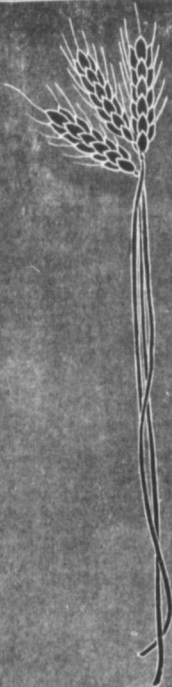
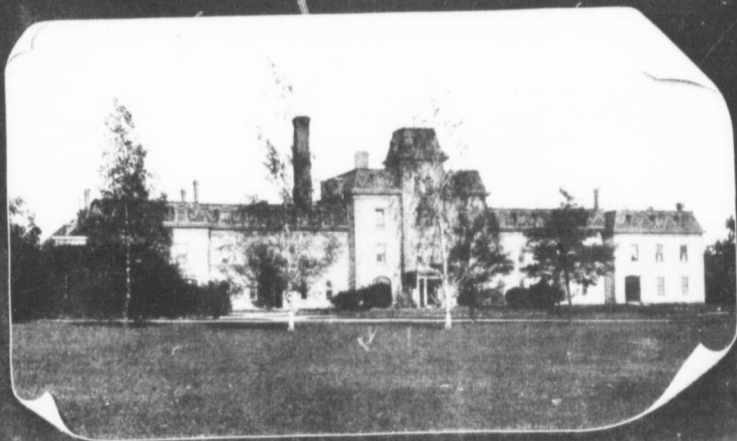


VOLUME XX.



NUMBER 8.



THE
O·A·G·
REVIEW

May
1908

Melotte

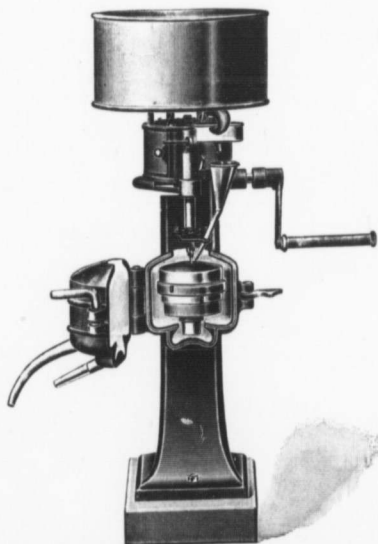


Cream Separator

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This is the Splendid Prize offered by the Review in the Competition announced on another page of this issue.

MACHINE SUPPLIED BY

R. A. Lister & Co. Limited

58-60 STEWART STREET,
TORONTO.





The more you compare,
the more you investigate,
the nearer we are to your
order, for the

National

Cream Separator

STAND FOR

Quality

Strength ..

Durability.

We not only write these statements but prove them by the fact that
The **National** has won first honors throughout the Dominion
in all contests and shows during 1907.

The **National** is the Dairyman's choice and the farmer's
favorite, ask those who use it.

The **National** is built of the very best material, by experts,
in the largest and best equipped separator factory in Canada.

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Branches—Truro, N. S., Winnipeg, Man., Prince Albert, Sask., Calgary, Alta

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The Manufacturers Life Insurance Co'y

Head Office, Toronto, Canada.

OFFICIAL CALENDAR

OF THE DEPARTMENT OF EDUCATION.

May:

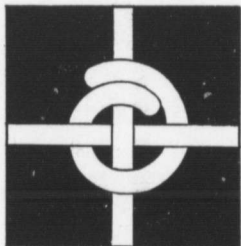
1. Toronto University Examinations in Arts, Law, Medicine and Agriculture begin. (Subject to appointment).
1. Arbor Day. (1st Friday in May).
22. Empire Day. (1st school day before 24th May).
Notice by candidates for the District Certificate, Junior and Senior Teachers' Examinations, University Matriculation and Commercial Specialist Examinations to Inspectors, due. (Before 24th May).
25. Victoria Day (Monday).
26. Inspectors to report number of candidates for District Certificate, Junior and Senior Teachers', University Matriculation and Commercial Specialist Examinations. (Not later than 26th May).
30. Assessors to settle basis of taxation in Union School Sections. (Before 1st June).

June:

1. Public and Separate School Boards to appoint representatives on the High School Entrance Boards of Examiners. (On or before 1st June).
By-law to alter School boundaries—last day of passing. (Not later than 1st June).
7. University Commencement. (Subject to appointment).
12. Senior Matriculation Examination in Arts, Toronto University, begins. (Subject to appointment).
19. Provincial Normal Schools close (Second term). (Third Friday in June).
22. Inspectors' Report on Legislative grant due. (Not later than 22nd June).
23. Model School Entrance and Public Graduation Examinations begin.
24. High School Entrance Examination begins. (Subject to appointment).

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THE PEERLESS WOVEN WIRE FENCE



It is all in the LOCK.
A LOCK that holds without damaging the wire.
A FENCE made from all No. 9 hard steel wire.
This is the second year for PEERLESS in Canada.
It is already a leader.
Send for our free booklet telling you how to build a
good woven fence; also how to make concrete fence
posts at home. Write today.

The Banwell-Hoxie Wire Fence Co.
LIMITED
HAMILTON, - ONTARIO.

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AN antiseptic, cleanser, deodorizer and purifier of real serviceability: **Kreso** is just this. In a 1% solution it destroys the most resistant non-spore-bearing disease germs. It prevents contagion. It purifies the atmosphere. It destroys offensive odors.

POWERFUL DISINFECTANT

Kreso is an ideal disinfectant for stables, dog-kennels, hen-houses, bird and animal cages, water-closets, urinals, outhouses, garbage-boxes, sinks, cess-pools, etc.

Containers—8 fl. oz. to 10 gallons.

Write Us for Descriptive Booklets.

PARKE, DAVIS & CO.
WALKERVILLE, ONTARIO.

Up-to-Date Creamerymen

Use Up-to-Date and Modern Factory Appliances

Up-to-Date Manufacturers

Build Modern Factory Machinery and Equipments

We are Up-to-Date Manufacturers. ARE YOU an Up-to-Date Creameryman? Write us when in the market for anything needed in your factory. We will be in a position to fill your order, as we carry everything in stock from Engines and Rollers down to the Ladle and Packer. We will be pleased to quote you prices on anything you may require. : : : : :

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C. Richardson & Co., St. Marys, Ont.

Branch House: CALGARY, ALBERTA.

**\$65.00**

Gilson Gasoline Engines

All Sizes. All Styles. For all Purposes. Gives plenty of Power
at Little Cost. Highest Grade. Lowest Prices. Easy to Under-
stand and Operate. Economical and Durable.

Let Us Send You Handsome Catalogue and Prices.

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Rest - - - - -	11,000,000
Undivided Profits -	422,689

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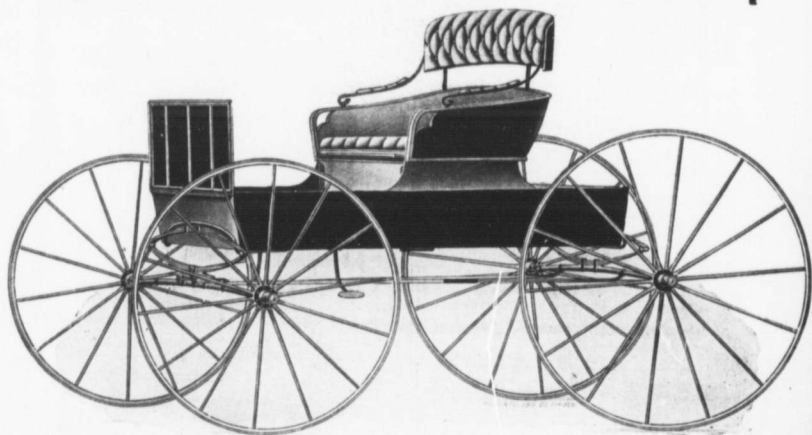
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Arched Axle, wood bedded.
Body—23 x 56 inches.
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Trimmings—No. 1 leather or Bedford cord.
Wheels—Steel, solid rubber or cushion rubber tires.
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Perhaps the nicest up-to-date Bike construction on the market.
Ask your agent for the Armstrong Line.

Catalogue on application.
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Pneumatic
Tires
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Horseshoe Pads
High Pressure
Steam Packing
and everything in Mech-
anical Rubber Goods.

The Dunlop Tire and Rubber
Goods Co., Limited
Head Office and Factory
Booth Avenue - Toronto, Canada
St. John Montreal Vancouver Winnipeg

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LARGE ASSORTMENT



GRIP LIMITED

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Calendar Dept.

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BRAND NEW!

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POWDER

LICE KILLER

ESPECIALLY FOR POULTRY

25c

Buys you a large can—sifter top—
shakes out like salt.

Zenoleum Lice Killer is made by us
and backed by the same broad guaran-
tee which Zenoleum carries.
Your dealer can supply you.

ZENNER DISINFECTANT CO.

70 Sandwich St., Windsor Ont.

E. H. Harcourt Co., Ltd.

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Stationers

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Embossers and

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CONTENTS

Vol. XX.

MAY, 1908.

No. 8.

	Page.
Agriculture in Its Relation to Manufactures— <i>By C. C. James, M.A.</i>	413
A Voice From the Sea— <i>By Reverend A. E. Burke</i>	419
The Study of Insects an Essential Part of Farming— <i>By Dr. James Fletcher.</i>	423
Tennyson's Use of Nature in "In Memoriam"— <i>By William Houston</i>	427
The Reforestation of Waste Lands— <i>By C. A. Zavitz</i>	431
Our Early Spring Flowers— <i>By D. H. Jones, '08</i>	435
The Passing of the Forest in Relation to the Flora— <i>By H. Groh, '08</i>	438
Reading in the Farm Home— <i>By G. LeLacheur</i>	441
Book Reviews	446
Editorial	448
College Life	451
Athletics	457
Old Boys	462
Macdonald	467
Locals	472

ADVERTISING.

Cream Separators and Appliances—Cover—Pages i., iii., ix., xxxii.	
Railways, Banks, Insurances—Pages ii., iv., xx., xxviii.	
Manufacturers—Cover—Pages iii., iv., vi., vii., x., xi., xii., xiii., xv., xviii., xxi., xxii., xxvii., xxviii., xxix.	
Live Stock—Page xxx.	
Newspapers, Books and Book Publishers—Pages vi., xii., xx.	
Seedsman and Commission Companies—Pages viii., xi.	
Guelph Business Houses—Pages x., xiv., xvi., xvii., xviii., xix., xx., xxi., xxii., xxiii., xxiv., xxv., xxvi., xxvii., xxx., xxxi.	

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All the care which long experience can suggest in selecting the best seed obtainable, together with the most modern and up-to-date machinery, is used to bring our seeds up to the highest possible standard of purity.



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To complete our equipment, we have added a Seed Laboratory, where all our seed is tested, as well as by the Department of Agriculture at Ottawa.

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The Steele-Briggs Seed Co
Limited
TORONTO HAMILTON WINNIPEG

The O.A.C. Review

THE DIGNITY OF A CALLING IS ITS UTILITY.

VOL. XX.

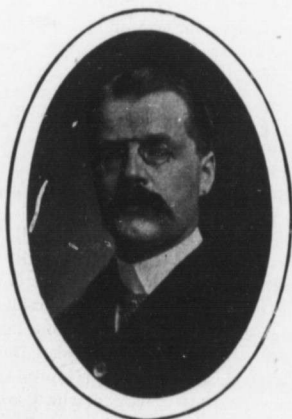
MAY, 1908.

No. 8

Agriculture in Its Relation to Manufactures

An Address to Manufacturers.

By G. G. JAMES, Deputy Minister of Agriculture for Ontario.



C. C. JAMES, M. A.,

THE manufacturers of Canada are likely to be more interested in the condition and prosperity of the farmers than are the farmers in the condition and prosperity of the manufacturers. There are reasons for this. The manufacturer knows that the prosperity of the farmer is a matter of

importance, of necessity in fact; the farmer is not always so fully convinced that the success and prosperity of the manufacturer are of first importance to the country. One thing is certain, that each should more fully understand the other and the relationship of the one to the other.

This evening it is the duty and the privilege of the speaker to discuss the question of the relationship of agriculture to manufactures. There is, of course, the equally important question of the relationship of manufactures to agriculture. Frequently, in discussing these questions, attempts have been made to discuss the relative importance of these two lines of work, and comparisons have been made along the line of capital invested, numbers employed, and value of output. Such comparisons are hardly fair or equitable. You cannot fairly make a comparison on the ground of product, since agriculture is one of the original sources of wealth and manufacturing is not. The finished product of the farmer is, in most

cases, the raw material for the manufacturer. You can compare agriculture with the other three great original sources of natural wealth—forestry, fishing and mining. The pre-eminence of agriculture in this comparison stands out when we consider that we are so rapidly exhausting our forest resources, that we have permitted our lakes and streams to be depleted, and how certain is the fact that every ounce of mineral taken out of the ground can never be returned; whereas our farms are, on the whole, as productive as they ever were and may be made still more productive.

The agriculture of Ontario stands in very close relationship to our manufactures. It affects the latter in at least three important ways. First, it is a source of raw material; secondly, it is a market for manufactured products; thirdly, it is a source of capital. The first point need not be enlarged upon,—flour mills, bake shops, packing houses, tanneries, canning factories, all draw their supplies from the farm. While the farmer sends a portion of his product straight to the producer, the bulk of his product must find its way to the manufacturer of the town and city before it is ready for the world's consumption. The value of the farming community as a market for manufactured goods is becoming more important, and will increase as the farmer becomes more prosperous. The farmer is becoming more and more a purchaser of manufactured goods. The days of homespuns have gone by and the butcher's cart and the baker's wagon may now be seen making their regular rounds along the concession roads and side lines of many counties.

It would perhaps, be too strong a statement to say that it is the farmers'

money that is keeping the manufacturing industries going, but there is something to be advanced along that line. The great development of manufacturing in this country is partly dependent upon moneys advanced by the banks. Whence comes this money of the banks? From deposits. During the past few years there has been a great expansion in the banking of this country. Formerly, banks were confined to the cities and towns, but of late we have seen a great multiplying of the branches. These have been opened up in the small towns and villages and through these branch banks, the deposits have been increased by millions of dollars. These deposits have been made by farmers. Look at these figures for the annual value of cheese alone: Leeds, \$1,600,000; Hastings, \$1,400,000; Oxford, \$1,200,000; Dundas \$1,100,000; Frontenac, \$1,000,000. As for bacon, Simcoe, Kent, Grey, Essex, Wellington and Oxford annually produce approximately \$6,000,000 worth in all, from \$1,150,000 to \$880,000 in each case.

The agriculture of to-day is quite a different industry from the agriculture of earlier days. When the first settlers came into this Province to establish homes for themselves, they found here a wilderness. In the earliest days timber and ashes were their only product. As the clearings enlarged wheat and oats became their marketable product. Then came the old country settlers with their love for live stock, to be followed later by dairying and fruit-growing. Specializing has become the rule, and to-day we find the farmers producing crops in each county, and in fact in each township suited to the locality, the soil, the climate and the local markets. To-day the farmer is a

manufacturer and he is producing more wealth than ever he did before. He is working on higher levels than did his forefathers; he is adding more to the wealth of the country, and he is consuming more of your manufactured products.

To show you how he is increasing his bank deposits, let me give you the returns from the three most important items, beef, bacon and cheese: In the past eight years the sales of beef from Ontario farms have increased from \$13,000,000 to \$29,000,000; bacon and pork from \$10,000,000 to \$22,000,000; and cheese from \$10,000,000 to \$17,000,000. This is a total increase of \$35,000,000, an average of \$200 for each of the 175,000 farms. At the same time the total value of all field crops has increased from \$107,000,000 to \$143,000,000. This will explain where the money has come from by which the farmers have paid off their mortgages, purchased farm machinery, built new barns, improved their houses, and increased their deposits at the banks, thereby materially assisting the business men and the manufacturers to extend their business.

The old agriculture has been giving place to the new, and the best principles of successful business life and of manufacturing are being applied. What are these principles that promise so much for agriculture?

1. The careful study of the cost of production.
2. Economy in production through the saving of waste products.
3. Co-operation in production, handling and marketing of products.
4. The employing of the best machines.
5. Special training for the men engaged in the work.

Let me briefly refer to these five points:

It is much more difficult for the farmer to make an accurate estimate of the cost of producing grain, hay, fruit, beef mutton, bacon, cheese, butter, or the live animal, than it is for the manufacturer to work out the cost of his marketable products. The latter has his work shut in within the four walls of his factory, he can determine cost of raw material, labor and interest on his capital with some assurance of accuracy. The farmer works hand in hand with nature. A variable element, that of weather conditions, enters largely into his operations. Soil and sunshine and living animals do not so readily permit themselves to be tabulated in a mathematical calculation. Nevertheless, whereas formerly farming was so largely a matter of general results, we now find close study being given to the calculating of costs of production and our most successful farmers are those who are able to keep close record of the productions of their different fields, to figure out balanced rations, and to determine whether it really pays to use certain foods or to produce one line of product in preference to another. At the recent dairy convention held at Picton, a most interesting discussion was held on the subject of producing alfalfa hay at a very low price to replace in the feeding rations wheat bran which now costs from \$20 to \$26 a ton. And the discussion was carried on with paper and pencil, the difference in cost being figured out to the exact cent.

Profits in manufacturing result today largely from a saving in material; what was formerly waste product now becomes a by-product. Farming in

the earlier days was always carried on with utter disregard of waste product. The wheat farmer of Manitoba has burnt his straw and has dumped his manure into the river. The progressive Ontario farmer is compelled to save his waste and use it to increase his next year's product. No other business in the world could stand the tremendous waste of agriculture. But a great change is taking place. The waste land covered by the old rail fence is being utilized, waste food is being turned into pork and bacon, and in the cheese factory and creamery the scientific instruments of recent invention are daily used to see that no waste results. In a word economy is being applied to agriculture and with fine results.

Co-operation is becoming a word to conjure with in agriculture and the manufacturers will soon find this out, as will the merchant and the banker. Perhaps even the politicians may ere long awaken to the force and strength of what this means. Our cheese and creamery business are based largely upon co-operation. In the past five years the value of the cheese sold from Ontario cheese factories was \$74,600,000. Out of this no less sum than \$65,850,000 went to the farmers for the milk supplied. Co-operation reduced the cost of production and of marketing. Co-operation in the fruit industry is under full swing. The farmers owning orchards form a co-operative association, erect a fruit house, purchase spraying machines, gather, sort, pack and market their fruits. It is money that tells and the reports for the past two years of the fruit-growers in these co-operative associations are that they have received higher prices than have others not so

situated. Then we know of successful co-operative canning factories, farmers uniting to put \$40,000 capital in one factory and carrying on the business with very satisfactory profits not only from the producing side but also from the canning side. The shortage of good labor has suggested co-operation in labor and in the purchase and use of machinery. We might mention co-operation in the supplying of meats for their table and the purchase of other staple articles of food. Co-operation is booming at the present time and we are likely to see some most radical changes in farm methods in the near future.

Manufacturers know the value of good machinery. Our farmers are beginning to awaken to the importance of this subject; but with them the machines just now being studied are living machines. To the farmer, the cow is a machine for turning the raw material of grass, and grain or hay and roots into milk. This living machine is being studied and most extraordinary results are being obtained. The average production of the cows of Ontario is certainly not over 3 500 pounds of milk per year. In the dairy herd at the Agricultural College there are sixteen milch cows. Let me give you the record of the four best and the four poorest for 1907.

