Volume XX

Number 6



O.A.C REVIEW MARCH



1913

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In each of the above tests the milk was fed to the machine at the flushed, and when taken apart was free from cream and in good condition. The milk skimmed was not new milk, but had been kept over, some of it to do to the machine nearly 100 lbs, per hour faster than its rate canneity and to the machine nearly 100 lbs, per hour faster than its rate canneity and that the cream skimmed contained a high per cent of butter fat, so that I consider the work done in this test exceptionally good.

W. WADDELL, Proprietor Kerwood Cheese and

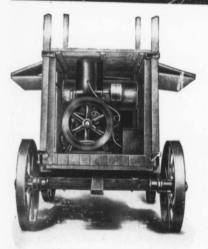
The above test again emphasizes the superiority of the Standard in close skimming. Even eld milk, fast-skimming and heavy rich cream did not prevent the Standard from skimming closer than other separators do under most favorable conditions. Figure it cut, It will pay be discard your old machine and get a "Standard" and do it now. There is no other that can give you equal results, and it's results that count.

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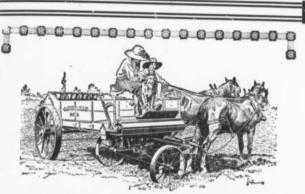
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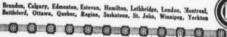
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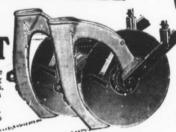
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set zig-zag, and only
6 inches from row to

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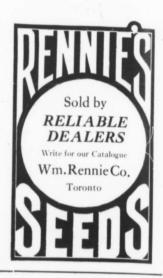
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is still the best Province in the Dominion

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HON. J. S. DUFF. Minister of Agriculture, Toronto, Ont.

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



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The O. A. C. Review is published by the "O. A. College Students' Publishing Association," O. A. College, Guelph, Canada, monthly, during the college year.

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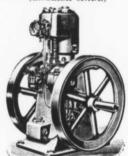
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STUART A. LISTER, Manager.

THE O.A.C. REVIEW

THE DIGNITY OF A CALLING IS ITS UTILITY

VOL. XXV.

MARCH, 1913.

No. 6

Agricultural Survey, 1912

F. C. NUNNICK, B. S. A.

Agricultural Specialist, Conservation Commission.

URING the summer of 1910 a start was made in agricultural survey work in Canada by the Lands Committee of the Commission of Conservation. which has been continued on the same farms during the summers of 1911-12. This work has consisted of the collection of data upon which to base future operations and make recommendations; a kind of diagnosis, as it were, of agricultural conditions in representative throughout the Dominion. twenty men were employed by the Commission each summer to circulate printed question schedules among the farmers in the districts chosen, and from the testimony of the farmers and the personal observation of the collector the desired information was obtained. One hundred or more farmers were visited in each province. In nearly every instance farmers have been willing to give all the information asked for, and have given it as accurately as they could when they understand that the reports are confidential and have nothing to do with taxation. The survey work in 1912 included the following:

1. An investigation of areas under crops; crop rotation; crops used; seed selection; varieties used; amounts seeded to clover and alfalfa;

comparison of yield with that of ten and twenty years ago; the uses of manures and fertilizers, how applied, and care to prevent waste of same.

2. An investigation of weed pests, insect pests, and plant diseases, with special reference to their prevalency, and the time when they were first



F. C. NUNNICK.

introduced to the farm; whether increasing or decreasing; estimated loss; causes responsible for the foregoing, and the preventive measures adopted.

An investigation of the fuel, power and water supplies. Special attention has been paid to the length of time the fuel supply will last, to the afforestation of present waste land and the results of planting where any has been done; the motive powers for house, farm and field work; the source and location of water supply for house use and for stock, the distance from possible sources of contamination and how conveyed to the house; and conveniences in the houses for conserving human energy.

4. The obtaining of information regarding the amount of stock kept and sold annually; the amount of hay and grain sold and fed annually; the labor problem on the farm; the drawbacks to profitable continuation of the present systems of farming; and the branches of farming specialized in.

The following table shows some of the conditions existing on the farms visited, as found in Part 1, of the investigation:

	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	D.C
Per cent. in grain	22	5	10	13	30	59	58 58	A1ta.	D.C.
Per cent. in hoe crop		2	2	2	10	.8	3	.3	3
Per cent. hay and pasture	48	27	41	44	35	7	2	11	13
Per cent. following no rotation	65	75	61	89	34	24	12	29	83
Per cent. using seed grain grown on own farm		53	81	87	87	93	100	79	37
Per cent. systematically select- ing seed		2	2	.4	2	24		5	3
Per cent. cleaning seed grain through fanning mill	99	62	79	92	100	85	99	94	38
Per cent. not knowing names of varieties of grain sown	2	7	33	28	14	19 .			30
Per cent. saving their own tim- othy seed	73	31	45	44	41			21	2
Per cent. saving their own clover seed	2	1	2	14	40				1
Per cent. of grain sown seeded to clover	51	49	52	7	40				32
Average number pounds of red clover sown per acre	2.5	5	4	4	6				9
Average number pounds of alsike sown per acre	1	3	3	4	1				4
Average number pounds of timothy sown per acre	8	10	7	8	5	8		0	
Per cent. growing alfalfa	13	7	3	10	33	5	3	6 15	33
Per cent. exercising no care to prevent waste of farm	10	,	0	10	66	9	3	10	33
manure	46	48	61	86	77	100	100	100	93
for smut	23	7	1	1	14	96	91	92	39

Just here it might be interesting to note how many varieties of the different grains are sown in some districts. In Lanark County in Ontario 19 varieties of oats and 6 of wheat were being grown on the 50 farms visited. In Carleton County,

of New Brunswick, 13 varieties of oats were found on 39 farms.

