Thurs)	" " "
12.00-12.15	120	Optional	Exercise based on	Grammar (Mon. Wed)
12.15-12.30	125	Busy work and drawing	class work and preparing spelling	Geography (Tues. Thurs)
12.30-12.45	130	Intermission		
12.45-1.00	135	Writing (Mon. Wed)	Dict. (Tues. Thurs) for all classes.	" " "
1.00-1.15	140	Mental	Prepares spelling, Nature Study (Fri. 30)	" " "
1.15-1.30	145	Correcting and writing mistakes	History (Tues. Thurs)	Prepares Dict. or Hist. (Friday)
1.30-1.45	150	Home work	Correcting mistakes	History (Tues. Thurs)
1.45-2.00	155		Nature Study (Mon. Wed)	Dict. & Spelling (Tues. Thurs)
2.00-2.15	160			Dict. & Spelling (Tues. Thurs)
2.15-2.30	165			Nature Study (Mon. Wed)
2.30-2.45	170			Dict. & Spelling (Tues. Thurs)

able material see the first two pages of the Ontario Teachers' Manual on History. It should not be difficult to develop the ability to tell a story so that it is real and vivid to the children. Read again the articles by Miss Workman and Miss Watters on "Story Telling" in recent issues of THE SCHOOL, also the editorial note on "The Teaching of History" in the September number. Try dramatization of some of the stories used. It will not be necessary to use stage scenery; the children's

Time Table

Time	Monday and Wednesday	Tuesday and Thursday	Friday
7.00-7.05	Opening Exercises		
7.05-7.15	Pt. I. Arithmetic	Pt. I. Arithmetic	Pt. I. Arithmetic
7.15-7.25	Pt. II. Arithmetic	Pt. II. Arithmetic	Pt. II. Arithmetic
7.25-7.40	III. Arithmetic	III. Arithmetic	III. Arithmetic
7.40-7.55	IV. Arithmetic	IV. Arithmetic	IV. Arithmetic
7.55-8.10	Pt. I. & II. Reading	Pt. I. & II. Reading	Pt. I. & II. Reading
8.10-8.20	Recess	Recess	Recess
8.20-8.30	Pt. I. Reading	Pt. I. Reading	Pt. I. Reading
8.30-8.45	Pt. II. Reading	Pt. II. Reading	Pt. II. Reading
8.45-9.00	Dict. & Spelling	Dict. & Spelling	Dict. & Spelling
9.00-9.15	Grammar	Grammar	Grammar (Analyses)
9.15-9.30	Noon	Noon	Noon
9.30-9.45	Pt. I. Reading	Pt. I. Reading	Pt. I. Reading
9.45-10.00	Pt. II. Reading	Pt. II. Reading	Pt. II. Reading
10.00-10.15	III. Read. & Literature	III. Read. & Literature	III. Read. & Lit.
10.15-10.30	IV. Read. & Literature	IV. Read. & Literature	IV. Read. & Literature
10.30-10.45	V. Lit. (Reader)	V. Lit. (Reader)	V. Lit. Selections
10.45-11.00	Recess	Recess	Recess
11.00-11.15	VI. Language	VI. Geography	VI. Nature Study
11.15-11.30	VI. Composition	VI. Geography	VI. Composition
11.30-11.45	VI. History	VI. History	VI. Composition
11.45-12.00	VI. Writing	VI. History	VI. Composition
12.00-12.15		VI. History	VI. Composition
12.15-12.30		VI. History	VI. Composition
12.30-12.45		VI. History	VI. Composition
12.45-1.00		VI. History	VI. Composition
1.00-1.15		VI. History	VI. Composition
1.15-1.30		VI. History	VI. Composition
1.30-1.45		VI. History	VI. Composition
1.45-2.00		VI. History	VI. Composition
2.00-2.15		VI. History	VI. Composition
2.15-2.30		VI. History	VI. Composition
2.30-2.45		VI. History	VI. Composition
2.45-3.00		VI. History	VI. Composition
3.00-3.15		VI. History	VI. Composition
3.15-3.30		VI. History	VI. Composition
3.30-3.45		VI. History	VI. Composition
3.45-4.00		VI. History	VI. Composition

vivid imaginations supply almost all that is required. Pictures are an essential to good history teaching in any Public School grade. A. & C. Black publish at a reasonable price good sets of pictures for use in British history. These may be obtained from the Macmillan Co., 70 Bond St., Toronto.

3. *It is difficult to construct a workable time-table for an ungraded school.* It is; but the time-table is one of the best indications of success, or the reverse, in ungraded school work. No one can make a workable time-table for another. A rural school time-table is an individual thing; just

TIME-TABLE—UNGRADED SCHOOL.

	FORM I (Junior)	FORM I (Senior)	FORM II	FORM III	FORM IV
9 00-9 05			Opening Exercises.		
9 05-9 15			Music or Singing for all Classes in the School.		
9 15-9 20	<i>Arithmetic.</i>	Problems.	Literature and Reading.	Problems or Seat Work.	Problems or Seat Work.
9 20-9 35	Number Work.	Problems.	<i>Literature and Reading.</i>	Problems or Seat Work.	Problems or Seat Work.
9 35-9 45	Number Work.	<i>Arithmetic.</i>	Prepare Spelling.	Problems or Seat Work.	Problems or Seat Work.
9 45-9 50	Writing.	Prepare Spelling.	Prepare Spelling.	<i>Arithmetic.</i>	Problems or Seat Work.
9 50-10 00	Writing.	Prepare Spelling.	Prepare Spelling.	Prepare Spelling.	<i>Arithmetic.</i>
10 00-10 10	Clay Modelling.	<i>Spelling Test.</i>	<i>Spelling Test.</i>	Prepare Spelling.	Prepare Spelling.
10 10-10 20	Clay Modelling.	Clay Modelling.	Clay Modelling.	<i>Spelling Test.</i>	Prepare Spelling.
10 20-10 30	Clay Modelling.	Clay Modelling.	Clay Modelling.	Correction of Errors.	<i>Spelling Test.</i>
10 30-10 40	Recess.	Recess.	Recess.	Recess.	Recess.
10 40-10 45			Music or Singing for all Classes in the School.		
10 45-10 55	<i>Reading.</i>	Reading.	Problems.	Composition.	Grammar.
10 55-11 05	Busy Work.	<i>Reading.</i>	Problems.	Composition.	Grammar.
11 05-11 15	Composition.	Composition.	<i>Arithmetic.</i>	Composition.	Grammar.
11 15-11 30	Composition.	Composition.	Composition.	Composition.	Grammar.
11 30-11 45	Recess.	Composition.	Composition.	Composition.	<i>Grammar.</i>
11 45-12 00	<i>Geog. Comp. or Lit.</i>	<i>Geog. Comp. or Lit.</i>	<i>Geog. Hist., or Comp.</i>	Prepare Literature.	Prepare Literature.
12 00-1 00	Noon.	Noon.	Noon.	Noon.	Noon.
1 00-1 05	<i>Arithmetic.</i>	Seat Work.	Literature and Reading.	Literature.	Literature.
1 05-1 15	Number Work.	Seat Work.	Literature and Reading.	<i>Literature and Reading.</i>	Literature.
1 15-1 30	Number Work.	Problems.	Literature and Reading.	Map Drawing.	<i>Literature and Reading.</i>
1 30-1 40	Busy Work.	Problems.	Literature and Reading.	Map Drawing.	<i>Comp. (2), History (3).</i>
1 40-1 50	Busy Work.	Problems.	<i>Literature and Reading.</i>	Seat Work.	<i>Comp. (2), History (3).</i>
1 50-1 55	Busy Work.	<i>Arithmetic.</i>	Busy Work.	Seat Work.	<i>Comp. (2), History (3).</i>
1 55-2 05		Examination of work, or Physical Culture, or		"Current Events" for all classes.	
2 05-2 30		Writing (2) or Art (2) or Constructive		Work (1) for all classes.	
2 30-2 40	Recess.	Recess.	Recess.	Recess.	Recess.
2 40-2 50	Busy Work.	Prepare Reading.	Seat Work.	<i>Geography.</i>	Prepare Geography.
2 50-3 10	Busy Work.	Prepare Reading.	Seat Work.	Seat Work.	<i>Geography.</i>
3 10-3 15	<i>Reading.</i>	Prepare Reading.	Prepare Spelling.	Seat Work.	Seat Work.
3 15-3 20	Spelling.	<i>Reading.</i>	Prepare Spelling.	Prepare History.	Map Drawing.
3 20-3 35	Spelling.	<i>Spelling.</i>	<i>Spelling.</i>	Prepare History.	Map Drawing.
3 35-3 45	Busy Work.	Busy Work.	Busy Work.	<i>History.</i>	Seat Work.
3 45-4 00		Hygiene (2) or Nature Study (2) or Supplementary	Reading (1) throughout the School.		

Numerals, e.g. (2), indicate number of lessons per week. Italics indicate Recitation periods.

Manners and Morals, twice each week, in place of two of the lessons at end of third or fourth sessions.

This time-table is suggestive only.

as surely as one must eat one's own dinner, so surely must one make one's own time-table. It is not impossible in any case whatever. It will require thought, effort, originality, but every teacher is expected to be able to use these.

The Ontario Teachers' Manual on *School Management* has a chapter on this subject which every teacher should read. On page 15 of the same Manual there is the story of the teacher who dodged the issue by purchasing a ready-made time-table for her school. In this printed time-table there was provision for a Form V class but she had no such class.

On his visit to her school, the Inspector asked her what she did when the time arrived for teaching the Fifth Class. Her reply was, "I wait until the time comes for the next class and then I proceed as indicated on the time-table". Here was surely the limit in lack of initiative and slavish adherence to the ideas of others!

Multiplicity of classes makes good work very difficult of accomplishment but means may be found to minimize this difficulty.

Three time-tables which have been used by successful teachers are published herewith in the hope that they may be found suggestive. But all of these time-tables are open to some adverse criticism; they have various faults. No doubt, no one but the author of each can use it. No teacher can do successful work for any length of time by following another's time-table. Construct *your own*.

4. *Is there any Mediaeval History that is better for ordinary reference work than Robinson's History of Western Europe? What would be a good one to supplement it?* If you have not yet bought Robinson's History of Western Europe, you had better secure the new and revised edition, entitled *Mediaeval and Modern Times*. It is an excellent book. For supplementary reading you might get Emerton's *Introduction to the Middle Ages* and his *Mediaeval Europe* published by Ginn & Co. The one brings the story of the Middle Ages down to 800, and the other takes it on from that point. The old prices of these books were \$1.25 and \$1.50. For a review of *Mediaeval and Modern Times* see THE SCHOOL of May, 1917, page 544.

Primary Reading

FLORENCE M. CHRISTIANSON

Niagara Falls South

THE first day I am usually able to establish the sounds of the letters *a, c, t*. Then for two or three days we make sure that we know them and practise writing them in the air, on the blackboard, and at the desks. These letter sounds are reviewed every time we have a reading lesson and others such as *m, s, p, h, f, n, r* are added from time to time as fast as the children are able to learn them. It would take about five or six weeks to establish these along with the sight words taught.

At the end of the first week I introduce phonograms or "keys" as the little ones are pleased to call them. These are *at, am, ap, it, un, um, est, ill, ick* and scores of others that will readily suggest themselves to the independent teacher. Just one or two at a time.

I then place a phonogram on the blackboard. Let it be *at* and at a little distance in front of it I place in rapid succession the sounds *c*, *m*, *t*, *p*, *r*, etc., and after a little practice they get the power to coalesce the sounds and say the word almost before they know it. It really does one good to see the interest on some of the faces as they get this power to help themselves.

While establishing these fundamentals I have also taught all the words contained in the first seven or eight pages of our Primer as whole words by the "Look and Say" method. Having arrived at that stage we go back and resolve into their sound-elements all the simpler words already known as wholes.

As a preliminary review, we always begin our reading lesson by recalling what we already know. When pupils are in their places before the blackboard, I ask, "Who will be the first to give us the new sound we learned yesterday?" Then we get that and the others that we already know are supplied one by one and I write them on the board or have the pupil that supplies the sound do so. Thus we get a row of letter sounds along the lower edge of the board. Next I call for the phonograms. These are readily supplied in the same way, and are placed at the top of the blackboard. (We have two benches made for us by some of the Second Book boys and by stepping up on these benches the little ones are able to reach well to the top of the board.)

Each key is underlined and vertical lines are drawn so that each key is at the top of a column. Then we begin to make words with each key by coalescing the sounds at the bottom of the board with each key in turn. I let each child that finds the word write it in its place. As we wear out a key, *i.e.*, we come to know absolutely all the words that it will make, we lay it away and use it less often.

While I am standing before the class and after these reviews, I write on the blackboard a short story containing the new words I have just taught and using old words which are not well established. I make the story as nearly as possible a perfect model because the children will be asked to translate it as soon as they return to their seats. As soon as I have finished writing, I call for some one to read it. Others follow until I am satisfied with the reading.

Another time the seat-work will be making words. I place on the blackboard, say, *three* keys, never more than *five*, and with these as bases they form words by putting the known letter sounds before them.

The variety and large number of words they produce is simply marvellous. Incidentally, this method makes good spellers. One day I had a pupil at the board writing the words she knew, when the Inspector happened in. He watched her for a while and then turning to me he asked, "Where does she get the words?" When told, he marvelled at

it. To test whether she really knew them or whether it was only memory work, each word was pointed to in any order and she knew every one. She had thirty words in her list.

While we are writing and learning the words made with the phonograms we also learn their meaning as, for example, when we get the word *pit* we learn that the pit is the stone inside a cherry, etc.

I do not put the Primer into the child's hands till he has come well along in it. I teach the Primer systematically but the pupils have no text, so that when I do put the book into their hands they can read at once and make fair progress with new work. We have little trouble changing from script to print. Now and then one comes across a pupil who finds it difficult but it is usually a case where the phonics have been omitted.

After the child gets his book I write each lesson from the book on the blackboard. If the lesson is long I use only a portion of it at a time. For extra drill, I make up stories using the same words as those the original story contained and bring old words to help out and for additional drill. This gives a large amount of excellent practice in writing, reading and word-recognition.

PHONOGRAM TABLE AT 4 WEEKS.

<i>at</i>	<i>ap</i>	<i>am</i>	<i>an</i>	<i>it</i>	<i>un</i>
cat	cap	tam	can	mit	tun
mat	map	ram	man	tit	fun
tat	tap	Sam	tan	pit	run
pat	pap	ham	pan	fit	sun
fat	rap		fan	sit	
rat	sap		Fan	hit	
sat			ran		
hat					

a, c, m, t, p, f, r, s, h.

AFTER 6 WEEKS.

<i>ill</i>	<i>ell</i>	<i>ick</i>	<i>ike</i>	<i>ink</i>	<i>est</i>	<i>ing</i>	<i>ark</i>
mill	mell	tick	Mike	mink	test	ring	mark
till	tell	pick	tike	pink	pest	sing	park
pill	pell	rick	pike	rink	fest	ling	sark
fill	fell	sick	like	sink	rest	bing	hark
rill	sell	lick	dike	link	hest		lark
sill	hell	dick	bike	think	lest		dark
hill	dell	chick			nest		bark
dill	Nell				best		
bill	bell				chest		
chill							

a, c, m, t, p, f, r, s, h, l, n, d, b, ch.

These tables are not kept on the board, nor preserved in any way but are built up by the children from time to time. Each lesson finds some new words added.

Literature in the Kindergarten and Primary Schools

ETHEL M. HALL

Ryerson Critic Staff, Faculty of Education, University of Toronto

PLATO in his 'ideal republic' makes education begin with music, which in his definition includes *literature*, and makes gymnastics come later. Music for the soul—the soul first.

"You know", he says, "that we begin by telling children stories, which though not wholly destitute of truth are in the main fictitious, and these stories are told them when they are not of an age to learn gymnastics".

Greek children, therefore, had a foundation of literary training before being sent to school. "Because", said Socrates, "rhythm, and harmony sink most deeply into the recesses of the soul and take most powerful hold of it, bringing gracefulness in their train".

The little pickaninny who is lulled into dreamland with "Sleep, O sleep, my little Pickaninny", the Indian baby who is rocked to sleep by the wind as the mother weaves baskets beneath the tree and sings, the white baby who lies in his dainty crib and falls to sleep to the music of "Sweet and Low", and is dressed in the morning to the rhyme, "This little pig went to market," or takes his morning nap to "Bye baby Bunting", is having the first foundation of literary appreciation through rhythm and rhyme.