	Lbs. Milk.	Value of Milk.	Value Feed.	Profit over Val. of Feed
1.	19,064	\$179 16	\$69 40	\$109 76
2.	11,806	110 29	48 28	62 01
3.	12,283	104 19	49 28	54 91
4.	10,880	95 12	41 92	53 20
13.	7,578	60 06	33 57	26 49
14.	5,263	56 70	32 53	24 17
15.	7,442	63 41	39 81	23 60
16.	7,574	57 95	40 51	17 44
Average of whole herd:—				
	9,585	85 55	42 87	42 30

Now let us take the record of a first-class dairy farmer's herd. In the 1907 competition, held by the Western Dairymen's Association; the following results were made by the winners of the silver and bronze medals: From a herd of 12 cows, owned by W. E. Thompson, of Innerkip, 96,240 lbs. of milk were sent to the factory for which \$934.64 was received an average of \$77.88; from a herd of 8 cows, owned by Wm. Pearce, of Holbrook, 60,572 lbs. of milk were sent to the factory, for which \$585.02 was received, an average of \$73.12.

There are over one million milch cows on the farms of Ontario and the total annual value of dairy products is about \$35,000,000. The dairy herd at the Agricultural College produces on an average about three times the average of the farm cows of the Province, one cow produced about six times the average, and the four poorest milkers produced twice the average. The only conclusion is that we are still doing our much-praised dairy work in Ontario with poor machinery. What wonderful possibilities there are here. You see how, by the improvement in stock, better care and better feeding, it is quite possible to double, yes, to treble, the output without increasing the number of cows. This is worth striving for and this is what our dairy schools, our dairy instructors, our dairy associations, and our cow-testing associations, are working for.

And then there is the education of the farmer, but most of all the education of the farmer's son. We train our doctors, lawyers, engineers and our teachers, and we enact laws making it compulsory for them to reach certain standards, but the poor farmer has, until comparatively recent years, been

left to train himself. We have had no standard for him. We left him to learn his business while he was earning his living. There is growing, however, a demand that some consideration shall be given to the man who tills the soil, and that he shall have offered to him an education that will fit him for his work and that he shall get this chance of education, not when he has come to manhood or passed middle life, but in his youth when he is in a receptive, teachable stage, and when education should really mean something for him. The farmer is coming into his own and we are beginning to see that farmers should grow up in their business like other men and that the same consideration should be given to them that has been given to the more favored men of the town and city. The proper training of the farmer is of interest and of importance to the business men of the towns and cities and they should be first to support every movement for his betterment and to insist that every opportunity shall be given him for educational improvement. The agriculture of Ontario is capable of greater development than any other of our resources. If only we could set all the forces in motion and increase the facilities now in operation for disseminating information and arousing the younger men of the country, the annual production of this Province would soon increase by many, many millions of dollars annually. And what greater assurance would there be for the development of the social and moral strength of this people than the increasing comfort and happiness of a prosperous and contented yeomanry. The elements of social disturbance and of national downfall are developed amid the changing, restless people of

city and town. The growth of a strong, sturdy, rural element is a safeguard to any people.

We should be careful in this country that the agricultural classes and the great business and manufacturing classes shall not be set one against the other but that they shall co-operate. They should understand each other and be prepared to assist each other within reasonable limits. Neither should seek to monopolize the great forces which direct the movements of the country. Each should receive fair consideration, as both are necessary.

On account of your location in city

and town you have the advantage of position. There is just this danger that you may become so absorbed in your work, in the building up of your factories and the improvement of your cities and towns, you may not follow as closely as you should the upward movement of the farmer. Farm life is on the move, it is expanding, it is enlarging, and you will do well to get in touch with it and to keep in touch with it, and by all means in your power to assist in this movement which means much not only for the farmer himself but for the growth and well-being of the whole nation.



Photo by A. E. Slater.

RIVER SPEED GUELPH

"Oh glide, fair stream, for ever so!
Thy quiet soul on all bestowing."

—Wordsworth.

A Voice from the Sea.

By REVEREND A. E. BURKE.

Reverend A. E. Burke is parish priest of Alberton, P. E. Island, and holds high office in his church. He takes great interest in political questions, and has made the P. E. I. tunnel question prominent. He was a promoter of the P. E. I. Prohibition Act, which is working so effectively. He is a valued contributor to farm journals, and discusses with wonderful insight and fluency the various problems of the farmer. He has been for years President of the P. E. I. Fruit Growers' Association, and also President of the Maritime Beekeepers' Association.—Ed.

No matter the claims from other sources upon our time and sympathies; no matter the diversion of attention because of our having something of our own here, in these provinces, of which we are as proud as the young father of his firstborn; no matter the feeling in other circles that after all, we, of the Maritime Division of Canada, have been largely used as beasts of burden to fetch and carry for the more fortunate Western sections; it is certainly a personal pleasure to renew the acquaintance with Guelphers (and we know only the agricultural students under this term) which we

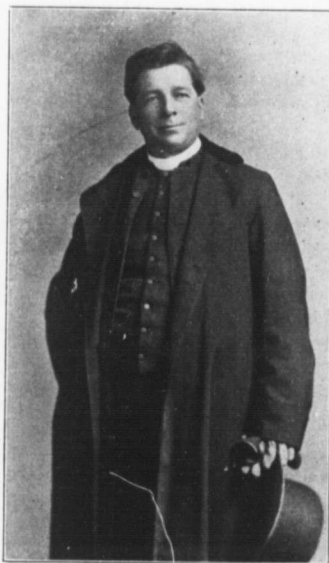
made on many occasions of capital importance to the farming interests of the nation, and which once made, however restrictive, is cherished always in the individual and extended to all those

who in solidarity recognize the colors of the O. A. C. Indeed, at one time we were almost convinced that we had

passed a term or so under its walls, so familiar did we grow with all the characters which entered into the speech of graduates, and, also, the concerns, grave or sprightly, which filled up their College life. This was when we were getting organized here educationally, and every man of any consequence sent to help us came from Guelph. There were banquets, too, at which the old spoke of Alma Mater with a gravity and respect almost sacred, and the young forgot the sublimity

of their seniors to reach, replying to "The Ladies" especially, the bottomless pit of absurdity—

"Forsan et haec olim meminisse juvabit."



REVEREND A. E. BURKE.

Then, on the agricultural press of the country one finds Collegians everywhere, and the seductiveness of their sirenlike appeals has gotten us into many troubles, but troubles we would not now be without. If there is one satisfaction more than another which comes to people in our station of life, it is that which is felt in making little sacrifices to help out the ingenuous young editor of a farm journal, breaking his first lance in the public service. We have been associated with a number of them and the memory of it all is consoling. They have an unbounded confidence in their ability to make things go and that is agreeable, if inherent in youth. Left to the old jaded scribe anyway—him of the soured and sullen type—what would our farm literature be? One does not even like to think of it. The promise, the hopefulness, the confidence of youth is always refreshing. Would that it were perpetual.

Our relations with some of these young men have been very intimate. "Philosopher, guide and friend" even, doesn't cover it. They have come to us in all sorts of situations, and the very confidence reposed begot a tenderness of feeling for them which no other association seemed to set up. We have seen them at their desk; we have had them in our home; we have met them casually or by appointment at the great gatherings of the country, and we are glad to say that they have always edified us by the faithfulness with which they discharged their duty, whatever it was, the loyalty they professed for their leaders, their devotion to ideals, and above and beyond all, the ever consuming desire to be of use to the great agricultural interests to which they had voluntarily plighted their

troth. There is something more satisfying than fame, or honor, or riches in this life—the husbandman feels it in all its subtlety after he has cleared the land and planted the seed—it is the joy bordering on ecstasy, at the sight of the fruits of our labors and lessons, garnered in the pure and generous lives of youthful pupils. Measuring by this standard the Professors of Guelph are often enraptured.

How do we account for this? How is it that a greater enthusiasm is manifest in the O. A. Collegian than in him of the classical institutions of the country? Why does the very name of Guelph intoxicate him as with love and devotion? We cannot presume to say definitely, but incline to the belief that it comes of the gratitude arising from the satisfaction and profit which the acquisition of the practical, as differentiated from the ideal, ever induces, untenable as this ground may appear to the poet. Verifying things satisfies usually better than dreaming over them, even if a great American poet has assured us that—

"The dreamer lives forever and the toiler dies in a day."

However, the Agricultural College, a practical school of farming, where the student not only reads about how things are done but actually does them and knows that he can do them any-time out in the world again, when necessary, is the first branch of technical education which the country has inaugurated; and the success attending it has created a national demand for the full equipment of the other departments comprehended in a general system. It looks, too, as if the Central Government would have to inaugurate a complete national system of technics, with which all the special services of

the provinces may ultimately co-ordinate. The public bodies have taken hold of this matter and already the Premier of Canada has sent enquiries to the Premiers of the several provinces as to the need for or utility of such a scheme.

But speaking of the graduates of Guelph, it is sometimes said to us, when we are commending them and inferentially the school whence they come, "Oh, very well; but what is the use of them to the actual work of farming? They won't stay on the farm at all. They are as truly educated off it as the graduates of the classical places." We are not in a position to say just what proportion of the boys return to farming, but we believe it to be considerable. At first all the graduates were doubtlessly needed for purposes of teaching, either in other colleges, in the Farmers' Institutes, in the divisions of agriculture, at Ottawa, or in the provinces; or in the editorial chairs of farming papers. A number of bright fellows will always be required for this expanding work; but now that most of these places are filled, the cry, "Back to the Land!" will find them pioneering the new and practical husbandry which is to make the nation strong and great. We know of numbers already settled upon their own hundreds, working out their own fortunes peacefully and pleasantly, and pointing conclusively to the recent contention that there is nothing so sure as that the farmer will be the gentleman of the future. Guelph, no more than Rome, wasn't built in a day, and the wonders we have seen at her hands in a fairness, encourage us to expect anything in the years that are to come.

Following the example of Ontario in all things agricultural—let us willingly

acknowledge our obligations—we have attempted in these Sea Provinces to organize the industry somewhat, attaching skilled teachers to the public service, and, after much thought and considerable trepidation, inaugurating a College of Agriculture, built, equipped and maintained, it is true, by Nova Scotia, the least agricultural but most munificent of our provinces, but open to students from all of them and from Newfoundland, some day to constitute a province of the Dominion herself. The fact that one of her sons had prosecuted his studies at Guelph with such success as to secure a place on the teaching staff there, encouraged the authorities in placing Melville Cumming at the head of the new institution. The task of organizing was one truly herculean; it might well discourage the professor from well-established and fully-equipped Guelph; it did quickly bring him to a realization of the seriousness of his purpose, but he bent the energies abundantly supplied by his breeding and up-bringing in bracing Nova Scotia, and, with the courage natural to the Collegian, faced it manfully and triumphed, as courage born of duty ever deserves to triumph. Truro is incomparable with Guelph yet—will ever be if the latter maintains its lead, and we hope she will—but it is a wonderfully efficient school already, and will undoubtedly fill the place in agricultural higher instruction to these provinces which the old College so well filled for all Canada, for so many years. Of course this Maritime Canada is only a small country at best—Ontario is many, many times larger than New Brunswick, Nova Scotia and Prince Edward Island put together—and we are split up into three Governments with tendencies to independence,

even if scant revenue preaches unification of effort in many things; therefore, it may not be as easy as we would wish to concentrate all our efforts agricultural at Truro, but we hope that folly will never seize upon the other two so effectually as to urge them to the construction of another school in which to compete with that which is now so successfully launched under Cumming. This year's course there boasted nearly two hundred students, something which has certainly gratified all interested in the College and given assurance of its ultimate success. The Mother College of Guelph will rejoice in this as well as we do, and take the same tender interest in the promising daughter school as is verified in the lives of every good family in the domestic walks of life. And even if filled with students from Newfoundland, New Brunswick and our Garden Province, who in the old days would

have gone to Ontario, if anywhere, Truro will not forget the debt she owes to her Western prototype, nor cease to maintain a love for and interest in her rulers, professors and students, all of whom are united with her in the gentle bonds of brotherhood.

Personally, we have no great part except that of sympathy in and approval of this good work—sympathy which compels us to publish abroad the excellent results of these institutions, so that a more universal and healthier emulation may extend the limits of their usefulness to Canada and the chief interest on which her greatness depends; approval which comes of contact with the product of its schooling—a youth imbued with all the qualities of manhood, and true to its destiny in building a better land here in agriculture, as a foretaste of the rewards which must crown well-doing in the land of the hereafter.

OUTLOOK.

Not to be conquered by these headlong days,
 But to stand free: to keep the mind at brood
 On life's deep meaning, nature's altitude
 Of loveliness, and time's mysterious ways;
 At every thought and deed to clear the haze
 Out of our eyes, considering only this,
 What man, what life, what love, what beauty is,
 This is to live, and win the final praise.

Though strife, ill fortune, and harsh human need
 Beat down the soul, at moments blind and dumb
 With agony; yet, patience—there shall come
 Many great voices from life's outer sea,
 Hours of strange triumph, and, when few men heed,
 Murmurs and glimpses of eternity.

—Archibald Lampman.

The Study of Insects an Essential Part of Farming.

By DR. JAMES FLETCHER, Ottawa.

ALL crops grown are liable to be reduced in value by the attacks of insect enemies which beset them from the time the seed is sown until the mature crop is harvested. Conservative estimates by experts put this loss at one-tenth of the whole value of an average crop, and many claim that this figure is far lower than is actually the case. It will be recognized by all that insects abound everywhere and sometimes not only injure seriously the crops of our fields and gardens but also attack our live stock, our orchards, vineyards and forests, as well as our food and clothing, our houses and even ourselves. There is no plant known which has no insect enemies, and some have more than one hundred different kinds which derive their nourishment from them. The apple tree alone has upwards of 360 distinct pests which prey upon its leaves, fruit, wood and roots. The plum, pear and cherry, the oak, ash, elm and pine, all have their special predators. A loss of one-tenth of a crop is seldom noticed unless steps have been taken to protect a similar crop grown under the same conditions so that a comparison may be made. The late Dr. J. A. Lintner, of New York, in his first annual report, gives some remarkable figures which are well attested. The loss to the wheat crop in the State of New York in 1854, from the Wheat Midge alone, was

estimated at \$15,000,000; and it was even greater in the State of Ohio. In 1857 the loss exceeded that of 1854; and in Canada in the same year the Wheat Midge destroyed 8,000,000 bushels of wheat. The Chinch Bug in the year 1864 destroyed \$73,000,000 worth of wheat and corn in the State of Illinois. The Rocky Mountain Locust has been the cause of widespread devastation and of the loss of many millions of dollars, both in the Western States and in Canada. The Phylloxera of the grape, an American insect which was accidentally introduced into France, by its attacks on the vines of that country, disorganized the wine trade of the whole world. Dr. L. O. Howard recently gave, in the principal address before the Section of Economic Zoology of the Seventh International Zoological Congress, at Boston, in August, 1907, some striking figures showing the power of insects to affect the wealth of nations. The Gypsy Moth and Browntail Moth have already necessitated an expenditure of over \$2,000,000 in the effort to control their ravages. The Mexican Cotton Boll Weevil has done an enormous amount of damage, and the fears it has aroused in the cotton growing countries have threatened a disturbance in the balance of trade of the entire world. During seasons of its greatest abundance the damage in the Southern States has occasionally been estimated at

\$30,000,000; and to the loss from this insect must be added an additional amount due to the well known pests, the Cotton Worm, and the Cotton Boll Worm.

Not only have millions of dollars been lost from the direct attacks of insects upon crops, but many millions more have been expended in studying their habits and in efforts to control them. As evidence of the value of this work done against injurious insects may be cited the large expenditures annually voted by governments to carry on the work. The United States Government appropriated no less than \$650,000 for entomological purposes in the fiscal year ending June 1908. The United States Entomologist has now a staff of 100 experts working with him in his bureau at Washington; and over 200 more officials are employed by him in making investigations in the field upon insect pests.

Much attention has recently been drawn to the value of knowledge of insects, by the excessive ravages, and successful efforts to control it, of the San Jose Scale in North America. Mr. W. H. Bunting, one of the leading fruit growers of Ontario, gave it as his opinion, in a lecture lately delivered in Ottawa, that the appearance of the San Jose Scale in the fruit orchards of Ontario had been one of the best things for the fruit growers that had ever happened. The efforts necessary to keep this dire enemy in check and to grow paying crops of fruit, had brought about better methods of working orchards than had ever previously been practised. The San Jose Scale is known to be very hard to control; but all the best fruit growers now acknowledge that a practical remedy is available in the lime and sulphur wash, and

have found that, by a regular application of this wash, not only the San Jose Scale is destroyed but many other fungus and insect enemies of fruit trees are kept in check, and that the trees actually increase in vigor.

In 1904 Professor F. M. Webster, one of the most eminent of our American students of insects, made the startling statement that "it costs the American farmer more to feed his insect foes than it does to educate his children." Professor Slingerland, of Cornell University, commenting on this and carrying on the same train of thought, said: "The yearly losses from insect ravages aggregate nearly twice as much as it costs to maintain our army and navy, more than twice the loss by fire, twice the capital invested in manufacturing agricultural implements, and nearly three times the estimated value of the products of all the fruit orchards, vineyards and small fruit farms in the country." He also pointed out that New York was then spending a little more than \$40,000,000 yearly on its entire school system, or about \$6 per capita. As about a million people were living on the farms in New York, the farmers' share of this great educational fund was about \$6,000,000. One could say, therefore, that it cost New York farmers more than twice as much to feed their insect foes as to pay their share of maintaining the schools for educating their children. To come nearer home, the agricultural products of the Province of Ontario, in 1906, were \$220,000,000; the cost of education to the Province was \$5,000,000; and the losses by insects, one-tenth of the value of the crop harvested, were \$22,000,000. Thus it cost the farmers of Ontario in 1906 more than four times as much to feed

injurious insects as it did to educate the future citizens upon whom the progress of the country depends.

In view of the above facts, the remarkable apathy of the farmers of this country towards the losses which they suffer from insect foes, and the wide-spread neglect which prevails in carrying out regularly remedial measures which it had been proved will save a large proportion of this loss, are some of the unintelligible mysteries of the present day, which cannot, and probably never will, be explained. Professor H. T. Fernald, of Massachusetts, when speaking to the Association of Economic Entomologists in Chicago last winter, referred to this curious attitude of those most interested, and urged that efforts should be made to change it as soon as possible. He feared, however, that it would be necessary to wait for a new generation of farmers, better educated primarily in elementary schools where Nature Study has been made a regular part of the training of boys and girls, and then in agricultural colleges such as were to be found in every State of the Union, and which, in even a more perfect state of development, we now have in Canada.

This seeming apathy may to a measure be explained by the fact that experience has shown how certain satisfactory results may, as a usual thing, be secured; but experience, although it teaches surely, teaches slowly, and these results can in no way compare with those which could be secured by one who was on the alert to take advantage of the latest discoveries by which labor may be saved and dangerous foes avoided or conquered. There are certain principles and prac-

tices in working land, fertilizing the soil and rotating crops, which are universally recognized as good farming. These methods will vary according to circumstances, such as climate, soil, and the aggregated experience of the most successful tillers of the soil in the locality. Good farming, it is true, is the greatest safeguard against losses from injurious insects and from noxious weeds; but no one can doubt the great value of special knowledge. With our excellent agricultural colleges in Canada, we should be able to look forward hopefully to the development of a class of farmers better equipped to succeed in their chosen life-work than were their forefathers, who had none of the present-day advantages of a practical common-sense training in many of the lines of special scientific investigation now recognized as an integral part of advanced agriculture.

As stated above, every cultivated crop suffers from insect enemies; but it has been shown that, with a small amount of accurate, definite knowledge of the habits of insects, a very large proportion of this loss may be prevented. A great deal has been done by earnest students of insect life, and practical remedies are now available for most of the regularly occurring pests of the farm. For the effective use of remedies, a certain knowledge of the habits and structure of insects is necessary, so that on the sudden appearance of an enemy, the proper remedy may be used and at the time when it will be most efficacious. Every farmer, therefore, who is possessed of even an elementary knowledge of insects and their habits, is armed with what may be of enormous value to him (entirely disproportionate with the

small amount of trouble taken in acquiring it) when an outbreak of some unknown or unusual insect enemy may occur. In acquiring this special knowledge of insects, a farmer should endeavor, first of all, to grasp general principles, such as, what an insect really is and how it differs from other small animals, what the broad differences are which separate Biting Insects from Sucking Insects, so that the proper remedies, active or preventive, may be chosen. The difference in habits of the various classes, groups and families while passing through their four stages of development, will among other things enable him to distinguish to a large extent those orders in which he is likely to find his worst enemies and many helpful allies, such as the predaceous

and parasitic enemies of injurious species.

