

THE EDUCATIONAL REVIEW.

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ST. JOHN, N. B., MAY, 1905.

WHOLE NUMBER. 216

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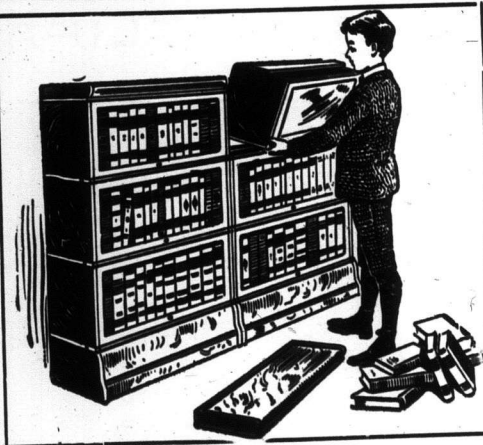
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G. U. HAY,
Editor for New Brunswick.

A. McKAY,
Editor for Nova Scotia.

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CONTENTS:

Moving about in the West.....	299
Empire Day.....	300
May in Canadian History.....	301
Our Native Trees.....	301
Teachers' Pensions.....	302
Drawing for the Lower Grades.....	303
The Union Jack.....	304
Mental Arithmetic.....	305
Amendment to N. S. Education Act.....	306
Natural Science Teachers' Association of N. S.....	306
The Future of English.....	307
Nature Study.....	307
New School Laws.....	309
The School Visitor.....	310
What Birds do for us.....	311
Transactions of N. B. Historical Society.....	311
The Presumption of Brains.....	312
Canada's New Ocean Ports.....	312
English Views on American Education.....	313
Dalhousie Convocation.....	314
N. B. Teachers' Association.....	314
Teachers' Conventions.....	315
Current Events.....	317
School and College.....	318
Book Reviews.....	319
May Magazines.....	320
N. B. Official Notices.....	321

THIS number closes the eighteenth volume of the REVIEW. It has been published continuously since June, 1887.

AN index to volume eighteen will be published in the June number of the REVIEW.

ATTENTION is directed to the official announcements of Chief Superintendent Dr. Inch in another column.

Canada has over a hundred thousand Indians. They are increasing in numbers and cultivate a hundred thousand acres of land.

Moving About in the West.

By G. U. HAY.

Only a few centuries ago Western Canada was the Great West to European explorers. Now the west has shifted to the vast plains of the North-west, and the Far West lies beyond the Rocky Mountains. Every day sees immigrants, numbered by the thousands, seeking homes in this vast and fertile country, which seems to swallow them up, for outside of the cities and towns along the line of the Canadian Pacific Railway few houses or shacks of settlers are to be seen. Nothing gives one a better idea of the immensity of this prairie country than its seeming lack of inhabitants, after the thousands of settlers that have been poured into it in late years from the outside world.

The centre of this great region of the middle west is Winnipeg, of whose future its citizens have boundless dreams. But they do not dream dreams alone. In the market place, on the street, at the hotel, in the private house, you hear the same story of the city's marvellous expansion and faith in its limitless possibilities. You ask for a conservative estimate of its population, and you are given a figure that exceeds the combined population of Halifax and St. John. If you hazard the opinion that Winnipeg is probably the most progressive city on the continent, the optimistic citizen will agree with you, except as to the "probability."

What strikes the stranger as a somewhat anomalous condition of affairs in a country where there is an abundance of cheap land is the excessive rate at which choice building lots are held in Winnipeg. Passing along one of the best known residential portions of the city, I was told that a lot could be had at \$100 a foot (frontage). Some time ago the government wished to buy a lot which it needed, and had to pay \$1,000 a foot for it. Still more recently the Canadian Bank of Commerce had to pay \$1,700 a foot for a piece of land which it needed to extend its present buildings.

One is impressed with the schools and school

buildings of Winnipeg. Much attention is given to games and physical exercises, which give the pupils an alert, easy carriage which distinguishes them in the school or on the street. Lacrosse is played in summer and football during the winter; and the ambition of every Winnipeg youth, when he reaches a certain age, is to enrol himself in one of the many school athletic clubs which exist in the city. Valuable prizes are awarded to the victors of these inter-school contests. Years before the boy reaches the age which secures the much-coveted admission to the school athletic club, he may be seen industriously practising football or lacrosse on side streets or vacant lots.

The mental alertness which characterizes all the school exercises must be due in some measure to this fine system of physical exercises. The pupils are easily governed, or do not appear to be governed at all. By means of the schools the best foreign elements are soon absorbed into the life and progress of the city. I heard a young Icelander in the first standard read with remarkable clearness and expression an English passage, and was told that up to a year or two before Icelandic was the only language he had heard. During the first year the pupil's efforts are confined largely to reading and writing, and securing in these rapidity, clearness and ease. The results were surprising, so were the results in music, nature-study and mental arithmetic.

The superintendent of the schools for the city is Mr. D. McIntyre, of Dalhousie, N. B., formerly superintendent of schools in the North End, St. John. He has seen the city grow from a few thousand inhabitants in a score of years to its present position. There are many handsome school buildings of gray brick, furnished with all modern improvements. To assist Mr. McIntyre there are two supervisors of primary schools, a supervisor of music, and a supervisor of physical drill. Last year there was a supervisor of nature study, and the results showed what could be accomplished in this line with skill and intelligent direction. Teachers, if approved by the Winnipeg board, begin with a salary of \$500. The highest salary paid to a principal of a common school is \$1,800. The salary of the principal of the collegiate school is \$2,400. This year a system of superannuation has been adopted, some account of which will be given in a future number.

Winnipeg has an excellent normal school, under the principalship of Mr. W. A. McIntyre, and a

fine collegiate school of nearly 500 pupils, who are prepared for the business of life and for entrance into Manitoba University.

Empire Day.

The observance of Empire Day, the school day next before the 24th of May, originated in a recommendation of the Dominion Educational Association, at its meeting in Halifax in 1898.

The Council of Public Instruction of Nova Scotia was first to adopt the suggestion, setting apart the day named for special exercises in the schoolroom, not for the purpose of developing a spirit of boastfulness in the greatness of the British Empire, but for the study of the causes of that greatness, of the history of the rise, growth and alliance of its different peoples, and of the development of that spirit of unity which binds together all the nations within the Empire as loyal, free and willing partners in the great confederation of kingdoms and provinces over which King Edward reigns.

Outside of the schoolroom, and beyond the limits of the Dominion, the idea is spreading. The 24th of May, which we in Canada know as Victoria Day, is beginning to carry the sentiment, if not the name, of Empire Day to other Britons beyond the sea. The mother country is beginning to realize more than ever before that in the loyal co-operation of her colonies, and in her loyal co-operation with the colonies, lies her true strength.

The motives of the United Empire Loyalists were too grand to perish in defeat. Their sacrifices have borne fruit in Canada; and, through Canadian influence and example, their love of British freedom in self-government and British devotion to the crown now spreads to other British lands, to warm the hearts and guide the movements of free and loyal Britons in a wider empire than that of which they dreamed and for which they fought in vain.

To bind us closer to our sister colonies, as well as to the motherland, and to increase our mutual helpfulness and love for them, is and should be the chief aim of Empire Day.

King Edward VII planted two trees in Central Park, New York, when he visited America as Prince of Wales in 1860. The trees were the English oak and American elm. Both trees are now alive.—*Exchange.*

May in Canadian History.

In May, 1407, John Cabot sailed from Bristol on the famous voyage of discovery which first brought the English flag to the shores of the New World. (In the same month, Americus sailed from Cadiz, reaching what is now known to have been the coast of the Gulf of Mexico a few days later than Cabot's discovery of some portion of our coast.)

In May, 1534, Cartier first saw the coast of Newfoundland; and in May of the following year he set sail from St. Malo on his second voyage, which was to result in the discovery of the gulf to which he gave the name of St. Lawrence and the river now also called by that name. After wintering in Canada, he started on his return voyage on the 16th of May, 1536; and he left St. Malo on his last voyage to Canada on the 23rd of May, 1541.

Champlain discovered the Ottawa river in May, 1613.

On the 18th of May, 1642, Maisonneuve founded Ville Marie, afterwards to become the commercial metropolis of Canada, the city of Montreal.

The Hudson's Bay Company was incorporated by royal charter in May, 1670.

In May, 1690, Sir William Phipps captured Port Royal.

The 18th of May is celebrated in St. John, N. B., as "Loyalist's Day," because the United Empire Loyalists from the first fleet of transports landed at St. John at about that date in 1783; and May 18, 1785, is the date of the charter of the City of St. John, the oldest incorporated town in Canada.

In May, 1813, United States troops were defeated by the British and Canadian forces at Sackett's Harbor, and at Fort Meigs, near the site of the present city of Toledo; and in May of the next year Oswego was taken by the British.

May 25th, 1870, the Fenians crossed the frontier at Trout River, Quebec, but were driven back by Canadian volunteers.

The work of construction of the Canadian Pacific railway was begun in May, 1881.

The first meeting of the Royal Society of Canada was held in Ottawa on the 25th of May, 1882.

The battle of Batoche and the surrender of Poundmaker a few days later, virtually putting an end to the Northwest Rebellion, took place in May, 1885.

In May, 1901, the Canadian House of Commons passed a bill to establish the 24th of May as a holiday in Canada, under the name of Victoria Day.

Our Native Trees. III.

By G. U. HAY.

Different species of trees differ from one another in form, so that it is possible to tell them apart even at a distance after we have become well acquainted with their appearance. We should train ourselves to do this by observing carefully full grown trees of every type, noticing how the trunks, branches, twigs and leaves dispose themselves.

We see that the trunks of some trees shoot up in a main stalk, giving the tree the shape of a lengthened cone. This is the *excurrent* form. The word is derived from two Latin words which mean *running away from*, the idea being that the trunk seems to be running upward out of the way of the branches.

The *deliquescent* is another form. The trunk seems to be lost in the branches which spread out in every direction, often giving the tree a rounded or pear-shaped appearance, as in the oak and elm. The derivation of this word "deliquescent" is also suggestive, as it means *to melt away*, as if the trunk melts away into branches.

Between these two types there are many varied intermediate forms resembling the types more or less. It would be a useful exercise in tree-study and drawing to have children draw the general outlines of trees.

Trees are also evergreen or deciduous, according to whether they retain or shed their leaves during the winter season. A glance at the ground under evergreens will show that their leaves decay and fall off, but this is done so gradually that the tree seems to be always in possession of the same green leaves. The leaves do not remain on the tree longer than two or three years. When do deciduous trees lose their leaves? When are they replaced? Is this a wise provision for the winter? Why? Why do not evergreen trees suffer in the winter because of retaining their leaves?

If you notice trees growing close together in the forest you will see that they grow higher than single trees in open fields. You will notice also that the lower branches of forest trees have died and fallen off while the trees were young. Nearly all the growing branches and leaves are near the top where there is plenty of light. Contrast trees growing in the forest with those growing widely apart in the open. Which would make the better timber? Why? Which are the more ornamental? If you were planting trees for ornament, would you plant them close together? How if you were planting them for timber? Why?

THE MAPLE TREES.

Of the five maples referred to last month, three grow to the size of large trees—the white maple, the red, and the rock or sugar maple. The remaining two—the striped maple, or moosewood, and the mountain maple—are small and shrubby. The maples are rapid growers, and are therefore frequently planted, but they are not so long-lived as some other trees.