As the child grows larger he is given weightier ballads, stories in prose and singing games and pantomime plays.

He has already begun to enter upon his literary inheritance, the rich legacy of centuries, for he has a good stock of classic rhymes and songs and stories and plays which are leading factors in the formation of good habits of speech. If this good work has been done at home, it should be continued by the teacher.

The first point then is to feed the child upon the very best literary food—that is, the very best measured by literary standards. Much of the verse which has been given to little children is void of anything nutritious by means of its lack of poetic quality.

A case in point—just to-day a little girl called at my home and said, "Could you give me the words to the 'Sandman'? You taught it to us when I was in your room". "Why, Annie", I said, "that is some time ago. In which grade are you this term"? "The Sr. III", she said, "but I can remember the lesson quite well and I thought I should like to have the words".

"Children who have been accustomed to stories of the Iliad will read and re-read this treasure in later life with an advantage which

could not have been theirs had not the heroes of the old story been the companions of their childhood thought". Children reared upon such literature will not sink to the dime novel or the pernicious pages of the Sunday supplement.

Begin with Mother Goose melodies, nursery rhymes, and singing games which are classics in the child world. Then rise to selections from Blake and Wordsworth, Stephenson and Field, Tennyson and Browning, Sherman, Rossetti, Shakespeare and the Bible.

The first duty of the teacher of literature to little children is to teach himself to love and appreciate the beauty of a selection by much reading of literature. He must know and love the wonderful old folk and fairy tales, not as mere nursery tales, but as great and simple art. He must read the hero tales and romances till he knows them as a treasure house out of which he may draw at his need. Many, many children's stories and poems he must read to be able to judge them.

The aim of the teaching of a poem is not to correlate it with some other subject of the curriculum—geography, history or nature study—but to make the child love it for its own sake, for the music of its rhyme.

The child's interpretation differs from that of the adult but even thus early children enter into the spirit of the poem, rejoice in the beauty of the language, and are happy in the rhythmic recitation. The beautiful words are treasured in their memories to return again and again to gladden their hearts just as the bright vision was repeated in the experience of the poet.

The child's appreciation of the beauty of the thought, of the melody of the language, should never be sacrificed to the mere intellectual understanding of the poem. The first appeal of the true poem is never to the mind, but to the soul and it is thus that every true poem should be taught.

Haliburton and Smith give the following as a *general method* of teaching any poem. 1. Preparatory discussion. 2. Presentation of the poem as a whole. 3. Analysis. 4. Oral reading. 5. Dramatization. 6. Use as a song. 7. Memorization.

1. A discussion in which the teacher supplies all the necessary information, using at the same time the new words of the poem so that the pupils become familiar with them in advance.

2. The whole poem should be first presented by the teacher, who by a clear earnest rendering endeavours not only to make clear the meaning of the poem, but also gives her pupils a standard of correct oral reading.

3. Questions are asked which may be answered without previous study. New words which cannot be explained by pupils will be used by the teacher in some previous work—language or blackboard reading lessons.

4. If the poem be simple enough the pupils are now ready to try oral reading. Through the study of the poem and the teacher's rendering they understand the thought and are ready to give it to others. The listeners may be asked to close their eyes and mentally see the picture in the part read. Thus the reader strives to make the image clear.

("If a teacher can establish in her pupils the habit of looking upon a poem as a collection of thoughts and pictures, rather than lines, she will have done much to make her pupils pleasing interpreters of verse".)

The lesson closes with the teacher's rendition of the poem as a whole in order to leave with the pupils the author's thought expressed more maturely.

5. Memorization should prove an easy task after the selection has been thoroughly studied. The poem may be written on the blackboard and read orally by the class, then all but the most important words erased. These words are used as suggestions and the pupils recite the poem. These words are erased and the pupils recite from memory. Various methods may be used to create interest.

6. Every poem is not suitable for dramatization or song. *Little Boy Blue* and *Sing a Song of Sixpence* may be dramatized; *Sweet and Low*, *Sleep Baby, Sleep*, and *Daisies* may be sung.

We have used poetry as a basis for study in the kindergarten and primary schools because there are certain results which can be obtained with little children only through poetry. In the story we are intent upon the subject matter and the imaginative creation. Most of the stories adapted to children are given in many versions with changing vocabulary each time. In verse the child gets an experience of the musical side of literature. Little children need the marked metre of the poem to suggest the rhythm. It is sometimes wise to allow little tots to march to the recitation of the memorized poem or use the rhythmic clapping of the hands to impress the metre of the verse. Sometimes the soft-voiced concert recitation soothes the nerves of an otherwise weary class.

The teaching of verse gives time to linger over and enjoy many fine and delicate aspects of the art that we are apt to overlook in the story. Sometimes the nature of the verse—the condensation, the careful arrangement of the chosen words—calls us to go slowly with it.

As soon as the little child can read he should have a printed copy of the poem before him. Unit poems can be purchased or hectographed and the pupils may make themselves a literature reader of these units.

Instead of the regular lesson the teacher should frequently use the period to read from the exhaustless storehouse of beautiful poems. Thus the pupil will desire to reach out into larger fields.

The distinctive service of poetry will be to cultivate in the children a sense of the musical side of literature. This may be done through reading to them.

List of Poems for Study and Memorization in Kindergarten and Primary: *Mother Goose Rhymes; Ding Dong Bell; Little Jack Horner; Sing a Song of Sixpence; Humpty Dumpty; Little Boy Blue; Little Bo-peep; Little Miss Muffet; Little Tom Tucker; Jack and Jill; Jack be Nimble; Baa-Baa, Black Sheep; Hey! Diddle, Diddle; Hickory, Dickory, Dock; Rock-a-bye Baby.*

Cradle Songs: *Lullaby—Rands; What Does Birdie say?—Tennyson; Sleep, Baby, Sleep; Sweet and Low—Tennyson; Rock-a-bye Baby—Field; Irish Lullaby—Graves; Wynken, Blynken and Nod—Field; Slumberland—Anon.*

Stephenson: *Dark Brown is the River; My Shadow; A Good Play; The Wind; Foreign Children; The Swing.*

Rossetti: *The Wind; What Does the Bee Do?; O Lady Moon; How many Seconds in a Minute?*

Blake: *Little Lamb; Piping down the Valley Wild.*

Rand: *The Wonderful World.*

Vandegrift: *The Sandman.*

Book Reviews

The Teaching of Government, by C. G. Haines and others. 284 pages. Price \$1.10. The Macmillan Co. of Canada Ltd., Toronto. This volume is the report of a committee of seven appointed by the American Political Science Association "to consider the methods of teaching and studying government now pursued in American schools, colleges and universities, and to suggest means of enlarging and improving such instruction". It contains an account of recent progress in the teaching of government, a report on the teaching of civics in various parts of the United States, a suggested course of study and methods suitable for various kinds of schools, a report on the teaching of political science in colleges and universities, and full bibliographies. The section on methods and courses of study will be especially interesting to teachers. The work suggested for elementary schools is mainly community civics, but includes also a brief outline of the government of city, county, state and nation. The course for the High School deals mainly with state and federal government. This volume is very timely and suggestive and should appeal strongly to progressive teachers. G. M. J.

Ten Boys' Farces, by Eustace M. Peixott. Published by Walter H. Baker & Co., Boston. 107 pages, paper cover; price 25 cents. The prime function of these farces is to amuse both those who act and those who listen. Though not of high literary merit, they supply very useful and appropriate material for those recreation centres, boys' clubs, Y.M.C.A.'s and settlements that attempt dramatic work. F. E. C.

Why Britain Went to War, by Sir Edward Parrott. Price 50 cents. 224 pages: numerous illustrations. Thomas Nelson & Sons, Toronto. Not many High School students will be interested in the official books on the causes of the present war, but in the volume under review they obtain the gist of them, narrated in most attractive fashion. There is also other valuable material on the growth of Germany and the history leading up to the great struggle. The whole story from the time of Napoleon is told so that it will make a strong appeal to boys and girls of High School age. It should find a place in every High School library. W. J. D.

Geography—The Study of a Continent

JOHN B. BRENNAN, B.A.

Principal, Queen Victoria Public School, Toronto

[NOTE—Preparatory to the study of a continent, the pupils should have a working knowledge of the zones. They should know the cause of winds, and the approximate limits of the chief wind belts of the world. They should also clearly understand what is meant by climate and the influences that affect climate.]

Definition of Geography.

“The unity of all the sciences is found in geography. The significance of geography is that it presents the earth as the enduring home of the occupations of man. The world without its relationship to human activity is less than a world. Human industry and achievement, apart from their roots in the earth, are not even a sentiment, hardly a name. The earth is the final source of all man’s food. It is his continual shelter and protection, the raw material of all his activities, and the home to whose humanizing and idealizing all his achievement returns. It is the great field, the great mine, the great source of the energies of heat, light and electricity; the great scene of ocean, stream, mountain and plain of which all our agriculture and mining and lumbering, all our manufacturing and distributing agencies are but the partial elements and factors. It is through occupations determined by this environment that mankind has made its historical and political progress. It is through these occupations that the intellectual and emotional interpretation of nature has been developed. It is through what we do in and with the world that we read its meaning and measure its value”.*

Maps versus text-book.

To one who reads and appreciates Professor Dewey’s conception of geography, the subject assumes a greater importance. He views it no longer as a mere study of disconnected facts, a mere memory lesson, but a training in observation and reasoning. Dewey’s thought, that the progress of mankind is through occupations determined by environment, is very far-reaching. From the geographical standpoint, environment is synonymous with the general structure of “the enduring home of the occupations of man”—the earth—and upon this structure depend in large measure, the climate, the vegetable growth, the occupations of the people, the growth of great centres of population and the people themselves.

*John Dewey: *The School and Society*. page 32.

All these points of information may be learned by the pupils directly from the text-book, but this is not the best way to teach geography. The chief objection to the text-book system of instruction is that it tells too much, leaving little or no room for initiative on the part of the pupil. The best method of instruction is that which leads the pupil to the discovery of truth for himself.

If in studying a continent the pupil is to gather his own information, persistent and careful use of maps should be made. A *good* map contains a wealth of facts, and it should be the constant endeavour to learn these facts from the map rather than from the text-book. The best maps for this purpose are of two kinds—the orographical map, from the Greek words *oros*—a mountain, and *grapho*—I write, and the rainfall map.

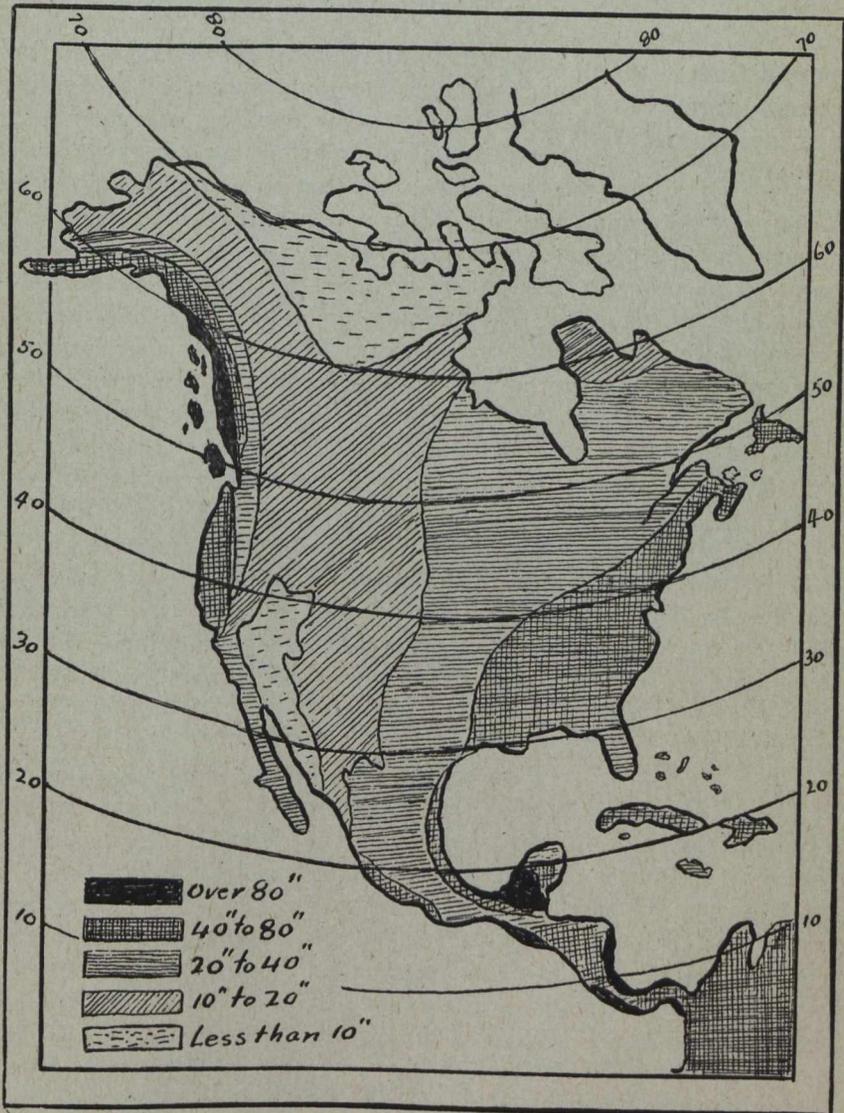
The Orographical Map.

The orographical map will present almost at a glance a clear idea of the relief of the continent. By relief is meant the mountain ranges, plateaus, plains and valleys, and their relation to one another. It will show the inland water systems and the depth of the surrounding oceans. It will also enable us to determine to some extent the rainfall. It is a well-known fact that as we go higher above sea level the rainfall of a country increases. This is because the mountains force the winds to rise in order to cross them. The higher we ascend the earth's surface the colder the air is, and as cold air cannot contain so much moisture as warm air, the moisture condenses and falls as rain. The rainfall map will, however, show with some degree of exactness the average annual rainfall of every part of the continent.

The Rainfall Map.

The value of a rainfall map becomes apparent when we consider that, while relief and climate must be taken into account, the rainfall is the most important factor which determines the character of the vegetation as well as its distribution. For our purpose all vegetation may be roughly divided into two classes—trees and grasses. The grasses for convenience may be divided into those which are used chiefly for fodder, and those such as wheat, oats, barley and the like, whose value depends on the filling out of the heads. Trees, we know, require a great deal of moisture and considerable warmth to induce growth. Therefore, from such a map we should be able to learn that, in the torrid and temperate zones, wherever the average yearly rainfall is indicated at 80 inches or more the chief form of vegetation will be immense forests. Regions in which the rainfall averages from 40 to 80 inches will also have their forests, but the trees will not assume such large proportions; and, as the amount of rainfall decreases, the trees become smaller and smaller

NORTH AMERICA—RAINFALL



J.B. Brennan

and finally degenerate into shrubs. A rainfall of from 20 to 40 inches is capable of producing the wheat variety of grasses, but in those districts in which the rainfall is from 10 to 20 inches wheat will not mature and these regions can produce grasses only of the fodder variety. A rainfall of less than 10 inches brings us to a desert region. These desert regions

may occur in any one of the zones; they may be warm or cold. The vegetation of the extreme north and south is represented by mosses and lichens.

**Occupations
depend largely
on minerals and
vegetation.**

Now since all animal life depends primarily upon vegetable life for existence and since man is more or less subject to his environment, a knowledge of the relief of the continent and of the nature and distribution of its vegetation will enable us to determine with some degree of accuracy and precision the pursuits that will be followed by man in the various parts of the continent. This information may be obtained by the pupils themselves from a study of the maps. By studying the orographical map the main elements of relief and the other physical features may be learned by observation. By a glance at the map the pupil will, from the latitude, be able to say what parts of the continent are likely to be hot, or temperate, or cold, while a general idea of the rainfall may be had by considering the prevailing winds in conjunction with the mountains. This, however, should be verified by consulting the rainfall map. The textbook must be the source of information regarding the minerals.

If we bear in mind that minerals and vegetation control in a great measure the distribution of population, we can learn, chiefly from the maps—by the simple process of observation and reasoning—what the occupations of the people are likely to be in the various localities.

The Study of North America.

Relief.