A conspicuous defect in the preparation of some of those who are engaged in practical entomology to-day, is a lack of knowledge of the elementary principles of agriculture itself, of which this branch of science is only a part. This lack has sometimes rendered suggestions useless, or, at any rate, has made them unattractive to the farmers whom it was desired to help. Not only is a knowledge of insects and of their habits an essential part of the training of a farmer, but a knowledge of farming and horticulture, is equally essential to the practical entomologist, if he would aspire to do the most useful work possible in his profession, to his own honor and to the greatest advantage of his agricultural associates.



Photo by Lucie Bailey

We speed or dream upon the open meres;
The woodlands fold us in their pungent
gloom;

—Lampman.

Tennyson's Use of Nature in "In Memoriam."

By WILLIAM HOUSTON, M.A.

AMONG the many notable aspects of "In Memoriam," this is by no means the least interesting or important. All of Tennyson's poems show that he was a keen and persistent observer of natural objects. He had a quick eye for form and color, and an acute ear for sounds. This inference from internal evidence is amply borne out by the testimony of those who were intimately acquainted with him, or were much in his company. Bayard Taylor tells of a walk he took with Tennyson over part of the Isle of Wight, and of his astonishment at the poet's knowledge of the geology of the locality. The fact that Shakespeare, Milton and Goethe were also close observers of nature makes one suspect that it is impossible to be a great poet without making free use of this source of inspiration and storehouse of analogies.

It should be noted of Tennyson that, like other great writers, he does not leave himself open to the suspicion of having introduced his touches of nature for the mere purpose of displaying his knowledge or adorning his verse. It will be found that he cites natural objects, processes or laws as a means of making more effective the expression of his thought. Many of his brief descriptions are, of course, exquisitely beautiful, but that is because he was always the artist and did not work "without a conscience or an aim."

If the reader of "In Memoriam" does nothing more he will be richly rewarded by going through the poem and making a classified list of all the natural objects named in it, with the characteristics specified by the poet and some account of his purpose in introducing them just where they occur. He will find that Tennyson was fond of the sea in all its moods and tenses, that he took a deep interest in the heavenly bodies, that he could speak of trees and of towns by names and peculiarities, and that he was familiar with birds and could make apt use of both their songs and their habits. A few citations will illustrate this point:

"And only through the faded leaf
The chestnut pattering to the ground."

"Than some dead lake
That holds the shadow of a lark
Hung in the shadow of a heaven."

"I do but sing because I must
And pipe but as the linnets sing."

"Dark yew which graspeth at the
stones."

"Short swallow-flights of song that dip
Their wings in tears and skim away."

"The flies of latter spring
That lay their eggs, and sting, and sing,
And weave their petty cells and die."

"Bring orchids, bring the foxglove
spire,

The little speedwells darling blue,
Deep tulips dash'd with firey dew,
Laburnums, dropping wells of fire."

"When rosy plumelets tuft the larch,
And rarely pipes the mounted thrush
Or underneath the barren bush
Flits by the sea—blue bird of March."

"The brook shall babble down the
plain,

At noon, or when the lesser wain
Is twisting round the polar star."

"Sad Hesper o'er the buried sun."

"Bright Phosphor, fresher for the
night."

"Sweet Hesper-Phosphor, double name
For what is one, the first the last,
Thou, like my present and my past,
Thy place is changed; thou are the
same."

But natural objects, as such, however, deftly used by the poet, would fail to make the deep impression on the reader that is produced by references to the great processes through which nature reaches her results. A merely statical view of nature is not simply unsatisfying, it is impossible. The most outstanding characteristic of the universe is its mobility. Nothing is at rest; all is force and motion. The dynamical view of nature is not only the most impressive but the only possible one that can be taken by the thoughtful observer. The recurrence of the seasons is noted throughout the poem. In the "In Memoriam" the two friends

"From April on to April went,
And glad at heart from May to May."

"And all the secret of the Spring
Moved in the chambers of the blood."

"No joy the flowing season gives
The herald melodies of Spring."

"O thou New Year, delaying long,
Delayest the sorrow in my blood,
That longs to burst a frozen bud
And flood a fresher throat with song."

The anniversary of Hallam's death,
a stormy autumn day, is described as

"issuing out of night,
With blasts that blow the poplar
white,
And lash with storm the streaming
pane."

Hallam's birth-day is described as

"A bitter day that early sank
Behind a purple-frosty bank
Of vapor, leaving night forlorn."

Among the things that recall Tennyson's "Old Affection of the Tomb," and at the same time urge him to seek "A friendship for the years to come," are:

"Summer on the steaming floods
And Spring that swells the narrow
brooks,
And Autumn with a noise of rocks
That gather in the waning woods."

When the tide that comes up the
Severn twice a day from the ocean
"hushes half the babbling Wye," its
tributary, then

"The Wye is hushed nor moved along.
And hush'd my deepest grief of all,
When, fill'd with tears that cannot
fall,
I brim with sorrow-drowning song.

The tide flows down, the wave again
Is vocal in its wooded walls;
My deeper anguish also falls,
And I can speak a little then."

The perspective of the universe is a familiar thought with Tennyson. Is it the fact

"that the past will always win
A glory from its being far;
And orb into the perfect star
We saw not, when we moved therein?"

He is aware of the changes in the face of the sun:

"The very source and fount of day
Is dash'd with wandering isles of
night."

The law of gravitation underlies phenomena of various sorts; one of these is noted by Tennyson in this stanza:

"Thy spirit ere our fatal loss
Did even rise from high to higher,
As mounts the heaven-ward altar-fire
As flies the lighter through the gross."

He was able to anticipate the psychophysicists in their view of the relation of mind to body:

"The body new to earth and sky,
What time his tender hands is prest
Against the circle of the breast
Has never thought that 'this is I.'"

He could easily and aptly describe a simple and well-known physical phenomenon:

"Break, thou deep vase of chilling
tears,
That grief hath shaken into frost."

The peculiarities of animals he can use at will to illustrate a point. If there were no life beyond this then:

"'Twere best at once to sink to peace,
Like birds the charming serpent
draws,

To drop head-foremost in the jaws
Of vacant darkness and to cease."

Sir Charles Lyell's theory of the formation of the earth's crust by the

operation of forces at work in our own time, and not by cataclysms such as the older geologists imagined, was quite familiar to Tennyson:

"The moanings of the homeless sea,
The sound of streams that swift or
slow

Draw down Aeonion hills, and sow
The dust of continents to be.

"There rolls the deep where grew the
tree,
O earth, what changes hast thou
seen!

There where the long street roars,
hath been
The stillness of the central sea.

"The hills are shadows, and they flow
From farm to farm, and nothing
stands;

They melt like mists, the solid lands.
Like clouds they shape themselves and
go."

Not less familiar are Darwin's conceptions of "natural selection," and the "survival of the fittest:"

"Are God and nature then at strife,
That nature lends such evil dreams?
So careful of the type she seems,
So careless of the single life:

"That I, considering everywhere
Her secret meaning in her deeds,
And finding that of fifty seeds
She often brings but one to bear,"

* * * * *

"So careful of the type? but no,
From scarp'd cliff and quarried
stone

She cries, 'A thousand types are
gone:

I care for nothing, all shall go.

"Thou makest thine appeal to me;

I bring to life, I bring to death;
The spirit does but mean the breath,
I know no more."

And, when, as he rises to a height of permanent exaltation toward the close of the poem, he turns to both the physical and the social world for his illustrations, he once more shows himself an evolutionist of the noblest type:

"The love that rose on stronger wings,
Unpalsied when he met with death,
Is comrade of the lesser faith
That sees the course of human things.

"No doubt vast eddies in the flood
Of onward time shall yet be made,
And throned races may degrade;
Yet O ye mysteries of good.

"Wild hours that fly with hope and
fear.

If all your office had to do
With results that look like new;
If this were all your mission here,

"To draw, to sheathe a useless sword,
To fool the crowd with glorious lies,
To cleave a creed in sects and cries,
To change the bearing of a word,

"To shift an arbitrary frown,
To cramp the student at his desk,
To make old bareness picturesque
And tuft with grass a feudal town;

"Why then by scorn might well descend

On you and yours, I see in part
That all, as in some piece of art,
Is toil co-operant to an end.

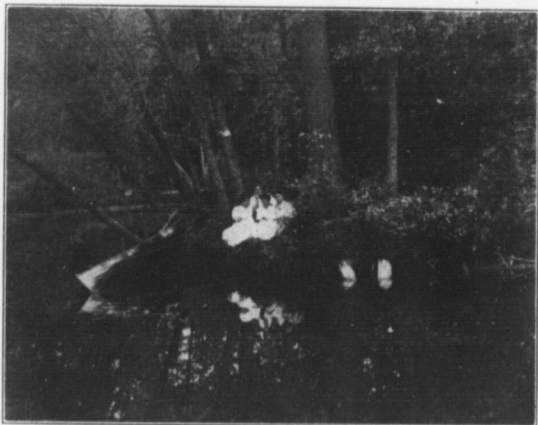


Photo by Lucie Bailey.

I steal by lawns and grassy plots,
I slide by hazel covers;
I move the sweet forget-me-nots
That grow for happy lovers.

—Tennyson

The Reforestation of Waste Lands.

By E. J. Zavitz, M.S.

TO-DAY when much is heard of the needs of a forestry policy it may be of interest to review or take stock of the existing conditions in Ontario, especially in that older portion of the Province known as Agricultural Ontario.

When the pioneer entered this region, he found the forest an almost impenetrable barrier.

In these early days the soil was chiefly cleared for food production purposes, but following this came years of crude exploitation mainly for the value of the timber as a produce.

Clearing has gone on until we have in many counties as low as five per cent. of so called woodlands. In an agricultural country where intensive methods of tilling and cropping are being developed is there room for forestry.

In other words are there soils in older Ontario which we can afford to devote to the production of wood crops.

The soils of any country gradually fall into two classes which may be termed "absolute forest soils" and "agricultural soils." It would be difficult to accurately define where agricultural soil ends and absolute forest soil begins, but roughly we can say that soil which will give a better rental return, producing wood crops than food crops, is absolute forest soil.

We find that in Germany where both agriculture and forestry are highly developed that only about fifty per cent. of the soil is tilled. Forest crops

of course are relegated to very inferior soils.

We have throughout the older parts of the Province large tracts of lands which will probably never be suited to agriculture. These areas are largely pure sand soils or thin soils on rocky formations.

Cut No. 1 shows a sand formation in Norfolk County, which possesses a history. This land was originally covered with a splendid growth of White Pine, White Oak, Chestnut and other valuable trees. Through ages of accumulation of leaf litter, etc., on the soil, this land to the early settler seemed very fertile.

Owing to its porous, sandy character it was warm and naturally drained well.

At first it grew splendid crops of wheat, but it gradually lost its humus content as well as the more important minerals necessary for agricultural crops, and to-day it is considered worthless. In the area shown in Cut 1, there are the remains of an old farm house and two old apple trees. In this locality there is about two thousand acres of such land and about the borders may be seen farms which are abandoned, soon to reach the condition shown in Cut 1.

Norfolk County has at least five thousand acres of lands which must some day be relegated to the production of forest crops.

Cut No. 2, shows another type of waste land along Lake Huron. This

land is lake shore, sand hill formation and no attempt has been made to farm it. The lumbermen have gone through and taken out the better classes of timber after which fires have followed destroying much of the humus in the soil. At present the sand is shifting and prevents the young growth of evergreens from obtaining a foothold.

Cut No. 3 shows the type of sand plains to be found in Simcoe County. This sand does not blow easily and is

the neighborhood of 70,000 acres of such absolute forest soil.

We have in various parts of Southern Ontario lands similar to those described, and it is quite safe to say that there will eventually be over five hundred square miles of these lands not including Muskoka and Parry Sound.

It is generally admitted that these lands can only be made productive by being managed for timber crops.



Photo by E. J. Zavitz.

SAND PLAINS IN CHARLOTTEVILLE TOWNSHIP, NORFOLK COUNTY.

covered with a sparse growth of weeds. The trees noticed are mostly Red or Norway pine, and this area once produced splendid specimens of red pine.

Attempts have frequently been made to use this land for agriculture and occasionally some unsuspecting victim buys a cheap farm.

This land would soon be restocked with red pine if it were not for the repeated ground fires which sweep over the area. In Simcoe County there is in

There are many reasons why such soils should be farmed for wood crops.

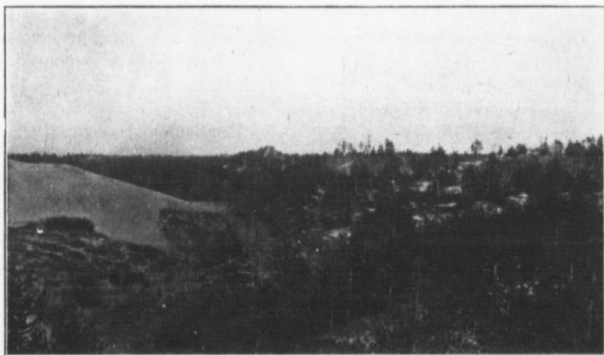
While there are many indirect arguments for the adoption of a reforestation policy, the strongest appeal to many must be that lands thus managed will in time produce a direct revenue.

Saxony, where typical German forest management exists, in 1905 received a net revenue of \$1,900,000 from 420,000 acres of forest land or a net revenue

of \$4.50 per acre per annum. Many other cases could be cited where state managed forests are producing similar revenues. It is often asserted that we cannot expect to manage forest property as economically as is done in Germany.

dollars in labor earnings and give rise to a labor earning of over 75,000,000 dollars in wood-working industries.

If such areas were again placed under forest it would assist to insure this older part of the Province against a wood famine for its local industries.



MOVING SAND IN LAMBTON COUNTY, KILLING THE REMNANTS OF FOREST GROWTH.

While labor is cheaper in Germany than in Ontario, wood prices are much the same, and we shall gradually approach economic conditions which prevail in many parts of Germany.

The confidence of business men in reforestation is also shown by the fact that several large concerns in the United States are actually carrying on replanting work. Notable cases are the Pennsylvania Railroad in Pennsylvania, the Cleveland-Cliff Iron Co., in Northern Michigan, and the Merschon Lumber Co., of Saginaw, Michigan.

The management of waste lands as a forest property would give employment to many who find it difficult to get winter employment under present conditions.

German forests afford 35,000,000

Another feature to be considered is that to-day Ontario imports almost all of the valuable hardwoods used in the Arts. Our northern forests do not produce these hardwoods, and we are practically dependent upon hardwoods grown in the United States and the tropics. All are familiar with the gradual rise in the price of hardwoods and the fact that it is becoming increasingly difficult to obtain our supply from the south. In some of these waste areas it is possible to produce such valuable hardwoods as oak and chestnut, etc.

In many cases these sandy formations are shifting and covering better classes of soil. This is particularly true in Norfolk, Lambton and Prince Edward Counties.

I occasionally receive correspondence asking for assistance to prevent such conditions.

Maintenance of forest conditions on these areas would improve conditions of stream flow and climate, as well as providing natural haunts for birds, etc.

I find that occasionally land agents manage to sell farms to persons ignorant of the actual conditions in these areas. Although only one prominent case has come under my observation, still there is always a possibility of this occurring.

If such areas were managed as provincial forests they **would be preserved** to the **people** of the province as healthful pleasure grounds for all time to come.

The need for such areas is well shown in the fact that Rondeau Park

has every year thousands of local visitors. These areas being properly managed for forest purposes, would be splendid object lessons in forestry and general forest management to visitors from surrounding communities.

Successful reclamation and management of these absolute forest soils can only be developed under state control.

The long time element involved in maturing wood crops discourages private investment. History of forestry in older countries goes to prove that private individuals cannot be depended on to **properly manage forest properties**. Cupidity or lack of judgment may at any future time undo the work of a generation. The only solution of the problem is in the segregation of these lands to be permanently managed as provincial forests.



RED PINE PLAINS IN SIMCOE COUNTY.

Our Early Spring Flowers.

By DAN. H. JONES, '08.



HEPATICA.

During the latter half of April and the early days of May our earliest woodland flowers make their first appearance. At this time of the year the country, as a rule, presents a somewhat dreary aspect. The meadows are a dirty brown, and the passing of the snow has left them in disorder. It may be here and there in shaded nooks a little snow is left, but this will invariably be dirty, having on its surface some of the winter's litter. This enhances the dreariness of the scene. If, however, we have some time to spare, say on a Sunday morning or Saturday afternoon, when the business of the week is over, and, tired of reading books or taking air upon the city streets, we play truant from church and wend our way to the woods, we shall undoubtedly, if we have any appreciation of nature whatever, be well repaid for our exertions.

Directly we enter the bush the charm peculiar to the place lays hold upon us. At once we forget the outer world and as we drink in the fragrant air, the peace and quietness and refreshing recreation we were longing for is ours. The birds make merry overhead as they flit from tree to tree carolling for very joy. The leaves beneath our feet rustle as we move along, and as we

look to note how deep they are, we see the first flower of the season—the modest hepatica. Winter's bands are burst, and by how frail a flower.

Let us note the beauty of the bloom and if we can the means whereby it was enabled to reveal itself so early in the season. What a soft and tender tint the petals are!—mauve, light blue, pale pink, or perhaps a darker blue with bordering lines of white. How long and slender is the stem! and for a purpose too, has it not had to force its way through five or six inches of rotting leaves! And now let us remove these hindrances that cluster all round it; and here what do we find? Lying prone upon the ground we see ten or a dozen long stemmed leaves of last season's production, green and full of the sap of life; and if we lay bare the



SPRING BEAUTY.

crown we notice that the plant has a fleshy base. Here it is, so scientists say, that the plant stores up the needful food enabling it to flower so early

in the year. "Consider the lilies how they grow."

So our attention now is turned towards the flowers. Having seen one we look for more, and as we move along we spy a bank that's bare of leafy carpet. Upon its slope we see a bit of pink, which on nearer view proves to be the blossom of the spring beauty, cheerily lifting up its brightly-tinted face to welcome the diffused light of the sun as it glances down through the yet unfoliated trees. To look at it makes one feel as Wordsworth did when for the first time he recognized the beauty of the little celandine. Although it had existed around him in profusion for more than thirty years, he, according to his own confession, had not been conscious of its presence. But one day on noticing the flower, his nature-loving heart was constrained to render a glowing tribute to its daintiness:—

Pansies, lilies, kugcups, daisies,
Let them live upon their praises.
Long as there's a sun that sets,
Primroses will have their glory.
Long as there are violets,
They will have a place in story.
There's a flower that shall be mine,
'Tis the little celandine.



BLOODROOT.

Thus we give to the little spring beauty a joyous welcome as it announces the advent of fairer days. It seems perhaps audacious on the part of so small a thing to come forth so boldly and herald the approach of the vernal season. But

there it is, a dainty, delicate, prim little flower, its blossom not more than half an inch across when fully open; the petals pink streaked with darker veins; the flowers hanging in a loose raceme upon a slender stalk five inches long, and no foliage other than two little pointed leaves gracefully posed the one against the other half way towards the top. The chord it strikes in us is one of gladness. This, perhaps, is all the flowers that we shall see on this occasion. But if we come along a fortnight later the bloodroot will force itself upon our notice with its glistening white, starlike blooms. It is a very attractive flower, though not so soft and delicate in appearance as the Hepatica. Yet its clear, sharp outline, and the spotless purity of its white petals are sure to demand and win our admiration as we pass it by in the sheltered nooks or fence corners. It will be in evidence in all stages of development.



TRILLIUM.