The rock or sugar maple grows very slowly, but when mature is more stately and beautiful in shape than the others. It reaches its greatest perfection on rich woodlands or hillsides facing the sun. It has yellowish-green flowers and three to five-lobed leaves. The depressions or sinuses between the lobes of each leaf are rounded, while in all other maples they end in an angle. The sugar maple is well known for the quantities of sap which it gives out during the early spring when frosty nights are followed by bright warm days. The maple sugar made from sap has always been esteemed a great dainty. The white maple and, to a lesser extent, the red, also produce sap, from which maple sugar is made.

The wood of the rock maple is hard, strong, light reddish brown. A cubic foot of it weighs forty-three pounds, and is much heavier and its timber harder to work than the other maples. Those who have split rock maple wood know how firmly its fibres hold together. Bird's-eye and curled are varieties of rock maple wood. For some reason, not easily explained, the fibres of certain trees are twisted or arranged in a series of circles, which make, when smoothed and polished, very beautiful wood for furniture and the interior finishing of houses, railway cars, etc. The woods of the bird's-eye and curled varieties are well known in this respect.

The wood of the red maple is very similar to that of rock maple in color and hardness, but is not so strong, and is lighter, a cubic foot weighing thirty-eight pounds. The wood is worked more easily than the rock maple, and is used for furniture, gun stocks and for other purposes. The value of these hard woods for furniture and other uses has increased, and now the smaller and poorer trees are cut only for firewood.

The white or silver maple is usually found on low grounds and intervals, and grows rapidly, the small sapling becoming a stately tree in about fifteen years. Its wood is light in color. A cubic foot weighs thirty-two pounds. It is much used

for furniture; selected pieces, showing the grain, being much used for sideboards and chamber sets. It is also used for hardwood floors, for large tools and machinery, holding nails and screws strongly. The silver maple and its European varieties make beautiful shade trees.

Teachers' Pensions.

The Halifax school board is seriously considering the desirability of a retiring allowance for city teachers worn out by long service. The prominent idea is the protection of the public, for any school board will hesitate about dismissing aged teachers who have faithfully devoted the best of their lives to their work on salaries so meagre that it was impossible to make any provision for old age.

It is proposed to ask the teachers to contribute one per cent of their salaries for the first five years, two per cent for the second five years, and so on, not to exceed six per cent; that after twenty-five years' service, women, *if incapacitated*, may retire at the age of 55 on \$200 a year; men after thirty years' service, at the age of 60, on \$300. Special regulations will be made for special cases where teachers have to retire prematurely from any cause.

The proposed retiring allowance is so small and the tax upon the teacher so considerable that the fund will be nearly self-supporting—any deficiency to be made up by the school board. The administration of the fund will be placed in a commission composed of three members of the school board, three representative teachers and the supervisor. The option of contributing to the fund will be left open for two years to teachers now in the employ of the board, but all new teachers will be required to contribute from the time of appointment.

Twenty-five years ago the scale of salaries now in use was adopted in Halifax. Since that time the cost of living has gone up at least thirty per cent, so that salaries are now practically thirty per cent lower than they were then. If good teachers are to be secured and retained, there must be a decided advance in salaries.

In the heart of a seed
Buried deep, so deep,
A dear little plant lay fast asleep.
"Wake!" said the sunshine, and creep to the light,
"Wake!" said the voice of the rain drops bright.
The little plant heard and it rose to see
What the wonderful outside world might be.

Drawing for the Lower Grades. VI.

By PRINCIPAL F. G. MATTHEWS TRURO, N. S.

Before proceeding with the lessons in freehand drawing, it may be well to point out a few of the faults to be looked for, with a view to their eradication. Probably the most common is for some of the children, especially those with short fingers or chubby hands, to fall back into a habit of drawing the lines in little bits, with a kind of painting stroke, with the result that the line is drawn thickly, and lacking that pleasing freedom of curve which we have been endeavoring to attain. The only way to cure this is to insist on the proper method of holding the pencil, and give frequent drill exercises as

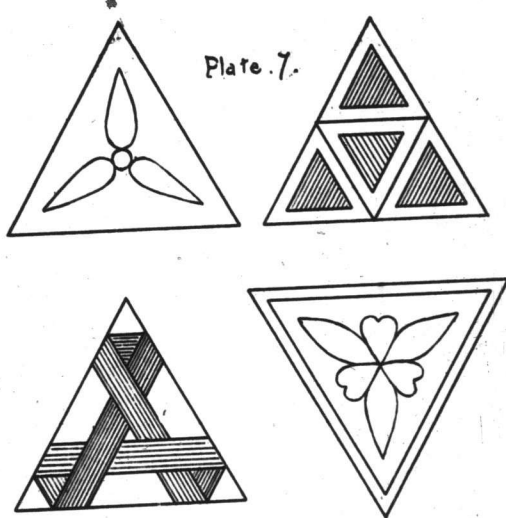
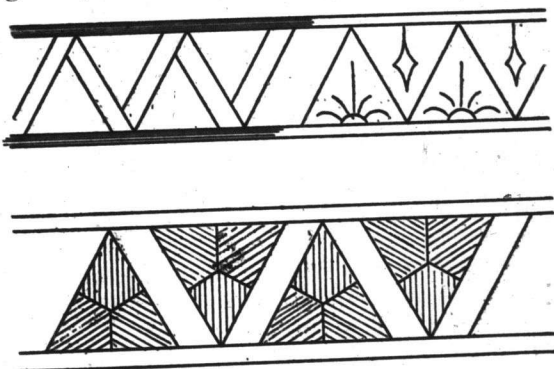
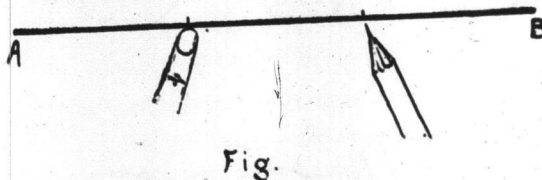


Plate 7.

suggested in an earlier article. In the worst cases, the children should be required to note the positions of commencing and finishing the desired line, and then to pass their hands, while holding the pencil correctly, several times over the course before marking the line. This tends to bring the fingers more under control, and makes the hand and eye work better together. It also cures another fault, that of excessive use of the eraser. If the children are allowed to use the eraser too freely, they are inclined

to become careless in their work. They should be taught that when a line is drawn it should not require alteration, and must remain. This causes them to think where it must be placed, and inspires both confidence and carefulness. Another fault, and one that is only too common among teachers, is, in the case of balanced copies, to draw the whole of one half first, and then "draw the other half like it." This is a most mischievous plan and should never be countenanced. Of course, if the copy consists of a single curve on each side, there is obviously nothing else to do. The above remark refers to more intricate copies, where each separate line or curve should be drawn and balanced before drawing the next.

The last article dealt with the drawing of triangles. The freehand drawing of these should follow, and the incorporation of them in design, as in the case of the square and oblong. The pupils may here be taught how to divide a line into three or six equal parts without actual measurement. In the first case, if AB be the line to be trisected, place a finger of the left hand on the line at the same time with the pencil, which is to mark the first division. (Fig. 18). By this means the



equality of the three parts may be seen at a glance. In the case of six parts, first divide the line into halves, and proceed with each half as above. Some suggestions for design based on the triangle are given in Plate 7. The simpler ones may be repeated to form borders, and, if satisfactory, colored with crayons.

On returning once more to the drawing of objects, it is necessary to again refer to the various curves—portions of circles, ellipses and ovals, single and double. The children should be taught to analyse these, and commit them to memory, so as to recognize them at a glance. They will then be able to draw difficult curves in one stroke, and not have to break off repeatedly to take another look at the object. The teacher will require some discretion in the choice of objects, and also in the blackboard copy to give an easy rendering, not following unnecessary detail too closely, but rather looking after the long sweeping curves to be found in the outline. Plate 8 contains some exercises selected to

comply with the foregoing, also some exercises based on the ellipse. Many others may be found by the teacher. At this stage the children may also be trained to judge the comparative dimensions of objects. Care must be taken that the pupils are required to estimate the sizes by means of the eye, any mechanical methods of testing coming afterwards. Suppose the example selected be a window, the lesson may be somewhat as follows: "Which is the greater, the height or width of the window?"

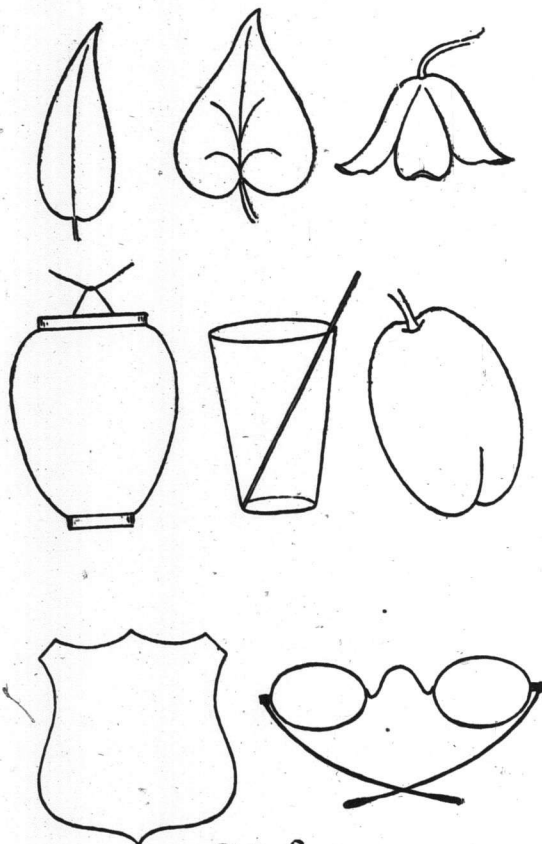


Plate 8.

"How much greater is the height than the width?" (Note that the answer required is not in feet and inches, but in comparative measurements—thus, "one and a half times the width.")

After obtaining approximately accurate replies, show how to verify with the pencil. Hold the pencil at arm's length, close one eye, and let the end of the pencil be held in a line with one side of the window. Keep this end steady and slide the thumb along the pencil, until it is in line with the other side of the window. The pencil must be held at right angles to the arm. Next hold the pencil upright, still keeping the thumb in position, and compare this distance with the height of the window. The pupils will readily see that this furnishes them

with a good means for testing the proportions of their drawings.

[Note the optical illusion in second line in Plate 7. The sides of the triangles appear bowed. This is caused by the series of parallel lines running in different directions.]

The Union Jack.

It is only a small bit of bunting
It is only an old colored rag,
Yet thousands have died for its honor,
And shed their best blood for the flag.
We raise it to show our devotion
To our King, to our country and laws;
As the outward and visible emblem
Of advancement and liberty's cause.

You may call it a small bit of bunting,
You may say it's an old colored rag;
But freedom has made it majestic,
And time has ennobled the flag.

It is charged with the cross of St. Andrew,
Which, of old, Scotland's heroes has led;
It carries the cross of St. Patrick,
For which Ireland's bravest have bled;
Joined with these is our own English ensign,
St. George's red cross in white field,
Around which, from King Richard to Wolsey,
Britons conquer or die, but ne'er yield.

You may call it a small bit of bunting,
You may say it's an old colored rag;
But freedom has made it majestic,
And time has ennobled the flag.

It flutters triumphant o'er ocean,
As free as the wind and the wave,
And the bondsman, from shackles unloosened,
'Neath its shadow no longer's a slave.
It floats over Malta and Cyprus,
Over Canada, India, Hong Kong;
And Britons, where'er their flag's flying,
Claim the rights that to Britons belong.

You may call it a small bit of bunting,
You may say it's an old colored rag;
But freedom has made it majestic,
And time has ennobled the flag.

Canada was the first of Briton's colonies to ask for and receive self-governing powers.

Canada was the first colony of the Empire to form a confederation.

The twentieth century is Canada's century, as the nineteenth was that of the United States.

Canada ranks seventh in the list of maritime nations,

Mental Arithmetic.