Turn to the orographical map, page 72 of the *Ontario School Geography*. Note the different shades of colouring. What does each tint represent? The explanation is found in the key in the lower left-hand corner of the map. When the pupils have familiarized themselves with the key ask them to trace out the highlands. The map shows that the main orographical features are two mountain systems—the Appalachian Mountains in the east and the Cordilleran Mountains in the west. In the north-east there is also the Labrador Plateau. What is the nature of the land lying between these highlands? The tinting indicates a broad belt of lowlands stretching continuously from the Arctic Ocean to the Gulf of Mexico. This is called the Great Central Plain. Note the distance of the mountains from the coast line. What is the nature of the area between the Appalachian mountains and the coast? It is level. As this plain borders the coast line, it is called a coastal plain. Is there any such well-defined coastal plain on the west side? Why not? These coastal plains do not end at the sea-shore but gently slope under the sea for varying distances.

This extension of the coastal plain beneath the sea is called the *continental shelf*. Trace the continental shelf along the east coast. How does it differ from the shelf along the west coast? Where is the shelf widest? Off the coast of Newfoundland. This broad continental shelf extending 500 miles beyond Newfoundland forms the valuable fishing grounds known as the Newfoundland Banks. (Waters more than 100 fathoms deep do not make good fishing grounds.)

Drainage.

The drainage areas may now be considered. The slope of the plains is indicated by the tinting on the orographical map. It is better indicated by the course of the rivers. The names of the chief rivers which drain the various basins should be learned. *The Height of Land* will mark the northward and southward slopes of the Great Central Plain. Invite comparison as to the value, from the commercial standpoint, of the rivers that empty into the Gulf of Mexico with those that flow into the Arctic Ocean. Which are of greater value those that flow into the Atlantic or those that flow into the Pacific? Why? The rivers that flow into the Arctic Ocean flow from a warmer to a colder region and are ice-bound part of the year. Those that empty into the Gulf of Mexico flow from a colder to a warmer region and are navigable the entire year. The coastal plain on the west is very narrow; the rivers are, therefore, as a rule short and the current rapid. The wider coastal plain on the east renders the rivers navigable for a considerable distance.

The Coast Lines.

An examination and comparison of the coast lines is of value, as the nature of the coast line is often a determining factor in founding settlements and from this may be traced the reason for the presence of large cities in various places. Coast lines may be described as *broken* or *entire*. What is the advantage of a broken coast line over one that is entire? The broken coast line gives rise to harbours. Compare the north coast with the east coast. Both are very much broken. Note the latitude of the north coast. It is so far north that its harbours are ice-bound for a considerable portion of the year; the harbours on the east are always open. The west coast is almost entire, consequently, there is a dearth of good harbours except in the north, off the coast of British Columbia. Why is the east coast of North America more densely populated than the west coast? On account of the advantages offered by the east coast—its wide coastal plain, its good harbours, and its greater proximity to the world's market—Europe. It was also the first to be settled and the Appalachian Mountains formed a barrier in early times to western extension.

Climate.

Note the latitude. The continent extends from the Arctic Ocean to the tropics, hence the climate is naturally determined largely by the latitude. In what zone does the greater part of North America lie? In spite of the fact that the greater part lies in the north temperate zone most of the country is subject to great and rapid changes of temperature. Why is this? Our orographical map shows the general direction of the highlands to be north and south. What protection has the Great Central Plain from sudden cold waves from the north or sudden heat waves from the south? None. The climate of the east coast is much more extreme than that of the west coast. How can we account for this? A warm current from the south-west washes the shores of the Pacific while a cold current creeps down the Atlantic coast.

Rainfall.

Before consulting the accompanying map let us endeavour to determine the rainfall from the orographical map. We know that the rainfall depends largely upon the prevailing winds in conjunction with the mountains. From our knowledge of the chief wind belts of the world we can say that the prevailing winds of most of North America are westerly. The southern part of the continent, however, beginning about Mexico, is in the region of the north-east trade winds. Sea breezes are also prevalent from the Atlantic and Pacific Oceans. (Land and Sea Breezes.) As the mountains run north and south, parallel to the coast, they precipitate on the windward side *nearly* all the moisture which the Atlantic and Pacific Oceans would otherwise send to the interior. Thus while the coasts have a plentiful supply of rain, large areas of the interior are very dry. We can conclude that the Great Central Plain does not have so great a rainfall as the coastal regions. If we further consider that the mountains on the east are not nearly so high as those on the west, we can draw the further conclusion that the eastern part of the Great Central Plain will have a heavier rainfall than the western part. Mexico and what we call Central America will have a considerable rainfall due to the moisture-laden north-east trade winds. We may turn now to the rainfall map and verify the conclusions we have made.

Vegetation.

In this general survey of the continent, it will be sufficient if the pupils can tell the characteristic vegetation of a region according to its rainfall. They should be able to tell that the east and west coast regions will have their forests, and that the Great Central Plain will produce grasses; the eastern part those grasses of the head variety and the western part the fodder grasses.

Occupations.

The occupations of the people depend largely upon the minerals and vegetation. The pupils will learn the minerals from the text-book or from the teacher. Minerals are generally found in the highlands and in their vicinity. Therefore, in the highlands *mining* will be the chief occupation. *Lumbering* will be carried on in the forest regions. *Agriculture* in the head-grass regions and *cattle-raising* in the regions that produce fodder grasses. Along the coastal regions the occupations will be fishing, chiefly, and those occupations incident to fishing, such as ship-building and the curing of the surplus catch of fish.

These different occupations necessitate the manufacture of various machines and implements. In a new country, the follower of any occupation may manufacture his own tools. For instance, the fisherman may construct his fishing-boats and his nets, but with the growth of population there is a specialization of work of this sort. Hence we have the rise of centres devoted to the manufacture of the various implements and to their distribution. Means of transport are necessary for this distribution and for the exchange of commodities, hence railways and all that they mean.

If the text-book is now read on this particular part of the work the reading will resolve itself into a review lesson. After the study of the continent has been completed there is no better form of review than the making from memory of the orographical and rainfall maps.

The above study of the continent of North America must not be regarded as being complete. It is merely suggestive of what the pupils, under the guidance of the teacher, may learn from map-reading. As the work progresses and the interrelation of the various phases of the study becomes clear, the pupils depend less and less upon the teacher and it is surprising to what an extent the spirit of self-reliance and independent investigation is developed.

An old gentleman heard the tutor tell his son that the earth rotates every twenty-four hours. So he put a glass of water on his garden wall, and left it all night.

Next morning he went to the tutor and discharged him, saying: "It is all rubbish about the earth going round, because if it did all the water would have run out of the glass."

The old gentleman beamed upon the little boy who stood on the crest of the hill one night at twilight, a happy, contented smile on his lips.

"I am very pleased to see you watching the beautiful red glow of the setting sun, my little man," he said, patting the youngster's back. "Do you watch it every night?"

The little lad chuckled. "Oh, no, sir!" he said gleefully. "That's not the sun setting. That's our school burning down."

Life at an English University

(Continued from the November number)

DONALDA J. DICKIE, M.A.
Normal School, Camrose, Alberta

At last one day when the three weeks were all but gone, following Emily's direction, I found the pretty path by the Thames that leads to Iffley and paying my penny toll, I climbed the hill and stood in Iffley Church—the most perfect specimen of Norman architecture in England. It is a tiny church and I shall not try to describe it. I can wish no better wish for any who may read, than that they may see it before they die. I thought, that April morning, as I stood half in tears at the wonder of it, that it must surely be the most beautiful thing in the world. I have seen much since but I still think so.

College opened, that is to say "people came up", the last Friday in April. The Principal received me in her own sitting-room, a wide room full of sunshine, the blaze of logs on the hearth, and fine old furniture. She came across the room to greet me, tall and very gracious, one's dream of a story-book Englishwoman plus an air of brisk modernness. She drew me down on the couch beside her and at once I knew that certainly I should find here what I had come across land and sea to find. I was presently directed to my room under the charge of "Maggie"—the housekeeper—famous among many generations of Somervillians. She was a busy woman that day, but managed to make me feel that I was specially under her charge and therefore that no harm could come to me.

Somerville College, during the war, inhabits "Oriel"—its own buildings having been commandeered as a hospital. I found my suite—bed and sitting room—at the top of a narrow stair, up which Sir Thomas More is said to have lived in his college days. There are a great many colleges in Oxford, some large and some small, but they are all built on the same plan—that of the quadrangle. The buildings are narrow, the depth of one room only, and they form a rectangle about the quad—a space of grass with a walk about it. On each side two or more stairways give access, each to its own set of rooms. Thus if you live on stairway 15 and your friend on stairway 14 there is no way of reaching her except by descending into the quad and mounting her stair.

I found my trunks already in my room. The bedroom was very small, the furniture good but sadly defaced by time and boys. I laughed outright at the mirror; it was exactly ten inches square. I believe few English women know the luxury of a full length mirror. Dressing

table mirrors, mostly small, were the only sort I ever encountered in a bedroom. My sittingroom was long and narrow with a great black fireplace yawning for its mouthful of flame. It looked into the quad and into the street through windows half hidden in ivy. Before the hearth stood the longest, widest, deepest basket chair you can imagine.

I had partly unpacked when a tap at the door heralded two athletic young women—an English college woman does not like to be called a "girl". They assured me that they had come to take me out to tea because, said the rosy one, "It is so jolly stupid taking tea in hall the first day". I hastily found a hat and jacket and we sallied forth to a tearoom in "The Broad" where I was regaled with tea and toast, a variety of fascinating cakes and much college gossip, receiving with becoming meekness much invaluable information about college people, ways and things. These I learned were second year people, in short "would be seniors next term". Undue liberties promptly discouraged!

Two hours later, while again absorbed in unpacking, another tap announced "the senior who lived at the foot of my stair". She was a thin-faced girl with bright eyes who chatted very formally for a moment and invited me "to go into dinner with her". Seizing so favourable an opportunity, I made haste to inquire what sort of dress was expected and was informed that "before the war evening dress was imperative but that now people wore anything short of a bathing suit". Dinner at seven-thirty was an event. My escort awaited me at the foot of the stair and led the way through a group of girls in the entrance—these I learned were invited to dine at "The High"—into a long, very high and dark room, with great coloured windows and many portraits. A fire roared on a huge hearth. There were four long tables stretching along the width of the room and a fifth upon a raised dais at the farther end. Girls came in each with a partner and took their places anywhere. There were about sixty of them. I thought them very pretty on the whole. Fine complexions and good hair were the rule, while there were three or four really beautiful faces. Many of them wore beautiful evening clothes. They chatted together with what I felt to be more dignity and restraint—in short, more social poise—than a roomful of Canadian or American girls might have had. One caught at once the English feeling that dinner is a function where one is expected to talk, not chatter. One felt that they were getting their training for the dinner tables of the world.

When all were standing behind their chairs a silence fell which lasted while "The High" filed in and took its place at the table on the dais. They surrounded its ends and one side, no one sitting with her back to the room. The Principal sat in the centre in a great carved chair. The silence continued until she had pronounced the brief Latin grace.

Maids served a three course dinner. It was well cooked and there was enough of it, though not too much, less being served at dinner than at any of the other meals. My escort attended to me carefully, broaching more than one profound subject. I fear, however, that she found me somewhat unappreciative of her obvious learning. I thirsted for information and asked questions steadily. I was still neglecting my custard when again silence fell and everyone stood up facing the door. "The High" was going out. The Principal passed down the room first, the staff followed in the order of their service, the pretty Irish girl, who was the history tutor, going last. When all were gone the noise began again and those who had not quite finished sat down to do so. A tall blond girl opposite invited me "to coffee". I was taken to her room and ensconced in the mate to my own great chair, while my hostess brought forth biscuits and a very plain cake. She proceeded to make very bad coffee in a saucepan. Before it was ready, half a dozen other women came in, filling the couch and overflowing it on the floor. They chattered frankly now and were as merry as any college girls could be. Someone played upon the piano in the corner but no one stopped talking. Just at first they were politely careful to include me in the conversation, but presently forgot and left me to enjoy the gossip thoroughly.

The University of Oxford, the group name for the twenty or more colleges which have made the city famous since the thirteenth century, is the most ancient institution of learning in the Empire. As a corporation, however, the University is comparatively modern, having been given a modernized charter and powers based upon the same principles as other university affiliations of colleges in much later times. Another widespread fallacy regarding the University is that of its wealth. As a corporation, it is, I am informed by a member of its council, as lamentably short of funds as other educational institutions. The colleges, on the other hand, are as rich as they are old, having been richly endowed by their founders with land, which has increased enormously in value with the passage of centuries. The University, as does other universities, maintains a staff of professors, lecturers and readers; arranges standards and courses; attends to examinations, etc. The colleges are residences for the students. Each has its own hall, chapel, library, common room, gardens and playing fields. Sometimes it has a lecture room; often the dining hall is used as in Magdalen College where we went on Tuesdays and Thursdays at eleven to hear Sir Walter Raleigh, the professor of poetry. It is a lecture rather largely attended by the public and here, on sunny mornings, the Poet Laureate is apt to drop in and sit down beside you, to hear his friend lecture.

At Christ Church they use the library as a lecture room; Mr. Nicol Smith, "The Goldsmith Reader", lectures in the Ashmolean Museum, Dr. Carlyle in the dining hall at University College, etc. It is the business of the student to get to his lecture, wherever and whenever it may be, no easy task when it is across the city from the last one and but five minutes between. This is, doubtless, one reason for the almost universal use of cycles, now that motor cars are forbidden and gasoline *non est*.

It is less of a problem, though, than it would be in one of our universities, because, comparatively so few lectures are taken. Lectures are a minor part of the course in Oxford, when students will arrange to take three or four a week instead of that many in a day, as here. The greater part of the work is done under "tutors" or "coaches". Each college has its own staff of these. They are usually "fellows" of the college and live in it, being provided for in the endowments. For centuries, the fellows were not allowed to marry. They are now permitted to do so—indeed a reasonable proportion of them marry members of the women's college. The quiet life of the fellows, their almost monastic seclusion—it may be such—in the cloisters and behind the great walls in the beautiful "fellows' gardens" is particularly conducive to success in research work and much of it has been and is being done there.

(Continued in the January number.)

[The editor apologizes for his failure to keep his promise to conclude this article in this issue. Space is more than ever at a premium this month and he had not the heart to "cut out" any of this delightful description. The only alternative is to keep an instalment for next issue.]

Modern Lays and Ballads, selected by R. M. Leonard. 127 pages; price 25 cents. Oxford University Press, Toronto. This volume belongs to the *Oxford Garlands Series*, and contains a collection of ballads very suitable for the first two years of the High School course. Twenty-three authors from William Cowper to Dr. Robert Bridges are represented by a well chosen series of ballads which cannot fail to interest any class. G. M. J.

Working Composition, by John B. Opdycke. 337 pages. Price \$1.30. D. C. Heath & Co., Boston. This is a composition prepared specially for pupils who are going into factories or business houses, and both the instruction and the exercises are based on the ordinary experiences of industrial and commercial life. A rather unique feature of the book is a series of "problems" which not only furnish subjects for composition, but provoke serious thought. G. M. J.

The Story of Lord Kitchener for Grade III, by A. O. Cooke. 95 pages. Price 20 cents. The Oxford University Press, Toronto. This is one of the *Herbert Strang's Readers*, a series in which are many very suitable books for children. This volume is of convenient size and form; has large, clear type; and the story is intensely interesting from beginning to end. There are a number of good illustrations. Every Public School child will enjoy this book.

Educational Leadership

G. FRED MCNALLY, M.A.
Principal, Normal School, Camrose, Alberta

THE war has caused changes of an almost revolutionary character in education in England. The great masses of the people, hitherto but little interested in education, have begun to demand reforms undreamed of a few years ago. A practical man, an enthusiast in the cause of education and an administrator of real ability, in the person of Mr. Fisher, has been placed in charge of this department of government. In spite of the tremendous war expenditures, the votes for education have steadily increased until now they total many millions more per annum than at the outbreak of the war.

One wonders what the influence of all this and of the war in general is to be on Canadian education. Already demands are being made for an increase in the provision for technical training and for the practical in education. If we are to expect changes and shiftings of emphasis similar to those now taking place in the British Isles whence is to come our leadership for the recasting of our systems and determining what these changes shall be? It will not be sufficient merely to express dissatisfaction with existing conditions nor to demand sweeping and far-reaching changes. There will be needed trained minds with real capacity for leadership, persons who have studied education from the scientific viewpoint. Is this leadership to come from within the ranks of educationists or is it to be thrust on us from without? Unless those who ought to be able to provide it are prepared, without doubt the opportunity will pass from them.