If we notice a series of plants illustrating the growth from the early stages to maturity, we shall see that it has a very ingenious device for protecting the young flower bud in its struggle towards the light. The bud is terminal on a fleshy stem. Around it is a protecting sheath, and around this again completely enfolding it is a large foliage leaf. With the bud so wrapped up and protected from injury, the stem rapidly forces its way up through the debris of the forest floor until it has reached nearly its full height. The flower bud then gradually pushes its way through and above the enfolding

leaf. Then the sepal sheath falls away and the bud opens out into the glistening starlike flower, a thing of beauty and a joy to behold. The name of the plant is suggestive. If we break the stem near the root a bright red juice will exude in considerable quantities. Query,—how does such a strongly-colored juice produce so dazzling white a flower?

The Dutchman's breeches and the squirrel corn next claim our attention. They are much alike in structure and in general appearance, somewhat more modest and unassuming than the blood-root. The flowers of both are white or pale yellow, hanging in racemes or



DOGTOOTH
VIOLET.

rather slender stems, some six or seven inches long. The leaves of both are very similar and are much cut into around the borders — multifid according to scientists. There is a slight difference in color, however, especially on the underside where squirrel corn is tinged with

purple while the Dutchman's breeches is a pure pale green.

In another week the white and purple Trilliums will add their gracious presence to the ever increasing company of woodland flowers. Tall and dignified, with gracefully drooping heads, they arrest our attention and elicit our admiration.

Next comes the dog-tooth violet which by the way is not a violet but a lily. Its bright yellow flower stands out clear and distinct from its surroundings. A peculiarity of the leaf is the numerous purple blotches to be

found scattered all over it. Science teaches that purple has the power to intercept and retain the heat rays of the sun much more so than green.



WILD GINGER.

Now the leaves which come later in the season when the days are warmer are all green; and such a fact suggests that the purple-blotched early leaves are a device for getting heat on cold days in early spring.

Next we find the violets abounding in profusion. The common blue, the sweet white, the downy and the yellow, with here and there the long-spurred and a few other varieties of this much favored order are found in bunches almost everywhere we turn in the rich loamy woods.

Mention must also be made of the long-stalked, spreading-leaved, insignificant-flowered blue cohosh. This plant spreads abroad its leaves to the breeze, which sways them to and fro like the fronds of some graceful fern. It is perhaps the least inviting of any of our spring flowers. The leaves are a purplish-green with a dash of indigo. Its small, insignificant flowers are often hid from the notice of the casual observer by the leaves with which they are in color practically identical.

Next we notice the meadow rue looking something like an enlarged

maiden-hair fern, tall and straggling; and in striking contrast to this we see the barren wild strawberry and the bright little gold-thread nestling down among the moss and short grass. Anon comes the sweet cicely with its pleasantly aromatic odor; the pepper-root, or crinkly-root, and the wild ginger, the flower of which, near the ground, modestly hangs down its head until sometimes it touches the earth itself, for it is fertilized by ground insects rather than by the fliers. These with others such as jack-in-the-pulpit and skunk cabbage, both of which may be found in boggy places hard to get at,

help to brighten the characteristic dreary aspect of early spring, and remind us that fairer days are at hand, that summer is coming along with all its effulgence of beauty; and then we feel as "Pippa" did when she sang her song:—

The year's in the spring,
 The spring is at morn;
 The morn is at seven,
 The hillside's dew-pearled;
 The lark's on the wing,
 The snail's on the thorn;
 God's in his heaven,
 All's well with the world.

The Passing of the Forest in Relation to the Flora.

By H. GROH, '08.

THE passing of the forest in its bearing upon agriculture, is a theme which has become almost trite in our ears, from the frequency of its discussion. Of its relation to the flora we have perhaps heard and thought less; and yet this phase of the question, besides possessing considerable interest, is by no means lacking in importance. In the lines which follow, we can hope only to introduce for further thought on the part of each reader, some of the changes in the vegetation which follow in the wake of settlement.

• One hundred years ago, when the population of Ontario was confined for the greater part to a mere fringe along the Great Lakes and rivers bounding the province, and the Indian with his

light demands upon the products of the soil was almost alone in the interior, the forest was allowed to stand and reproduce, subject alone to the conditions imposed by the natural struggle for existence. In this struggle it had gained the ascendancy, and extended with little interruption over valley and hill alike. Its absolute sway was redeemed from any possibility of monotony, by its richness in species, and the endless ways in which one and then another of these species preponderated, as the conditions placed it at an advantage over its fellows. Such plants as could survive the predominance of the trees or flourished best under their shade and protection, constituted a luxuriant undergrowth, which still further removed any sug-

gestion of monotony. Any plants other than these, were of necessity less characteristic members of the forest society, and maintained themselves as best they could, whenever the odds were least against them.

No sooner did settlement begin, than these more or less stable associations of plants at once commenced to undergo change. The substitution of the cultivated plants of orchard, field and garden, for the forest cover of the soil, which was in itself the first and most obvious of the changes which have taken place, has continued, as we well know, until many counties in older Ontario have now over ninety per cent. of their area under this new type of vegetation, or lying barren of all but grass and shrubby herbage. We are recognizing to-day that we have much exceeded wisdom in our destruction of the woodlands; but regrettable as the loss of the trees may be from our pecuniary viewpoint, the consequences to the flora of the province, are in much a truer sense, irreparable.

When once we feel keenly enough the necessity for it, we will replant such of our lands as would be better covered with trees; and before another hundred years has passed, we can have a generation of trees like those which have been removed, if we so desire. The Germans and others are already demonstrating what can be done in husbanding the source of wood supply. But plantations are not forests, and will never give back to us the wealth of forest verdure, nor the unconventional charm of the primeval wildwood, which in our blindness we have squandered. The blow of the pioneer's axe accomplishes more than merely the felling of the trees.

It would exceed the limits of this article to dwell separately upon each of the various conditions whose creation has forced the wild flowers, ferns, and mosses of the forest floor, to follow its receding margin. Drainage, the invasion of the sod, the exposure to the full, strong light and winds of the open; these are but a few of the insidious foes, in the presence of which existence for them became impossible. To these we are forced to add one more—the vandalism of the race, whose proudest boast in dispossessing the red man of his forest home, has been that "the desert should blossom as the rose." What have we really brought to pass? We have caused the earth to "laugh forth into beautiful harvests" for the sustenance of teeming populations; and these multitudes have sallied forth to wantonly strip it of the few remaining flowers, whose persistence would serve to add grace and beauty to the nooks and by-ways beyond their doors. Only look at the denuded retreats of Toronto's Don—and of our own picturesque Speed. We have simply to go out a short ten miles, and there discover the undisturbed profusion of the trailing arbutus and many sister flowers, in their haunts, to realize how pitilessly they have been driven back from the presence of men.

What, then, if anything, does our flora gain in exchange for the airy forms and fragrance of the wild flowers? We introduce rich grains, fruits, and ornamental plants, and till the ground to suit their wants; and this same commerce and agriculture brings with it thistles, mustards, and burdocks, for an eyesore and a plague. Surely we cannot allow the native flowers to disappear for want of the

sentiment necessary for their preservation.

What is said of the smaller plants, is demanded on behalf of the woods themselves. We have burned, and pastured, and culled, and neglected, until the few acres which remain at the rear of the farm, or along the river bank, are sorry remnants indeed, of that forest which has been the glory and pride of Canadians. The towering pines, and girthy maples and elms, once the admiration of all, are making room for ironwoods, blue beech, and other trees, which are as truly weeds as any pest in the fields. Waste places which were at one time foolishly uncovered, or which have been swept over since their exposure to the sweeping winds of the open country, are growing up, not to the valuable trees which they bore formerly, but largely to the freer-seeding, worthless poplars and white birches. It is encouraging to know that more interest is being taken in the proper and judicious management of these wood-lots; and it is to be hoped that we shall not much longer be called upon to witness mistakes like those of the past.

To realize yet more forcibly what is the effect upon vegetation of the passing of the forest, we have only to consider its influence on the climate,

on watercourses, etc. The destructive spring freshets and floods, followed by seasons of drought, and the sweeping winds, which are drawbacks of so many older settled countries, are directly traceable to this cause. The experience of such countries as Palestine, parts of China, and even of Spain, should suffice to show how arid lands are produced; and should serve as a warning to us. May we profit by it, while the trees are still ours. It is a hopeful sign, that the Government of our Dominion has seen fit recently to set aside for perpetual forest, the whole eastern slope of the Rockies; thus ensuring the permanence of the streams which have their source in its wooded sides, and mean so much to the productiveness of the broad plains of the western provinces. Similarly commendable is the policy of creating forest preserves in the highlands of Ontario.

These tracts of unbroken forest will help materially, not only in keeping this a land of varied products, but also in preserving to future generations the aesthetic influences of virgin nature. With this assured, who can conceive of Canada as the home of any but a worthy race; true to the soil, jealous of their nation's high destiny, and ready to stand by their fullest conception of right and duty.



Reading in the Farm Home.

By G. LE LEGHEUR.

The Following Article is the Second Year Prize-Winning Essay.

THE great importance of reading is not generally recognized in the average rural home. Here, we too often find a few scattered books lying around in out-of-the-way places. They frequently consist of some wishy-washy books for the younger members of the family, and perhaps some light novels and catchy magazines which serve as the mental food for the more mature. The father possibly limits himself to the daily or weekly paper; while the mother has, as her friend and adviser, some faithful cook-book. The result of this reading is seen all too plainly in the lives of those whom it satisfies. In conversation, their great stock-in-trade consists of the small doings of the neighborhood, including choice bits of slander and gossip. They go on in the same old ruts, possibly priding themselves on sticking to the principle—"What was good enough for father is good enough for me."

However, we are glad to note that this condition is slowly but surely becoming a thing of the past. Whether owing to a natural evolution of mankind or to a change in conditions, we cannot say; but it is indeed true that the time is rapidly passing when anyone can make a living by farming: he may *exist* but he cannot *live*. Thinking people are coming to realize that to be progressive, up-to-date farmers they must have an intelligent understanding of their work, a knowledge of public and political questions, and an interest

in the welfare of the people around them. These may be acquired through the medium of reading.

But the busy, work-a-day farmer asks, "How am I to get the time?" and possibly this is one of the hardest points to solve to his satisfaction. By making an intelligent study of his work and the principles underlying it, he could so rearrange his methods that they would not require nearly so much time as they do at present. Many farmers, through lack of information, are still sticking to old, obsolete methods which not only require much more time but do not give as good results. Much of their effort is fruitless and oftentimes they are actually losing money. Indeed, the spectacle is by no means uncommon of men selling their farms because they cannot make a living on them. Intelligent reading would not only be a means of saving time and bringing increased returns—thus necessitating less work for a living—but would give an interest to the work which would make it a pleasure rather than a drudgery.

Many people do not really know how to read. Some read so that they become practically intoxicated. They rant over without applying their reasoning powers, without questioning the statements. To read properly one must weigh and consider—"Will it suit my case?" or using the Biblical text, he must "prove all things." He should not be afraid of wasting time by re-

reading, as he will often get more by reading the second or even the third time than from the first. One has not really mastered an article until he is able to give the substance of it to another; and just here it may be said that there is no better way of fixing it in his own mind. One must use judgment, weigh, consider, and apply if he would truly master.

Now every farmer cannot avail himself of the advantages of attending a college where the principles of agriculture, as known and practiced by the leading agriculturists of the world, are taught; but he has the opportunity of reading in his own home on subjects pertaining to his work. An abundance of suitable reading material is open to him, the most common of which is the agricultural papers. These are now being published in almost every province and the farmer should choose the ones most suitable to his conditions. They contain the experience of some of the leading agriculturists of the present day, and deal with questions of interest to the average farmer in a very able manner. The editorials are written by men who have a deep insight into agricultural knowledge, men who have a healthy view of agriculture and are endeavoring to raise it to its proper position. Such papers are bound to give farmers a wider outlook and a greater respect for their work; and they give information which, if applied with discrimination, will go a long way towards making farm life more attractive and more profitable.

Other means of educating the farmer in his work are the free bulletins which are issued from time to time by the different Departments of Agriculture. They occupy a position between the

agricultural paper and the agricultural text book. They are written by capable men—specialists in their line—and they deal with special phases of agriculture. They are scientific, but are written in such a practical manner that they may be understood by any person of average ability. They are up-to-date and are, therefore, more reliable than the average text book. In this progressive age books soon become old unless they contain foundation principles which never change. But standard agricultural books fill an important place in education for the farmer.

It is little use to read the agricultural papers, etc., and then consider them finished. If it were possible to retain the ideas set forth from a mere reading, we might indeed become "walking encyclopedias." The important thing is to know where to find just what we want at a certain time, and this can be best facilitated by having a library properly indexed. The numbers of the paper should be bound in with their index and kept for future reference. The bulletins and text books should be looked over carefully or read if opportunity offers, so that one may know where to get information on any question which happens to come up. If used in this way they may become a valuable fund of knowledge to the owner. The agricultural papers, bulletins, reports and standard books, which may be procured from time to time, should form the basis of a good farm library.

But the farmer should be more than a mere machine. He will be a broader and more useful man if he be public-spirited, which means to take an interest in the public questions of the day. If he is going to vote intelligently

he must inform himself on such questions as the ownership of public utilities, immigration, and transportation. Besides these broader questions which affect the public generally he should be especially interested in questions which concern his profession, namely: the tariff, marketing of produce, and agricultural education. By taking an interest in these questions he may not only improve matters so far as he himself is concerned but he may be of service in the broader sphere of humanity. This is likely to remain an agricultural country for some time to come, and the farmers of Canada have it in their power to better their condition through the franchise. Realizing their privileges they should so educate themselves that they may know what is best for them. The percentage of farmers in our parliaments is very small when we compare the large number engaged in agriculture with the numbers engaged in the other professions. Who knows better than the farmer what is the best policy to promote his calling? Why should not more of our well-trained, prosperous farmers occupy positions in the government? They themselves must answer the question.

In looking for reading material on public and political questions we must give the newspaper the more important position. But too much dependence should not be placed on the views of the party paper, as they are generally prejudiced—better to get both sides if possible, and the independent view as well. The best papers procurable are none too good, and even they should be read with discrimination. The larger questions on the editorial pages contain the gist of the paper and deserve due attention. The

newspaper is a varied periodical intended to suit the taste of the general public: some desiring one phase, others another. Scare headlines, sporting news, and notorious happenings are not much use to the farmer. He must pick and choose in order to spend his time to good advantage. Papers approaching the yellow-journal type—the mawkish, sensational papers which apparently gloat over the degradation of humanity—should be entirely tabooed.

Magazines are supplementary to the newspaper. And here again one needs to use his best judgment. There are high-class magazines and low-class ones; the former are fairly reliable while the latter are written up in a style to supply the unnatural appetite of a large number of people. The matter in our average magazines is manufactured by paid correspondents who are too frequently satisfied if they can get interesting material even at the expense of reliability. Still the best magazines—such as the Canadian Magazine and the American Outlook—contain much valuable information and stories true to the life of the time which are interesting to the younger members of the family.

If the mother of the family has not had a good training in home-making she should avail herself of the very best literature on such subjects as Household Economy, Hygiene, and Child Nature. The importance of these subjects is not sufficiently recognized although the intelligent and economical management of the home, and the health and training of the family depend on a knowledge of them. Some women "throw as much out the back door as their husbands bring in at the front"—they are poor managers, poor

cooks, and altogether incapable of running a home. If all our Canadian girls had to pass reasonable examinations on the general management of a home before getting married, quite a number of them would die old maids, and in the end it might be well for the country. The care and training of the child is the most important task which can be intrusted to any individual. It is a great truth that "Who rocks the cradle rules the world," and it is from the mother in particular that the child receives the bias and training which fits or unfits it for life. The home is the basis of a nation's greatness, because it is there that her people get the most important part of their training. No other organization can take its place, not even the school or the church—they may supplement it but nothing more. The child has received its bent before ever it comes under the influence of the school. The mother especially has charge of its previous health and training in that period when it is in the most plastic condition—when it is most easily made or marred. How important it is, then, that she should have the best possible training for her duties! Reading is one means of getting this training; in some cases, the chief method.

Although I treat of reading for the mother separately I do not mean that she should keep rigidly to her own sphere and the husband to his. If they wish to get the most from their reading and to keep in harmony with each other, there should be a reciprocating of ideas. They will have the fruits of their reading better fixed in their minds by so doing, and if they are really helps they will work out their ideas in harmony together. Still I do maintain that the mother has very little time

which she can afford to devote to such matters as politics. The question of woman suffrage is not within the scope of this paper, but I merely remark in passing that it should not be allowed to interfere with the proper management of the home.

But the father and mother may follow out the suggested lines of reading and still not be well equipped for the battle of life. They should know themselves, and have an intelligent knowledge of their relations to each other and to their fellow-men. Their past training, their friendships, and their reading from childhood have been important factors to this end, but the unfoldment of truth is progressive, and they may still do much to help it along by reading the great men and the great women who have given forth from their experience and wisdom for the uplift of humanity. The writings of these men and women are a noble heritage of the past, put on record for our guidance and development. This life is too short to learn all by the bitter lessons of experience; it behooves us, therefore, to profit by the successes and failures of others. The company of the great is elevating in our libraries, just as it is in our drawing-rooms.

Having treated the question of reading for the father and mother we must now turn our attention to the most important consideration—reading for the children, the boys and girls in the home. I say the most important consideration because it is in childhood that the taste for reading is developed and the habit formed. Not only is the taste for reading developed then, but the taste for certain kinds of reading. It is the duty of the parents to guide the reading according to the nature of the child.

But first comes the formation of the habit. A close observer will notice that the child has a very active imagination. Some may describe it as an "over-active imagination," especially when the little boy tells of seeing "fifty dogs in the yard with our Dash," and under pressure afterwards narrows down to "at least one other dog." This period in the development of the child mind is perfectly natural, and need not be a cause for worry; it should rather be satisfied by nursery rhymes, Mother Goose stories, etc. A good story-teller occupies a high place in the favor of children: he will be "kept busy." Story-telling is quite an art, but in these days of abundant literature much suitable material may be procured and read to the children. The value of reading aloud in the home, as a means of giving children a taste for reading, cannot be over-estimated. A word of explanation here and a short discussion there, raises the interest to a state of enthusiasm.

Once they have formed the habit it is just a matter of direction. Because of their admiration for the heroic, good healthy stories of adventure seem to be especially adapted to them. Such writers as Henty and Bullen have become famous because of their "Books for Boys." Any stories—fiction or otherwise—which give a healthy view of life are suitable. Many of these are found in our high-class magazines and in such papers as the *Youth's Companion* and *Boys' Own*. As the boy gets older he may become interested in the literature of the farm, and the girl in the literature of the home if such be open to them. But even then, they may develop an inclination towards other pursuits. The boy may have a special liking for one of the so-called

"learned professions," while the girl may desire teaching, nursing, or something else. In that case they will naturally read according to their choice, but it is a fact that the choice of a profession generally follows from the reading or the environment of the child. Right here, therefore, a great deal can be done in educating the boys and girls towards the farm. An effort should also be made to lead them out in the noble literature of the past which was suggested for the parents. The standard writers—Shakespeare, Scott, Dickens, Longfellow, Carlyle, and Tennyson—will never die because they have left themselves in books for the service of humanity.

While considering reading for the boys and girls we cannot pass without referring to that modern curse, the dime novel. Its very cheapness makes it all the more obnoxious because it is thus more easily obtained. It gives false views of life, holds up a kind of mock heroism, and is often full of mental suggestions which are anything but elevating. There is grave danger of children's falling into the dime-novel habit unless they are provided with suitable reading material. "Prevention" is the word in this case, and satisfying the natural craving of the child for heroic deeds and noble endeavor is the only sure prevention. Many lives are being wrecked every year from this terrible scourge, and generally through neglect on the part of parents.

In this busy, bustling western world many individuals are so engrossed in pursuing the bubbles which are glittering just before them that they fail to see things in their proper proportion. They are inclined to try short-cuts in following up their get-rich-quick

schemes, but in the road to learning there are no short-cuts. If our Canadian farmers are to get in line with the "new agriculture" they must make an effort; each must work out his own salvation by making use of the means at his disposal. Reading will help to make them the full men which they ought to be. Let our farm homes,

then, join in adopting the sentiment of the following line:—

Read, study, think—our motto be!