By F. H. SPINNEY, NORTH SYDNEY, C. B.

FRACTIONS, ETC.

When pupils have learned to add and subtract fractions by the ordinary method, they will be much interested in a simple artifice by which the operation may be performed by a rapid mental solution.

Place upon the board a few questions in addition:

$$\frac{1}{3} + \frac{1}{4} \quad \frac{1}{6} + \frac{1}{4} \quad \frac{1}{3} + \frac{1}{10}$$

Ask the pupils to add these by the ordinary methods. They of course get the answers $\frac{7}{12}$, $\frac{2}{3}$, $\frac{13}{30}$. How is 7 obtained from 3 and 4? How is 12 obtained from 3 and 4? How is 13 obtained from 6 and 7? How is 42 obtained from 6 and 7? How is 23 obtained from 13 and 10? How is 130 obtained from 13 and 10? When the pupils clearly see that the numerator of the sum is found by adding the denominators, and the denominator of the sum by multiplying, place many such questions upon the board, asking for "hands up" to supply answers.

$$\frac{1}{11} + \frac{1}{6} = ? \quad \frac{1}{10} + \frac{1}{4} = ? \quad \frac{1}{30} + \frac{1}{11} = ?$$

It will be observed that these fractions have denominators which are prime to each other; but even when not prime, the operation can be performed more quickly by this method than by finding the "least common denominator."

$$\text{Thus } \frac{1}{4} + \frac{1}{6} = \frac{6+4}{24} = \frac{10}{24} = \frac{5}{12}$$

$$\frac{1}{6} + \frac{1}{13} = \frac{13+6}{78} = \frac{19}{78}$$

All these steps can be readily kept "in mind," so that a pupil, after a little practice, will infer the answer at a glance.

When the numerators are greater than unity, as

$$\frac{4}{7} + \frac{3}{10}, \quad \frac{2}{3} + \frac{5}{11}, \quad \frac{7}{8} + \frac{1}{2}$$

lead the pupils to observe that the results are:

$$\frac{4}{7} + \frac{3}{10} = \frac{4 \times 10 + 3 \times 7}{70} = \frac{61}{70}, \quad \frac{2}{3} + \frac{5}{11} = \frac{22+15}{33} = \frac{37}{33}$$

The brightest pupils will add three fractions almost as readily:

$$\frac{1}{3} + \frac{1}{2} + \frac{1}{5} = \frac{2 \times 5 + 3 \times 2 + 3 \times 5}{30} = \frac{10+6+15}{30} = \frac{31}{30}$$

In subtraction:

$$\frac{1}{4} - \frac{1}{7} = \frac{7-4}{28} = \frac{3}{28}$$

$$\frac{3}{4} - \frac{2}{3} = \frac{3 \times 3 - 4 \times 2}{12} = \frac{9-8}{12} = \frac{1}{12}$$

$$\frac{5}{6} - \frac{3}{4} = \frac{20-18}{24} = \frac{2}{24} = \frac{1}{12}$$

RAPID MULTIPLICATION.

My pupils are much interested in certain forms of rapid multiplication which will apply to a great variety of numbers. The simplest of these are:

What part of 100 is 50? Then:

$$48 \times 50 = \frac{1}{2} \text{ of } 48 = 24 \times 100 = 2400$$

$$64 \times 50 = \frac{1}{2} \text{ of } 64 = 32 \times 100 = 3200$$

What part of 100 is 25? Then:

$$48 \times 25 = \frac{1}{4} \text{ of } 48 = 12 \times 100 = 1200$$

$$64 \times 25 = \frac{1}{4} \text{ of } 64 = 16 \times 100 = 1600$$

What part of 100 is 75? Then:

$$48 \times 75 = \frac{3}{4} \text{ of } 48 = 36 \times 100 = 3600$$

$$64 \times 75 = \frac{3}{4} \text{ of } 64 = 48 \times 100 = 4800$$

What part of 100 is 12½? Then:

$$48 \times 12\frac{1}{2} = \frac{1}{8} \text{ of } 48 = 6 \times 100 = 600$$

$$64 \times 12\frac{1}{2} = \frac{1}{8} \text{ of } 64 = 8 \times 100 = 800$$

How much is 99 less than 100? Then:

$$35 \times 99 = 3500 - 35 = 3465$$

$$85 \times 99 = 8500 - 85 = 8415$$

How much is 98 less than 100? Then:

$$35 \times 98 = 3500 - 2 \times 35 = 3430$$

$$85 \times 98 = 8500 - 2 \times 85 = 8330$$

How much is 49 less than 50? Then:

$$48 \times 49 = 2400 - 48 = 2352$$

$$64 \times 49 = 3200 - 64 = 3136$$

How much is 51 more than 50? Then:

$$48 \times 51 = 2400 + 48 = 2448$$

$$64 \times 51 = 3200 + 64 = 3264$$

How much is 52 more than 50? Then:

$$48 \times 52 = 2400 + 96 = 2496$$

$$64 \times 52 = 3200 + 128 = 3328$$

How much is 26 more than 25? Then:

$$48 \times 26 = 1200 + 48 = 1248$$

$$64 \times 26 = 1600 + 64 = 1664$$

How much is 24 less than 25? Then:

$$48 \times 24 = 1200 - 48 = 1152$$

$$64 \times 24 = 1600 - 64 = 1536$$

The teachers will observe that this entire operation can be readily performed by a mental solution, and after some practice very large numbers may be used which makes the exercise the more attractive to the pupils.

The Doukhobor migration of eight thousand persons from Southern Russia to Canada in 1899 was the greatest modern exodus of a whole people.

Amendment to the N. S. Education Act.*Editor Educational Review,—*

DEAR SIR,—As secretary of the N. S. Teachers' Union, many complaints have come to me in the last seven years from teachers whose schoolrooms had been invaded by irate, and, in most cases, ignorant parents, who coarsely abused and even threatened the teacher in the presence of the pupils for some transgression or shortcoming of which the said incensed individual fancied the teacher to be guilty. Instances of this kind are not only unpleasant, but they weaken the influence of the teacher and impair her usefulness with the class.

Now, as we had no statute to punish such an offence where the culprit stopped short of actual assault, or to prevent its recurrence, except the unsatisfactory one of binding the obnoxious person over to keep the peace, the following bill was introduced on behalf of the Teachers' Union by Hon. Attorney-General Longley, at the last session of the legislature, and passed through both its branches, with many sympathetic and commendatory expressions, but without a dissenting voice.

In the provincial press, too, all were able to see the reasonableness of what was asked; and not a word of opposition or adverse criticism appeared, except in the case of one unimportant weekly. Indeed, teachers throughout the province always find the reputable press friendly and helpful; and, as it is exceedingly desirable that the amendment to the statutes given below should become as generally known throughout Nova Scotia as possible, I suggest to teachers to see that a clipping of this important Act be sent to each local paper, with the request that it be published for the benefit of all whom it may concern.

W. T. KENNEDY,
Secretary N. S. Teachers' Union.

Halifax, April 18, 1905.

AN ACT TO AMEND CHAPTER 52, REVISED STATUTES, 1900,
"THE EDUCATION ACT."

Be it enacted by the Governor, Council and Assembly, as follows:

5. Said chapter is amended by adding thereto after Section 109 the following section:

109A (1) Subject to the authority of the trustees, the teacher shall have a general oversight over the school premises during school hours, and may exclude therefrom all persons who disturb, or attempt to disturb, the school work.

(2) Every person who, in or upon any school premises and in the presence of a pupil or pupils attending such school, uses profane, threatening, abusive or improper language towards a teacher, or speaks or acts in such a way as to impair the maintaining of discipline by the teacher in such school, shall be liable to a penalty of not less than five dollars, nor more than twenty dollars, and in default of payment, to imprisonment for a period not exceeding thirty days.

Natural Science Teachers' Association of Nova Scotia.

All interested in manual training will no doubt be pleased to learn that the teaching of the branch of it for girls—domestic science—in the public schools of the province has now become so widespread that, in the beginning of this year, it was felt by the teachers of it that the time had come to form into an association.

This was accordingly done on the 5th of January at a meeting held in Truro, and very ably presided over by Miss E. P. McCall, principal of the school of household science there.

Then the first meeting of the new association was held on Thursday, April 20th, in the domestic science rooms of the manual training school in Halifax. There was a very full attendance of members, and after the business of enrolling new members, reading of secretary's report, etc., had been transacted, the president gave a short address of welcome, in which she took occasion to emphasize what was embodied in the constitution as one of the objects of the association, namely, "to secure for domestic science its proper place in the curriculum of school studies for girls," and went on to show that this could only be gained by making the subject an intellectual study, and teaching it as a science.

Three very interesting and instructive papers were read by members. The first by Miss A. B. Juniper, of the Macdonald consolidated school, Middleton, gave some very valuable information in regard to the methods of teaching the subject in English schools, and showed that there it ranks as equal to any other branch of school study. The second paper, by Miss Cora Archibald, of Truro, was a very full account of a short course in dairy work taken at the new agricultural college, Truro. The last paper, by Miss Sterritt, of Yarmouth, related a number of ingenious devices adopted by her for meeting the expenditure for materials needed in her lessons.

The chairman of the Board of School Commissioners said a few words of welcome on behalf of the Halifax school board. Mrs. Charles Archibald, the association's first honorary member, gave, in her usual graceful way, a short address of congratulation and encouragement; and then Supervisor McKay expressed very strongly his desire to have the subject of domestic science acknowledged as of equal value with other subjects taught in our schools, and also the absolute necessity of teaching

it as a science, correlated with physics, chemistry and other school subjects, and not as mere cookery.

It was felt by all present that the meeting had been both inspiring and instructive. Future meetings, it is hoped, will afford further opportunities for the discussion of the aims to be kept in view, and the best methods to be adopted in teaching this important subject; and, as one result of the meeting, it is most earnestly hoped that the Council of Public Instruction will, in the very near future, agree to acknowledge the importance of domestic science by allowing it to count for as much in grading examinations as any of the other prescribed studies.

President, Miss Helen N. Bell, Halifax; Secretary-treasurer, Miss E. P. McCall, Truro.

The Future of English.

It is an interesting and significant fact that negotiations between Generals Nogi and Stoesel for the surrender of Port Arthur were carried on in the English language. Neither of the generals understood the language of the other. English was the only foreign language both of them understood, and so they talked English. For over two hundred years French has been the language of diplomacy. It is possible that it will soon be displaced by English, which is already the common language of commerce.

There is a great future for "the tongue that Shakespeare spoke." Already it is the language of 130,000,000 of people; while Russian is used by 100,000,000, German by 75,000,000, Spanish by 70,000,000, and French by 42,000,000. In another century the English speaking people will probably outnumber all those who use the other languages mentioned. It will be the language of the North American continent (probably including even Mexico), of the island continent of Australia, of New Zealand, and a large part, and the best part, of Africa. In another century the population of what is now Greater Britain will far exceed the population of what is now the United States and Great Britain combined; so it seems quite certain that English is destined to become the most widely used language in the world.—*Hamilton Herald*.

Canada's sea coast line is equal to half the circumference of the earth.

Nature Study.

To the majority of pupils the growth of plants is the most interesting department of nature study. There is no other subject more easily correlated with the pupil's other studies, or that lends itself to so many interesting experiments. It can be utilized to create a love for nature work, and it is most important in its practical results.

The following Notes of Lessons on How Plants Feed, selected from *The Practical Teacher*, will be found very helpful to the readers of the REVIEW.

Class.—Suitable for Grade VIII in either urban or country schools.

Time.—Two lessons of thirty minutes each.