At the head of the Department of Education in most of the provinces is the responsible Minister of the Crown or committee of the cabinet. These men are lawyers or doctors or business men who have seen the vast possibilities in the field of education and whose tastes have led them to be interested in this department. They are not educational experts. They do not pretend to be. They are administrative heads who strive to put business methods into a governmental department where there is danger of theory and precedent and conservatism having too much influence.

If the responsible head is to administer his department successfully, he must have available, alert, and aggressive leadership of a professional character. It should be possible to find this leadership amongst the men and women in the administrative and teaching positions in his own

province, and the outstanding figures in the educational life of the Dominion as a whole.

When one considers the tremendous advance in the scientific study of education in the last twenty years, he will be forced to the conclusion that the opportunities for advanced training in education in Canada are hopelessly meagre. For example, distinctive training for secondary teachers is limited to one province. Even here, graduates of High Schools and persons holding the Bachelor's degree have until this year been trained together and given essentially the same course. Practically no training is offered in this country for administrative officers, inspectors, superintendents, supervisors, normal school instructors, instructors in college departments of education, high school principals, training school principals and critic teachers. With no opportunity of securing such training without going abroad, it is not surprising that the majority of educators interpret this to mean that everybody is quite satisfied with the quality of service now given, that the "trial and error" method of procedure is still the best we have, and that to worry one's self to the extent of seeking out and securing this advanced training would be a work of supererogation.

In but few cities of the Dominion and fewer provinces have definite studies of retardation and elimination been undertaken. Judging from the reports in which these statistics have been tabulated, much more use could be made of the material thus gathered. What is the cost of adequate medical inspection per pupil per year? What is the average cost per pupil for the country as a whole? Is this too high or too low, in the light of experience in England? Has the work of medical inspection been standardized at all or does each medical officer follow his own inclination? Is medical inspection necessary in cities only?

When the Dominion Hospitals Commission was faced with the problem of retraining returned soldiers, it turned instinctively to the trained psychologist to assist in determining that for which each man was by inherited nature adapted. At that, the men trained for this type of testing were all too few. The tests used were those devised by scientific educationists for use in schools. Our work is less effective than it might be because we have so few schoolmen qualified along this line.

Scientifically devised scales of measurement for testing objectively the results we are actually obtaining in our schools have been prepared that we may know where we are going. In looking over these one does not detect the name of any Canadian. We have as many plans of teacher-training in this country as there are provinces. Each is willing to maintain that his is best and proves his faith by erecting barriers of one sort and another to make the free interchange of teachers relatively difficult.

Not only have we made little or no progress towards standardizing the work of teacher-training but we have as yet devised no way of determining whether the work of any one institution is efficient or not when considered absolutely. We still go forward putting our faith in mere opinion. This, of course, has one great advantage; where nobody knows, one opinion is as good as another.

There are several explanations of the apparent indifference of schoolmen in Canada to these and other important advances in educational practice. Some years ago, kindly intentioned persons told us that certain of our provincial systems were the best in the world and we "good easy men" found this pleasant to the taste and settled back to perpetuate this good thing, forgetting that education means growth and continual growth. Then we have a habit in this country of working our people in positions of leadership too hard. Departmental officials, superintendents, inspectors, principals and all have too little time for study and reflection. This is a mistaken policy. Without leisure no great advance in science is made.

In addition to the matters referred to above, there are many others of major importance in the field of education, demanding leadership of the most highly trained and efficient type to-day. In one province a survey is being made of the efficiency of its present system of rural education. When a man was needed for this work he was secured from outside this country. This survey marks an important advance in our practice and will doubtless be of great value. We must have trained men, however, to profit by it and carry out the recommendations which will accompany the report.

No situation in Canada presents a greater challenge to the educational statesman than our rural situation. But little has been done so far in caring for the mentally deficient and feeble minded. Here again the trained specialist is wanting. The whole system of secondary education needs reorganization. Little effort is being made to test the pre-vocational school or the junior high school scheme. There is no lack of opportunity for the trained man or woman with capacity for leadership in the country to-day, nor is there any doubt that there are literally hundreds of bright men and women in education in Canada to-day who realize the inadequacy of their equipment and who would welcome any reasonable opportunity to prepare themselves for expert service in this field. One other fact in the situation needs to be considered. Training for expert service, be it medical, legal, educational or what not, requires years of hard work and the expenditure of large sums of money. Such leadership cannot be secured in the field of education for two thousand or three thousand dollars per year any more than it can in law, medicine,

or engineering. If it is, the training will be inadequate and the service secured be of a quality commensurate with the price paid.

Forward-looking men in all walks of life really interested in education must realize that the present situation and that which lies just before us demand that our leaders be men and women acquainted with the best that has been thought and practised anywhere in the world. We must have better opportunity for training leaders, a livelier sense on the part of educationists of the need of advanced training and a realization of the need of trained experts on the part of "consumers" of education.

Book Reviews

Lloyd George, The Man and His Story, by Frank Dilnot. 195 pages. Price \$1.00. The Musson Book Co., Toronto. Regardless of politics most people admire the present Prime Minister of Great Britain and marvel at his achievements in the various rôles he has undertaken. Here is a brief and very readable story of his life and his work. Every teacher, and every boy and girl of reading age, will take pleasure in a perusal of it. It is an excellent book for the school library. W. J. D.

The Rural Teacher and His Work, by H. W. Foght, Specialist in Rural School Practice, United States Bureau of Education. 359 pages. Price \$1.40. The Macmillan Co., of Canada, Toronto. Everyone who thinks of educational matters realizes something of the vastness of the rural school problem. But it is a larger problem than most people think. How are our best-trained teachers, our mature, energetic, forceful, competent teachers to be induced to remain where they are most needed—in the country? Mr. Foght shows how necessary it is that the rural school teacher should be also a community leader—a real force, one of the leading spirits of the neighbourhood. Among the remedies for the present unsatisfactory condition he mentions special training for rural school work, better salaries, closer supervision, teachers' cottages, reconstruction of the curriculum. This is a thought-provoking book; those interested in education will derive a great deal of profit from it. Every teacher will find inspiration in it. W. J. D.

The Last Days of Fort Vaux, by Henry Bordeaux. 227 pages. Price 3s. 6d. net. Thomas Nelson & Sons, Toronto. A most realistic account of the desperate fighting that took place at this point on the French front. It gives one an idea of the kind of warfare now being waged. W. J. D.

A Book of Narratives. Edited by Oscar J. Campbell, Jr., of the University of Wisconsin, and Richard A. Rice of Smith College. Cloth. 504 pages. \$1.50. D. C. Heath & Co., Boston, New York, Chicago. Here is a book that will please everybody who likes to read a good story well told. The editors have so chosen and grouped the stories that they will do more than please. The aim of all great literature is to interpret life. The specific aim of fiction is to see life imaginatively. To inculcate something of this supreme art of seeing life by the methods of fiction is the purpose of the editors of this book. They have made thirty-five selections from the great masters of fiction and have grouped these so as to illustrate the different sorts of appeal that fiction makes to life and the different sorts of vital problems that are illuminated by the skilful writer of fiction. W. J. D.

Myths and Legends of British North America, by Katherine B. Judson. 211 pages. Illustrated. Price \$1.50. A. G. McClurg & Co., Chicago. The author has collected a great many Indian myths and legends and has retold them so that they are very interesting to children. This book can be recommended for the school library; it will be of assistance in the lessons on early Canadian history. W. J. D.

Robin Hood. Price 1 shilling net. George G. Harrap & Co., London. This is a splendid edition for children. The type is very clear and readable; the illustrations are good. W. J. D.

The Alberta Provincial Convention

IN Alberta the Provincial Convention is the big educational event of the year, and the drawing up of the programme is a difficult and important piece of work. With a view of getting an expression of opinion as to what should be the aim of the programme-makers in planning the Convention a few representative teachers were asked to express themselves in not more than 150 words on the following topics:

1. The general purpose of the Convention.
2. The main features of a programme which would subserve this purpose, with special reference to (a) meeting in sessions *vs.* general sessions; (b) the place of "inspirational" addresses; (c) the amount of time that should be given over to business and when this time should be taken.
3. Do you think that the sessions could be made more attractive than they usually are? If so, how?

As to the first topic there is pretty general agreement in the replies received, by implication at least, that the big Convention is no place for the discussion of the minutiae of class-room procedure. In nearly every case the purpose of the Convention is stated in broad and general terms. Thus Mr. D. A. McKerricher, Calgary, gives it as his opinion that the main purposes are:

"(1) To attend to the business which naturally pertains to the provincial organization of teachers;

"(2) To provide inspiration of a broadly human sort, such inspiration as the speakers at our conventions for a number of years have given us".

Even in the sectional meetings Mr. McKerricher thinks "that the Provincial Convention should concern itself mainly with the broad general aspects of our work, and that questions of method in the various subjects should be left largely to the district associations".

On this subject Mr. E. T. Mitchell, Olds, writes, "The history of education is the history of human progress or stagnation. The teacher being isolated, the product of authority, the slave of a system, there is an almost irresistible tendency to stagnation. The teachers must wake up, shake themselves free, express their opinions, impose their will, and direct, as well as participate in, the movements which shape the destinies of our people. To do this they must get together, not only in isolated groups, but in the big Convention".

"The general purpose of the Provincial Convention", writes Miss K. B. Goodfellow, Camrose, "strikes me as a very broad term. One purpose, I would say, might be to give the teachers a wider outlook

than the four walls of the school room. Whatever the general purpose is, it certainly ought not to be to drag the jaded teacher through a whirl of intellectual dissipation”.

Since Miss R. J. Coutts, Calgary, discusses only this first topic, her entire contribution is given at this point:

“The opportunity the Convention gives of renewing and strengthening friendly relationships and forming new ones is a magnet which draws teachers from all parts of the Province to the meeting place, the point of contact. Nor could there be a more human motive than this, nor a much higher one. Then there are those for whom this yearly gathering makes the one golden opportunity for the purchase of the season’s outfit of clothes, a necessary forward step in professional progress—for, to quote the wife of a Calgary editor, ‘Normal School students have no clothes.’ ‘It is a change from the routine of the class’, is the thought that surges through the minds of the mass of the teachers; and let him who is without sin cast the first stone at them. To the professionally-minded, a constantly growing number, there is the keen desire for help in solving knotty educational problems, and they look to the Convention to give this help.

“Perhaps the most difficult of these problems which confronts the live teacher to-day is how to relate the daily class work to the life of the home, the playground, and the community. Hints along this line from those who prepare the intellectual menu would be duly appreciated. To develop in the rank and file of teachers an interest in the affairs affecting the general well-being of the community, a skill in cultivating that same interest in the pupils in their charge, might well form one of the purposes for which the provincial association exists. Would an oratorical contest among teachers, say in the Public School section, on some topic of general educational interest, or relating to public well-being, work toward this aim?”

As to the relative advantages of sectional meetings and general sessions there is marked difference of opinion. On the whole, while the value of the sectional meetings is recognized, the general sessions stand most in favour. Miss S. Smith, Medicine Hat, prefers the smaller meetings, for in them “the individual interest is greater and the interchange of thought more free”. But on the other hand Miss Goodfellow strongly champions the general session: “Granted that a wider viewpoint is one purpose, the custom so largely followed of meeting in sections must surely defeat that purpose. The majority are thus denied many of the choicest items on any day’s programme, and since it is the *vision* or *spirit* of a great address that is carried away, any topic or phase of school work that is touched upon by a master hand will yield fruit for all”. On different grounds Miss Jean Walker, Edmonton, also

approves the general session: "Meeting in sections is more helpful to teachers of graded schools than to those of rural schools; consequently general sessions are better because they could be arranged to include all". Mr. W. H. Foster, Calgary, holds that "in the general work of the Association the division into sectional meetings for the discussion of special subjects is of great importance and enables those interested in special departments to get the maximum of benefit". He goes on to say, however, that "while the sectional meeting has its value, it should not take precedence over the general session"; and he finds values for the latter in its broader scope and in the standing which the larger gathering with "its distinguished personalities" gives the profession with the "public men and business experts of the Province". Mr. McKerricher also "would favour a generous allotment of time to the general session"; and Mr. Mitchell would give about equal place to both kinds of meetings, suggesting that "the whole of the afternoon sessions might be devoted to meeting in sections".

But in regard to the place of "inspirational" addresses there are no two opinions. All agree, in effect, with Mr. Foster that these addresses are "the outstanding features of the Convention". "Inspirational addresses are of utmost importance", is Mr. Mitchell's opinion; and Miss Goodfellow suggests: "One of what we term the 'inspirational' addresses might fittingly come at the beginning of the work of any convention. Having the tendency as it does to draw out the best in everybody, it would thus add greatly to the atmosphere of the whole gathering; another of these utterances to which everyone looks forward, and which abides with one 'after many days' would lend dignity to the closing moments of the Convention". Miss Smith asserts that "as the value of the 'inspirational' addresses is inestimable, we will all agree that they should have foremost place on the programme," and Miss Walker advocates at least two of these addresses by "the best speaker that can possibly be secured"; and would have this speaker given "the most important place on the programme, local speakers being almost entirely omitted". Verily a prophet is not without honour, etc., etc. It would be a courageous executive that would hazard a programme made up entirely of local speakers in the face of such an unanimity of opinion as this.

But if in regard to an "outside speaker" the custom of former years stands approved, not so in the matter of business. There is a clear demand for more time and more suitable time than formerly to transact the business of the association. Mr. McKerricher, for instance, even while maintaining that "our conventions have been well planned", and doubting "whether they can be improved very much", is constrained to add, "except, perhaps, in the conduct of business". "Business of im-

portance", he says, "such as the organization of an alliance, should not be dealt with by a handful of delegates at the fag-end of a convention". It is this relegating of business to the end of the last session that is most strongly opposed. Thus Miss Goodfellow: "The business of any organization is an important matter, and sufficient and suitable time ought to be set apart for it by the framers of any programme; but whatever time be allotted to it, let it be such that the majority can conveniently be there to carry it on, and *let it not be the last hour* of the Convention". Similarly Mr. Mitchell: "Business should be disposed of first, not last. Part of each forenoon could be devoted to it. Notice of motion should be required, time limit set for speeches, arguing back and forth should not be tolerated, and nothing in so large a Convention should be haphazard". Others state that business should be "in the morning", or "on the second day". In fact there is entire agreement that the conduct of business should be improved.

The main suggestions for making the sessions more attractive are to make them shorter, to provide more music, and to give more opportunity for social and recreative activities:

"The time-table should not be over-crowded nor the hours too long. The social side of the Convention demands time".

"The sessions could be made more attractive by almost eliminating long papers and substituting good practical talks by speakers with strong personalities whose voice can be distinctly heard by all present".

"More music, more opportunities for meeting socially, would make the sessions more attractive".

"The Convention might open with a feature and close with a feature instead of with tiresome addresses and belated business".

To conclude with Miss Goodfellow's contribution on this topic:

"Too much even of a good thing is undesirable, and there is usually a surfeit of such on any convention programme.

"Fewer items, proper time limits for discussion, and a margin for outside interests would, I feel sure, prove of more value in the end.

"Vary the programme, introduce new features, provide for model lessons by the teachers of the teachers, have music and *more* music at every meeting, make a part of every session recreative, in a word make the Convention a period not only of work but of play too, and finally insist that the last word be said two hours before any one must catch a train, and the interest and success are assured".

"Johnnie," said the teacher, "Who is it that sits idly by all day while the others are working?" Johnnie paused a second, then his eyes brightened and he blurted out, "The teacher."

Stick Printing and Wood Block Printing

R. W. HEDLEY, B.A.
Art Supervisor, Edmonton Schools

THE aim of Art education in the Public Schools is chiefly to lead the pupil to appreciate the beautiful. To do this requires the gradual development of taste, and a certain amount of technical skill in mastering to some extent those mediums of Art expression generally recognized as most suitable. While drawing as training for the hand and eye is useful in expression, the development of taste is brought about gradually through the application in various problems of the principles of design or composition, including those of colour theory.

The teaching of design in the Public Schools may be approached in at least two ways. First, by taking a given space in the form of a square, rectangle, etc., and breaking this space up according to the requirements stated in the problem. Second, by employing some simple design unit, which may or may not have been in itself a problem, and endeavouring to place these units in the best arrangement. In following the former method one of the best mediums in the lower grades is stick printing and in the upper grades we may combine both methods in block printing.