With this slogan as their watchword, the time cannot be far distant when the "Lords of the Soil" will have appropriated for their use, the fields of knowledge which are lying all around them.

Book Reviews.

New Books on Entomology.

Insects Injurious to Vegetables—By F. H. Chittenden, Sc. D., U. S. Department of Agriculture. New York: Orange Judd Company, 439-441 Lafayette street. 262 pages 163 illustrations. (Price, \$1.50.)

Every one who possesses a garden, whether in town or country, is sure to be troubled, from time to time, by insect pests and to be at a loss regarding the most effective methods of dealing with them. This handy volume affords the information needed, in convenient form, and should prove a most useful guide to vegetable growers in defending their crops against insect attacks. The opening chapters give a brief account of the classification of insects, prevention of their ravages by methods of cultivation, insecticides and how to make and use of them, mechanical means that may also be employed. Then follows an account of a number of insects that attack crops in general without confining themselves to a particular kind of plant, such as Cutworms, Grasshoppers, Plant-lice, Wire-

worms, Flea-beetles, etc. The remainder of the volume deals with the enemies of special vegetables, beginning with Asparagus and going on in alphabetical order to Tomatoes. By this arrangement the needful information regarding an insect can at once be obtained, and under each vegetable will be found a description of the enemies to which it is exposed, and of the remedies which should be applied; sufficient illustrations are also given to render identification easy. All our agricultural and horticultural students should have this work; Nature Study teachers will find it most useful for the identification of common everyday insects; and to market-gardeners it must be simply invaluable. The author is on the staff of the Bureau of Entomology at Washington and has published a number of excellent bulletins on injurious insects; his statements may therefore be relied upon and his advice followed without hesitation.

C. J. S. B.

The O. A. C. Review

EDITORIAL STAFF.

A. D. CAMPBELL, '09, Editor.

F. C. NUNNICK, '10, Associate Editor.

L. A. BOWES, '08, Agricultural.

MISS K. VAUGHAN, Macdonald.

A. E. SLATER, '08, Experimental.

MISS S. CALDWELL, Asst. Macdonald.

R. M. WINSLOW, '08, Horticultural.

A. G. TURNEY, '09, College.

G. B. CURRAN, '08, Athletics.

G. LeLACHEUR, '10, Locals.

H. SIRETT, '09, Alumni.

J. W. JONES, '09, Staff Photographer.

DAVID M. ROSE, '08, Acting Business Manager.

Editorial.

In our College Life Columns this month it is our pleasure to record the winning of three

The Presentation of Prizes.

prizes by various members of the student body. These are the '05 medal, the Chapman scholarship and the Valedictory prize. Various other prizes such as the prizes in the Oratorical and Public Speaking Contests, the Governor-General's prize, the Barton-Hamer medal and others are awarded during each college year. These prizes are presented from time to time as they are won at probably the next student body meeting, or in some cases they are simply handed to the winners.

The Review takes the stand that this is not the best method of presenting these prizes. We feel that if as many as possible were presented at one time it would be in the interests of the college and of the student body. The

winning and awarding of these prizes would mean more. As it is now, it is scarcely known that the prizes are ever given, and certain it is that only a very few students could name all the winners in any one year. We do not recommend extreme display but we have no hesitation in saying that there is in this connection too little display for the advancement of college spirit.

The proper time for the presentation of these prizes would be at Commencement Exercises held at the close of the term, but, as our graduates go to Toronto for the conferring of their degrees, we, as a result, have no closing exercises in Guelph.

What we should recommend then would be the holding of a regular convocation such as is held in other colleges during the first or second week of the college year. This assemblage would consist of the faculty, the whole Macdonald Institute and O. A. C. stu-

dent body and any friends of the college who might care to be present. This, we think, would be a fitting occasion for the presentation of prizes. The significance of the winning of such prizes would be impressed on the in-coming students, and the delivery of addresses by some of our own faculty and by outsiders, would have an elevating and inspiring influence on the whole college life.

One of the great difficulties that the Review staff encounters from time to time is the securing of good and suitable photographs to use as illustrations. We

Our Illustrations. We desire on this occasion to appeal to our readers, and especially to ex-students of the college, to assist us in this matter. If the Old Boys would send us pictures of their homes, of their stock and of landscape scenery, we could use many of them to excellent advantage. It would do themselves no harm and it would aid the Review greatly. By a little effort many pictures could be taken during the coming summer and forwarded to us for use during next year. It is one of the aims of the Review to make the Old Boys' column a source of delight to the Old Boys, but this can only be done with the assistance of these same men. We hope for better things during the remainder of the year.

It is a regrettable fact, that about four hundred subscribers to the O. A. C. Review have failed to send in the small amount due us as the subscription price of the paper. It is surely not the great-

Concerning the Subscriptions.

ness of the amount that causes such a long list of delinquents. We verily believe that the insignificance of the sum is the cause of its being so often overlooked, as a larger amount would in all probability be more promptly settled. It matters little, however, at this juncture what the subscription price is. What we wish you to know is, that we earnestly desire to have the subscriptions promptly settled for. Now, Mr. Subscriber, when you read this, just think whether or not you have paid this year's subscription. If you have, happy are you; if not, don't say, well, I must attend to this, and then go away and forget it, but sit down and straighten up this little matter. If you are an ex-student or an outside subscriber the price is fifty cents a year.

June is coming, and with it comes the throng of visitors to the Ontario Agricultural College. To the ex-students we would say boom these June Excursions; it makes one of the most pleasant outings imaginable, and you are entertained here right royally. We know many farmers who visit the college annually and we are glad to welcome them back each year. There is much to be learned from one of these visits, especially if you go out over the experimental plots with an able instructor of the department, who explains the results of the various experiments, points out the varieties of the different crops which are giving the best returns, and answers any questions you may wish to ask concerning the work. Then there are various other departments which you will be pleased to inspect, such as the Dairy, Horticultural, etc..

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and in each of these there is much useful information to be gained. If you have never visited the college, get yourself out of the old rut and come up here for a day, it will be time well spent.

In this issue the Athletic Society is again appealing to the ex-students for support in the building of a covered rink. Everyone who is now familiar with college conditions is convinced that the rink is a necessity and that it can be built. Judging from the interest that is now being taken in Scientific Agriculture in Ontario a thousand regular students should be registered at the college each year within the next few years. It requires but a moment's thought to determine what immense benefit a covered rink would be to such a student body.

As to the funds for such an under-

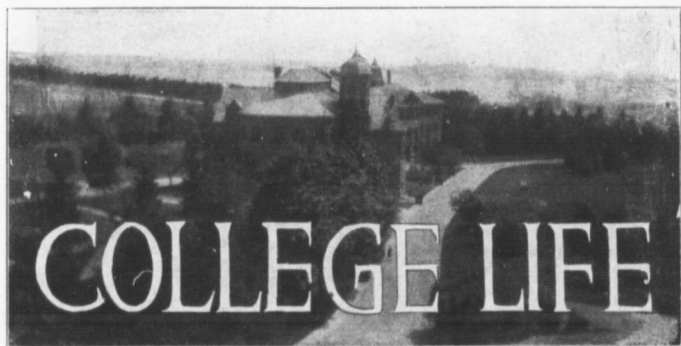
taking a goodly sum will be provided by ex-students. On the other hand, the student body will, from time to time, raise large sums of money. Many concerts are held here by the students each year. At the present time these are all free. But there is seldom a concert which is not worth, at least, twenty-five cents. The Review would recommend that an admission fee be charged. The attendance would be just as large. When the students realize that the money is to be put to such good use every man would be present, and even if he were unavoidably absent his contribution would come in just the same.

The time has now come when the rink movement must be kept uppermost in the minds of every one connected with this college. All that is needed is the united effort of Faculty, Ex-students, Macdonald Institute girls, and Ontario Agricultural College boys to make the rink a reality within a very few years.

THE SOWER.

A brown, sad-colored hillside, where the soil,
 Fresh from the frequent harrow, deep and fine,
 Lies bare; no break in the remote sky-line
 Save where a flock of pigeons streams aloft,
 Startled from feed in some low-lying croft,
 Or far-off spires with yellow of sunset shine;
 And here the Sower, unwittingly divine,
 Exerts the silent forethought of his toil.
 Alone he treads the glebe, his measured stride
 Dumb in the yielding soil; and tho' small joy
 Dwell in his heavy face, as spreads the blind
 Pale grain from his dispensing palm aside,
 This plodding churl grows great in his employ;—
 Godlike, he makes provision for mankind.

—Charles G. D. Roberts.



GOING are the Seniors when exams are over. Going are the Juniors when Nature Study is finished. Gone are the Sophomores and Freshmen, and peace and wisdom once more reign supreme on College Heights. It is the earnest hope of the editor that everybody has passed his examinations and that as many as possible may return in the fall to complete their studies, and to those who go to tread new paths in life, that success and prosperity may attend them. In the meantime, while the senior is working hard, let the junior, asleep under the shade of the maple tree, dream of the glories of nature study, or chasing bugs across ploughed fields, muse on the uncertainties of life.

The Athletic Concert.

The annual athletic concert was held in the gymnasium on Saturday evening, March 21st. The entire programme was marked by a variety, choice and finish that greatly pleased the exceedingly large audience in attendance and reflected much credit on the Athletic Association Executive,

Mr. Reeds, and the numerous participants. The work of the gymnasium team was at all times good, and the pyramid displays were well designed and carried out. The supple-jointed little Jap, Iwanimi, grotesquely arrayed in a brilliant red costume, and wearing "the smile that won't come off," performed his work with an ease, a neatness and finish that stamped him as a born gymnast, and brought forth round after round of applause. The fencing, boxing and wrestling bouts were well contested and duly appreciated.

A variation in the programme was introduced by the Philharmonic octette, who rendered a couple of illustrated songs in a happy manner, and were heartily encored. Mr. David McKenzie, as the burly clown, by his acrobatic stunts on the stage and exceedingly clever detective work among the audience, created much laughter and merriment. One of the chief events on the programme was the presentation of the Pringle Cup by Professor G. E. Day. This cup was donated two years ago by Mr. Pringle, of Guelph, to be-

come the property of the student who should win the championship of the indoor sports on two successive occasions. By good all-round work, W. Baker, of the '08 class, succeeded in winning the championship both last year and this year. The cup is thus his property, and right well has he merited it.

The evening's entertainment terminated with a very successful representation of "Dormitory Life." The participants spared neither young nor old, neither male nor female, in their witticisms, and both boys and girls came in for a fair share of jollying. An impromptu supper was held in the room, and stimulated by the effect of the many luscious and tempting dishes set forth, and possibly somewhat inebriated by the ginger beer (which flowed copiously) many witty sayings proceeded from the students. The poor old college beef, hung, drawn, and quartered, as it has been, mutilated and contorted by all the tortures which the fiendish cruelty of the Spanish Inquisition could impose, was finally subjected to the axe, and one last, dying, desperate effort made to sever those strands of perdurable toughness. This concert was undoubtedly one of the best, if not the best, ever given by our Athletic Association, and great credit is due to the president, Mr. Hare, and his able executive. The following is the programme:

1. Exhibition on German Horse - -
Gym. Team.
2. Fencing Bout - - - - -
U. G. Maryat, W. R. Thompson.
3. Exhibition on Parallel Bars - -
Gym. Team.
4. "Where Are You Going My Pretty Maid?" - - - - -
Philharmonic Octette.

5. Boxing Bout - - - - -
E. H. Aldwinckle, C. L. S. Palmer.
6. Mat Work - - - - -
Gym. Team.
7. Wrestling Bout - - - - -
M. F. Coglan, H. R. Christie.
8. Presentation of the Pringle Cup -
By Prof. G. E. Day.
9. Exhibition on Horizontal Bar. -
Gym. Team.
10. "Simple Simon" - - - - -
Philharmonic Octette.
11. Representation of Dormitory Life
A. G. Turney, J. D. Tothill, R. C. Treherne, E. H. Aldwinckle, E. W. Stafford, A. J. Logsdail, R. Fraser.

Easter Honors.

That much-coveted trophy, the '05 medal, donated each year to the best all-round man in the graduating class,



R. M. WINSLOW, '08.
Winner of the '05 Medal.

has been awarded to Mr. R. M. Winslow. "Windy" is not just as his nickname would indicate. He is a man in every sense of the word. His bluff,

good natured disposition, cheery word of greeting for freshman, senior or professor alike, and great ability as a student, have won for him a high



G. LE LACHEUR,
Winner of the Valedictory Prize.

esteem on College Heights. He has accomplished good work for the Review and has used his six feet two inches of bone and muscle to advantage on the gymnasium team. His record as a student is one of which he may well be proud, for he has headed his class in every year, and holds the Governor-General's silver medal for general proficiency in first and second year work. In addition to his other attainments, Winslow has proved his ability as a platform speaker, this year winning the public-speaking contest. The class of '08 has made no mistake in its selection, and the Review predicts a great future for "Windy," and extends to him its heartiest congratulations.

Since coming here in the fall of 1906, G. Le Lacheur has firmly established for himself a reputation as a consistent

and clever student, and therefore we were not much surprised to hear that in spite of keen competition, he had won the "valedictory prize." Mr. Le Lacheur's essay, entitled "Reading in the Farm Home," appears in the first half of this number, and is well worthy of perusal. The Review offers its congratulations.

Last fall, Mr. George Chapman, of Guelph, generously donated the sum of twenty dollars, to be expended in books, as a prize in English, the prize to be awarded on the work in English of the first two years, and the award to be based on the degree of efficiency attained in literature, composition and public speaking. The honor of being the first man to win this prize falls to an Englishman, Mr. E. H. Aldwinckle, who hails from the world's greatest city. Congratulations, Winkle, keep it



E. H. ALDWINCKLE,
Winner of the Chapman Prize.

up. Aldwinckle has done good work during his two year's course and ranks high in the opinion of his fellow-students and professors. We trust that

he may see fit at some not far distant date to return to the O. A. C. and procure his B. S. A.

The Sophomore Banquet.

Nine p. m. was the time, and the Banquet Hall of the Royal Canadian Cafe (Kandy Kitchen) was the scene of the Sophomore Banquet, held by the class of 1910. It was an unqualified success; not a hitch in the whole programme, and everyone present voted it one of the best, if not the best, of all the Sophomore Banquets held here.

Feelings of joy and sadness were mingled in the hearts of the banqueters as they gathered round the tables. Joy, because they were through examinations and looking forward, most of them, to home and dear ones there. Sadness, for they realized that it was the last time on this earth that they would be all gathered together, and that they would soon be separated—many of them forever—and scattered to the four quarters of the globe. However, when ceremonies commenced these thoughts of sadness were banished for the time being and all entered right heartily into the spirit of the proceedings.

An excellent menu was provided by the genial proprietors of the Royal Cafe, and the boys did full justice to it. The name of each dish was accompanied on the menu card by an appropriate quotation from one of the college professors, such as, "Salad" with "Succulent foods are very essential." Prof. G. E. Day. The demands of the inner man being attended to, everybody who could smoke (and a good many who couldn't) "lit up" and leaned back in their chairs to enjoy the toasts.

The speeches were, of course, the

feature of the banquet, and were thoroughly enjoyed and heartily applauded by the listeners. They were all exceptionally good, and some of them would have been a credit to the most illustrious assembly. There were speeches comic and speeches dignified—language humorous and language serious. There were skits on the boys and skits on the professors—and to a great extent did the boys enjoy hearing about the tricks their professors, as students, used to play. But best of all were those speeches impressing on the class the importance of their calling and life-work, their responsibilities and duties as educated citizens in a land where farming will be always the chief occupation of the people, and where scientific agriculture is of such importance.

A reading, a vocal and an instrumental solo, together with the different selections rendered by the orchestra, all contributed to the pleasures of the evening, and were well appreciated and applauded.

Following is the toast list:

The King.

"Ay, every inch a gentleman!"

Class President—O. C. White.

"God Save the King"—Orchestra.

Our Alma Mater.

"Our song and feast shall flow to the fame of thy name."

—Campbell.

S. E. Todd, Prof. J. B. Reynolds.

Instrumental, R. Fraser.

The Staff.

"So are they all—all honorable men!"

—Shakespeare.

E. Robinson, W. R. Graham.

Music, orchestra; reading, E. A. Howes.

Our Sister Classes.

"The name of friendship is sacred."

—Longfellow.

J. M. Lewis, R. M. Winslow, H. Sirett, W. W. Emmerson.

Music, orchestra.

Class of '10.

Self-reverence, self-knowledge, self-control,

These three alone lead life to sovereign power.

—Tennyson.

J. E. Howitt, G. Le Lacheur.

Vocal solo, F. C. Nunnick.

Macdonald Hall.

By their yells ye shall know them.

A woman's soul leadeth us upward and on.

—Goethe.

A. M. Shaw, E. H. Aldwinckle.

Music, orchestra.

Agriculture.

Who can cease to admire

The ploughman consul in his coarse attire?

—Dryden.

F. C. Nunnick, Prof. G. E. Day.

H. R. C., '10.

Societies Reorganize.

The various students' associations have organized for next fall as follows:

Literary Society.

Honorary President—Professor C. A. Zavitz.

President—W. M. Waddell.

Secretary—S. H. Gandier.

Treasurer—D. Gordon.

Philharmonic Society.

Honorary President—J. W. Crow, B.S.A.

President Macdonald Hall—Mrs. Fuller.

President—A. McLaren.

Vice-President—J. D. Tothill.

Secretary-Treasurer—J. D. Lawson.

Committee—J. M. Lewis, A. Eastham, C. S. Howard.

Dramatic Managers.

R. C. Treherne, G. H. Unwin.

Review Staff.

Editor—A. D. Campbell.

Associate Editor—F. C. Nunnick.

Macdonald—(To be elected).

Agriculture—H. Sirett.

Experimental—G. H. Cutler.

Horticulture—A. G. Turney.

College Life—G. Le Lacheur.

Old Boys—C. Ferguson.

Athletic—H. R. Christie.

Locals—P. E. Light.

Photographer—J. W. Jones.

Artist—G. H. Unwin.

College Song Competition.

The Philharmonic Society have started a song competition under the following conditions:

1. The competition shall be open to all students and ex-students.
2. The song must be original.
3. No song shall necessarily be accepted.
4. Songs with music accompanying them shall be given the preference.
5. The prize shall be \$10, or value.

The Society has been instituted for the purpose of developing a love for music amongst the students. Now this can only be done through the co-operation of all the students, and, therefore, we should like every student who sings, or plays any instrument, to practice as much as possible this summer and come back in the fall ready to help us in our chorus, choir, and orchestral work.

The Executive have also decided to hold a song competition for the Macdonald Hall students and ex-students.

The conditions are as above and the prize a beautiful Bronze Shield, with the College Coat of Arms on it.

All songs must be in the hands of the Secretary, Mr. J. D. Lawson, before the 31st of October, 1908.

A college song should help greatly in consolidating the student body and producing the much coveted college spirit, so give your hearty co-operation and make this competition a strong one.



SOPHOMORE CLASS, '10.

A Subscription Prize.

The editor of this column desires to draw the attention of the ex-students to the students' prize, which is this month being offered for competition to the readers of the Review. The prize which is a Melotte Cream Separator from the factories of the R. A. Lister Co., is to be awarded the candidate securing the largest number of new subscribers, other than students, under the following regulations:

1. Competition begins when this number is received, and terminates October 31, 1908.

2. Candidates must be students or ex-students of the College.

3. Candidates must be subscribers to the Review.

4. The Review is to be offered at the ex-student rate, viz.: 50 cents per year, and no shorter term subscriptions are accepted.

5. All subscriptions must be forwarded to us by the end of the

month in which collected, so that the mailing list may be adjusted in time for the new subscribers to receive their copies the following month.

6. Information regarding the progress of the competition and some idea of the candidate's standing will be forwarded him on the 1st and 15th of each month during the contest.

All those who intend entering the competition should send in their names at once and get receipt blanks and any further instructions that may be required.