Object.—The chief object of these lessons is to instil a love of nature in the minds of the children by exciting their interest in natural objects, but they will be found helpful in a course of systematic botany.

STEP I. PREPARATION.—In order to grasp this subject thoroughly, the children should have received some instruction in the nature and properties of carbon, oxygen and nitrogen; they should know that air is a mixture of these last two gases, and that it contains a small quantity of carbonic acid gas, which is formed by the union of carbon and oxygen. Experiments should be made in water culture. Having placed a few peas or beans in damp sawdust until they begin to germinate, wash them in clean water and fix them in position by means of corks in wide-mouthed bottles. A normal solution for water culture can be made as follows:

Distilled Water,	½ gall.
Potassium Nitrate,	1 dram.
Calcium Sulphate,	½ dram.
Calcium Phosphate,	½ dram.
Magnesium Sulphate,	½ dram.
Sodium Chloride,	½ dram.
Chloride of Iron,	A trace.

This is a standard solution supplying all that is necessary for the growth of the plant. That each of these is necessary to the growing plant is proved by growing peas in different solutions, each corresponding to the normal solution, but with each of the salts omitted in turn; the effect of growing in pure water should also be tried. These specimens should be kept in the class-room so that the children may watch their growth. A day or two before the lesson a plant should be shut up in a dark cupboard in order that its leaves may be experimented on during the lesson.

STEP II. PRESENTATION.—All children know that an animal has to take food of some kind, and those that keep pets dearly love to feed them; but plants also take nourishment in a less obtrusive, but none the less interesting, manner.

On what does a Plant Feed?—In order to answer this question, let us find what substances go to build

up the plant. Take a turnip or a potato, and, after weighing it, dry it slowly in an oven; this will reduce the weight very considerably, showing that the greater part of the turnip consists of water. Continue heating, but at a higher temperature, and the turnip will soon be reduced to a black lump like a cinder, but this cinder, as we have already learned, is a form of carbon, so we see that next to water carbon is the substance that enters most largely into the composition of a plant. Now wrap a wire round the charred remains and hold them in a Bunsen flame; soon there is nothing left of our turnip but a little white ash, which represents the mineral matter which is present in the plant.

We have found that the plant is built up of water, carbon, and a little mineral matter, and therefore it must feed on these substances, but how does it obtain them? Let us examine the specimens that we have been cultivating in water. Those that are supplied with the normal solution are in a flourishing condition, showing that they have got all the nourishment that is necessary for their proper growth. The water and mineral matter are contained in the bottle, so the plant evidently absorbs these by means of the tiny rootlets that spread out in the solution. Those specimens that are living in solutions that are deficient of any of the necessary salts are not doing well, the one that has no iron is wanting in color, and the others are stunted and weak. The plant, then, obtains its water and mineral matter by means of its roots, but it must obtain its carbon in some other way, for the normal solution contained no carbon at all. The air, however, contains a small quantity of carbonic acid gas, and it is the function of the leaves to break this up into the carbon and oxygen of which it is composed, retaining the carbon for the use of the plant, and setting free the oxygen.

How the Root Feeds the Plant.—We have seen that the root supplies the plant with the water and mineral matter that it requires. Now let us see how this is effected. All the nourishment that the root obtains from the ground must be in a liquid form; in fact, it is contained in solution in the water that it absorbs, but the point arises, how does this liquid run *up* the tree in order to feed the shoots at the top, the usual order of things being for water to run down. If we take a very fine tube and fasten it in a vertical position, with one end dipping into some colored water, we shall find that the water is drawn some distance up the tube, and if we take several tubes we shall find that the water stands highest in the narrowest tube. Water will rise in a lump of sugar in the same way, for the spaces between the particles of sugar act like very fine tubes. The oil creeps up the wick of a lamp for the same reason; this may be shown by hanging a piece of wet lamp-wick over the edge of a beaker of water and letting the end dip into a pot of red ink; the ink will gradually creep up the wick until it reaches the beaker and colors the water. These examples serve to illustrate the way in which the

sap rises from the roots to the highest point of the tree.

How the Leaves Feed the Plant.—We have seen that the leaves supply the plant with carbon by breaking up the carbonic acid gas which is found in the air, but we want to know what there is in the leaves to bring about this decomposition, and next how the carbon, which is a solid, is conveyed through the pores of the plant in order to supply nourishment to every part that requires it. If we soak leaves in water, they do not color the water at all, but if we boil them for a few minutes, then soak them in methylated spirit, they will lose their color, and the spirit becomes green. Evidently, then, the well-known green color of the leaves is due to some substance which is insoluble in water, but soluble in methylated spirit. This substance is called chlorophyll. If a few sprigs of water-cress are placed under water and the whole exposed to the sunlight, the action of the chlorophyll will be shown by the bubbles given off from the leaves. These bubbles will not be given off unless the leaves are exposed to the sunlight, for, as will be clearly shown presently, the chlorophyll will only act upon carbonic acid gas in the presence of light. The duty of the leaf, however, is only half done when it has obtained a supply of carbon, for solid carbon is perfectly useless as a food for the plant. This fact is well known to dwellers in towns, where the leaves of plants are apt to get covered with soot, which is a form of carbon, but these particles of carbon, instead of feeding the plant only choke up the pores of the leaves. Before the carbon can be of any use it must be changed into something that the plant can absorb into its system, viz., starch and sugar.

The properties of sugar are familiar to every child, and starch is known as a white substance that is used for stiffening linen. If we make some thin starch paste and add a few drops of solution of iodine, the starch paste will turn a deep blue color; this is the best test for ascertaining whether starch is present or not. Pour a few drops of solution of iodine into some flour paste, also pour some on a piece of bread and on a slice of potato; in each case we get the blue color indicating the presence of starch. Let us bleach a leaf by boiling it and soaking it in methylated spirits until it has lost its green color; if we now dip it into a solution of iodine it will turn blue, indicating the presence of starch. This is a store of food stuff that the leaf has formed from the carbon, and which is laid up to carry the plant over the sunless periods when the leaves cannot obtain carbon.

Now test a leaf from the plant that has been shut up in the dark cupboard. We shall find that it does not contain starch, for the plant has drawn on its stock of food without the leaf being able to replenish it. We have not quite come to the end of the matter yet, for although the starch has gone from the leaf, the point as to how it went still remains to be settled, for, as we shall see, starch is quite as

insoluble as carbon in cold water. This is shown by shaking up some starch powder in a little water and then filtering it to remove the starch that has not been dissolved; on testing the clear liquid that runs through, we find no trace of starch, showing that starch is insoluble in cold water. Before the starch can be removed from the leaf, therefore, another change must take place; the starch is changed into sugar, which is, of course, soluble and easily carried away.

What a wonderful little factory a simple leaf is, for here, as we have seen, carbonic acid gas is first of all decomposed, the carbon being converted into starch and stored up; then, as it is required, this store of starch is again changed into sugar and carried away. We might ask why the carbon is first changed into starch instead of being changed straight away to sugar. A moment's thought will show the beauty of this arrangement, for, if the leaves kept their store of food in the form of sugar, they would lose it during every shower of rain, hence these wonderful changes.

STEP III. ASSOCIATION.—Several points would be taken up during the lesson and associated with kindred ideas. Thus plants would be compared with animals in respect to the nature of their food and their method of feeding.

Attention would be drawn also to the wonderful balance that nature preserves, for by breathing into lime-water, we can show that animals breathe out carbonic acid gas, which would in course of time render the air quite unfit to support animal life unless some means were taken to remove it from the air. This, we have seen, is done by the plants, and thus the balance is preserved.

STEP IV. FORMULATION.—1. Plants are built up chiefly of water, carbon, and a little mineral matter.

2. The water and mineral matter are obtained by the roots from the earth.

3. The leaves supply the carbon; the chlorophyll in the leaves in sunlight decomposes carbonic acid gas and retains the carbon.

4. This carbon is converted into starch and stored up in the leaves.

5. The starch is changed to sugar when the plant requires nourishment.

STEP V. APPLICATION.—In an agricultural district the application of these lessons would be most important. Two points to be dealt with would be the use of manures, both natural and artificial, in supplying the necessary plant food, and also the fact that as plants do not all require these various food stuffs in the same proportion, it is necessary to vary the crops in order to obtain the greatest return from the soil.

The wind of May
Is sweet with breath of orchards, in whose boughs
The bees and every insect of the air
Make a perpetual murmur of delight.

—William Cullen Bryant.

New School Law.

Below is given the text of the recent addition to the New Brunswick School Law, known as "Regulation 48, Conveyance of Children to and from School."

In pursuance of sections 57 and 124, in reference to the conveyance of children to and from school, the following conditions and regulations are prescribed:

2. The trustees may purchase for the use of the district if in their opinion it is expedient to do so, a sufficient number of vans for the conveyance to and from school of children residing within the bounds of the district, but at a distance of over one mile and a half from the school; and shall make provision for the proper protection and care of said vans.

2. Children residing not further than one mile and a half from the school shall have no right of conveyance in the school vans, but the trustees, in their discretion, may permit the younger children who reside within one mile and a half of the school to be conveyed in the vans; provided it shall not be found necessary on that account to increase the number of vans otherwise required.

3. Pupils of the school not resident in the district, or temporarily resident therein for the purpose of attending the school, shall have no right to be conveyed in the school vans.

4. The trustees shall advertise for tenders for the conveyance of the children by posting notices in three public places within the bounds of the district at least fourteen days before the date assigned for the opening of such tenders; and also in a newspaper, if any, published in the county; such notices shall define the route or routes to be followed, shall state the approximate number of children to be carried, whether or not the contractor is to furnish a vehicle, and such other particulars as may place the tenderer in a position to form an intelligent judgment of the duties required of him in case his tender shall be accepted.

5. After the opening and consideration of the tenders received, the trustees may accept or reject any or all of such tenders, and may enter into a contract, in their discretion, with any person or persons for the performance of the duties required, whether such person or persons have previously sent tenders or otherwise.

6. All contracts for the conveyance of the children must be in writing; and each contractor shall give a bond to the trustees for the faithful performance of his contract in the sum of \$100.

7. Every contract shall, in addition to other matters agreed upon by the contracting parties, provide:

(a) That the contractor shall furnish necessary robes, blankets, etc., to keep the children comfortable; and in case the district does not provide the vans, that the contractor shall furnish a suitable vehicle or vehicles with sufficient seating capacity to convey all the pupils belonging to the route.

(b) The contractor shall provide a good and reliable horse or team of horses for each van required, and a trustworthy driver, who shall have the con-

trol and care of the pupils, and shall be responsible for their conduct and safety while under his charge.

- (c) That the driver shall stop at the highway entrance to each of the residences of the children, for a period not exceeding two minutes, for the purpose of taking on board the van the children belonging to such residences.
- (d) That the pupils shall be delivered at the schoolhouse not earlier than half an hour and not later than ten minutes before the regular hour for the opening of the school, and that the van or vans shall be ready at the door of the schoolhouse not later than five minutes after the regular hour of closing.

8. The trustees may, in their discretion, make special arrangements for the conveyance of children living in branch roads from their residences on such branch roads to the main road for the purpose of meeting the van or vans on their way to and from the school.

The School Visitor.

The Hillside school had begun its fall term. There was a new teacher—a young lady with a bright face and pleasant voice.

"Now, children," said the teacher one day, "I think the school visitor may be here to-morrow or the next day." The children all promised to behave well. They did not like to hear that the visitor was coming. He was very tall, very grave, and very strict; and they were afraid of him.

The next day this tall, stern gentleman said to himself, "I will visit the Hillside school to-day."

He went to the door. The wind was sharp and chilly, so he turned back and said: "Wife, can you tell me where my overcoat is?"

"Yes, it hangs in the barn chamber. It has been there all summer," she replied.