In stick printing the materials required are small pieces of wood about one inch long, and shaped at one end in the form of a square, rectangle, circle, or triangle. It is well to have two or three square-end pieces of different sizes, such as one-half, one-quarter, or one-eighth inches square; so also of the circle. This gives variety and allows more possibilities to the pupil. The ends of these sticks should be as reasonably smooth as possible. Rubbing the ends on a piece of fine sandpaper will put them in good shape. There should also be at least three pans to hold the three primary colours, red, yellow and blue. The pans should be about one inch across the bottom and fairly shallow. In the bottom of each, place a small piece of felt or a few pieces of blotting paper cut to fit. The colouring matter should be yellow, red, or blue liquid dyes, enough to saturate the pad nicely. If these are not available, thick water colours, with a very little mucilage added, serve very well. If pupils have a colour box this plan is not at all difficult.

The problems illustrated as suitable for the various grades are only suggestive. The work should be progressive in difficulty and scope from grade to grade. Block printing might begin about grade VI. After grade I the pupils should be encouraged to show originality in designing units and in arrangement.

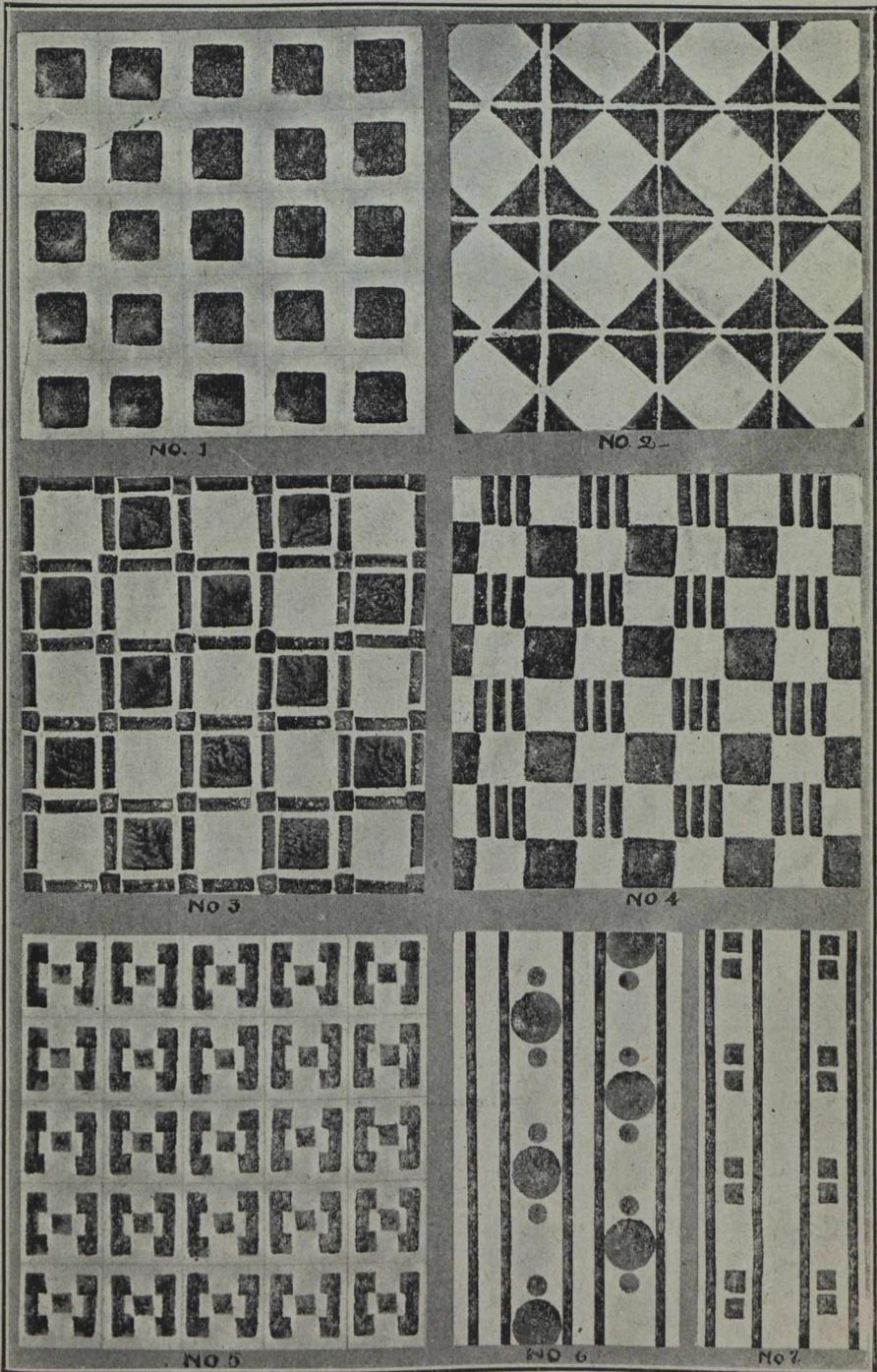


Plate I

In grade I the technical difficulties are to be mastered. If the paper is not already ruled into inch squares, this must be done first; however if thin paper is used the difficulty may be overcome by folding the paper both ways, thus leaving creases as guides. Then the printing itself may be done carefully and neatly. The writer has seen very good work when a whole class performed each operation in unison. After the paper was ruled and the unit decided upon (in grade I work) and all had the proper stick, each pupil placed his stick against the colour pad, held it there until at the teacher's word all carried out the next operation of printing on the paper in a certain square. The stick was held in position a few seconds until the print was made, and then the whole operation was continued in making the next print, etc. The result was that the work of almost every member was clean and fairly well done. After a few lessons of this nature the technical difficulties disappear.

In both stick printing and block printing it is better to place the paper on which the pattern is to be made on a thin exercise book or a folded newspaper, which acts as a pad, rather than on the hard surface of the desk.

The subject may now be developed by a series of progressive problems. First select the problem, as, for example, a simple linoleum pattern for a doll's house. What stick or what simple pattern may be used, and how shall the pattern be arranged to give the best effect? Problems of this nature increase in difficulty and in variety by selecting two sticks, or later three, to form a group pattern. This brings up also the problem of what sticks will go together to make up a design unit. From grade II up pupils should design units and criticise the results as to whether they look well together. Progress will be better noted by the manner of the criticism and the exercise of taste than by any other means.

There is a very wide range of problems suitable for work of this kind. In general they may be classed under two heads, surface patterns, and borders. In the former would be tile and linoleum patterns, wall papers, and similar material used in furnishing the house of our childhood fancy; designs may also be planned for gingham patterns and other materials used in dress or in house furnishings. Ever keep clearly in mind that we are aiming at suitability of pattern, arrangement, and, later, colouring. As a rule pupils soon decide that blocks with straight sides make patterns most suitable for tile or linoleum, while the circular forms look very well on materials for curtains, etc. The borders to match furnish a good problem and introduce the principle of rhythm. In the lower grades I would not dwell on the names of these principles of design, as rhythm, but rather on what arrangement helps to make our border show continuous movement. The name will come later on.

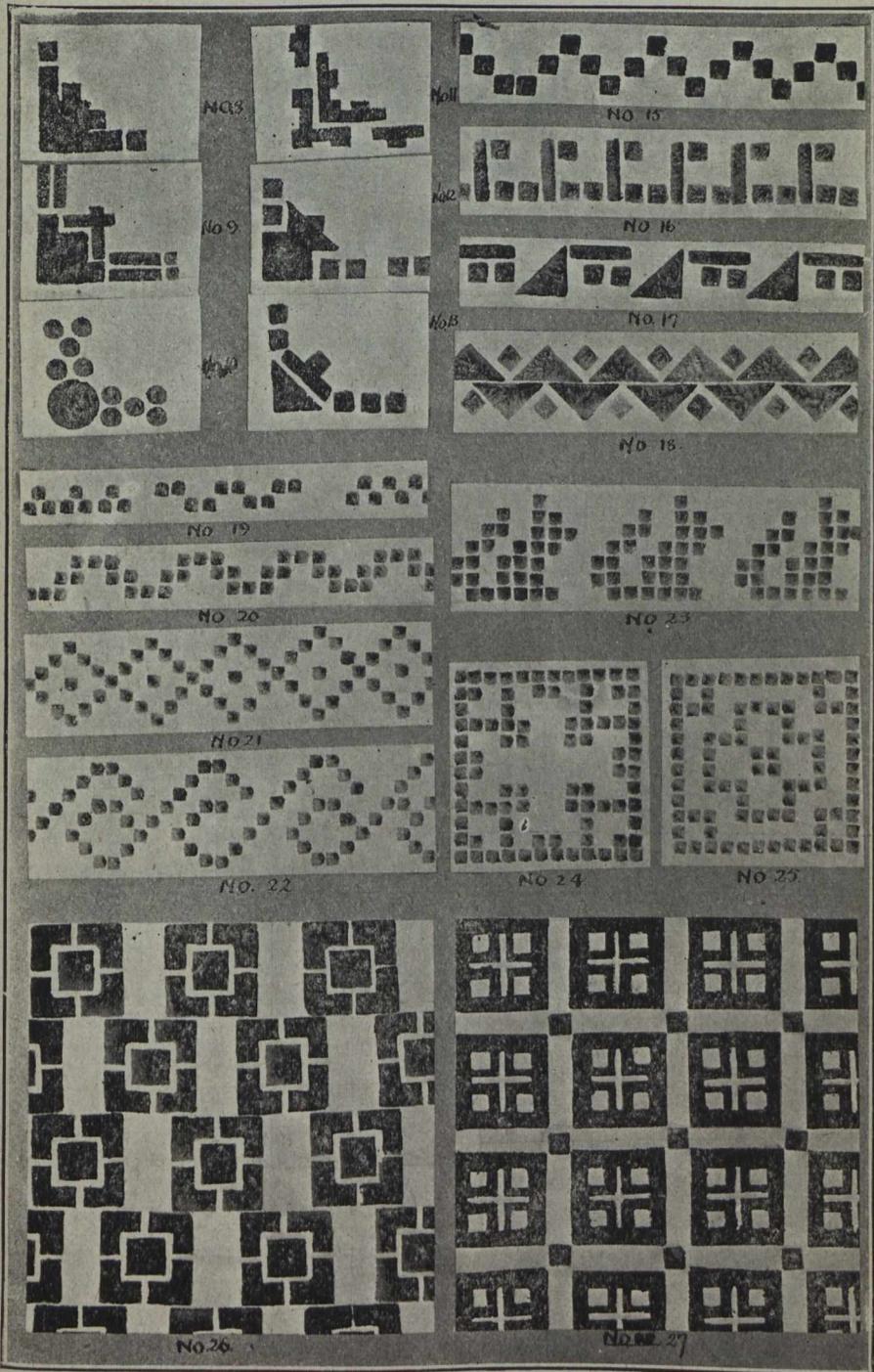


Plate II.

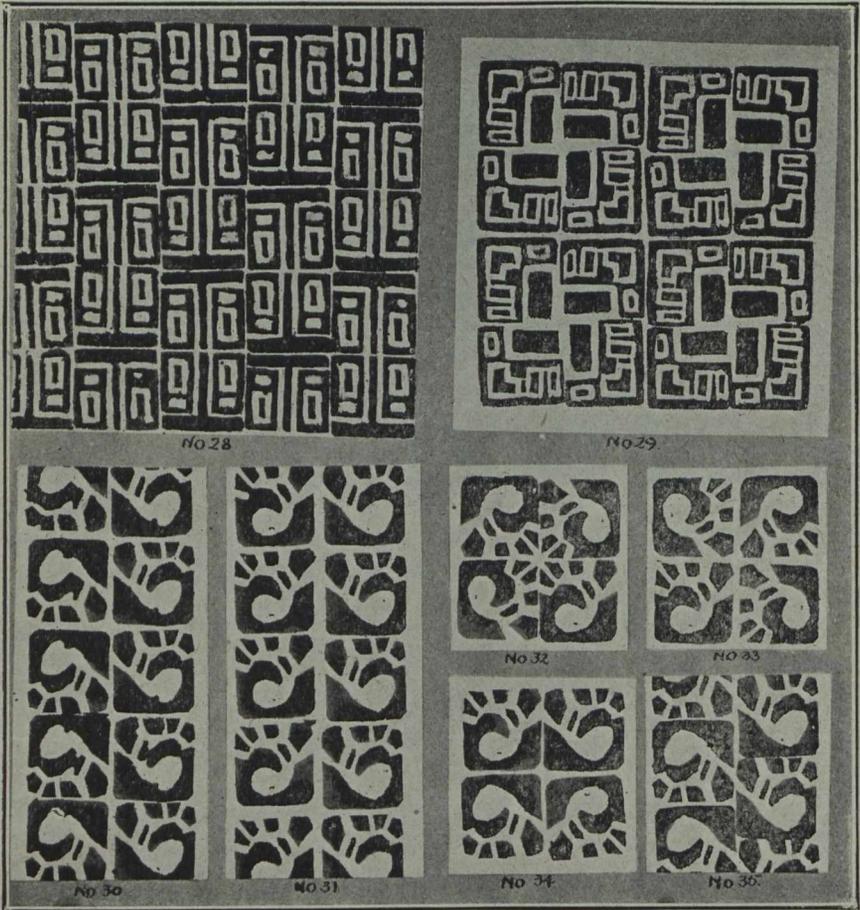


Plate III.

Numbers 1 and 2 are simple examples suitable for Grade I, one block only being used. In numbers 3 and 4, at least two blocks are used. A great many varieties of pattern may be made by using various combinations of blocks that will go together. This work is suitable for Grade II. In numbers 5, 6 and 7, is work suitable for Grade III. In 5, blocks are superimposed to make the pattern. This may be extended to Grade V. In 6 and 7 are examples of textile patterns, of which a great variety of designs may be made, using lines and spots. Numbers 8 to 13 are examples of corners, as for booklet covers. Numbers 15 to 23 are various examples of borders, and are merely suggestive of a very great variety that is possible by using various blocks, or by varying the design, especially in 19 to 23. Thus problems may be given in keeping with the grade. Numbers 24 and 25 are examples of more elaborate tile patterns; a great variety may be made using a twelve-square side. Numbers 26 and 27 are simple symmetric block patterns suitable for Grade VI, as being perhaps the simplest. By varying the squares in these quite a variety is possible. Numbers 28 and 29 are examples of straight line forms, but with more variety, and also variety of arrangement. Two blocks may be cut, the one the reverse of the other, as in 31. By

using these, or one alone, a very great variety of arrangements may be made, and quite different patterns may be secured. The block used in 32 is only one quarter of the whole design. In these curved forms have been introduced. This work is suggested for Grade VIII.

If this work is taken up in a progressive way through grades I to IV the pupils will be ready to devise simple bisymmetric units of their own; this introduces the subject of block printing. For myself I like to use, in the Public School, linoleum rather than blocks on which to cut the patterns because linoleum can be cut more easily and quickly, and produces almost as good results. Plain floor linoleum of moderate thickness is best. A worn piece may be cut up into squares about three quarters of an inch to the side. If you happen to live near a house-furnishing store, and can get pieces from cuttings, so much the better. The boys should furnish small blocks with faces about the size of the pieces of linoleum, and with a little liquid glue the linoleum may be fastened to the block.

It is best to begin by designing bisymmetric units, using straight line forms largely at first; these are simpler and the cutting is easier. Let each pupil design his own unit, trace it on the linoleum, and cut the part sharply down at least one-sixteenth of an inch. The process of printing is similar to that of stick printing mentioned above. In the Public School anything that would require oil colours should not be attempted; the problems are to design the unit, to make various arrangements using that unit, and to select the best. Lastly the colour scheme for background and for unit should be decided.

In grades VII and VIII oblong shapes may be used and also designs where simple curved forms are made. If the teacher can get examples of certain Indian designs many useful suggestions for the pupils may be obtained. All the principles of design may now be taken up and taught in connection with this work.

The problem of arrangement in connection with surface patterns has always a large place. The units may be arranged as a stripe pattern, or in more condensed units. Sometimes two blocks may be made, the one the reverse of the other, and again various new arrangements may be made. In the colour scheme, which unfortunately is difficult to illustrate, some portion may later be filled in with bright colour properly related to the general colour, and the effect is wonderfully enhanced. If the teacher is enthusiastic, the class will generally respond to such suggestions as these. The creative instinct is thus aroused at the right time, and if steadily fostered will give a clear insight into the principles of design and the use of these principles in every-day problems.