Subscriptions will run from date of receipt until September 1, 1909.

Subscribers will receive copies every month in the year excepting July and August.

The final awards will be made by a committee of four, elected by the student body, to whom a full report of each candidate's work will be submitted and same announced in the first number of the Review appearing after the prize has been awarded.

Athletics.

The Covered Rink.

AWAY back in the nineties this College was young—the buildings were few—the classrooms scarce and the surrounding grounds in their first stages of scientific cultivation. But even as they were, they were sufficient for the needs of the students. The graduates of these years tell repeated stories of the unorganized conditions of affairs that existed even among themselves. The chances then of advancing themselves in cultivated and athletic pursuits were incomparable to those that exist in these enlightened days.

It was not until the close of the nineteenth century that the College became affiliated with the University of Toronto and was enabled thereby to give her students a more advanced and truly scientific course that lead up eventually to the conferring of the B. S. A. degree. Since then the knowledge and fame of the Ontario Agricultural College has advanced in leaps and bounds. The numbers of her students increased, and correspondingly, accommodation for the increasing numbers was added.

New buildings were erected from year to year, the old and consequently out-of-date laboratories were pulled down to give place to better houses of equipment for the continually advancing knowledge. Agriculture and the knowledge of agriculture was now in the ascendant, and like all true and

noble pursuits they were not to stop half way. Buildings continued to be erected, yet more proficient professors were added to the staff, and again more students were found making their way to Guelph and to the Ontario Agricultural College to follow up the opportunities and study the wonders that were opening up before them. With this increasing number of students came reform. Like a miniature army they found that they were incapable of doing justice to a course that so befitted them. Consequently, following closely on the heels of reform came organization; and with organization came results which are now proved by the efficient present-day state of affairs. Presidents of years were nominated; managers of the different sports were appointed. Athletic, Literary, Y. M. C. A. organizations were formed—and yet later came the College Paper, "The O. A. C. Review," detailing the events of the year and so forming a diary that will forever be looked back upon as literature incapable of becoming dry. Through the pages of the O. A. C. Review the ex-students are enabled to keep in touch with their Alma Mater, and observe with pride the advance of some subject that they in all probability were the originators of; or if not the originators they took more than an active interest in.

College life is never more interesting than when ten or fifteen years old—

when old reminiscences are recalled. And what do these thoughts lead to? It can only be one thing in its essence; that is the rapidity of the progress and the vastly improved standard that is upheld in this year '08. And this standard has yet to advance.

In the introduction to the Calendar of the College, these words are written: "To the observant statesman it is

And this is what the Athletic Association in conjunction with the series of lectures at the O. A. C. is striving to do. A strong man makes a better farmer than a weak one, and an able thinker makes a better business man than a dunce. These are merely common sense statements but many men misapply them. Good head work and study combined with fresh air and



THE GYMNASIUM TEAM, '08.

Photo by J. W. Jones.

plain that the readiest manner of increasing the national wealth is by increasing the quantity and quality of the produce."

Cannot this be read "To the observant statesman it is plain that the readiest manner of increasing the national wealth is by increasing the quantity and quality of the men that produce the produce."

exercise form an ideal man—a man who is broad-minded, whose senses are not confused or centered on one thing, and one who takes an interest in everything. What use to the world is a "plug" in the true sense of the word? He resembles the domesticated cat, which through disuse of its limbs and senses, is absolutely unable to compete in the world with its brother in the

wild state. Man is domesticated and the only way to ensure good brain work and the free, healthy use of every organ is exercise. And this is what athletics do.

At the college here many games are played, and perhaps the most neglected of all in the way of training and preparation is hockey. This game is one of the foremost of Canadian national sports; it is typical of Canada and of Canadian ways, and yet here in Canada, in Guelph, in the Ontario Agricultural College it is most neglected. We have traced as clearly as possible the advancing course of the college. We have noticed the gradual growth of student organizations. Are we now to stop when there is yet time and every chance of improvement?

It is no wonder that we are unable to compete with the colleges in hockey when no opportunity is given for a team to practice and to make themselves efficient in this game. The more scientific the work, the more exercise is needed to counteract it. Consequently unless more opportunity is afforded the students, scientific advancement suffers. This may seem a somewhat exaggerated view but the idea brought out by its meaning is evident.

In football we have every convenience at our hand; the ground on which to play and the necessary requirements for the game.

In the gymnasium we have a building in which we are enabled to exercise ourselves during the winter — but in hockey, the Canadian national winter game, we have comparatively nothing on which to train a team worthy of the college. Let us be consistent, therefore, and devote our energies from

now on towards forming a covered rink.

This affair, more so than any other, must receive the entire and unquestionable support of the whole student body. The Athletic Executive are willing to do all that is in their power, and their mode of action has been outlined.

Consider how often we hear of men from other colleges gaining diplomas, medals and certificates for their industry, and this now compared to the head of the league in some sport or other. We venture to say that a college fame is more aroused by doings in athletics than almost any other way, and if this is so, are we not all eager for our college, our Alma Mater, to stand up well in comparison with other colleges? We think so, therefore, let us of the present, as well as of the past, devote ourselves to obtaining sufficient funds to put a covered rink on a financial working basis.

A considerable sum of money is necessary to put up one of sufficient size and one that would do credit to the institution. Therefore it is estimated roughly that a sum of money, about \$6,000 would be necessary.

It is considered that \$3,000 to \$4,000 would be sufficient to put it on the so-called working basis.

It is hoped that the present students will individually take their own initiative and attempt to forward this cause in the most practical way they can; further, it is hoped that any advice or suggestion will be forwarded to the Executive where it will receive due consideration.

With this brief review the Executive consider that the matter rests now almost entirely in the hands of those that are interested in the college, and

it is sincerely hoped that this scheme will meet with the entire approval of all concerned.

It is now intended to lay before everyone expressions of favors that have been received during this College Year of '07-'08.

J. W. Crow	\$25 00
F. H. Reed	25 00
R. W. Mills	25 00
G. E. Sanders	25 00
W. J. Hartman	25 00
H. W. Scott	25 00
M. F. Cogan	25 00
F. Prittie	25 00
W. S. Jacobs	25 00
H. C. Wheeler	25 00
R. S. Duncan	25 00
G. Goulding	25 00
M. S. Sproat	10 00
A. Leitch	25 00
M. H. Jull	25 00
J. H. Hare	25 00
F. A. Clowes	25 00
F. B. Warren	25 00
D. M. Johnson	25 00
D. A. Mackenzie	25 00
C. Murray	25 00
G. Hibbard	25 00
W. A. Brown	25 00
N. Foster	25 00
T. Reg. Arkell	25 00
D. H. Jones	25 00
J. Caesar	25 00
W. C. Owen	25 00
G. M. Frier	25 00
M. Ballantyne	25 00
G. Curran	25 00
F. H. Dennis	25 00

Expressions of favor were received from—T. D. Jarvis, H. H. LeDrew, E. G. DeCoriolis, C. F. McEwen, J. B. Fairbairn, S. F. Edwards, W. P. Gamble, G. Smye, B. G. Palmer, T. H. Binnie, Joseph P. Cleal, and H. S. Arkell.

Indoor Baseball.

For the fourth time in succession the '08 indoor baseball team have been successful in capturing the inter-year series for the championship of the college. This year's series was fully as successful as former years. The fight for first place was between the junior and senior years, with the other two teams clearly out-classed.

The feature of the series was the good work of the junior team. They started the season crippled by the loss of a couple of their star players of the old team, but by constant practice they developed new men into good players and easily defeated their rivals of the Freshmen and Sophomore Years. However, their winning streak was cut short when they met the strong Fourth Year team, the Seniors winning quite easily by the large score of 25-13. The '08 team, winning their next two games, again met the Juniors. This time the closest, hardest game of the series was played, but the fast fielding and heavy hitting of the experienced Seniors were too much for the Junior team, the final score being 13-9. This game practically cinched the series for the Seniors, who in their next game defeated the Freshmen by the overwhelming score of 42-8, making a record for the highest score ever made by any team in a championship game at this college.

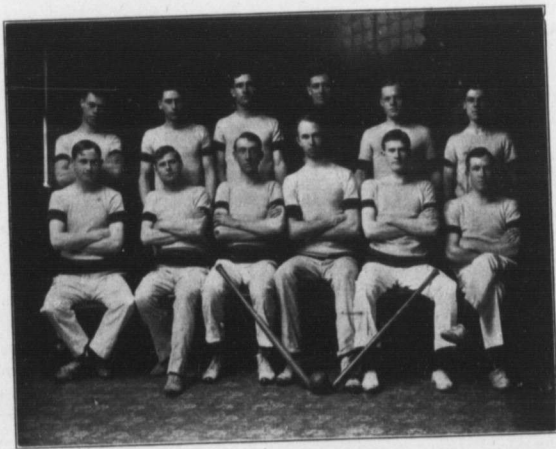
The '08 team well deserve the honors they have won this year. In their Freshman Year they were severely trounced in their opening game by 32-6 by the '04 Senior team. However, in the next few games they learned how to bat, and easily won the following games; met and defeated the Seniors, and in the play-off of the tie won after an exciting struggle by the close margin of one run. As Sophomores,

the '08 team made an inauspicious opening, being defeated in their opening game. However, they won the remainder of their games in easy fashion. As Juniors the '08 team fought hard to retain their honors, and although in many close contests, did not lose a game. In their final year the team played better ball than in any previous series, going through the season undefeated and running up large scores every game.

Indoor Cup.

As announced in last month's issue the indoor cup has been lifted by W.

Baker. As indoor sports have become so prominent at our college, we believe that another cup should be put up for competition before next season. Any old student who feels that he owes a debt of gratitude to his Alma Mater could not repay it in a better way than by donating a cup to be competed for by the students at the indoor meet. We hope that this plaintive announcement will meet the eye of some generous graduate, and that by the time our college reopens the indoor cup will have been replaced.



THE '08 INDOOR BASEBALL TEAM.

Our Old Boys.

THE home in which a man dwells, if it be of his own making, reflects to a remarkable degree the attitude of that man toward his surroundings. By its substantiality it will portray the expectation of its builder in regard to the length of time he expects it to be occupied either by himself or by his heirs. The attempts that have been made to beautify the grounds surrounding it, and the care with which they are kept, will indicate the degree of appreciation with which its inmates regard natural beauty; and to a certain extent their aesthetic development.

If agriculture is to be considered as a distinct profession and not as a medium through which men may be obliged to pass a part or the whole of the active portion of their lives, in order that they, or that their sons may be enabled to enter what are considered more attractive fields; if agriculture is to have the stability which should belong to an occupation numbering among its followers two-thirds of the population of the Province of Ontario, and has invested in it over one hundred millions of dollars; if, as a profession, it may be considered sufficiently attractive to permit the farmer, while considering the greatest welfare of his sons, to hope that one, and that the most worthy, will succeed him in the occupancy of his home, then our farmers can do no better by their children than give them a home which will always be for them a pleasant memory,

a home in which they will love to visit their parents in their autumnal years and which will be the scene of frequent family reunions to which they will come from the narrow confines of the city office or from the busy whirl and dust-laden atmosphere of the factory, or from the newer homes which they are striving to make to a younger generation what this one is to them, to gather once more around the bounteous board, to walk again in familiar paths where every blade and branch recalls happy days. If the training offered by an agricultural college gives to its students a greater appreciation of the dignity of agriculture then we should be able to look to our ex-students to set an example in the building and beautifying of farm homes that will help make rural life what it should be. We present to our readers cuts of the homes of three of our ex-students who are doing much for the uplift of agriculture. It is worthy of remark that while one of these is the present Minister of Agriculture, the other two are sons of ex-ministers. They are all men to whom the professions and commercial enterprises offered tempting openings, but their appreciation of the advantages of farm life was such that after completing their college course they returned to the farm. When not engaged in his parliamentary duties, and as frequently as his work will allow when the legislature is in session, the Hon. Nelson Monteith may be found at his comfortable home on his



HOME OF HONORABLE NELSON MONTEITH, STRATFORD, ONT.

farm, about two miles from Stratford. There, under the bracing influence of the fresh air and restful surroundings, Mr. Monteith gains the mental and physical tone that enables him to beam benignantly through the most trying session.

The home of Mr. E. C. Drury is in Simcoe County, near Thornhill. There Mr. Drury is giving his attention to the development of a herd of high-class dairy Shorthorns. He is also a member of the provincial staff of institute speakers, and an active participant in political affairs.

"Maple Shade," the home of W. A. Dryden, at Brooklin, in Ontario County, is well-known to all breeders of Shorthorn cattle in Ontario. There

"Bill" is conducting, with his characteristic energy, one of the best known stock farms on the continent.

In the recent election of the Senate of the Alberta University, we are pleased to be able to inform the readers of the Review that Mr. Geo. Harcourt, B.S.A., Deputy Minister of Agriculture for Alberta, was a successful candidate. At first the outlook for an agricultural representative on the Senate was very doubtful. As time went on, however, the Alberta O. A. C. Boys' Association decided that if the proper man were chosen, and if earnest, systematic work were performed in the endeavor to secure his election, success might reasonably be expected. Consequently, Mr. Harcourt was chosen as a man

not only suitable for the position, but also one whose candidature would receive favorable consideration from graduates in no matter what profession.

Although there were 360 members at Convocation, six of whom are graduates in agriculture, and further, although there were about sixty men in the field as candidates for the Senate, it is most gratifying to realize that a graduate in Agricultural Science has one place out of five amongst this most important body.

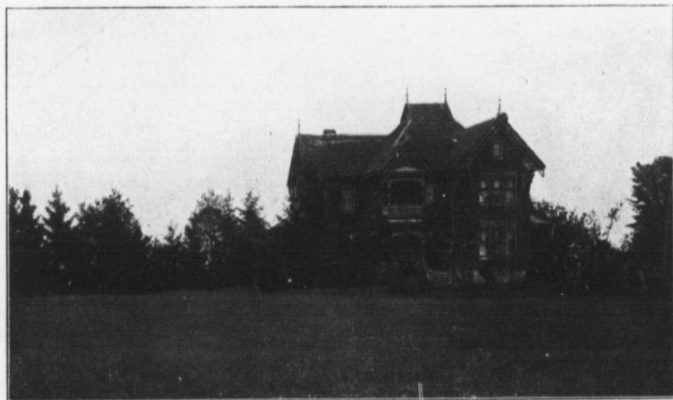
In a Province such as this, where agriculture is the fundamental source of wealth production, and where development is sure to take place at a rapid rate in the next half century, it is highly important that a man interested and thoroughly familiar with agricultural education, have a place in the governing body of the Provincial University, and that he be a man who will use his influence to win the sympathy and support of those who have

it in their power to shape the educational policy.

Mr. Harcourt is a man who is well and favorably known throughout the Province, as evidenced by his successful election. He is a man of wide experience in educational matters, and to whom the welfare of agricultural education of this Province may safely be intrusted. One paper commenting on Mr. Harcourt's candidature, stated "that he probably stands highest as an agriculturist in the Province to-day."

The Alberta O. A. C. Boys' Association was formed a little less than one year ago, and although there are not yet many achievements to chronicle, we feel that the success of Mr. Harcourt's election is something for which the association may claim some small amount of credit, and indeed we think may justly feel proud.

Adolph Lehman, B.S.A., Ph. D., a member of the second graduating class, has established for himself an



HOME OF MR. E. C. DRURY, CROWN HILL, ONT.



HOME OF MR. W. A. DRYDEN, BROOKLIN, ONT.

enviable reputation. When at college Mr. Lehman possessed a great affinity for the study of chemistry, and, having spent some time on that department here. After graduation he went to Germany to resume his studies, obtaining there the degree of Ph.D. On his return to America he was first connected with the Louisiana Experiment Station and later with the Central Experimental Farm at Ottawa. About ten years ago he was appointed to take charge of a large chemical establishment in India. He is at present employed as agricultural chemist by the Government at Mysore, India, his address being Office of the Agricultural Chemist, Government of Mysore, Bangalore, India.

In Mr. F. R. E. DeHart, 92, we have a striking example of the attainments often reached by many of our

ex-students. After leaving college DeHart settled down at Grand Forks, Alberta, but later removed to Kelowna, B. C., where he is actively engaged in producing nursery stock and small fruits. As a proof of the quality of fruit which he produces, his exhibit was awarded the gold medal for the best collection at the last Vancouver Fair. This is the highest honor that can be won in fruit in British Columbia.

F. E. Millen, '06-'07. Many who attended the college last year will learn with surprise of the wedding of F. E. Millen, who took the first year work with the class of '10. Millen was married at Sittingbourne, England, on March 4th, to Miss Clara Gordhew, of that place. Millen writes that he hopes to visit the college and complete his course here. The Review and his class-

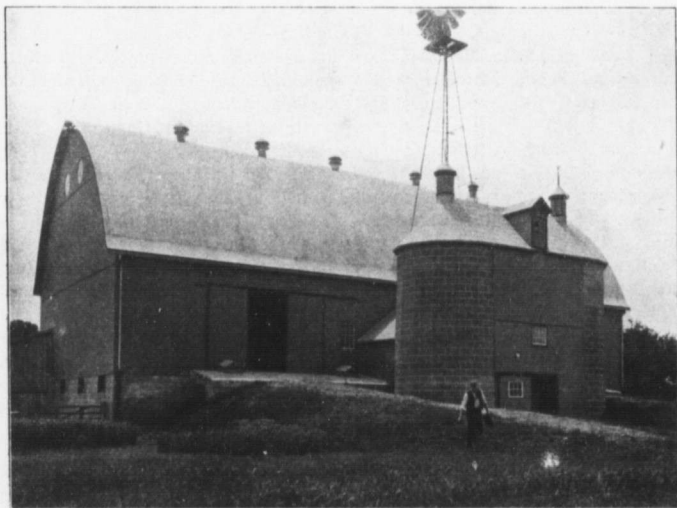
mates join in wishing him a happy future.

W. A. Boutwell, '05-'07, has purchased a wholesale and retail meat business at Barrie, Mass. He will have as assistant "Kim" Packard, '06-'07. The combined enterprise of these two will undoubtedly win for them success in their venture.

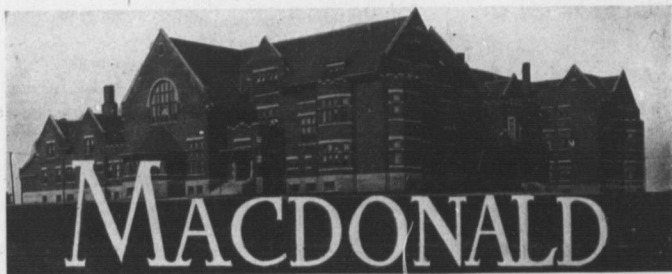
R. H. Jenkinson, '05-'07, and his brother Lawrence, '05-'06, have purchased a fruit farm close to Toronto. Since completing his associate course, "Roy" has been engaged in the offices

of the Agricultural Department in Toronto. In forsaking a sedentary for a outdoor occupation, we feel sure he has acted advisedly; by bringing his business talents as well as his horticultural training into his work his success is assured.

V. R. Purvis, '99-'01, is still occupying the position in the stores department of the Transcontinental Railway survey. He is at present situated on the northern shore of Lake Nepigon; his address is Wabinosto Cache, Nepigon, Ont.



MR. W. A. DRYDEN'S BARN.



The Progress of Domestic Science.

LIKE many of the really good movements along educational and other lines, Domestic Science as a branch of Public School work has been taken up slowly in Canada. But although slow its progress is sure, as we see in the fact that equipment for this study is being installed in most new schools in cities and towns of Ontario. The West, too, is just beginning to take it up, and in the Maritime Provinces it is fairly well established.

The old objection that equipment of school kitchen, etc., is expensive is probably responsible for the fact that many schools have not yet taken up the work. But another reason of equal importance in the matter is that the general public has not, even yet, grasped an adequate idea of what Domestic Science is; and so they have little or no vision of what lies ahead of us in splendid possibilities from Domestic Science, if it be well and widely taken up in the years to come.