Dr. Bray put on his coat and walked away to the schoolhouse.

The teacher placed a chair for him on the platform. Just as he had asked the first arithmetic class a puzzling question, one of the girls at the desk gave a little scream. All the others nestled and fidgeted, looking as if they would like to scream too.

The visitor turned and looked at them very sternly indeed. The teacher touched her bell and shook her head at them.

"Please, teacher," squeaked one little voice, "it was a mouse."

"I hope we may have order in the schoolroom now," said Dr. Bray in his deepest tone. And then he gave out his question once more.

Pop! another mouse! This one ran over to the boys' side, and two or three of the boys saw where it came from. They nudged each other and clapped their hands over their mouths to keep from laughing aloud.

The teacher touched her bell again and called "Silence!" She felt very much disturbed that her boys and girls should act so. But, as she glanced toward the visitor to see how he took it, she was obliged to smile herself; for a third mouse jumped out of the good man's pocket and scampered away.

The boys laughed aloud now, and the girls were all in confusion.

Dr. Bray arose from his chair, prepared to say something very severe indeed. To do this properly he put his hands in his pockets, and out jumped the last poor, frightened little mouse.

The doctor's overcoat had hung so long in the barn chamber that a mother mouse had made her snug nest in one of the pockets, and now her little ones had all come to school with the visitor.

The visitor had a broad smile on his own face now. "I really must beg your pardon," he said, "for bringing a pocketful of mice to school."

The teacher then gave a ten minutes' recess, and it was a very merry one. Then the scholars came to order and behaved very well indeed, but they did not feel half as much afraid of Dr. Bray after that visit.—*Woman's Journal*.

I have mentioned in these hints before how I have found schools in which pupils and teachers were discussing some very practical affairs of common, everyday life. In one, there was a talk of telegraphs and telephones, as to how they are constructed, how operated, their advantages, etc. In another, as to the things in our common markets that are brought in by the railroads, what they are, whence they come, etc.

Now there is plenty of such and similar topics. And, in almost every school, it would be well to have a little time set apart every day, or frequently at least, for the discussion of such topics. Pupils would thereby acquire much useful knowledge. And what is perhaps of equal importance, they would learn to connect the affairs of everyday life with the work of the schools. One of the greatest lacks in much of our school-work, is that the pupils see no relation between it and the life they live outside the schoolroom.—*School and Home Education*.

To overcome the tendency of primary pupils to value all words equally in reading, I have suggested to teachers additional attention to phrasing and developing in the minds of the pupils a quick perception of the natural grouping of words. Careful attention to this matter in such a simple and natural way as to awaken an interest in the pupils will establish the habit of unconsciously connecting related words and uttering them with reference to the ideas which they convey. I have found that the pupils respond very quickly to the suggestion to "find the words that belong together," and when they speak them with this grouping in mind, natural and effective expression can hardly fail to result.—*Selected*.

What Birds Do For Us.

One of the most important features of bird study should be to make the children realize the great value of birds to man. Among the birds which do not appeal to little children is the common crow. When they see him in the cornfields pulling away the young sprouts and nipping the swollen kernels at the roots they naturally think he is doing great harm. They are partly right, but at the same time he is doing good, for he eats the cut worms, wire worms, and white grubs, which are most destructive to the corn crop. A good farmer will prevent the loss of his corn by the crow by lightly coating the seed with a solution of tar. The crow, after a sample of this, is quite content to turn his attention to the cut worms, thus preventing them from destroying the corn.

The crow blackbird, another bird which we are very apt to think of as only doing harm when we see him in the corn and grain, is often busily engaged eating May-bugs which are serious pests to the agriculturist.

We all know that the little English sparrow does great damage to fruit and shade trees. He destroys the buds and blossoms of the pear, peach and cherry trees, and often mutilates the blossoms of the maple and elm trees without eating a particle of them.

The cedar birds' fondness for fruit often overcomes him, and he helps himself to such delicacies as raspberries, blackberries and cherries, and in his search for insects perhaps does harm to the apple blossoms, but the farmer readily forgives him, as his more substantial diet consists of immense quantities of insects which are so injurious to trees, that in some cities they strip the elms year after year.

It would take pages to tell of the many ways in which birds are of use to man, but a few examples given the children will incite them with the desire to find out for themselves the value of each bird which they study.—*Selected.*

What bird builds no nest, but puts her eggs in the sand?

What birds lay their eggs in the nests of other birds?

What bird builds her nest in chimneys?

What bird builds her nest under over-hanging eaves of barns or houses?

What bird builds nests in holes in trees?

Name some birds that nest in holes in the ground.

Name some birds that build nests in clefts of rocks.

What birds build colony nests, a very large number building in one place?

In almost every line of export and import, the trade of Canada is rapidly increasing.

Transactions of N. B. Historical Society.

Number Six of the Collections of the New Brunswick Historical Society, which has just appeared, completes the second volume of the transactions. The contents of this number include the story of the Old Townships of the River St. John, a very interesting series of documents edited by Rev. W. O. Raymond, LL. D.; the journal of Gamaliel Smethurst, who explored the North Shore of New Brunswick in 1761, edited by Prof. W. F. Ganong, Ph. D., who places it with the narratives of Cartier, Champlain, Denys and LeClerq as among the precious classics of English literature; the Royal Commission and Instructions to Lieut.-Governor Thomas Carleton, with introductory note, by W. M. Jarvis; and a sketch of the Life and Administration of Lieut.-Governor Carleton, by Rev. Dr. Raymond. Instructive maps accompany the first two articles. The Carleton papers are illustrated by *fac simile* reproductions, including a portrait of George III from Carleton's commission, and by photographs of the church at Natley Scures, in Hants, where Lieut.-Governor Carleton is buried, and a tablet there erected to his memory by the legislature of New Brunswick.

The teacher must be a constant and interested reader of the books he is demanding his pupils to read. He must know and enjoy his "Robinson Crusoe" and "Alice in Wonderland," his "Being a Boy" and "Little Women." His knowledge of juvenile literature should not be merely a shadowy reminiscence. The teacher who has ceased to read the grade of books which make a normal appeal to the immature minds of his pupils is beginning to lose his usefulness. For he owes to the students not merely to tell them the titles of the books to be read, but to stimulate them and sympathize with them from his own vital interest. Many a teacher has been kept fresh for his professional work by his reading of children's books.—*The Outlook.*

It's little I can tell

About the birds in books;

And yet I know them well,

By their music and their looks;

When May comes down the lane,

Her airy lovers throng

To welcome her with song,

And follow her in train;

Each minstrel weaves his part

In that wild-flowery strain,

And I know them all again

By their echo in my heart.

—Henry Van Dyke.

The Presumption of Brains.

In these days most children are thought to be too feeble to go to school in a storm. Instead of the little red schoolhouse, they have palaces of pressed brick, with furnaces, double windows, and polished desks; and when it rains the storm signal stops the school. We do not recognize the probability of physical hardihood; and we do too little to develop it.

No more do we recognize intellectual vigor—brains—in the child; and many of the recent methods of teaching do not stimulate the growth of mental fibre. To begin with, the kindergarten is an attempt to systematize play, and by a species of legerdemain to get from play the discipline of work. But play, useful and necessary as it is, is spontaneous activity; and it ceases to be play when reduced to a system.

Next object comes in and entertains the child through the senses; as if the senses were all-important, and the brain non-existent or not to be disturbed. But the sense perceptions predominate in the child; his whole life before coming to school is made up of them. It is not these that need stimulating, so much as the mental activity to which they ought to lead. The objective method is good, even indispensable, in due proportion; but the tendency is to so emphasize it as to neglect the brain which most needs and has less of the training.

When we come to reading, the methods are simplified to the last homeopathic dilution. The simplest word is illustrated by a picture of the most familiar object—a cat; and from this we advance by imperceptible gradations, interminably. This elementary process is good for a start; but it should be dropped very early—as soon as the child catches the notion of what reading is. There is a presumption that the child has brains, and that he can soon see through so simple a process.

And spelling is tabooed by many progressive educators, especially the spelling book; as if it were too great a tax upon the "gray matter" for the child to learn to spell a word which he has not used!

In number, objects and pictures are used, in many of the highly elaborated text-books, to such an extent that any one of the higher orders of domesticated animals ought to learn the elementary processes of arithmetic in less time than is assigned for the average child. I am not objecting to these ingenious methods, at the beginning; but they ought to be dropped at the earliest possible moment, so that the child may be compelled to employ his own activity—to use his brain; for, let it not be forgotten, the child is presumed to have brains.

In the study of language—for grammar is a term not to be tolerated till the age of adolescence—the simplifying process has eliminated everything above mere childish twaddle. Nothing beyond the child's limited apprehension is to be placed before him. The geography is made as familiar as the school-yard. The supplementary reading is, much of it, written down to the child's low level. Finally the text-book is abandoned; and the teacher, laced in

corsets of snug-fitting programmes and definite directions, is set up to talk, talk, talk. School must be made interesting. The children must not be over-worked.

There is a presumption at the start that the child has brains. It is safe, also, to assume that he has used that organ to some extent, and in more directions than one, before coming to school; and he must be compelled to use it again, and to use it constantly. This presumption will enable the teacher to skip many of the methods and to lighten and shorten the work.—*Pennsylvania School Journal*.

Canada's New Ocean Ports.

It is admitted on every hand that the terminal seaports of the Trans-Canada leave nothing to be desired. The harbor of Port Simpson is said to be the finest on the Pacific coast north of San Francisco. It has the additional advantage of being much nearer to Yokomama than either Vancouver or San Francisco. Nottaway, on James Bay, which is to be reached by a branch of the main line, is the only deep-water harbor on the bay, and with some dredging might be used by vessels drawing thirty feet of water. The coast line of James and Hudson's bays, tributary to this railway, will be about four thousand miles. Chicoutimi, on the Saguenay, can be reached by vessels of any draught, and Quebec has magnificent docks which have cost the government millions of dollars, with deep-water berth and elevator facilities for steamers of any draught. The new bridge now building over the St. Lawrence at Quebec will enable the Trans-Canada road to make use of St. John and Halifax for winter ports if ever those of Quebec and Chicoutimi should be blocked by ice.

Too many a parent is satisfied if his child is trained to make a living. We teachers must have a higher aim; we must feel that we are training our pupils to make not, in the first place, a living, but a life. There is a wide difference. The beasts of the field make a living. They rise in the morning, eat the food that God provides, and the day is over. They die and the world is no better for their living. Some men are like this; they eat and sleep and die and the world never knows that they are gone. This is not life, such men make a living. This rather will be our ideal for ourselves and our pupils; we will so live that wherever we may be our presence shall be felt. Our associates will be better because we have known them. The civic life in our communities will be purer because we have lived in them, and we ourselves will win the blessings that comes to those who bring out the heaven that lies hidden upon this earth.

The Canadian Pacific Railway was built in five years, though the contracts allowed ten years for its completion. It was finished in 1885.

English View on American Education.

Dr. William T. Harris has recently called attention to a notable English report on American education, which he thinks should be the subject of careful study in every normal school in the United States during the current year. The report referred to is that commonly known as the Mosley Educational Commission.

The origin of this commission, as pointed out by Alfred Hosley, in the preface, dates back to South Africa. Mr. Mosley was the business partner of the late Cecil Rhodes, and through varied industrial and commercial enterprises in South Africa, he came in relation with many Americans, and notably several American engineers. The sagacity, skill, and intelligence of these men turned his attention to the United States. Accordingly he planned a visit to this country, as he himself says, "for the purpose of seeing what sort of a country it was that was responsible for sending so many level-headed men to the Cape."