A pupil in the junior department surprised his teacher recently by describing a circle as "a straight line that is crooked all the way round."

Outline of a Year's Course in Nature Study

PROFESSOR G. A. CORNISH, B.A.

Faculty of Education, University of Toronto.

IT is proposed to draw up a series of lessons in nature study for each form of the Public School. One topic is presented for each week of the school term. Care has been taken to so distribute the topics that the material necessary for each will be accessible at the season for which it is presented. Again, there has been an attempt made to distribute the lessons fairly among the different topics of the course of study for Public Schools. To give merely a list of topics is not sufficient; the teacher requires information regarding the topics and also suggestions as to the best methods of teaching. It is hoped that THE SCHOOL will be able as time goes on to present lessons on every one of these topics. In the meantime the best way to meet the needs of the teacher is to refer to books in which adequate information can be obtained. And it is also necessary to confine the number of books within the narrowest limits in order that every Public School can obtain them for the library. After each topic a reference is made to the book in which the necessary information can be obtained. The following abbreviations are used: Comstock—Comstock's *Handbook of Nature Study*. School (followed by month and year)—THE SCHOOL, the issue of the month indicated. G. & S.—Gregory and Simmons, *Lessons in Science*. Clark—Clark, *An Introduction to Science*.

It is suggested that one formal lesson should be taken in each week, preferably on Friday. During the early part of the week observations should be made by the pupils on the topic for that week.

The course for Form IV (Fourth Book Classes or Grades 7 and 8) is outlined this month; the courses for the other forms will be dealt with in subsequent issues.

September

- (1) 2nd week: Potato beetle (Comstock 409, Clark 477) or the Tent Caterpillar (School, Sept./16).
- (2) 3rd week: The Lady Beetle (Comstock, 413).
- (3) 4th week: The Pulse Plants (beans, peas, clover). (Comstock 652-8).

October

- (4) 1st week: Garden vegetables.
- (5) 2nd week: Insectivorous birds (woodpeckers, swallows, swifts, etc.) (Comstock 69-77, 112).

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(6) 3rd week: The autumn colours of leaves (School, Nov./12 and Nov./14).

(7) 4th week: Seed-eating birds (goldfinch)—(Comstock, 49); (song sparrow)—(Comstock, 91).

November

(8) 1st week: Injurious birds: English sparrow (Comstock, 84), crow (Comstock, 133), hawks and owls (Comstock, 108).

(9) 2nd week: The Fish (School, Oct./14, Comstock, 149).

(10) 3rd week: The Snail (School, June/15, Comstock, 458).

(11) 4th week: The Giant Water Bug.

December

(12) 1st week: The Crayfish (School, Oct./16, Comstock, 466).

(13) 2nd week: The bark and wood of trees (School, Dec./16).

(14) 3rd week: The evergreen trees (School, Jan./17, Comstock, 789-801, Clark, 454-5).

January

(15) 2nd week: Air pressure (G. & S., 41-54, Clark, 321, 378-9).

(16) 3rd week: Pressure in liquids (G. & S., 37-41, Clark, 335-9).

(17) 4th week: Capillarity and osmosis (Clark, 439).

February

(18) 1st week: Preparation and properties of oxygen (G. & S., 291-5, Clark, 50-1).

(19) 2nd week: Oxygen in the air (G. & S., 277-291, Clark, 385).

(20) 3rd week: Preparation and properties of carbon dioxide (G. & S., 319-29, Clark 60-1).

(21) 4th week: Carbon Dioxide in Nature (G. & S., 319-29, Clark, 57-8).

March

(22) 1st week: Heating houses by stoves, hot-air, hot-water, etc. (Clark, 21-7).

(23) 2nd week: Cooking by Heat (Clark, 84-90), The Steam Engine (Clark, 316-7).

(24) 3rd week: Dry Cell, Electric Light, Electric Toaster, Electric Iron (Clark, 210-4).

(25) 4th week: Magnets, Electric Bell (Clark, 218-220).

April

(26) 1st week: Structure and origin of soil (School, Oct.-Nov./15).

(27) 3rd week: Conduction of moisture by soil.

(28) 4th week: Mulching and effect on soil.

May

- (29) 1st week: The Buds of trees (School, Dec./14).
 (30) 2nd week: The opening of the buds.
 (31) 3rd week: The Root (Clark, 438-9).
 (32) 4th week: The Stem (Clark, 440).

June

- (33) 1st week: The Leaf (Clark, 440-4).
 (34) 2nd week: The Common Grains (Comstock, 660; School, June /16).

Topics in the Course of Study and lessons dealing with each topic.

1. Injurious and beneficial insects and birds. Lessons 1, 2, 5, 7, 8.
2. Aquatic animals. Lessons 9, 10, 11, 12.
3. Ornamental and experimental garden plots.
4. Tree studies. Lessons 6, 13, 14, 29, 30.
5. Functions of plant organs. Lessons 31, 32, 33.
6. Study of economic plants. Lessons 3, 4, 34.
7. Relation of soils and soil tillage to farm crops. Lessons 26, 27, 28.
8. Air and liquid pressure; capillarity and osmosis. Lessons 15, 16, 17.
9. Oxygen and carbon dioxide. Lessons 18, 19, 20, 21.
10. Practical applications of heat, steam, and electricity. Lessons 22, 23, 24, 25.

Apparatus needed to perform work successfully, with approximate price: 1 spirit lamp, 50 cents; 1 iron stand, 75 cents; 2 beakers, 50 cents; 12 test-tubes, 30 cents; 2 flasks, 60 cents; 6 rubber stoppers, 50 cents; 3 ft. rubber tubing, 50 cents; chemicals (potassium chlorate, manganese dioxide, hydrochloric acid, starch, iodine), \$1.00. Total, \$4.65.

Book Reviews

Everyday Bookkeeping, by Artemas M. Bogle, A.M. Price 65c. The Macmillan Company, Toronto. A quotation from the editor's introduction to this work fairly describes its scope: "Mr. Bogle's book shows the simplicity with which the accounts of everyday life may be kept, and the application of the principles of accounts to various interests such as a child with an allowance, accounts of a literary or debating society, accounts of a baseball team, accounts of a housewife, of a farmer, and of a physician". The average citizen does not need an elaborate system of bookkeeping. But what everyone should know, in order to keep his accounts accurately, is very simply arranged to be taught to children in the last year of their Public School career. s. w. p.

English for Coming Americans, by Peter Roberts. 50 cents. Associated Press, New York. It is generally recognized by leading educators that a knowledge of a new language is best and most rapidly obtained through the use of the "natural" or "direct" method. Dr. Roberts, in this book, explains very clearly how this method may be used to teach English to adult foreigners. The thirty lessons dealing with domestic, industrial, and commercial life are admirably suited to the needs of night school teachers. The chapter on "Action in the Classroom" should be carefully read and re-read by every teacher of non-English children or adults. J. T. M. A.

The December Competition in Art

DURING the past three months there have been frequent requests from Public and High School teachers for a renewal of the Competition in Art.

THE SCHOOL recognizes the value of such a competition for the following reasons: (1) A carefully planned competition should be a valuable guide to the work in Art which the teacher might profitably assign from month to month. (2) Teachers of schools where the pupils take part in the competition report increased interest and better work in this subject. (3) The reproduction of the best pieces of work affords a very acceptable indication of the character of the work being done in other schools by children of the same age or grade, and is often suggestive of improvements that might be made in teaching.

In the January number details of the work to be done for succeeding months will be announced, also the prizes to be awarded for the best work in each of the four branches of the Competition.

The Prang Company of New York and Toronto have generously agreed to supply the prizes. Look for a complete announcement in the next issue.

RULES FOR COMPETITORS.

1. The work must be original and must be so certified by the teacher.
2. All work must be on drawing paper of dimensions either 6'' x 9'' or 9'' x 12''.
3. Drawings must be sent flat—not rolled. Rolled packages will not be sent on to the committee of judges.
4. Sufficient postage for return must accompany each package. If this rule is not observed, drawings will not be sent on to the committee.
5. All drawings entered for the December Competition must reach this office not later than January 10th.
6. The three best pieces of work, if they are deserving, will be awarded prizes in order of merit—first, second, and third.
7. There are four departments in this Competition and for each there are three prizes, making 12 prizes to be awarded every month:
 - A. Three prizes for Forms I and II (Grades 1, 2, 3, 4) of the Public and Separate Schools.
 - B. Three prizes for Forms III and IV (Grades 5, 6, 7, 8) of the Public and Separate Schools.
 - C. Three prizes for Forms I and II (Lower School) of the Collegiate Institutes, High and Continuation Schools.

D. Three prizes for Forms III and IV (Middle School) of the Collegiate Institutes, High and Continuation Schools.

The work assigned (to be completed during December, and to reach this office not later than January 10th) is as follows:

Design in any medium a *cover* for a *booklet*. (In size this is to be not smaller than 5" x 7" and not larger than 7" x 10"). The design must show careful *lettering* and *decoration* appropriate to the proposed contents of the booklet. Note that a different cover is required for each of the four departments.

PUBLIC AND SEPARATE SCHOOLS.

A. Forms I and II (Grades 1, 2, 3, 4).

Cover for a booklet on *Christmas Toys*.

B. Forms III and IV. (Grades 5, 6, 7, 8).

Cover for a booklet on *Winter Sports*.

CONTINUATION SCHOOLS, HIGH SCHOOLS, AND COLLEGIATE INSTITUTES.

C. Forms I and II. (Lower School).

Cover for a booklet on *Canadian Trees*. (Use Gothic capitals).

D. Forms III and IV. (Middle School).

Cover for a booklet on *Industrial Art*. (Use Roman capitals).

Book Reviews

English Biography, by Waldo H. Dunn, M.A., Litt.D., Professor of the English Language and Literature in the College of Wooster. Published by E. P. Dutton & Co., New York. xxi+323 pages. Price \$1.50. The English and History teachers in our secondary schools are of necessity interested in English biography, not merely because the lives of the great men of England's past are sources of inspiration to boys and girls, and serve to enliven the arid pages of the text-book, but mainly because biography and history go hand in hand. The chronicle of events is illuminated and understood only when the personalities in the drama of history are understood. The evolution of English biography from the earliest church writings of the 7th century down to the finished, artistic product of the 19th century is clearly described in Professor Dunn's work, *English Biography*, recently published in the *Channels of English Literature Series*. The value of the account is enhanced by a chapter on "Problems and Tendencies of the Present", in which section the writer quotes from eminent authorities like John Morley, Rev. E. Edwards, A. C. Benson, and Mr. Gosse, as to the differences between biography and history, the place of correspondence in biography, the problem of dealing with genealogical details, and the problem of condensation. Chapters on English biography as literature, and on a comparative view, reflect the thoughtful attitude of the writer. A very complete list of English biography gives what is needed to make the book a reference guide to the teacher. Professor Dunn's style is logical and clear; he moves in his thought by definite steps to definite statements, and nowhere is the reader left floundering in a bog of theory and criticism. While exception may be taken to the number of extracts and quotations, yet his choice of extracts and authorities is apt and pointed. They mark the wide reading and scholarship of the author. He appreciates English biography as the finest product of world literature, and his praises are tempered by a sympathetic understanding of the limitations and shortcomings of our earlier biographers. The book is worthy of a place in the library of every teacher of English and History.

J. F. V.

Educational Books of the Year

[This list is intended for the guidance of teachers who are purchasing for the school library or for any library. Extended reviews of the books mentioned will be found in various issues of THE SCHOOL. The annotations have, for the most part, been taken from the reviews. Asterisks refer the reader to an alphabetical index at the end of the list which gives the exact addresses of publishers.]

English.

The Advance of the English Novel, by William Lyon Phelps, Lampson Professor of English Literature at Yale. Price \$1.50. Dodd, Mead & Co., New York. 1917. A book that can be heartily recommended.

English Biography, by Waldo H. Dunn, M.A., Litt.D., Professor of the English Language and Literature in the College of Wooster. Published by E. P. Dutton & Co., New York. xxi+323 pages. Price \$1.50. The story of the evolution of English biography. Very useful to teachers of English.

Southern Life in Southern Literature, selected and edited by Maurice Garland Fulton, Professor of English, Davidson College. Ginn & Co., Boston. 16mo., 530 pages, illustrated. 80 cents. A good anthology of the principal writers of the Southern States during the 19th century.

Poetry, The Renaissance of Wonder, by Theodore Watts-Dunton. 296 pages. Price \$1.75. The E. P. Dutton Co., New York. The author looked upon this as one of his best works. Valuable for teachers of literature.

Working Composition, by John B. Opdycke. 337 pages. Price \$1.30. D. C. Heath & Co., Boston. Intended for boys who will go into industrial life.

A New English Grammar, by E. A. Sonnenschein, D. Litt., Professor of Classics in the University of Birmingham and Chairman of the Joint Committee on Grammatical Terminology. 424 pages. Price \$1.10. (Part I, 25 cents, II, 40 cents, III, 50 cents.) *Oxford University Press, Toronto. It adopts the new uniform terminology now used in England.

English Grammar Descriptive and Historical, by T. G. Tucker, Litt.D. and R. S. Wallace, M.A., Professors in the University of Melbourne, 175 pages, price 3 shillings. London, Cambridge University Press; Toronto, *J. M. Dent & Sons. Useful for High School work.

The Typical Forms of English Literature, by Alfred H. Upham, Professor of English in Miami University. 281 pages. Price \$1.10. *Oxford University Press, Toronto. Very useful for teachers of literature.

The Rudiments of Criticism, by E. A. Greening Lamborn, Headmaster of the East Oxford School. 191 pages. Price 75 cents. *Oxford University Press, Toronto. A splendid book for young teachers or senior students.

An Introduction to the English Classics, by William P. Trent, Columbia University, Charles L. Hanson, Mechanic Arts High School, Boston, and William T. Brester, Columbia University. 302 pages. Price 60 cents. Ginn & Co., Boston. Contains many valuable suggestions.

The Contemporary Short Story, by Harry T. Baker. 271 pages. Price \$1.25. D. C. Heath & Co., New York. A very interesting volume for those who wish to write stories.

Shakespeare Criticism: A Selection. *Oxford University Press, 25-27 Richmond St., Toronto. xxvii+416 pages. Price 30 cents. A great deal of the sanest and best of the earlier Shakespeare criticism.

The Children's Library, by Sophie H. Powell. xiv+460 pages. Price \$1.75. E. P. Dutton Co., New York. A thorough and suggestive study of the problems of the school library and the children's department of the public library.

The Library, The School and the Child, by J. W. Emery. *The Macmillan Co., Toronto. 1917. 215 pages. Price \$1.25. An excellent book.

Practical English for High Schools, by Lewis and Hoscic. 415 pages. Price \$1.00. American Book Co., New York. A useful volume by teachers of wide experience.

Teaching Literature in the Grammar Grades and the High School, by Emma Miller Bolenius. 337 pages; price \$1.35. Houghton, Mifflin & Co., Boston. An excellent guide to methods.

English Composition as a Social Problem, by Sterling Andrews Leonard, A.M., Instructor in the Horace Mann School. Price 70 cents. The Houghton Mifflin Co., Boston. A very suggestive book.

The Essentials of Extempore Speaking, by Joseph A. Mosher, Ph.D. xv+207 pages. Price \$1.00. *The Macmillan Co. of Canada, Ltd. Useful for teachers of oral composition.

Dramatization, by Sara E. Simmons and Clem Irwin Orr. Scott, Foresman & Co., Chicago. Practical directions for the teacher, and a fine collection of dramatized extracts from the English classics.

What is English? by C. H. Ward. Price \$1.00. Scott, Foresman & Co., Chicago. Contains many practical suggestions for the teacher of English.

The Teaching of English in the Secondary School, by Charles S. Thomas. xvi+365 pages. Price \$1.60. Houghton Mifflin Co., Boston. A suggestive book on methods.

English for Coming Americans, by Peter Roberts. 50 cents. Associated Press, New York. A good explanation of the "direct" method.

Kitchener and Other Poems, by Robert J. C. Stead. xiv+161 pages. Price \$1.00. *The Musson Book Co., Ltd., Toronto. A good selection from the work of a promising Canadian poet.