The idea that Domestic Science is merely cookery seems still to prevail, although a good deal is said and done,

especially by those engaged in teaching the work—to throw a broader, truer light on the subject. Women's Institutes, now so numerous and successful, will in time do much to show forth the real idea of Domestic Science, for the scope of their work has been misjudged in much the same way as has been the case with Domestic Science. The erroneous fancy that at Institute meetings women exchange recipes, etc., etc., is having to give way to the truth that everything connected with housekeeping, homemaking and the general welfare of the people is studied and discussed by the members, who thereby grow in power to reason and act intelligently for themselves and their families.

And so it is in any Domestic Science work in public school or elsewhere, definite knowledge is imparted, but the aim is not so much to teach methods, rules and definite points in cookery, etc., as to awaken a lively interest in everything connected with household affairs and to encourage people to bring the enlightenment of some scientific knowledge and all their brain

power to bear upon the important matter of homemaking in its many phases.

The result of seeking to bring this about through teaching school children is necessarily slow, and what is being accomplished now will be better seen and judged after a few years than it can possibly be now, when the first seeds are being sown. Results more quickly to be realized are from classes of grown women in advanced training schools, and from evening classes such as are often formed under Y. W. C. A. auspices.

An interesting investigation into the success or failure of public school cookery was made in the United States recently; and although the success of the work is shown to be doubtful in some places, the report as a whole is not discouraging, in view of the fact

that the subject and methods of teaching it are comparatively new and undeveloped, and that from one lesson per week—which most school classes receive—it should not be expected that the girls will become proficient housekeepers but rather that their minds and interests will be quickened in that direction.

The subject of homemaking is of such far-reaching importance—touching as it does upon the physical, mental and moral welfare of the people and upon their happiness and efficiency—that it will surely more and more work itself into the attention of thinking people, and so in time establish a firm place for itself in schools and colleges, and enlist as workers the widely educated and cultured in ever-increasing numbers.

Color Harmony.

By Jessie P. Semple, Art Directress of the Toronto Schools.

In the space of a short article, and without illustrations, it will be impossible to go very exhaustively into the subject of color harmony though a few suggestions may be given that will be found helpful.

With a cheap, three-color paint box, and surrounded by the open book of nature, containing multitudes of harmonies, we may learn much that will be both interesting and useful. Let us take for example the leaf of a scarlet geranium and try to copy its color. We know that yellow and blue will make green and yet try as we may, we cannot match the color of our leaf with this mixture; with the addition of

a little red, however, our difficulty is overcome. By making experiments with leaves of flowers of different colors, we will find this to be true, that the color of the flower is always to be found in the leaf,—thus yellow flowers have yellow-green leaves, blue flowers have blue-green leaves, and where there is even the slightest trace of red in the flower the color of the leaf will also be modified by that color. Nature speaks to us here in no uncertain voice. Colors which are absolutely unlike cannot be harmonious. It is necessary that they have something in common—some little touch of sympathy—and so we see together

colors, one or both of which show modification by the other. We must not stop with the study of the two principal colors in a specimen. There are other colors in stems, joints, and even withered parts, that are well worth study and their duller colors give sober tones to our harmonies. We should not trust to knowing all this without actual experiment with our paints. A good practice is to carefully copy into a series of small oblong blocks the colors seen in some nature specimen. We call this making a color scheme from nature and we need not confine ourselves to bright things which will no doubt attract us at first, but try things that have withered, pieces of tree bark, stones, shells fungus growths of various kinds, even a cinder from the ash heap is not to be despised. After we have made a few

of these schemes we will see color harmonies in things we never even thought of as harmony color before, and we will be able not only to detect discords in color combinations, but to understand why the colors are discordant.

In choosing wall papers, carpets, furniture coverings, etc., we must realize that they are to be backgrounds for many things permanent and otherwise, and so colors that are modified or, as we say, dulled or grayed, are best; thus, a green that has been modified by red, a red by green, a yellow by violet, a blue by orange, will none of them make absolutely discordant backgrounds for anything, because the whole three colors are present in each and will give their tribute of sympathy in greater or less degree to any other color brought in contact with them.

My First Mountain.

It was four o'clock of a May morning and all night long a thunder storm had raged, and the prospect for climbing our mountain was not encouraging. Still, stealthy footsteps crept along the silent hall and stopped at my door. "Will we try it?" came a whisper; and bravely I sent back my answer, "Oh, yes." "Then hurry." So I hurried, and in a few minutes we were creeping down stairs with our boots in our hands. The mountain we meant to climb was an hour's ride in the train from Lansanne, our starting point. We reached Montreux after a painfully sleepy journey, and there took the funicular up the base of the mountain, which was almost perpendicular to our start-

ing point. The grass was long and very wet and after a few minutes' strenuous climbing we were soaked through and glad to stop at a little inn and get our breakfast.

Then the real work of the day began. We passed out of the region of cottages and hotels, gardens and trees, and came out on the barren mountain-side up which we zigzagged a narrow path. We stopped to get our breath, and in doing so turned around for the first time and looked down. To describe adequately what we saw is impossible. The sun had risen and everything was fresh after the rain. Below us stretched Lake Geneva, narrowing down between the sloping hills till Geneva was reached. Behind loomed

the Jura Mountains—so far away as to be almost indistinguishable from the clouds. To the left rose Mount Blanc, white and shadowy; and in front stretched the magnificent Alps of Savoy. On all sides were mountains, each trying, seemingly, to outdo the other in beauty and height—at our feet the lake. We silently turned about and began the ascent. Not being too

climbers and not to have done as they do, for when one is in Rome one must do as Rome does.

The path became very steep and was full of loose pebbles and rocks over which we had to pick our way very cautiously. The silence was intense, the only sound being that of our footsteps. Needless to say, talking was not indulged in, we needed all our breath



THE GIRLS OF THE COLLEGE CHOIR.

ambitious we had selected a modest little mountain called the Rocher de Naye. We could of course have taken the electric railway and gone to the top, but that would not have been half the fun, and besides, we had the natural desire to do as most people do in Switzerland—climb a mountain; and it would never do to spend a year in a country made famous by its climbs and

for climbing. Now and again a big stone would become loosened and go rolling away down the mountain, going faster and faster till it disappeared from view, and then after a time a dull crash would be heard, and we knew that one stone had found another resting place.

Whenever a halt was called we turned and gazed down at the scene

at our feet which each time became more and more extensive, and the town below smaller and smaller, till finally the people became tiny specks and the boats on the lake with their lateen sails looked like birds. Then we came to snow patches and played at snow-balling, and snap-shotted each other on the snow. It became hot as we were cut off from the breeze, and finally after climbing till noon, we came out on the top and felt again the wind in our faces and it was cold!—so much so that we were glad of the sweaters we had carried with us and grumbled at so much. Then we went to a big rock on the very summit and looked down and down to the depths below—a sheer unbroken wall of rock with not a ledge or foot-hold on it. Looking around we seemed to be in the midst of dark, forbidding peaks. The sun went under a cloud and even as we sat the wind blew up roll after roll of fog which filled the valleys and left only the tops sticking out. We felt as though we had suddenly been

stranded on a desert island in a sea full of other islands.

"Right about face and go down," came the word. I had not nearly enough of my mountain top and wanted to stay and feel that I was monarch of all I surveyed for a while longer, but it was too cold. So we started down. It looked very much like rain, so we hurried on reaching the zigzag again. I was told to run, and run I had to all the way down that mountain. If one goes slowly, one tires very quickly; and it took less than an hour to undo all our hard morning's climb. The rain overtook us and when the bottom was reached we were a very much bedraggled looking pair. In silence we sat in our wet clothing and waited for the steamer to take us home. In silence profound we made the journey, and crept home, but under the cheering influences of dry clothing, warmth and tea we talked over our day's experiences and my companion, a young English boy, said that it was not too bad for a girl.



Locals.

It's no joke looking for jokes during exams.

Replies to Exam. Questions.

A mutton sheep should have a thin head so as not to give it an awkward appearance.—L. Armstrong.

For the "chemical formula and preparation" of Paris green, please consult Bulletin 154.—Aldwinckle.

If the case of stranglers where real bad I would pass a probang.—Kitchen.

Hog cholera is the most popular disease in Ontario.—O. C. White.

An ideal farmer is a man who loves truth, tells lies and takes the Review.—Treherne.

Good examples of spring—flowering bulbs are the onion and aster.—Knauss.

Through an oversight the explanation to the illustration in last month's Locals did not appear. It read thus: "These are not members of the Horticultural Club, but are the Senior Flower Boys at the Oratorical Contest. They are here rehearsing their part during a pause in the selection. Two young ladies should be shown in the foreground quietly turning over the pages of their music."

Shaw (proposing the "Toast to the Girls")—It therefore behooves you, gentlemen, never to permit a Macdonald girl to walk alone. In the words of Falstaff, I would say—"Hook on, hook on, go with her, go with her."

Faulds (at the banquet, trying to do "what Rome does")—I can't get any smoke through this cigar.

Learmonth—You have the wrong end in your mouth.

It is reported that Newhall and Scotty Robertson are going to do some research work in poultry during the coming summer. We anticipate that their results will revolutionize the whole poultry industry.

We have heard of some professors marking exam. papers according to their weight. A new method has recently been discovered by Middleton and Knauss. They tossed coppers to see whether or not they had passed in English.

On the afternoon of April 14th there took place on the College Campus the greatest sporting event of the season—a half mile run between Dave Rose and Dave McKenzie. At the end of the first lap they ran neck and neck, with Rose breathing somewhat heavy. McKenzie's magnificent form stood him in good stead and as they finally approached the string he shot out ahead, finishing by about half a nose.

Teacher—Why, what are you doing with an egg in each of these five pans?

New arrival at Macdonald—My directions say to take five eggs and beat separately.

King (rushing to catch the train in Toronto)—Can you tell me, my little man, the quickest way to reach the station?

Street Urchin—Run, yer fool!

◇ ◇
April the Fourteenth.

Once in the stilly night
When Slumber's chain had bound us
Wild cheers from 1910,
Provoked the mice around us!
Aye, indeed! Many a fair maiden
Was that morning rudely awakened
From blissful dreams of that
Which might have been!

◇ ◇
During Pandology Lecture.

Dr. R.—"In childhood the predominating instinct is every man for myself!"

◇ ◇
In Sr. Normal English.

Prof. Reading Henry IV.—"That I might say with hook-nosed fellow of Rome, I can"—To whom does this refer?

Miss—Julius Caesar.

Professor—I am glad to see you at least know some of your ancient history.

◇ ◇
Certain of the Short Course girls seem to enjoy the walk from church.

Their motto apparently is: "We'll find a way or mate it!"

◇ ◇
Short Course girl on the morning after arrival during heated discussion concerning house practice—"Well at any rate I'm not going to get down on my knees to scrub floors."

Comfortable Homemaker in a superior voice—"Out of consideration for the floors there is a special instrument provided for such as you. Use the string mop!"

◇ ◇
Proofs of the Ancient Order of Baseball.

In Genesis we hear much of the beginning.

Eve stole first, Adam second.

Cain made a base hit.

Abraham made a sacrifice.

Noah put the dove out on a fly.

The prodigal son made a home run.

David struck out Goliath.

We hear much of foul flies in Pharaoh's time.

We know that Rebecca was in company with a pitcher.

Judas was a base man.

We hear of the Egyptians' shortstop near the Red Sea.

Jehu's team was highly praised.



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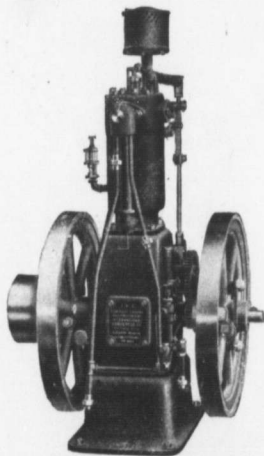
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The I. H. C. spreaders are the Corn King, a return apron machine, and the Cloverleaf, an endless apron machine. Each style is made in a number of sizes.

These spreaders are free from complication, and are made of carefully-selected, well-seasoned stock. Every part of these machines is constructed to insure durability and light draft. Local agents will gladly demonstrate the excellent features of these spreaders, and supply you with illustrated catalog, or write nearest branch house for colored hanger and booklet on "Wasteful Farm Practices."

Canadian Branch Houses:
Calgary, Regina, Winnipeg, Hamilton, St. John, Ottawa, London and Montreal.

International Harvester Company of America (Incorporated), Chicago, U.S.

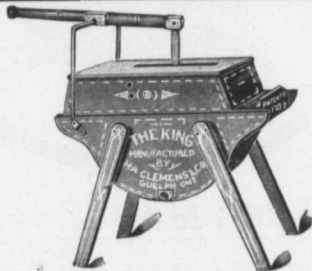
The King Washing Machine

Wholesale and Retail
Dealers in

LUMBER
LATH and
SHINGLES

All Kinds

Bill Stuff, Etc.



Manufacturers of

DOORS,
SASH,
FRAMES

All Kinds of
BUILDING
MATERIAL

The H. A. CLEMENS CO., Limited

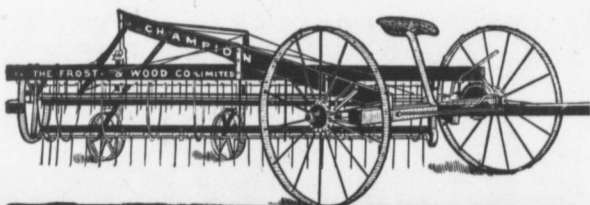
MANUFACTURERS OF

WASHING MACHINES, STAIR BUILDING and INTERIOR FITTINGS A SPECIALTY

Phone 50.

GUELPH, CANADA.

Please mention the O. A. C. REVIEW when answering advertisements.



BETTER HAY PRICES

"Well-cured, half-sold," is a true hay proverb. Sweet, clean, well-dried, even-colored hay brings a high price in every market. You can shake newly cut hay and rake it all in one operation, and save the price of a sulky-rake and a tedder—if you own a

Champion Side Delivery Rake Used in connection with the Champion Hay Loader

below illustrated, you have a combination that will do your haying up "to the King's taste." We can't go into detail here about these high-grade haying machines, but we have done so in our free catalog. In it you'll find answered the questions you're most liable to ask. Capacity of Loader is easily 2 tons in ten minutes; no break-downs, either; no getting off wagon to detach loader. With the Side Delivery Rake you can shake and rake a 20-acre field easily in four hours and leave it in good shape for the loader. It works so smoothly—no thrashing or hard-hitting—that it will rake clean a bean-field and not waste any. Better send for that catalog "F" and our "Farmer's Ready Reckoner." **BOTH FREE.** We have an agent in your vicinity who will gladly answer your questions. Call on him and ask about these two machines.

**THE FROST &
WOOD CO.,**
Limited
SMITH'S
FALLS,
CANADA



THE ADVANCE MAN ...

This Magazine
is printed by us.

of a good establishment is good printing.

Whether it's a Circular, a Letterhead, a Catalog or a Booklet, we produce the kind that pays. We'll figure for you, make a dummy, show you what we have done—and will do what we promise.

Distance is no barrier to satisfactory service. Write to-day.

Long Distance Phone 175
London, Ontario.

THE ADVERTISER JOB

Please mention the O. A. C. REVIEW when answering advertisements.

A Word With You, Mr. Man!

When you patronize the high-priced exclusive tailor you pay the average price of a suit and then that much more for the name on the label in the inside pocket.

When you buy MACDONALD clothes—tailored to your measure—you pay a fair price and we give you the label—a label which for (14) years has been identified with **honest clothes value**.

We are now showing a wide range of new fabrics in the season's most popular color effects. Your inspection is invited.

In our Furnishings assortments you will find the latest styles and finest qualities. We carry **Christy's English Hats**, and **Fowne's English Gloves**

We have the sole agency in Guelph for the famous **20th Century Brand**, ready-for-service clothing.

One Purchase will Acquaint You with Our Price Lowness!



D. E. MACDONALD & BROS.

If you appreciate **GOOD VALUES**, you will
be sure to buy your

Shirts, Ties, Collars, Hats and Furnishing Goods

Here. The choicest stock in the city.

My Tailoring Department

Is one of the most reliable in the trade. First-class, stylish clothing made to fit perfectly, and satisfaction always assured.

See My Stock of Fine Up-to-Date Goods. Only
— One Price —

Goods marked in plain figures. Be sure and give me a call.

R. E. NELSON,

Next Traders Bank
Just above the Post Office

Men's Furnishings
Hats and Fine Tailoring

Please mention the O. A. C. REVIEW when answering advertisements.

POTASH

Is an indispensable ingredient of a Complete Fertilizer and *has absolutely no substitute.*

POTASH may be had from all leading fertilizer dealers in the highly concentrated forms of

MURIATE OF POTASH

— AND —

SULPHATE OF POTASH

Copies of our publications, including "Tabulated Results of Fertilizer Experiments", "The Potato Crop in Canada", "Fertilizers for Hay and Grain Crops", etc., etc., will be mailed free to any address in Canada.

*The Dominion Offices
of the Potash Syndicate*

1102-1105 Temple B'd'g, Toronto, Can.



The Underwood

Typewriter combines a reasonable price with the most exacting quality. No other typewriter represents so much for the money. If all the good points of all other typewriters were combined in one machine, it might compare favorably with the UNDERWOOD—and it might suffer in the comparison.

UNITED TYPEWRITER CO.

LIMITED

Adelaide Street East, Toronto.

MINERAL WOOL

— FOR —

*Cold Storage Insulation,
Pipe and Boiler Coverings,
Engine Packings,
Roofing, etc., etc.*

**Eureka Mineral Wool &
Asbestos Co.
TORONTO**

GOOD THINGS TO EAT

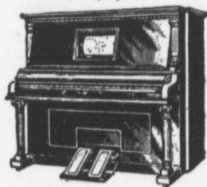
You can always rely on J. A. McCrea & Son for strictly

FRESH OYSTERS
LOWNEY'S CHOCOLATES
JACOB'S (IRISH) BISCUITS
CHRISTIES' FANCY BISCUITS
CHOICE SWEET ORANGES

In fact anything special you might want as a little extra treat.

J. A. McCrea & Son
Wyndham Street, Guelph

THE AUTONOLA
The Piano everybody can play
and play well.



BELL PIANOS

AUTONOLA
PLAYER PIANOS
AND ORGANS

CANADA'S BEST.

USED THROUGHOUT THE WORLD—BUILT TO LAST A LIFETIME.

Send for our free Catalog,
No. 71.



Cameron's Pharmacy

The store for Toilet Articles
such as Perfumes, Soaps,
Creams, Etc., Brushes,
Combs, Manicure Sets, Etc.

121 UPPER WYNDHAM STREET

REED BROS.

Successors to A. Matthews

Manufacturers of
*HIGH-CLASS MINERALS AND
AERATED WATERS*

DUNDAS ROAD . . . GUELPH

28th Syphon Soda Water a specialty

**GUELPH'S
BIG
HARDWARE
STORE
THE
BOND
HARDWARE
CO. LTD.
'PHONE 97**



It is Here

That the students
supply their needs
in Hardware, Cut-
lery and Sporting
Goods.

We keep every-
thing in Hardware
and prices are
always right.

DOMINION BANK**GUELPH****Total Assets - \$49,000,000**

A General Banking Business Transacted.
Savings Bank Department in connection
with all offices of the Bank.
Deposits of \$1.00 and upwards received.

Bankers for the O. A. C.

Manager Guelph Branch

H. C. SCHOLFIELD

**The CANADIAN
OFFICE & SCHOOL
FURNITURE CO.
PRESTON, ONT.**

Manufacturers of
High Grade Bank
& Office Fixtures,
School, Library &
Commercial Fur-
niture, Opera &
Assembly Chairs,
Interior Hardwood
Finish Generally.


**CENTRAL
Book Store**

Opposite where the Street Cars stop.



Text Books, Exercise Books, Foolscap
Writing Pads,

Up-to-Date Note Papers and Envel-
opes, Papetries, Etc., Etc.,


Bibles, Hymn Books

Books by Standard Authors, Poets,
Prayer Books

In fact, everything kept in a well-ordered
Book Store.