He spent some months in the United States, and was so keenly impressed with the efficiency of our educational institutions that he returned to England with the determination of getting together a party of experts to re-visit our country and test the soundness of his conclusions. Mr. Mosley financed the movement, and he secured in Great Britain twenty-six educational experts who returned with him to the United States during the autumn of 1903. Every possible educational calling was represented on the commission, as well as every shade of educational creed.

The subjects of investigation placed by Mr. Mosley before the commission were (1) development of individuality in the primary schools; (2) social and intellectual effects of the wide distribution of secondary education; (3) effect of specific instruction given in business methods and applied science; (4) present state of opinion as to the professional and technical instruction of university rank designed with special reference to the tasks of business life.

A volume of four hundred pages is the result of the investigation. The intimation of this report, written by Mr. Mosley himself, has the ring of a clear-sighted captain of industry. He was struck everywhere in the United States by the large amount of money devoted to educational purposes; the magnificent buildings and their lavish equipment; the practical character of American educational aims; the intense belief of the Americans in education; and by the prolonged period devoted to school training. He points out three defects in American education, viz., the large preponderance of women teachers, neglect of music talent and inferior music instruction, and specialized tendencies in sports.

Each one of the commissioners makes a detailed report. These individual reports give personal view-points, but the consensus of opinion of the entire commission may be briefly summarized as follows:

1. Absolute belief in the value of education both to the community at large and to agriculture, commerce, manufactures, and the service of the state.
 2. Belief in education has been the effect rather than the cause of American prosperity.
 3. In competing with American commerce, England in the future will be called upon to face trained men, gifted with both enterprise and knowledge. The commission impresses on the British public the absolute need of immediate preparation to meet such competition.
 4. The close connection in the United States between theory and practice, the practical bent of men of letters and science, and the service of numerous experts in every branch of useful knowledge.
 5. Spirit of co-operation which animates teachers and pupils—willingness of students to learn and desire of teachers to help their pupils in every way possible.
 6. Absence in America of class prejudices and of religious connections with education.
 7. Growth of manual training and its high value as an educational discipline in developing handiness and alertness and in familiarizing the pupils with constructive processes.
 8. Liberality displayed not only by the public, but also by private donors, on behalf of education.
 9. Small remuneration of teachers in the face of wealth of provision in the form of buildings and equipment.
 10. Injurious influence of the growing preponderance of women teachers. (Twenty-five members of the commission reach this conclusion; one member dissents from this view, and one member regards the subject as an open question).
 11. Co-ordination of education and ease with which American children pass from one grade of school to the next higher.
- The report is in all respects the most discriminating treatise on American education that has appeared in many years, and its value to us is no less great than to the British educational public. While criticizing adversely certain educational aims and practices, it is on the whole highly complimentary to the educational systems of the United States.—*Will S. Munro, in N. E. Journal of Education.*

An old Scotch farmer, being elected a member of the local school board, visited the school and tested the intelligence of the class by his questions. The first inquiry was:

"Noo, boys, can any o' you tell me what naething is?"

"After a moment's silence, a small boy in the back seat arose and replied:

"It's what ye gi'e me t'other day for haudin' yer horse!"—*London Answers.*

Dalhousie Convocation.

The convocation of Dalhousie University was held on the 25th of April. The three Maritime Provinces were all represented in the graduating class—55 from Nova Scotia, 6 from New Brunswick, and 4 from Prince Edward Island. There were 36 graduates in arts, 12 in law, 12 in medicine, 4 in science, and 1 in engineering.

During the past year the science department was enlarged by the addition of machinery for the mining laboratory and specimens for the geological museum. The department of civil engineering is now in satisfactory working condition with forty-six students, including a very successful class in mechanical drawing. A fair share of the bursaries and special prizes were won by the graduates of the Halifax Academy. T. T. Fulton, B. A., of Bass River, has the distinction of being the first graduate in mining engineering. Prominent among the graduates in law was Ira A. MacKay, Ph. D., from the education department of Cornell University. It is to be regretted that the legal profession should have captured one of the best qualified educationists of the province.

New Brunswick Teachers' Association.

The third annual convention of the New Brunswick Teachers' Association met in the high school, Fredericton, April 24th, President Wm. McLean in the chair. The delegates present were: W. M. McLean, W. J. S. Myles, J. Frank Owens and Thomas E. Powers, of St. John; Charles D. Richards, Woodstock; R. Ernest Estabrooks, McAdam; Miss Bessie M. Fraser, Grand Falls; H. Burton Loggie, Chatham; H. H. Stuart, Harcourt; Frank A. Good, Fredericton; Fred. A. Dixon, Sackville; W. R. Shanklin, Sunbury, Queens, and S. W. Irons, of Moncton.

The secretary-treasurer's report showed 358 paid-up members, exclusive of Albert County, which sent no returns. New subordinate associations since the last meeting were organized in Gloucester, Westmorland and Moncton. The prospects for the association were bright. The accounts showed a small surplus. The salary schedule and declaration of December last was unanimously endorsed by the convention.

It was resolved that the executive appoint three persons for each county or city, and one or more persons for the normal school to solicit new members.

It was unanimously resolved that the convention endorse the three recommendations in the Chief Superintendent's report, as follows:

"That the provincial grant to teachers of the

first and second classes after two years of service in the public schools shall be increased by ten per cent for third year, and by a further ten per cent each additional year thereafter until a maximum is reached of \$200 per year for first class male teachers; \$150 for first class female teachers, and \$120 for second class female teachers."

"That the sum of \$40 per year, instead of \$30, as at present, be paid directly to teachers out of the county fund, and that in order to meet the additional claim upon the fund the amount levied upon each county shall be equal to forty cents for every inhabitant of the county, instead of thirty cents, as at present."

"That each parish, so far as may be found practicable, shall constitute a single school district, with a school board elected or appointed as the legislature may determine. Among the important duties of the parish school board would be the grouping of the present districts and the establishing of central graded schools wherever the conditions would permit the appointment of competent teachers and the local supervision of all the schools of the parish by the agency of a secretary. The minimum rate of assessment should not be less than one-half of one per cent of the assessable valuation of the parish. It would enable the trustees to increase the local salaries of the teachers by at least fifty per cent without imposing too heavy a burden upon any locality."

On motion, the executive, with power to add to their number, was appointed as a standing committee.

The per capita tax was raised from ten to fifteen cents.

At the evening session the following resolution passed unanimously:

"In view of the expensive machinery of the normal school and the large number of trained teachers annually passing out of the institution, we feel that there is no scarcity of teachers to meet the needs of the province if adequate remuneration be offered by trustees. We therefore resolve that the legislative committee of this association strongly protest against the renewal of third class licenses and the issuing local licenses by inspectors."

It was unanimously resolved that all members of the association changing schools notify the secretary of the county association, and also that they be requested to report when they have secured schools. And further, that the county secretaries be urged to make a list of all unfilled schools, and furnish information when possible to members of the association.

No information concerning vacancies is to be given to those not members of the association.

The officers elected were: W. M. McLean, re-elected, president; H. Burton Loggie, vice-president; H. H. Stuart, re-elected secretary-treasurer; F. A. Dixon, Rex Cormier, R. E. Estabrooks, B. C. Foster and Miss Bessie M. Fraser, additional members of executive,

TEACHERS' CONVENTIONS.

KINGS AND HANTS COUNTIES INSTITUTE.

The annual teachers' Institute of District No. 5, comprising Kings and Hants Counties, met April 19th and 20th at Hantsport. The first session began at 9.45 a. m., on the former date, Inspector Roscoe, president, in the chair. After enrolling 120 teachers and some routine work arranged for, the president gave a short address of welcome, and outlined the work according to the programme. Principal Robinson, of Kentville Academy, read a short paper on Suggestions for Nature Study. After showing how natural the study of such subjects was, and yet how vague were the ideas of it in the minds of many, he outlined a plan which, if followed, would systematize the subject. The basis of this plan was to use the copies of the sheets sent out to teachers to fill in, entitled, Phenological Observations. Three would be needed, one for the pupil, one for the teacher, and one for the inspector. The one in the hands of the teacher should be filled for future reference. This would certainly improve matters, as there is no arrangement at present for continuous work in this delightful subject.

An illustrative lesson on the preparation of oxygen was given by W. H. Powell, of the Maitland school. A class of Grade X pupils was taught by various tests the physical and chemical properties of this element. After adjournment, the second session opened by a discussion on the relative values of the two systems of teaching music, tonic sol-fa versus staff notation. Mrs. P. E. Parker, a teacher of the Wolfville staff, outlined a plan by which the two might be combined, taking the former for the basis, and joining it as soon as possible to the staff notation. This she did very thoroughly, and the impression was fixed in the minds of all, that after all perhaps this was the better plan. And as it did not require that a teacher should be a good singer to do this, so it seemed apparent that there was no real variance between the two. Professor Haley, of Acadia University, then gave a clear exposition of the method of transmitting either impulses by the Marconi wireless telegraphy method. By diagrams and some simple apparatus he proved that the theory is well grounded, and that this mysterious device, although in its infancy, is here to stay, and in the years to come will be a great boon to mankind. Although not professing to explain everything about it, Professor Haley succeeded in interesting the teachers and others present, as well as clearly expounding the accepted theory with reference to the susceptibility of the ether to receive and transmit impulses.

Miss A. B. Juniper, teacher of household science in the Middleton consolidated school, read a carefully prepared paper on Discipline, as it affects the tone of a school. Comparing discipline in England with that in Canada, as far as she had seen it, she thought we were behind in many respects. Dis-

cipline she regarded as covering everything that improved the tone of a school, and that it meant more than perfect order in the schoolroom. As the teacher made or marred the school, so the teacher must be the example in discipline. Teachers, to have the respect of their pupils, must be moral, neat in appearance, self-controlled, and exacting in matters deemed of little importance by many. Principal A. Patterson, who is now seventy-five years of age, and still in active teaching at Acacia Villa school, complimented Miss Juniper on the ideas set forth by her, and proclaimed that what was needed to-day was efficient teachers, men and women of good moral fibre, quick to see the needs and ready to apply the cure.

The public meeting in the evening was a large one. The programme was a varied one, consisting of a prettily executed hoop-drill by twenty young ladies of the Hantsport schools, addresses on domestic science, its needs and benefits, by Miss Juniper; the development of the mineral resources of Nova Scotia, by Prof. Dahl, of King's College, Windsor, and Dr. Kierstead, of Acadia University, who spoke on the study of language and literature. The latter speaker was supplying the place of Superintendent MacKay, who was called away by the illness of his aged mother. Other music was supplied by Hantsport ladies, who are noted for their musical talent, and also by Principal Ford, of the Wolfville schools, who is an excellent teacher, not only in the schoolroom, but as well on the violin.

Thursday, April 20th, was crowded with work. Beginning at 9 a. m., a lesson was taught to a class of Grade VIII pupils by Miss Kaulbach, of Kentville Academy. This was a language lesson. The poem called "Bismallah"—"In God's Name," was written on the board and each pupil had a copy. It was a well taught lesson, conversational in manner and the salient points in diction, meanings of words, structure, were noted, and the story reproduced at the close by the pupils. Then followed a lesson to the same class on Mathematical Drawing, by Miss M. E. Parker, Hantsport. This lesson was well taught also, the children performing the work on the blackboard in the presence of all. Miss E. J. Yuill, Wolfville, gave an interesting address on English literature taught in Grades IX and X, more particularly Lamb's Tales. She gave the methods she used, and clearly showed how it could be done in a miscellaneous school. The main idea was to get the portraiture of the different characters in the pupils' own words, writing essays on different points, the study of words, etc. It was exhaustive, and showed what might be done by an enthusiastic teacher. Mr. B. McMahan, of Waterville, a former teacher, then brought up the subject of reading matter for teachers, emphasizing the necessity of taking the EDUCATIONAL REVIEW, *Canadian Magazine*, *World-Wide*, and other periodicals. He has the agency for several houses, and asked the teachers to make selections to keep abreast of the age,

The closing session in the afternoon was begun by appointing officers for the next institute, which is to be held at Wolfville. The following were appointed: Vice-president, R. W. Ford, Wolfville; Secretary-treasurer, J. A. Smith, Windsor. In addition, to complete the executive, Miss Forbes, Miss Kaulbach, W. J. Shields, E. Robinson.