The Little Book of Modern Verse, edited by Jessie B. Rittenhouse, 220 pages. Houghton Mifflin & Co., Boston. An attractive collection of poems.

Sir Walter Raleigh. Selections from His Poetry and Prose. Edited by Frank C. Hersey. 109 pages. *The Macmillan Co. of Canada. An interesting collection.

Poems by Alan Seeger. Price \$1.25. *S. B. Gundy, Toronto. Written by an American soldier who fell in the present war.

In the Day of Battle (Poems of the Great War), selected by Carrie E. Holman. Price \$1.25. *Wm. Briggs, Toronto. A good collection of war poetry.

Songs of Gladness and Growth, by James L. Hughes. Price \$1.00. *Wm. Briggs, Toronto. Poems by an educationist and of interest to teachers.

Persephone, by Katherine Merryman. Price, in paper, 6d. Geo. G. Harrap & Co., London. A delightful poetic dramatization of the old legend.

Regiment of Women, by Clemence Dane. Price \$1.50. *The Macmillan Co., Toronto. A good story of a girls' school.

A Soldier of Life, by High de Selincourt. Price \$1.50. *The Macmillan Co., Toronto. A war story.

The Wanderer on a Thousand Hills, by Edith Wherry. Price \$1.40. *S. B. Gundy, Toronto. A good story of education in China.

A Country Chronicle, by Grant Showerman. Price \$1.50. *S. B. Gundy, Toronto. An amusing narrative, very true to life.

Doreen and the Sentimental Bloke, by C. J. Dennis. Price 75 cents. *S. B. Gundy, Toronto. An amusing series of poems in "cockney" dialect.

Defoe's Robinson Crusoe, edited by W. P. Trent. 360 pages. Price 60 cents. Ginn & Co., Boston. A well annotated, illustrated edition.

Representative Short Stories and Selections from American Poetry. 25 cents each. *The Macmillan Co., of Canada, Toronto. Useful additions to the *Pocket Classics* series.

English Prose Extracts for Repetition, by E. H. Blakeney, M.A. Price 8d. Blackie & Sons, Ltd., London. Teachers of English may find this suggestive.

I Sometimes Think (sub-title, *Essays for the Young People*), by Stephen Paget. Pp. viii+155. Price \$1.50. *The Macmillan Co., Toronto. Contains nine clever and entertaining essays.

Spenser's Faerie Queene, Prose Selections from John Dryden, Poems by John Dryden. G. Bell & Sons, London. Good editions.

A Book of Narratives. Edited by Oscar J. Campbell, Jr., of the University of Wisconsin, and Richard A. Rice of Smith College. Cloth. 504 pages. Price \$1.50. D. C. Heath & Co., Boston, New York, Chicago. A book of well-told stories:

Robin Hood. Price 1s. net. George G. Harrap & Co., London. A good edition for children.

Selected Poems of Wordsworth and Tennyson, edited by E. A. Hardy, B.A., D.Paed. *Oxford University Press, Toronto. Price 20 cents. A very suitable text for class work.

Boswell's Life of Samuel Johnson, abridged and edited by Stella Stewart Center, A.M. 344 pages. Price 25 cents. The A. S. Barnes Co., New York. A good edition for High School use.

Letters from Many Pens, chosen and edited by Margaret Coult. 314 pages. Price 25 cents. *The Macmillan Co. of Canada, Toronto. An interesting collection.

Short Stories—Old and New, selected and edited by C. Alphonse Smith. 292 pages. Price 48 cents. Ginn & Co., Boston. A good collection.

The Deserted Village and the Traveller, by Oliver Goldsmith. 52 pages; price 10 cents. *The Macmillan Co. of Canada, Toronto. Suitable for rapid reading.

Stories in Verse. Selected by V. H. Collins. 176 pages. *Oxford University Press, Toronto. A good collection of narrative poems.

Modern Lays and Ballads, selected by R. M. Leonard. 127 pages. Price 25 cents. *Oxford University Press, Toronto. A good collection for Form I or Form II, of the High School.

The Globe Poetry Reader. Cloth, 190 pages; price 25 cents. *The Macmillan Co. of Canada, Toronto. A good collection for the first or second forms of the High School.

Shakespeare's Macbeth, edited by Daniel V. Thompson. Henry Holt & Co., New York. A useful edition.

Cymbeline in *The Granta Shakespeare* series. 1s. net. Cambridge University Press, London. *J. M. Dent & Sons, Toronto.

Coriolanus (*The Granta Shakespeare*). Price 1s. net. Cambridge University Press, London. *J. M. Dent & Sons, Toronto.

Much Ado about Nothing (*The Granta Shakespeare*). Price 1s. Cambridge University Press, London. *J. M. Dent & Sons, Toronto.

King Henry V. (*The Granta Shakespeare*), edited by J. H. Lobban. Price 1s. net. Cambridge University Press, London. *J. M. Dent & Sons, Toronto. The *Granta* editions are all good.

Romeo and Juliet, *King Henry V*, *King Richard III*. Price, 1s. each; cloth. G. Bell & Sons, London. Good editions.

PUBLIC SCHOOLS.

A Study of Fairy Tales, by Laura F. Kready. 290 pages. Houghton Mifflin Co., Boston. Exceptionally well done. It deserves the closest study of teachers of elementary work.

A Child's Book of Holiday Plays, by Frances Gillespy Wickes. 209 pages; price 60 cents. *The Macmillan Co., of Canada, Ltd., Toronto. Plays suitable for Public School Children and practical suggestions for the teacher.

The Lewis Story Method of Teaching Reading and Spelling, by G. W. Lewis. *The Lewis Publishing Co., Chicago. The unexperienced primary teacher will find guidance while the experienced teacher will receive help and inspiration.

The Adventures of Prince Melonseed, by M. Ella Chaffey; 163 pages; price 75 cents. *William Briggs, Toronto. Very interesting for children.

Language Exercises, by Clara E. Grant. 59 pages. Price 1s. 6d. net. Evans Bros., London. An excellent aid for young teachers; suggestive for experienced teachers.

Stories of the Scottish Border, by Mr. and Mrs. Wm. Platt. Price 1s. 9d. George G. Harrap & Co., London. Very interesting; a good book for Public School pupils.

Everyday Classics (Third Reader, 48 cents; Fourth Reader, 56 cents; Fifth Reader, 60 cents; Sixth Reader, 65 cents.) *The Macmillan Co., Toronto. These contain a valuable collection of good stories for supplementary reading or for composition.

The Snow Image and Other Plays, by E. Antoinette Lugus. Walter H. Baker & Co., Boston. 95 pages, paper cover; price 25 cents. These plays are adapted for school and social entertainment.

A Child's Own Book of Verse. Compiled by Ada M. Skinner and Frances Wickes of the St. Agatha School. *The Macmillan Co., Toronto. 1917. Three volumes containing approximately 275 choice selections. Price 40 cents, 45 cents, and 50 cents. In every respect a splendid book.

A Child's Robinson Crusoe, by William L. and Stella H. Nida. 160 pages. 37 illustrations. Price 40 cents. The Beckley-Cardy Co., Chicago. Well told and illustrated.

Nixie Bunny in Faraway-lands, by Joseph C. Sindelar. 160 pages with 94 illustrations in colours. Price 45 cents. Beckley-Cardy Co., Chicago. Thoroughly interesting to small children.

Ten Boys' Farces, by Eustace M. Peixott. Walter H. Baker & Co., Boston. 107 pages, paper cover; price 25 cents. Furnishes useful material for recreation centres.

Once Upon a Time, *The Story of the Golden Fleece*, *The Christmas Cuckoo*. 6 cents, 6 cents, and 7 cents. *The Macmillan Co., Toronto. Delightful stories for primary grades.

Stories for the Story Hour, by Ada M. Marzials. 256 pages. Price 2s. 6d. net. George G. Harrap & Co., London. Appropriate stories for every month in the year; useful to primary teachers.

Moni, The Goat Boy, by Johanna Spyri. Price 50 cents. J. B. Lippincott Company, Philadelphia. An interesting story for Second or Third Book classes.

History

The Days of Alcibiades, by C. E. Robinson. 301 pages; illustrated. Price 5s. net. Edward Arnold, London. Will make an excellent addition to the High School library.

Stories for the History Hour, by Nannie Niemeyer. 253 pages. Price 3s. net. George G. Harrap & Co., London. Furnishes a good course in history for Second Book classes, grades 3 and 4.

The Story of the French Revolution, by Alice Birkhead. Pages 236. Price 1s. 9d. George G. Harrap & Co., London. A most interesting volume.

The Federation of Canada 1867-1917. Price 50 cents. *Oxford University Press, Toronto. Four excellent essays, sane, authoritative, and inspiring.

Abraham Lincoln, by Edith L. Elias. Price 1s. 3d. George G. Harrap & Co., London. A good supplementary reader.

Adventures in Polar Seas, by David W. Oates. Price 1s. 3d. George G. Harrap & Co., London. An interesting book for boys.

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. Useful for study of this subject.

Mediæval and Modern Times, by James Harvey Robinson. 777 pages; price \$1.60. Ginn & Co., Boston. A much improved and attractive revision of Roninson's *History of Western Europe*.

The Story of France (1814-1914), by J. L. Beaumont James. 463 pages. Price 3s. 6d. *Thomas Nelson & Sons, Toronto. Gives the history of our great ally since 1814.

Defence and Foreign Affairs, by Z. A. Lash. 86 pages, price 50 cents. *The Macmillan Co., of Canada, Toronto. A carefully elaborated plan for the reorganization of the British Empire.

Sons of Canada, by Augustus Bridle. *J. M. Dent & Sons, Toronto. Price \$1.50. Every Canadian will find enjoyment in this.

Citizens of the Empire, by Irene Plunket. 168 pages. *Oxford University Press, Toronto. An elementary text on Empire civics.

The Story of the Buddha, Warwick, the King-Maker, Queen Elizabeth. Price 1s. 3d. each. George G. Harrap & Sons, London. Three good stories for supplementary reading.

An Introduction to the History of England, by E. L. Hasluck. Price 2s. 6d. A. & C. Black, London. *The Macmillan Co., Toronto. Delineates in clear outlines the main threads of our history.

La Salle (True Stories of Great Americans), by Louise S. Hasbrouck. 212 pages. Price 50 cents. *The Macmillan Co., Toronto. Gives in detail the story of the life and explorations of La Salle.

Social Problems, by Ezra Thayer Towne, Ph.D. *The Macmillan Co., Toronto. Price \$1.00. Written for the general reading public. It is worth reading carefully.

The Dawn of a New Patriotism, by John D. Hunt, clerk of the Executive Council, Alberta. Price \$1.00. *The Macmillan Co., Toronto. A book emphatically needed at the present time.

An Introduction to Economics, by Frank O'Hara. 255 pages. Price \$1.00. *The Macmillan Co., Toronto. The elementary principles are clearly presented.

Lord Selkirk's Work in Canada, by Chester Martin of the University of Manitoba. Price \$2.50. *The Oxford University Press, Toronto. An extremely interesting book.

British Colonial Policy, 1783-1915, by C. H. Currey, M.A., University of Sydney. *Oxford University Press, Toronto. 266 pages. Price 85 cents. A splendid book for history teachers and Upper School students.

The Fall of Canada, 1759-1760, by George M. Wrong, Professor of History in the University of Toronto. *Oxford University Press, Toronto. 272 pages. Price \$2.00. Should have a place in every school and public library.

Lord Kitchener: His Life and Work, by D. A. MacKenzie. 160 pages. Price 1s. net. Blackie & Son, Ltd., London. A good biography for High School students.

History of England Series, The Cave Boy, by M. A. McIntyre. Price 30 cents. *Days before History*, by H. R. Hall. George G. Harrap & Co., London. Price 30 cents. Good stories for Second and Third Book classes.

The Dawn of British History (300 B.C.-450 A.D.), by Alice Corkran; 250 pages. Price 40 cents. *The Birth of England (450-1066)*, by Estelle Ross. 250 pages. Price 40 cents. *From Conquest to Charter (1066-1215)*, by Estelle Ross. 250 pages. Price 40 cents. George G. Harrap & Co., London. Suitable for Fourth Book classes.

How We Pay Each Other, by S. T. Wood. 149 pages. Price 50 cents. *The Macmillan Co., of Canada. An elementary reader in simple economics.

The Foundation and Growth of the British Empire, by James A. Williamson. 290 pages. Price 75 cents. *The Macmillan Co., Toronto. An introduction to the study of history.

How Man Makes Markets, by W. B. Werthner, in *Everychild's Series*. *The Macmillan Co., Toronto. Price 40 cents. Well written and well illustrated.

Nelson's Map Book of the World Wide War. Price 50 cents. *Thomas Nelson & Sons, Toronto. An excellent book for teacher, student, or general reader.

War Maps. Price 2s. each. *Battle-Front Map*, George Philip & Son, Ltd., London. Size 46 by 36 inches. Price 2s. 6d. net. Useful, clear, large-scale maps.

The Russian Revolution, by Isaac Don Levine. 280 pages. Price \$1.00. *The Musson Book Co., Ltd., Toronto. A concise account of the revolution.

An Historical Atlas of Modern Europe from 1789 to 1914, by C. Grant Robertson and J. G. Bartholomew. Price \$1.25. *Oxford University Press, Toronto. Illustrates nearly every important phase of history in the last 125 years.

Lloyd George, The Man and His Story, by Frank Dinnot. 195 pages. Price \$1.00. *The Musson Book Co., Toronto. A very interesting book.

The Last Days of Fort Vaux, by Henry Bordeau. 227 pages. Price 3s. 6d. *Thomas Nelson & Sons, Toronto. Gives a good idea of present-day warfare.

Myths of Legends of British North America, by Katherine B. Judson. 211 pages. Illustrated. Price, \$1.50. A. G. McClurg & Co., Chicago. Recommended for the school library.

Modern European History, by Charles Downer Hazen, Professor of History in Columbia University. Henry Holt and Company, New York. Price \$1.60. To the teacher of modern history this is a very enjoyable book.

The New Era in Canada, edited by Dr. J. O. Miller, Principal of Ridley College. 421 pages. Price \$1.50. *J. M. Dent & Sons, Toronto. Every Canadian should read and study this book.

Greek and Roman Mythology, by Jessie M. Tatlock. Price \$1.50. The Century Co., New York. An exceptionally well-done piece of work.

How the Present came from the Past. (Book I—The Seeds in Primitive Life), by Margaret E. Wells. Price 56 cents. *The Macmillan Co., Toronto. Outlines man's development during the Stone Ages.

My Book of Best Stories from History, by Hazel Phillips Hanshew. Price \$1.50, net. Cassell & Co., Toronto. Can scarcely be recommended too highly.

History Maps, Ancient, Mediaeval, and Modern. Ancient Series, 16 maps, by James H. Breasted, Ph.D., and Carl F. Huth, Jr., University of Chicago. European Series, 23 maps, by Samuel B. Harding, Ph.D., Indiana University. Price \$70.00. *Denoyer-Geppert Co., Chicago. These maps are sold singly without stand or rollers at \$1.50 each. An extended review will be found in this issue. They are a great boon to the teacher of history.

A Note-Book of Mediaeval History (A.D. 323-A.D. 1453), by C. Raymond Beazley, Professor of Modern History in the University of Birmingham. 224 pages. *Oxford University Press, Toronto. 1917. Price 90 cents. Teachers of history will find it interesting and suggestive.

Martin Luther, The Story of His Life, by Elsie Singmaster. 138 pages. Houghton Mifflin Co., Boston and New York. A timely contribution.

Select Treaties and Documents, by R. B. Mowat, M.A. lxiii+147 pages. Price 2s. net. *Oxford University Press, Toronto. An exceedingly useful book.

The Diplomatic Background of the War, 1870-1914, by Charles Seymour, Ph.D., Assistant Professor of History in Yale College. xv+311 pages. Price \$2.00. Yale University Press, New Haven. This work is scholarly and judicial.

The Trail of Tecumseh, by Paul Tomlinson. Price \$1.35 net. D. Appleton & Co., New York. An intensely interesting narrative.

The United States and The War, by James M. Beck. 46 pages. The Pennsylvania Society, 249 West 13th St., New York. Helps to a clear understanding of the cordial relations existing between Britain and the United States.

An Introduction to the Study of International Relations, by A. J. Grant, J. D. I. Hughes and others. *The Macmillan Co. of Canada, Ltd. 1916. Pp. vii+207. Price 75 cents. A valuable book.