**C. ANDERSON & CO.**

\$
DO YOU WANT SOME?
\$



MONEY IN WIND

If you have the appliance to transform the energy to your pump. A few dollars will purchase a **CANADIAN AIRMOTOR** which will save more time and labor than any other **FARM IMPLEMENT**. Thousands of these are now doing this all over Canada. Will render service all the year round, and will cost you nothing more than a **LITTLE OIL** and **CARE**. The **CANADIAN AIRMOTOR** is made by Canadian labor, of highest grade work, and guaranteed at our own works. Mechanism, the essence of ingenuity and simplicity. Our catalogue No. 21 is of interest to Farmers and Dairymen.

ONTARIO WIND ENGINE AND PUMP CO., LIMITED, TORONTO

Please mention the O. A. C. REVIEW when answering advertisements.

IF YOU WANT A FIRST-CLASS JOB
 — IN —
**Plumbing, Gas,
 Steam or Hot Water
 Fitting**
 — GO TO —
FREDERICK SMITH
QUEBEC STREET
 Prompt attention to all jobbing.
 'PHONE 387.

SPORTING GOODS
 OF ALL KINDS.



McMILLAN BROS.
 Phone 31. 20 Wyndham St.

Geo. R. Wolcott
 Sheet Metal Contractor
 —
EXPERT ON HOT AIR HEATING
 —
We make a Specialty of —
 Copper, Galvanized Iron, Slate, Felt
 and Gravel, Tile, Paroid and
 Turnplate Roofing
 —
*Dealer in Stoves, Ranges and
 House Furnishing Generally*
 —
12 Cork St., GUELPH

J. D. McKEE
 Phm. B.

HEADQUARTERS FOR
**COLLEGE
 TEXT BOOKS**

We carry the largest and most complete stock
 of College Text Books in the city.
 We are agents for the Famous

Waterman Fountain Pen

J. D. McKEE, Phm. B.
 Phone 66
 18 WYNDHAM ST., GUELPH

Please mention the O. A. C. REVIEW when answering advertisements.

"Specialists"

We specialize in Men's Clothing devoting our whole attention to it, the result is

**T and D clothes to-day
are the best in Canada**

We Manufacture the Clothes. We Sell. And can give you better value than the dealer who pays a "middleman's" profit. Doesn't take much figuring to reach this conclusion.

We stand ready to prove it, and give you a cordial invitation to come and see for yourself.

THORNTON & DOUGLAS
LIMITED
CLOTHING MANUFACTURERS

Stores :
Guelph Stratford Chatham Berlin

We have a very complete
stock of

Entomological

— AND —

Botanical

Supplies

For Students. At Students' Prices.

Alex. Stewart,

— CHEMIST —

NEXT POST OFFICE

Well - Dressed Man

The well-dressed man is the successful man of the day. A good appearance counts for a great deal in these particular times, and a little care about neat and well-fitting garments is one of the best investments a young man can make. Have your clothes made to order by first-class custom tailors.

Talk With
Keleher & Hendley

A Great Stock of FURS to pick from, and we carry the finest. Our maxim is "Straight Goods and Straight Prices," which will win in any market. Fur-lined coats a specialty.

GOLDEN FLEECE

Agents for best makes Hats, Shirts and Ties.

THE Memory of Quality Lingers Pleasantly; so why not buy your

FRUITS AND GROCERIES

where quality is the first
consideration?

*OUR PHONE IS 169
We Deliver Promptly.*

BENSON BROS.

GROCERS.

IF

You think a furniture store should have what you want, we can fill your order and save you money on every purchase. TRY US.

GRANT & ARMSTRONG

Furniture Dealers and
Upholsterers

GUELPH, - ONTARIO.

Store a few doors above Post Office.

R. B. Kennedy

Photographer



THE BEST PLACE TO GET
A GOOD GROUP PHOTO-
GRAPH OR A PORTRAIT OF
YOURSELF. : : :

PHONE 498.

All in the
choice.
Coarse,
bitter salt
gives coarse,
bitter butter

—no matter how rich the cream
or how careful the work.

Windsor Salt

gives that smooth, firm quality—that
delicious flavour and uniform colouring.

Windsor—purest
and best of all salts
—is the least ex-
pensive. Costing
no more than
others, less goes
farther, besides
doing better work.
At grocers' every-
where. 198



WE GRIND OUR OWN LENSES

This means not only that we give quick and accurate service, but that here you get exactly what you should have—not something picked out of a box, nearly what you want.

When your EYES require attention go to one whose whole time is given to this work.

A. D. SAVAGE Guelph's Only . . .
Exclusive Optician

[ENTRANCE WITH SAVAGE & CO., JEWELERS]
Headquarters for Microscopes, Field Glasses, Etc.



**AN INFLAMED TENDON
NEEDS COOLING.**

ABSORBINE

Will do it and restore the circulation, assist nature to repair strained, ruptured ligaments more successfully than Firing. No blister, no hair gone, and you can use the horse. \$2.00 per bottle, delivered. Book 2-C Free.

ABSORBINE, JR., for mankind, \$1.00 bottle. Cures Strained Torn Ligaments, Varicose Veins, Varicocele, Hydrocele, enlarged Glands and Ulcers. Allays pain quickly

You may know R. C. Thomas, of Calgary, Alta., he writes, November:

"I use Absorbine in my livery and for my dray horses and find it very beneficial."

Robt. Jones, Sr., Marmora, Ont., writes, April 8th:

"I cannot praise Absorbine enough for what it has done for me. I had a valuable horse with a big leg and I used one bottle and it cured him completely."

"LITTLE WILLIE" POEMS.

Mickey Doyle was cut in twain
By the locomotive train,
On the wheels 'twas very rough—
Mickey was so awful tough.

—Ex.

Baby wouldn't go to bed,
Tho' his ma did ask it;
Papa soaked him on the head,
Baby doesn't need a bed,
Baby needs a casket.

—Ex.

Football.

A rush and a sickening thud;
A crash and a fall in the mud;
A half a yard gained;
An arm or leg sprained,
And the loss of a gallon of blood

—Ex.

CANADA'S BIG MUTUAL!

The Mutual Life Assurance Co. of Canada

A Sound Company for Sound Policyholders.

Insurance in Force	-----	\$51,000,000
Assets, all first class,	-----	\$12,000,000

GEORGE CHAPMAN, General Agent.

**Foreign Advertisers
in the O. A. C. Review**

Should seriously consider whether they can refrain from advertising in

The Guelph Weekly Mercury

The Weekly Mercury was established 1854, and has a sworn circulation of 4,844 copies per issue. Its clientele embraces the most progressive farmers and stock breeders in one of the oldest and best agricultural sections in Canada.

An advertisement in the Weekly Mercury always brings paying results.

J. J. McINTOSH.

Please mention the O. A. C. REVIEW when answering advertisements.



THIS IS THE SHEET METAL AGE.

Lightning, wind and rain make no difference to a roof that is covered with Galt "Sure-grip" Shingles.

Lightning just glides over the steel roof, runs down the conductors and disappears into the ground. Galt "Sure-grip" Steel Shingles and Steel Sidings never burn, remember.

The three raised beads on each shingle provide ample allowance for expansion and contraction. A roof covered with Galt "Sure-grip" Shingles has the power to automatically

adjust itself to all degrees of heat and cold. Galt "Sure-grip" Shingles will never crack or warp—they are the strongest shingles made.

You pay the same price for Galt "Sure-grip" Shingles as for the common kind—which do you think the better investment?

A post card will bring you our free illustrated catalogue.

THE GALT ART METAL CO., Ltd., Galt, Ont.

Galt "Sure-grip" Shingles

The Metropolitan Bank

Capital Authorized,	- - - - -	\$2,000,000
Capital Paid Up,	- - - - -	1,000,000
Reserve and Surplus Profits,	- - - - -	1,183,713

A General Banking Business Transacted.

Students' Accounts Receive Careful and Prompt Attention.

GUELPH BRANCH:

C. L. NELLES, - Manager.

Please mention the O. A. C. REVIEW when answering advertisements.

The Burgess Studio**HIGH-CLASS PORTRAITS****Special Rates to Students**

We are at your service for good
Photographs. Call and see us.

J. W. ROGERS

STUDIO OVER DOMINION BANK

Walter E. Buckingham, B.A., LL.B.

BARRISTER

Solicitor, Notary, Conveyancer, Etc.
Douglas Street, GUELPH.

Office Phone, 175.

House Phone, 404.

-- GO TO --

PETRIE'S**DRUG STORE**

**For Medicines and
Toilet Articles,
Seed Bottles, Etc.**

Headquarters in Guelph for all kinds of

Photographic Supplies.

Films developed and prints made.
Latest designs in Comic and Picture
Post Cards. Remember the place.

Petrie's Drug Store

Lower Wyndham Street.

PRINGLE THE JEWELER

Entomological Supplies,
Magnifying Glasses, all qualities,
Fountain Pens
Rubber Stamps,
O. A. C. and Macdonald Institute
College Pins

The Busy Book Store

O.A.C. and Macdonald Students
cannot do better than come to us for
all College Supplies. A full line
always in stock.

Buy a Sterling Fountain Pen and
stop dipping.

SCOTT & TIERNEY

Phone 72

Lower Wyndham Street

**Economical - -
- - - Clothing**

The best value for your
money is always got at our
Store. We can clothe you for
little money, and we can give
you as high-grade garments as
are made in Canada. In fact,
all our garments have CLASS
about them. A call solicited.

J. A. SCOTT**Designer of Men's Garments**

'Phone 72

McHUGH Bros., **26 Lower Wyndham St.**

Are prepared to supply students with the finest range of **Pipes, Tobaccos, Cigars, Cigarettes, Pouches, etc.**, at prices consistent with quality.

The finest assortment of goods shown in the city. Come in and see us.

DID YOU EVER
SEE A PRINTER
PRINT LIKE
THIS PRINTER
PRINTS? . . .

J. J. KELSO

Opposite Post Office, - Guelph

Snowdrift **Peoples** **Maple Leaf**

Three well-known brands of Flour.
Ask for them and be sure
you get them.

The James Goldie Co., Limited
GUELPH

Telephone 499

HEADQUARTERS

FOR HARDWARE AND
SPORTING GOODS AT
LOWEST PRICES.

G. A. RICHARDSON

Upper Wyndham Street - Guelph

OAK HALL **Clothing Store**

CLOTHES PRESSED AND CLEANED

We keep a Practical Tailor to do this work.

PHONE 510

PARCELS CALLED FOR AND DELIVERED

Jones & Johnston

INSURANCE

**Real Estate and Steamship
Agents**

Ask for information about the Dominion Line
Excursion Party to Edinburgh, Scotland.

PHONE 216

St. George's Square, Guelph, Ont.

THE **Dawson Commission Company,** **TORONTO**

Will be pleased to handle your shipments
of Poultry, Butter, Eggs, Apples, Money,
Beans, and other farm produce, and they can
get you as good prices as any other firm in
Toronto.

Correspondence solicited.

The Dawson Commission Company,
TORONTO.

STAMPS FURNISHED.

H. Occomore & Co.

SHEET METAL WORKERS

Heating and Ventilating Contractors

Dairy Supplies, Kitchen Furnishings

Stoves, Ranges, Granite and Tinware

A complete stock.

126 WYNDHAM ST.

GUELPH

'Phone 328.

NEW IMPORTATION OF CLYDESDALE STALLIONS

Mares and Fillies, Hackneys and Shetland Ponies

Your choice of 30 Mares and Fillies, including winners in Scotland, at moderate prices.

For particulars apply to G. A. BRODIE, BETHESDA, Ont

Stations: Stouffville, G. T. R.
Claremont, C. P. R.
Gormley, C. N. R.

Telephone Service from stations to residence

Smith & Richardson

COLUMBUS, ONT

Importers of Clydesdale Horses

This year's importation is by far the best bunch we ever landed, among them the Toronto and Ottawa Winners.

R. R. Stations—G. T. R.—Oshawa.
Brooklin.
C. P. R.—Myrtle

Long Distance 'Phone at Residence.

Pine Grove Stock Farm

Rockland, Ontario, Canada.

BREEDERS OF

SCOTCH SHORTHORNS and SHROPSHIRE

W. C. EDWARDS & CO., Limited

PROPRIETORS

JAMES SMITH, Superintendent

J. DRYDEN & SON

Maple Shade Farm BROOKLIN, ONT.

Home of the oldest and largest herd of Cruickshank Shorthorns in America.

Shropshire flock founded 1871.

Station—C. P. R., Myrtle, 3 miles.

G. T. R., Brooklin, 1½ miles.



Poultry, Pét Stock, Farm and Garden Books of all kinds.

Fanciers' and Stockmen's
Printing Leg Bands and
Stock Markers.

We have the most complete line of Poultry and Pet Stock supplies in Canada. Catalogue free.

A. J. MORGAN - LONDON

Please mention the O. A. C. REVIEW when answering advertisements.

PHOTOS!

COLLEGE GROUPS

- AND -

INDIVIDUAL SITTINGS

Promptly attended to.

D. H. BOOTH, Photographer

Upper Wyndham St.

Next RYAN'S

THE

ELECTRIC BOILER COMPOUND CO., Ltd

GUELPH, ONT.

Walker's Electric Boiler Compound

High Grade Lubricating Oils, Greases, Packings, Belt Lacings, Flue Scrapers, Etc.

Crystal Cream Separator Oil
A SPECIALTY

WATERS BROS.

HAVE BOUGHT OUT

The Chas. Chapman Co.'s, London

COMPLETE STOCK OF

NATURE STUDY SUPPLIES

Entomological Pins Insect Boxes Collecting Cans, Nets, Spreading Boards, Cyanide and Seed Bottles, etc. Lowest Prices. Mail orders will receive careful and prompt attention.

Waters Bros., 41 Wyndham St. Guelph

Dunrobin Stock Farm

CLYDESDALES, SHORTHORNS YORKSHIRES

A choice collection of the above line of stock always on hand.

Donald Gunn & Son, Proprietors

Beaverton P. O. and Station

G. T. R. and C. N. O. R.

— GO TO THE —

HUB BARBER SHOP

For a good Shave and Hair Cut

GEO. A. LEADSTON, Prop.

SOCIETY CARDS

Ladies' or Gent's. Printed. 50c per 50; 75c per 100. By mail prepaid. All kinds of Commercial and Society printing.

O. R. WALLACE, Opera House Bldg.

GUELPH, ONT.

D. M. FOSTER, L.D.S., D.D.S.,

— DENTIST —

Corner of Wyndham and Macdonnell Streets

Over Dominion Bank

Telephone 14.

CLOTHES

CLEANED, PRESSED AND REPAIRED

Work done right. Prices right.

Quebec St. opposite
Chalmers' Church

CHAS. A. KUTT.

R. H. McPHERSON, Barber

HAIR CUT, 15c; SAT., 5c EXTRA

Close 7 p. m.

Upper Wyndham Street, GUELPH.

LEE LEE & CO.,

Opera House Block

HAND LAUNDRY

Goods called for on Monday, and returned on Wednesday. We guarantee best work in Guelph.



REFERENCES

AGRICULTURAL COLLEGES

At Guelph, Truro, St. Anne de Bellevue, Winnipeg, and the trade generally.

BROADFOOT'S

Red Cross — Pharmacy

Phone 381 - St. George's Square.

CITY SHOE STORE

Try us for Sporting Shoes of all kinds. Satisfaction guaranteed.

W. L. KEIL,

Cor. WYNDHAM ST. and MARKET SQUARE.

MARRIOT & CO.

FLORISTS,

Roses, Carnations, Chrysanthemums, Smilax, Asparagus, Etc.

Phone 378. St. George's Square.

NOTICE

The best and most convenient Barber Shop for O.A.C. Students.

WM. COON, St. George's Square

Street Cars every 15 minutes. Three chairs. No waiting.

Stewart McPhie

W. A. Mahoney

McPHIE & MAHONEY

— ARCHITECTS —

Phones : Office, 215 ; Residence, 237

Telephone Building - Guelph, Canada

Our Groceries

— ARE ALWAYS —

Fresh, Wholesome and Strictly First Class

17 Lower Wyndham.

Telephone 112

Jackson & Son

Guelph and Ontario

Investment and Savings Society
SAVINGS BANK DEPARTMENT.

Deposits of \$1.00 and upwards taken
Highest current rates allowed.

J. E. McELDERRY, Secretary-Treas

FAR AHEAD OF ALL COMPETITORS

The IMPROVED 1908

UNITED STATES CREAM SEPARATOR

Is surely in a
CLASS BY ITSELF

The Improved 1908 U. S. Separator has met with such favor everywhere it has been used that people who have purchased other makes not uncommonly say, "Had I seen your separator first, I would not have purchased the separator I did."

Now, be sure (all you who are anticipating purchasing separators), you do not have this to regret when it is too late and you have parted with your good dollars.

Read below what Ex-Governor C. J. Bell of Vermont says about one of our new style machines he uses.

The new pattern of U. S. Separator I have been using the past few months is a complete machine. It is low down, runs very easy, skims clean, wears well, no repairs or changes to be made, cleans easy, in fact it runs like a top. All the farmer must do is milk the cows and take care of the cream, which is in elegant condition for any purpose.

I forgot to say it is the stillest running machine I have ever used.

C. J. BELL,

East Hardwick, Vt.



Write today for our Illustrated Catalog No. 143

Address all letters to the

Vermont Farm Machine Co.

Bellows Falls, Vt., U. S. A.

Distributing warehouses at: Chicago, Ill., La Crosse, Wis., Minneapolis, Minn., Kansas City, Mo., Omaha, Neb., Toledo, O., Salt Lake City, Utah, Denver, Colo., San Francisco, Cal., Spokane, Wash., Portland, Ore., Buffalo, N. Y., Auburn, Me., Montreal and Sherbrooke, Quebec, Winnipeg, Man., Hamilton, Ont., Calgary, Alta. 493

Massey-Harris
Cream Separator

EASY TO FILL.

EASY TO TURN.

EASY TO CLEAN.

SAVES MORE OF THE
CREAM AT ALL TEM-
PERATURES THAN
ANY OTHER.

NO DANGER FROM
EXPOSED GEARS.

CORRECT MECHAN-
ICAL CONSTRUCTION.

WAIST-LOW SUPPLY
CAN.

VERY SIMPLE.

DURABLE.



A handsomely illustrated booklet entitled "GIVE YOUR COWS A SQUARE DEAL," and containing much interesting and valuable information can be had by asking

The Massey-Harris Agent

BIG BUTTER CONTEST

National Buttermakers' Association

WON AS USUAL BY USERS OF

De Laval Cream Separators

On March 11th, 12th and 13th there was held at Minneapolis, Minn., the big annual butter scoring contest of the National Buttermakers' Association. 504 of the best buttermakers in the United States competed in this contest, which makes the results especially interesting and important. The first prize was won by J. C. Post, Hector, Minn., with a score of 98%; the second prize by E. A. Blomquist, Center City, Minn., with a score of 97½%, and the third prize by G. P. Sauer, East Troy, Wis., with a score of 97%. All three of these victorious buttermakers, of course, use De Laval cream separators. This contest, as has every similar contest held within the past sixteen years, shows a complete victory for butter made from De Laval separator cream. A clean sweep of all highest prizes was made by De Laval butter at the big National Dairy Show held in Chicago last October, as well as at sixteen of the more important state fairs of 1907. Going further back, De Laval made butter received the Grand Prize at the St. Louis World's Fair, as well as the Grand Prize at the Paris Exposition. Invariably in these big contests more than 90% of the contestants who receive a score of over 90% on their butter have been found to be DeLaval users. In hundreds of such contests the world over during the past twenty years, the superiority of the De Laval Separator over all others for making fine butter has been conclusively proven. A postal card will bring our handsome new catalogue illustrating and describing the new 1908 improved De Laval machines in detail, and affording a complete education in the production of the finest quality cream for making prize winning butter.

THE DE LAVAL SEPARATOR CO

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