Mr. Schurman, of the Business College, Halifax, gave an excellent practical lesson—How to Teach Writing—and introduced some new methods in business forms, etc. It was of great benefit to all present. The judges on exhibits of drawing and writing reported as follows:

All the writing prizes of Grades III and VII were taken by the Windsor schools, excepting the second prize in Grade III, which went to Hantsport. The drawing prizes went to country schools, three to Hants County and one to Kings County. Space forbids giving names. The last number on the programme was a paper on Civics, prepared by Mr. J. E. Woodworth, Berwick, and in his absence read by the secretary. It was an excellent paper, showing that radical changes need to be made in administering laws, and that a great moral reform must come if our country is to be kept pure. This is to be done in the schools as far as possible. After a discussion on the several topics considered during the day, and a short closing address by the president, the institute adjourned, to be again summoned at the discretion of the executive. It was considered a profitable institute, and the interest was sustained to the end. Fine exhibits of manual training work from Wolfville, Kentville and Windsor were displayed. A most tempting display of cooking from the domestic science department of Windsor schools was spread out tastefully, and showed what children could do in this important part of education.

It is needless to say that much of the success of this institute is due to the tact and enthusiasm of Inspector Roscoe, the president, who knows well how to govern such an assemblage.

CUMBERLAND COUNTY TEACHERS' INSTITUTE.

This institute, with an enrolment of 173 teachers, met at Springhill on Tuesday, the 18th of April, under the direction of Inspector Craig, whose opening address was clear, thoroughly practical, and well balanced.

A paper on Practical Teaching, by Principal Smeltzer, of Wallace, was ably discussed by Principal Soloan, Dr. Magee, and Mr. Munroe, of Parrsboro. Professor Benoit, of the normal school, explained the Application of Physical Principles to Weather Phenomena.

At the public meeting in the evening, President Craig spoke on the Practical Application of Acquired Knowledge. Principal Soloan gave a masterly talk, comparing the educational methods of the past and the present. Messrs. McLeod and Paul, the

representatives for the county, and Prof. Benoit also made excellent addresses.

Teachers' Reading, by Principal Sedgewick, of Oxford, was the first paper of the second day. It was unanimously decided that such a valuable paper should be published in the EDUCATIONAL REVIEW. A class of common school pupils was taught a lesson in English literature by Miss Grant, of Springhill, and a lesson in drawing by Miss Hockin, of Amherst.

School Gardens was the subject of an interesting paper by Miss Spencer, of Great Village. It was supplemented by Mr. P. J. Shaw, Nova Scotia, Director of the Macdonald School Gardens, who explained some of the manual processes involved, and how this subject could be related to other school studies. He mentioned that there were seventy-nine school gardens in Nova Scotia, each of which would receive a government grant of \$25 if doing satisfactory work.

Dr. Murray, of Springhill, explained How the Body is Rendered Immune Against Certain Diseases. Principal Delaney pointed out how school gardens could be utilized in every school. Miss Conway, of Springhill, gave a model lesson in geography. Principal Lay, of Amherst, urged the value of school libraries, and Miss Fitzpatrick, of Parrsboro, gave a model lesson adapted to Grades V and VI.

The interest was well sustained on the third day by Principal Herdman, of Acadia Mines, on Patriotism, by Miss McPherson, of Springhill, in a lesson on How to Teach Primary Readings, by Miss Cameron, of Parrsboro, on Teaching Children How to Talk, and by practical addresses from several leading teachers.

This convention will be of immense value to the schools of this district. It reflects the greatest credit upon Inspector Craig, whose profound interest in the progress of the schools under his direction is unexcelled.

Have a question box in your school in which any child can place any question he pleases, signing his name. Read the questions each day and have the pupils answer impromptu all for which they are prepared, and take the others home to search for the answers. Teachers who have used the question box say that it gives excellent results.—*American Primary Teacher.*

I do not own an inch of land,
Yet all I see is mine—
The orchards and the moving fields,
The lawns and gardens fine,
The winds my tax-collectors are;
They bring the tithes divine—
Wild scents and subtle essences,
A tribute rare and free.

—Lucy Larcom,

CURRENT EVENTS.

A hitherto unknown species of white bear, of a very small size, has been found in the west-central portion of British Columbia.

Chile announces its intention to acquire sovereignty over the former Peruvian provinces of Tacna and Arica, and Peru is preparing for war.

A new arrangement of all matters connected with the union between Norway and Sweden has been proposed by the Crown Prince. It is feared that disunion now would mean the absorption of the northern part of Norway by Russia, thus giving to the latter country an Atlantic winter port which would be used for other than commercial purposes.

The mother superior of the convent at Chatham, N. B., because of the occurrence of the disease at that place, called for volunteers from among the sisters to nurse small-pox patients, if it should be found necessary to establish a small-pox hospital. Every one of them volunteered.

Among the speakers already secured for the meeting of the American Institute of Instruction, to be held at Portland, Me., July 10-13, are President Eliot, of Harvard; President Carroll D. Wright, of Clark College; Prof. Herbert E. Mills, of Vassar; Chief Superintendent Dr. Inch, of New Brunswick; Prof. Sneath, head of the department of pedagogy of Yale University; Dean Arnold, of Simmons College; Mrs. Schoff, president of the National Congress of Mothers; Miss Abbott, head of the educational committee of the National Federation of Women's Clubs; Arthur Chamberlain, head of the department of manual training of the National Educational Association; Ray Greene Huling, head master of the English School at Cambridge, Mass.; Principal A. D. Call, of Hartford, Conn.; Gov. Cobb, of Maine; Inspector Bridges, Fredericton; Hon. Walter Ranger, State Superintendent of Schools, Vermont; and Hon. W. W. Stetson, State Superintendent of Maine.

The Grand Trunk Pacific is to have two western terminals, one at Port Simpson, and one at Kai Wan Island, some ten miles further south.

The government has chartered the steamer Neptune to go north again with another expedition to Hudson Bay. This year an earlier start will be made, with a view of investigating the ice conditions in Hudson Strait during the spring. The Neptune will carry supplies for the Canadian steamer Arctic, which wintered at Cape Fullerton, on the west coast of the Bay. The two vessels will form a summer patrol, the Neptune probably going north to the entrance to Barrow Strait, where conditions seemed so favorable last August for making the northwest passage that Commander Low regretted his instructions did not allow him to make the attempt.

The Canadian Pacific proposes to build houses and farm buildings on lands which it sells to British immigrants, allowing these, as well as the lands, to be paid for in annual instalments.

There is a report of the discovery of a rich coal area in the north part of British Columbia, along or near the line which the Grand Trunk Pacific must follow.

Recent explorations in British Columbia have disclosed a lake fifty miles in length, never before seen. It will be added to the map under the name of Lake Morice. Several new passes through the Rockies have also been discovered.

As the first step towards releasing the British garrisons at Halifax and Esquimalt, two companies from the military school at Fredericton will be sent to Halifax this month.

A new constitution for the Transvaal provides for a representative assembly, in the election of which the franchise is to be given to every burgher of the late South African Republic, as well as to certain white inhabitants of British birth. This does not amount to full self-government as yet, for the assembly will not have full control of the revenue.

The plague situation in India is becoming worse and worse every year. There have been over a hundred thousand deaths from this cause within the past three months. The terrible scourge has now made its appearance in Chile, where the port of Pisagua has lost almost all its inhabitants from its ravages.

The past month was marked by earthquakes and volcanic eruptions in many parts of the world. In India, within an area of seven hundred square miles, every building collapsed or was rendered uninhabitable, and fifteen thousand people were killed.

From his investigation of the records of Arctic explorers, a Swedish authority is led to believe that scurvy is due less to the lack of vegetables than to the use of preserved animal food in which the poison has developed. Explorers and Esquimaux have lived for long periods on fresh meat, retaining perfect health.

The egg of a moa was recently found embedded in the earth in a mining district in New Zealand. It is the second perfect one ever found.

The inconstancy of the power supplied by windmills has caused them to be little used in comparison with other sources of power. The improvements in storage batteries and the cheapening of their cost will, however, overcome this difficulty; and windmills will do a larger share of the work of the future.

A rather funny fight in favor of the use of the Irish language has been going on in Dublin. Two or three hundred persons in one day presented parcels at the post-office addressed in Irish. It is proposed to establish a "language week," during which time all the efforts of the Gaelic League will be directed to filling up the mails with letters addressed in Irish.

Emperor Nicholas has proclaimed religious liberty in Russia, and has remitted the heavy arrears of taxes of the peasantry.

A British cruiser has been sent to Montevideo to investigate the reported seizure of a Canadian sealing vessel. The captain and crew of the sealer are said to be in prison.

In view of the difficulty of establishing nationality in cases of need, the British authorities recommend to His Majesty's subjects travelling abroad the practice of registration at British consulates, more especially in the case of British subjects resorting to Central and South America.

An international railway tunnel will be constructed to connect Windsor, Ont., with Detroit, Mich. Several years will be required for the completion of the work.

The indications are that the volume of immigration from the United States this year will be even greater than that of last year. The heaviest immigration at present is from the states of Washington, Montana and Idaho; but the immigration agencies recently established in the eastern states are sending large numbers of people to western Canada.

The town council of Rat Portage has voted to change the name of the town to Keenora.

A British consul has been appointed for St. Pierre, Miq. The want of an authorized representative at St. Pierre has always been a matter of inconvenience to the Canadian customs authorities. With an accredited British representative under the protection of the French authorities on the island, the opportunities for illicit trade will be lessened.

The fastest trip ever made from Moville to Halifax was made by the Virginian, the second turbiner of the Allan Line, which arrived in Halifax on April 14th. Her average speed was a little over fifteen knots.

The production of cotton in the British colonies is likely to have a serious effect upon the export trade of the United States in that staple.

European capitalists are making preparation for a visit of the Abyssian ruler, Emperor Menelik.

The situation in Russia is still alarming, and class hatred is growing. The promised representative assembly, which may bring some relief, is expected to meet at St. Petersburg in June.

Spotted fever, otherwise known as cerebro-spinal meningitis, which has been unusually prevalent in New York of late, is now regarded there as a contagious disease.

The Russian Baltic fleet is now in the China sea, and has been joined by the third Pacific squadron near the island of Hainan. This gives the Russians a considerable advantage over the Japanese in numbers and strength, and a great naval engagement will probably take place within a few days. No important movements of the land forces of the belligerents have been reported during the month.

Railroads are approaching the heart of Africa from Cairo on the north, from Cape Town and Lorenzo Marques on the south, from the Congo on the west, and from Uganda and Abyssinia on the east.

SCHOOL AND COLLEGE.

W. O. Raymond, B. A., son of Rev. Dr. Raymond of St. John, is the winner of the Gault gold medal at the Montreal Diocesan College, for the highest standing in all subjects of the final year. He has also won the Lobley prize in dogmatics, the Garth prizes in Old and New Testament, the Ellegood prize in church history, and the Diocesan prize in liturgics; and was the valedictorian of his class.