The Empire and the Future, by Sir Charles Lucas and others. *The Macmillan Co. of Canada, Ltd. Price 75 cents. This volume is made up of a number of able lectures.

The Ancient World, by Willis Mason West. Revised edition, 667 pages. Allyn and Bacon, Boston. Well worth a place in any school library.

Selections from Roman Historians, edited with notes by Lindley Richard Dean, Ph.D., and Roy Joseph Defarrari, Ph.D. 260 pages. Allyn & Bacon, Boston. Valuable for sight translation in Honour Latin classes.

A History of Rome, by Philip Van Ness Meyers. Second revised edition, 242 pages. Ginn & Co., Boston and New York. Price \$1.12. An excellent little text.

The Earliest Voyages Round the World, 1519-1617. (*Cambridge Travel Books*), edited by P. F. Alexander, M.A. Price 3 shillings. Cambridge University Press. *J. M. Dent & Sons, Toronto. A good book to add to the school library.

Essentials in Modern European History, by Knowlton and Howe. Longmans, Green and Co., New York. *Oxford University Press, Toronto. On the whole, the book could scarcely be improved.

The Greek House, by Bertha Carr Rider. Cambridge University Press. *J. M. Dent & Sons, Toronto. Price 10s. 6d. Presents in compact form the latest results obtained from excavations in Greece.

The Political History of France, 1789-1910, by Muriel O. Davis. Price 75 cents. *Oxford University Press, Toronto. A useful book for the busy reader.

Europe in the Nineteenth Century, by Professor E. Lipson, M.A. A. & C. Black, London, 298 pages. Price \$1.50. *The Macmillan Co., Toronto. A concise, connected, analytical account of the internal development of the chief European states after 1815.

The Pupil's Class-Book of English History, by J. S. Lay. Three books of about 125 pages each. Limp cloth. Price 20 cents each. *The Macmillan Co. of Canada, Ltd.

The Expansion of Europe, by Ramsay Muir. 243 pages. 10 maps. Price \$3.00. Houghton, Mifflin Co., Boston. Thoroughly interesting and very helpful.

The Youth and the Nation, by Harry H. Moore. xvii+179 pages. *The Macmillan Co., Toronto. A successful attempt to interest boys in social questions.

England and Germany, by Bernadotte Everly Schmidt. Pages ix+524. Price \$2.00. *Princeton University Press. After a very thorough exposition of the historical evidence, the author takes the side of Great Britain.

The Teaching of Government, by C. G. Haines and others. 284 pages. Price \$1.10. *The Macmillan Co., Toronto. Very timely and suggestive.

Why Britain Went to War, by Sir Edward Parrott. 244 pages. Price 50 cents. *Thomas Nelson & Sons, Toronto. Should have a place in every High School library.

The Story of Lord Kitchener, for Grade III by A. O. Cooke. 95 pages, price 20 cents. *Oxford University Press, Toronto. An enjoyable book for Public School pupils.

An Elementary Civics, by McCarthy, Swan, and McMullin. 254 pages. *A Manual for Teachers of Civics*, by the same authors. Thompson, Brown, & Co., New York. Good guides to the new civics; intended for junior High School work.

Nelson's History of the War (Vols. XIV to XVII). 45 cents each. *Thomas Nelson & Sons, Toronto. Every volume of this is good.

Science

CHEMISTRY.

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Chemical Discovery and Invention in the Twentieth Century. By Sir William Tilden, F.R.S. George Routledge and Sons, London. 478 pages. 7s. 6d. A magnificently illustrated volume on the latest phases of the development of science.

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Introduction to Inorganic Chemistry, by Alexander Smith. Third edition; rewritten. Pages xiv+925. Cloth. 1917. The Century Company, New York. A valuable book.

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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.

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Electrical Laboratory Course for Junior Students, by Professor Magnus Mclean. Blackie and Son, London. 120 pages. 2s. Experiments are too difficult for secondary school students in Canada.

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A Descriptive Bibliography of Measurement in Elementary Subjects. Harvard bulletins in Education, Vol. V. 1917. Harvey W. Holmes, editor. Pages vi+46. Measurement is receiving a good deal of attention; this bibliography is very useful for those interested.

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Gringoire, edited by A. Wilson-Green. Cambridge University Press, London. *J. M. Dent & Sons, Toronto. A French prose comedy in one act.

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The Soldier's First Aid, by R. C. Wood, Q.M.S., A.M.C. Price 35 cents. *The Macmillan Co., Toronto. This is really a manual written in simple, direct language.

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Meditations of Marcus Aurelius. Translated and annotated by J. G. Jennings. Pages 131. Blackie & Son, London.

Hints that Win Success. Price 3s. 6d. net. Evans Bros., London. A treasury of devices for Public School teachers.

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The Book of School Games, edited by C. E. Hodges, M.A., Evans Bros., London. A real aid to the teacher.

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Publishers.

[The firms here mentioned will be glad to give information regarding any of their publications appearing in the above list. Their advertisements in this issue should be consulted.]

William Briggs, Queen and John Sts., Toronto.—See page i.

Chas. Chapman Co., 91 Dundas St., London, Can.—See page xi.

Comstock Publishing Co., Ithaca, N.Y.—See page xx.

Denoyer-Geppert Co., 460 East Ohio St., Chicago.—See page 311.

J. M. Dent & Sons, 27 Melinda St., Toronto.—See page ii.

Dominion Book Company, 36 Shuter St., Toronto.—See page xv.

Franklin, Macnutt & Charles, South Bethlehem, U.S.A.—See page 309.

S. B. Gundy, 25-27 Richmond St. West, Toronto.—(Inside front cover).

G. W. Lewis Publishing Co., 4707 St. Lawrence Ave., Chicago. See page xvii.

McClelland, Goodchild & Stewart, Ltd., 266-268 King St. West, Toronto.—See page x.

The Macmillan Co., of Canada. 70 Bond St., Toronto.—See page i.

Manual Arts Press, Peoria, Ill., U.S.A. See page xiii.

G. & C. Merriam Co., Springfield, Mass., U.S.A.—See page 313.

The Musson Book Co., 25 Dundas St. East, Toronto.—See page v.

Thomas Nelson & Sons, 77 Wellington St. West, Toronto.—See page 315.

Oxford University Press, 25-27 Richmond St. West, Toronto. See inside front cover.

Princeton University Press, Princeton, N.J. See page 316.

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Hints for the Library

The Political History of France, 1789-1910, by Muriel O. Davis. Price 75 cents. Oxford University Press, Toronto. This volume tells in brief compass the story of the government of France from the Revolution down to 1910. It will prove a useful book to the busy reader who wishes to know something of the rather intricate and involved course of French politics and government.
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A Child's Robinson Crusoe, by William L. and Stella H. Nida. 160 pages with 37 illustrations. Price 40 cents. *Nixie Bunny in Faraway-Lands*, by Joseph C. Sindelar. 160 pages with 94 illustrations in colours. Price 45 cents. The Beckley-Cardy Co., Chicago. These two small volumes are intended for children of grades two and three. The story of Robinson Crusoe is well and simply told and in this form is easily followed by a child of six. The illustrations add a great deal to the interest of the story. The Nixie Bunny volume is one of a series in which Mr. Sindelar uses the natural interest children have in animals to give the little folks a wide range of information about the world in which they live. It is a puzzle to adults why rabbits rather than people should go travelling in these stories, but little boys and girls seem to be peculiarly fascinated by animal stories, even when the animals are represented as acting entirely like mortals. The author's style is very suitable to the subject.
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Holly Drill (15 cents), *Rule Britannia* (15 cents), *We'll Fight for the Grand Old Flag* (15 cents), *Saluting the Canadian Flag* (15 cents), *Britannia* (25 cents), *Miss Canada's Reception* (15 cents). The first four of these are drills; the last three plays. The first five of them are by Edith Lelean Groves; the sixth by J. B. McDougall, B.A., of North Bay Normal School. All are published by McClelland, Goodchild & Stewart, Toronto. They furnish what many teachers are looking for at this time of year—good, patriotic entertainment adapted to the abilities of Public School children. Even the smallest rural school can undertake an evening function based on one of these drills or plays.
W. J. D.

Ancient-Mediaeval-Modern History Maps, by Professor J. H. Breasted and Prof. C. F. Huth, Jr., of the University of Chicago, and Professor S. B. Harding of the University of Indiana. The Denoyer-Geppert Co., Chicago. This series of historical wall maps is a noteworthy and very welcome addition to the equipment available for the teacher of history. The senior partner in the Denoyer-Geppert Co. was a successful teacher in High Schools and later in a Normal School. As a result he has planned a series of maps suitable for class-room use, and has secured the services of scholarly teachers, who have produced maps accurate in detail and eminently useful. There are 16 sheets, 44×32 inches, on Ancient History and 23 on European and British History. In many cases a sheet contains valuable insets besides the main map. The maps on ancient history, which show the results of recent archaeological research, illustrate very satisfactorily not only the wars and the political divisions of the ancient world, but early settlements, colonization, trade routes, and the areas of production of articles of ancient commerce. The maps on European and British history, while not as complete as one could wish, are a very fine collection indeed. Nearly all are valuable, but a few might be mentioned as particularly striking. The maps illustrating the Barbarian Invasions show the original homes of the invading tribes, the routes followed, the final locations of the invaders, and the kingdoms founded by them. The large and small maps on the Crusades show, not only the states of Europe and the routes followed by the Crusaders, but also the Christian states founded in Syria, and the territorial divisions of the Mohammedan world at various periods. Maps to illustrate mediaeval commerce and the Industrial Revolution in Great Britain emphasize a feature of European history that is sometimes neglected by map makers. The growth of the modern kingdom of Italy and the territorial changes in the Balkans 1683-1914 are well illustrated. While most of the maps deal with European history, five of the sheets are devoted to British history and would be useful either to Public or High School teachers of British history. Canadian teachers will be glad to learn that a series is being prepared on *American* history, which will illustrate not only the history of the United States and of Latin America, but the history of Canada as well. The colours of the maps are well selected and clear; unnecessary details are omitted; and, as a result the maps are quite satisfactory for use in the ordinary class-room despite their moderate size. The publishers are showing their good judgment by selling them either in sets or singly, and in a variety of mountings. History teachers should certainly investigate the merits of these maps.
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Notes and News

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

Miss Anna F. Almas, B.A., is on the staff of Wallaceburg High School. S. J. Mathers, who has been teaching on the Indian Reserve near Thamesville, has been transferred to a similar position on the Christian Islands.

P. K. Hambly, B.A., L. D. McCamus, R. E. Dewar, and J. T. H. Russell, B.A., of the class of 1915-16 in the Faculty of Education, Toronto, have enlisted for overseas service.

The Dundas Public School Board has appointed Miss Margaret Scott as nurse at the regular teacher's salary. Miss Elva Tucker of Orono, Miss E. Hepburn of Stratford and Miss B. L. Thompson of York are three new teachers on the staff of Dundas Public School.

G. A. Cole, for several years Principal of Central Public School, Orillia, has been appointed Senior Master in the Institute for the Blind, Brantford.

Miss Ada M. Adams, B.A., formerly of Beeton, is teaching moderns and English in Richmond Hill High School.

Roy E. Wagar has removed from Wensley, Ont., to Venn, Sask.

Further news of the class of 1916-17 in Stratford Normal School is as follows: Miss Agnes Mackay is at R.R. No. 3, Blyth; Miss Laura G. Ament is at R.R. No. 1, Seaforth; Miss S. H. Wyatt is teaching the junior room in Carlingford Public School; Miss Irene M. Walton is at R.R. No. 1, Bradford.

A reader sends in the following items: Mr. Jefferson of Oliphant is at S.S. No. 6, Howick, R.R. No. 1, Gorrie, Ont.; Miss M. Ries is teaching near Moorefield; Miss Marie E. Brown has removed from Goldenburgh to the Public School in Wood, Ont.; Miss Gertie Gould is teaching near Wood; Miss Andrews of Durham is teaching in Lakelet Public School; Miss E. Cook, formerly of No. 6 Howick is on the staff of Fordwich Public School; Miss Bowers of Wroxeter is at Johnston's School, R.R. No. 2, Clifford; Miss Pace is teaching in No. 3 Wells; Miss M. Harding of last year's class at Stratford Normal is teaching in No. 7 Howick; Miss May Clarke is near Harriston this year; Miss Via Carter is teaching in Clifford Public School; Miss M. Ross and Miss Stanley are again on the staff of Clifford Continuation School; Miss Cox of Goderich is teaching near Bancroft, Ont.; Miss Halliday is again teacher in the Monk Road School near Bancroft; Sampson Yates, formerly of Dunn's Valley School, is engaged in a munition plant at Sault Ste. Marie; Miss Jackson of Wood, Ont., is teaching in Peterboro Collegiate Institute.

*It is necessary to hold over several news items this month on account of lack of space.

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Alberta

Miss Evelyn Lees, the Grade VIII and Art teacher at Stettler for the past three years has taken charge of a rural school near her brother's homestead. Both her brothers enlisted. The younger, who took his Grade XI examination at Stettler last year, was killed in action at Vimy Ridge.

George Crawford is now Principal of the Consolidated School at Alix, succeeding Miss Gill who recently became Mrs. (Rev.) Little.

The annual convention of the Calgary and High River Teachers' Association met in Calgary the latter part of October. The attendance was large and a very full program was carried out. Features of the Convention were addresses by Rev. C. E. Bland, Calgary, and Dr. W. A. McIntyre, Principal Normal School, Winnipeg.

Miss Celia M. Gamble, who has been teaching at Wetaskiwin since the beginning of the year, was recently appointed to the staff of the Crescent Heights Collegiate, Calgary, as instructor in English and art.

Miss Barbara Horner, formerly of Macleod, is now teaching in the Consolidated School at Lomond, Alberta.

New Brunswick

Dr. W. S. Carter, Chief Superintendent of Education, recently went to Victoria, B.C. He will visit the most important schools there, and on his return will visit some of the leading schools in Edmonton, Calgary and Winnipeg.

Teachers' Institutes. On September 27th and 28th, Northumberland County teachers held their Institute at Chatham. The program included papers on writing by Sister St. Stanislas; Co-operation Between Parents and Teachers, Perley Quail; The Study of Plants, Haviland P. Hovey; Nature Study, Miss Nellie Stothart; an illustrated lesson on insects by Wm. McIntosh, Provincial Entomologist, and talks on school gardening and nature study by R. P. Steeves, M.A.

A public meeting was held on the evening of the 27th when addresses on education were delivered by P. G. McFarlane, M.A., Inspector of Schools, Mayor Snowball and others.

The Charlotte Co. Teachers' Institute was also held on the 27th and 28th of September. The attendance was large, and the interest good. Papers were read as follows: Nature Study—School Gardens, by Miss Gertrude C. Coughlin; Primary Hand Work, Miss Florence A. Osborne; English Composition, Grades 6, 7, 8, Miss Sara McCaffrey; Writing, Miss Helen Young; The War, James Vroom, M.A., Secretary St. Stephen School Board; Reading, Miss Margaret Lynds, Instructor in Provincial Normal School, Fredericton; High School Mathematics, L. A. Gilbert, B.A.

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The Secretary's report showed a total enrolment in the High School classes of 1,429, an increase of 61, with 49 classes and a staff of 75, and an average attendance of 29.2 per class. The elementary schools showed an enrolment of 21,674 the average attendance per class being 37.1. The total enrolment for all schools left a net increase of 496. It was stated in the report that the decreases in some schools had been due to the falling off in immigration consequent on the war.

The school for crippled children in connection with the Children's Memorial Hospital has at present sixty-one pupils on the roll under one teacher. An application was made for an additional teacher, owing to the special nature of the work, and the individual attention required for each child. The Board agreed to this appointment.



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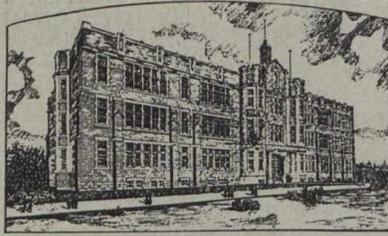
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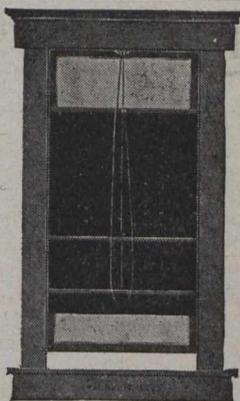
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