At the convocation exercises of Dalhousie University, Halifax, on April 25, the degree of B. E. was conferred for the first time. There were thirty-six graduates in arts, twelve in law, twelve in medicine, four in science, one in engineering, making in all sixty-five. Only once before in the history of the College has there been so large a number.

Dr. A. S. McKenzie, now a professor at Bryn Mawr College, will be appointed to the chair of physics in Dalhousie University.

It is claimed that fees charged for tuition at some of the leading colleges are too high. Harvard is discussing the question of raising its fees fifty per cent.

The gold medal for general efficiency at Chattanooga Medical College, Virginia, was won by E. A. Robertson, son of George Robertson, of Farmington, P. E. I.

Clement Vaughan, an honor graduate of Acadia University, has been awarded the travelling scholarship at Harvard, for the prosecution of studies abroad, and will go to Germany this summer.

Kings College, Windsor, N. S., will erect new buildings at Glace Bay and Sydney, in connection with the school of mining. The old Collegiate School at Windsor is to be moved to the top of the hill during the summer vacation.

A vacation course in manual training is to be held in the Provincial Normal School, Fredericton, if a sufficient number of teachers apply. Particular attention will be given to work suitable for small schools and for lower grades. Applications for admission must be made to T. B. Kidner, provincial director, Fredericton, not later than May 25.

Geo. Trueman, M. A., at present in charge of Charlotte County Grammar School, St. Andrews, will become the first principal of the new consolidated school at Riverside, which will open on September 1.

The Executive Committee of the St. John County Teachers' Institute has invited the Charlotte County Institute to meet with them on the 12th and 13th of October next, and the invitation will probably be accepted.

Very serious consequences for the Sultan of Turkey may come from the recent marked successes of the insurgents in Turkish Arabia. Sanaa, the chief town of Yemen, is invested; and, if the uprising in Yemen is not suppressed; and, if the up- of Mecca and Medina will be in some danger of falling into the hands of the rebels. This would endanger the Sultan's authority as protector of the holy places.

RECENT BOOKS.

PUBLIC SCHOOL HOUSEHOLD SCIENCE. By Mrs. J. Hoodless, Hamilton, Ont., and Miss M. U. Watson, Guelph College, Ont. Cloth. Pages 164. Price 50 cents. Copp, Clark & Co., Toronto.

In the growing importance of household science as a study in the schools, this book comes at an appropriate time, as it brings in changes adapting it to present conditions. It is a book of reference prepared for pupils in their school and home work.

Macaulay's SECOND CHAPTER. Edited by W. H. D. Rouse, Litt. D. Linen. Pages 136. Price 8d. Blackie & Son, London.

A convenient pocket edition of a chapter in Macaulay's History, with an introduction by the editor containing a brief sketch of the life and works of the historian.

From the same publishers we have a series of *English Language Notes* (Price 6d.) which the compiler tells us supplies sentences "taken from familiar stories and poems, all suitable for analysis."

Blackie's Course of Writing and Book-keeping Copy Books (price 2d. each) furnish a series of six, specially prepared for commercial classes in continuation and other schools. (Blackie & Son, London).

Shakespeare's TWO GENTLEMEN OF VERONA. Edited by K. Deighton. Cloth. Pages 119. Price 1s. 9d. Macmillan & Co., London.

A convenient edition of the Shakespearian play, which, with its introduction and notes, will be appreciated by the student.

SHORT STORIES FROM AMERICAN HISTORY. By Albert F. Blaisdell and Francis K. Ball. Cloth. 146 pages. Illustrated. Mailing price, 45 cents. Ginn & Co., Boston.

This is intended for use as a supplementary reader in the fourth and fifth grades of elementary schools, chiefly for United States boys and girls. There are in the book eighteen vivid narratives of dramatic events which took place during the first two hundred years in the history of the country.

COLUMBUS AND MAGELLAN. By Thomas Lawler, author of the "Essentials of American History." Cloth. Pages 151. Illustrated. Mailing price, 45 cents. Ginn & Co., Boston.

In this history of two greatest discoverers the world has known, the author has brought together the story of the beginnings of European civilization in the western hemisphere and in the islands of the Pacific. It is very attractive both in style, printing and illustration. In a concise but picturesque way the work presents a study of the founders of modern civilization in the Old World and in the New.

A SHORT HISTORY OF ENGLAND'S LITERATURE. By Eva March Tappan, Ph.D., of the English High School, Worcester, Mass. Cloth. Pages xv+276. Illustrated. Price 85 cents. Ginn & Co., Boston.

The history of English literature written by the Frenchman, Faine, is doubtless the most delightful, if not the most appreciative, work upon that subject which we possess.

As an introduction, and laying the foundation to enjoy English literature, Miss Tappan's work is excellent. She leads easily and pleasantly into the subject, winning the student's attention from the outset by a charming style and a knowledge of her subject. Every page of the book is stimulating and enjoyable. Her purpose is well expressed in her own words, "it is less important to know the list of an author's works than to feel the impulse to read one of them."

Zchokke's DAS ABENTEUR DER NEUJAHRSNACHT. Edited by Chas. H. Handschin, Ph.D., instructor in German in the University of Wisconsin. Cloth. Pages 130. D. C. Heath & Co., Boston, Mass.

In this "New Year's Night Adventure" we have a wholesome story of human life. The text, introduction, notes and vocabulary make the book well suited for students of German in the second year's course.

THE GREEK PAINTERS' ART. By Irene Weir, Director of Art Instruction, Brookline. Cloth. xviii+361 pages. Illustrated. Net price, \$3.00. Ginn & Co., Boston.

Intended for the student and the general reader, this book, attractively printed and illustrated, presents an interesting description of the painter's art in Greece. It comprises an introduction and five chapters as follows: A brief history of Greek painting, vase painting, color as applied to architecture and sculpture, Greco-Egyptian portraits and Greco-Roman mosaics, and mural painting in Greece and Italy. The author is an experienced teacher who has supplemented her studies in this country by 10-12 searches in the land of which she writes.

RETURN. A Story of the Sea Islands in 1739. By Alice Macgowan and Grace Macgowan Cooke. **THE CLANSMAN. An Historical Romance of the Ku Klux Klan.** By Thomas Dixon, Jr. The Copp, Clark Co., Ltd., Toronto, 1905.

Historical novels still pour forth from the press, and the Copp, Clark Co. have sent us two very good specimens of the kind. *Return* is a story of the early days of colonization in Georgia; it introduces General Oglethorpe's expedition against St. Augustine, the retaliatory attack of the Spaniards on St. Simon's Island, and the visit to Georgia of the famous preacher, Whitefield. The historical events and characters are vigorously and picturesquely treated, but they serve mainly as a background for the love story, which is the main interest of the book. Diana Chaters, the heroine, a beauty and heiress, is publicly jilted by a Scotch adventurer on the day set for the wedding. To bring about her revenge, she marries the young Virginian, Robert Marshall, but through the adventurous and stirring life of the colony and the contact with noble characters, higher motives are developed in her, and the story ends happily.

In *The Clansman*, the love affairs of the two pairs of young people are secondary in interest to the struggle of races in the south during the Reconstruction period. The author tells us that this book "is the second of a series of historical novels planned on the Race Conflict, 'The Leopard's Spots' being the first. Opening with a dramatic account of the proclamation of peace and the assassination of Lincoln, the story goes on to tell of the defeat of the President's policy of conciliation, and the scene is soon shifted to South Carolina, where the terrible results

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of the Reconstruction rule were met by the action of the formidable Ku Klux Klan. The story is well told, and holds the reader's interest from the first page to the last.

INTRODUCTION TO ANALYTIC GEOMETRY. By Percy F. Smith, Professor of Mathematics in the Sheffield Scientific School, Yale University, and Arthur Sullivan Gale, Instructor in Mathematics in Yale College. Semi-flexible cloth. 217 pages. Illustrated. Mailing price \$1.35. Ginn & Co., Boston.

The first nine chapters of Smith and Gale's "Elements of Analytic Geometry" form the basis of this text-book. Containing an adequate minimum preparation for the calculus, the work presents, in thirty or forty lessons, a short but thorough course in analytic geometry. The work is essentially a drill book for beginners, which presents the elements of the subject in a manner conforming with modern ideas.

THE TREND IN HIGHER EDUCATION. By William Rainey Harper, president of the University of Chicago. Cloth. Pages 390. Price \$1.50. The University of Chicago Press, Chicago, Ill.

This book, coming at a time when the author has passed through the trying ordeal of a dangerous illness, will receive the more attention. In itself it is an admirably suggestive commentary on modern higher education, breathing the spirit of the west, which has shown tendencies less artificial than those of the east, and more of an inclination to deal with matters which stand in close touch with life. The volume consists of twenty-three papers, some of which

have already appeared separately. The book may be read with profit by all interested in education, especially the higher phases of the subject.

MAY MAGAZINES.

Among the women's magazines none will be read with greater interest than the *May Delineator*, which appears with a varied and attractive table of contents, and news of the fashion world. Dr. W. R. C. Latson contributes an article on Housework as a Recreation, illustrating the proper methods of performing household duties so that they become profitable and pleasurable instead of disagreeable tasks, and Allan Sutherland tells something of the origin and romance of Keble's famous hymn, "Sun of My Soul." For the young people, there are amusements of various kinds and stories.... The *Atlantic Monthly* for May has great variety in the subject matter of its articles. A series of papers on the history of the United States from the close of the Civil War begins with "The Tenth Decade of the United States." Two articles on Schiller, one on the Centenary of Sainte Beuve, and one on Significant Tendencies in Current Fiction, keep up the high standard of literary papers set by this magazine. A very practical inquiry into the living expenses of university teachers, called, "What Should College Professors Be Paid?" is of especial interest just now in connection with Mr. Carnegie's latest gift. Thoreau's Journal is continued, and there is a good deal of other interesting reading.... *Littell's Living Age* for April 15th gives an Eng-

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lish teacher's picture of a Farm-school in the Transvaal, taken from the *Independent Review*. Santos-Dumont writes of The Future of Air Ships. An amusing parody of the arguments that plead for so-called practical education, entitled, A Plea for the Abolition of all Learning, selected from *Blackwood*, appears in the number for April 29th, which also contains a serious and deeply interesting paper on Agnosticism and Modern Decay, by Father Barry. The issue of April 22nd has an article by Prince Kropokin on The Morality of Nature, and the story, The Soldier and the Plague, from the *Cornhill*, is concluded.

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OFFICIAL NOTICES.

DEPARTMENTAL EXAMINATIONS, 1905.

(a) *The High School Entrance Examinations* will begin at the Grammar and Superior Schools on Monday, June 19th. Principals who wish to be supplied with question papers are requested to notify the Chief Superintendent not later than May 20th as to the probable number of candidates for this examination.

The Lieutenant-Governor's Medals are to be competed for at the High School Entrance Examinations in accordance with instructions given in Supplement to Regulation 46, a copy of which will be sent to any teacher who may apply for it to the Education Office.

(b) *The Normal School Closing Examination for the French Department* begins on Tuesday, May 23rd, at 9 o'clock a. m.

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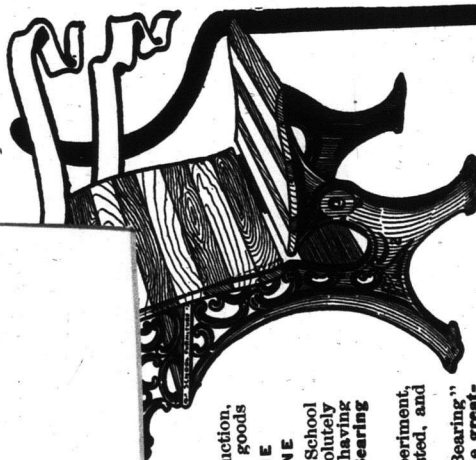
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