During the year of 1912 the writer sent out 200 personal letters to prominent farmers all over Canada asking their opinion as to how much stock should be kept and how many acres should be seeded to clover each year on the ordinary 100 acres to insure permanent soil fertility. Replies were received from 119 of these farmers, and the answers were surprisingly uniform. The average

numbers given by these men are as follows: cattle, 24; sheep, 23; swine, 22; acres to be seeded to clover each year, 20. The following table shows the actual existing conditions on the 1,300 farms visited.

Average number cows kept per	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
100 acres	6	6	4	4	6	.8	.5	1	,
ther cattle	7	6	4	7	15	3	.6	9	42
heep	6	6	2	5	4	.4	.09	1	-
rood Sows	1	.4	.4	.8	2	.4	.5	1	2
wine fattened annually cres seeded to clover per 100 acres of tillable land sur-	9	3	3	5	20	4	2	7	16
veyed	15	7	9	11	15				



Uncut weeds on neglected road on the prairie in Manitoba. There are enough weed seeds produced on a mile of such road to seed down a township.

It will be seen that the amount of live stock being kept is considerably below that considered necessary and that the number of acres being seeded to clover in most provinces is away below the 20-acre standard. The high average number of cattle being kept in British Columbia is due to a

couple of heavily stocked ranches being included in the farms visited in that province.

Almost everywhere the cry is heard from the farmers regarding the scarcity of labor. The following table gives figures regarding this question:

- 1	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C
Average number of days labor spent per 100 acres by men		190	153	267	341	95	76	103	456
Average number of days labor spent per 100 acres by women	235	203	152	236	355	68	85	100	41:
Average number of days labor spent per 100 acres by boys	25	16	31	13	12		2	2	76
Average number of days labor spent per 100 acres by girls	16	16	20	10	6				25
Average number of days labor spent per 100 acres by paid outside help	121	66	54	90	42	93	136	66	1.208
Average number days of total labor spent per 100 acres in year	717	491	410	616	756	256	200		
Per cent. reporting scarcity of labor	80						299		2.174
Per cent. reporting scarcity of		53	76	84	77	27	70	29	71
men	75	53	65	81	69	9	70	23	62
Per cent, reporting scarcity of domestics	7	25	33	13	22	17	6	19	7



Drifted soil in Manitoba, as a result of continuous cropping and cultivation and no thought or care given to restoring the humus.

In Prince Edward Island 36 per cent. of the farmers reported an average decrease of 20 per cent. in crop yields since 20 years ago. In Manitoba 56 per cent. reported an average decrease of 12 per cent. since 10 years ago. Not one reported in-

creased yield since 10 or 20 years ago, and all said their land was not yielding what it should or did.

In 1910 wild oats were found on practically all the farms visited in Manitoba; on 71 per cent. in Saskatchewan and on only 3 per cent. in Al-

berta. In 1911, we had 31 per cent. of the same farmers visited in Alberta reporting wild oats on their farms, while in 1912 there were 82 per cent. reporting wild oats, and 11 per cent. say they are increasing. In Alberta in 1910 stinkweed was not reported; less than 5 per cent, reported it in 1911, while 22 per cent. reported having it on their farms in 1912. In 1911 less than 5 per cent. reported Canada Thistle, while 27 per cent. reported it in 1912.

There were 300 farms visited in

nine districts in Ontario. On these farms Canada Thistle was reported by 95 per cent.; Couch Grass, 62; King Devil, 46; Mustard, 45; Ox-eye Daisy, 25; Rib Grass, 40; Sow Thistle, 54; Wild Oats, 27.

The foregoing figures and tables may not be models of mathematical accuracy and precision, but they serve to illustrate the fact that there is much still to be done if the fertility of the soil in Canada is to be maintained and the farms clean.



Just outside the fence shown in this picture a small stream was carrying away many dollars worth of liquid manure to a nearby creek, from which the cows were watered.

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At Nature's Heart

By Charles Hanson Towne

I know some poplars by a distant Oh, wise are they, my lonely, fearless stream.

That bring my tired heart the ancient dream.

Sick with the city's thunder and dismay,

away.

friends!

For all my doubts their whispers make amends.

Patient they wait, in solitude apart, Oft have I sought them, far and far To heal my stricken soul and hush my heart.

Emigration

W. R. REEK, B. S. A.

Editor's Note—Mr. Reek is in the London office of the Ontario Immigration Department, and writes from a thorough knowledge of the subject. He gives a glimpse of what Ontario is doing in an endeavor to secure the best class of emigrants for her farms.

REAT Britain is undergoing a remarkable change. The particular system of holding land which has been

in the majority of cases are former tenants. Every day, efforts are put forth to encourage the laborer to take a piece of land and assume some responsibility.

The idea that England owes every man a living is not so prevalent in

The idea that England owes every man a living is not so prevalent in the rural districts. Trade unionism and marked social distinctions and legislation are having varied effects on all classes of people. Landowners are leaving; merchants are leavmen with a few hundred pounds are leaving in small numbers; but the workmen by thousands. They are becoming acquainted with the overseas dominions through the booking agents, advertisements, lectures and through letters coming home from relatives and friends. These people are anxious to settle where they may own a farm or have a business where there is plenty of room for expansion. England has her congested areas which offer serious difficulties-her rural districts are not so inviting as Ontario's sections. where all are equal socially, if honest, and where telephones and telegraphs are so prevalent.

Canada's free lands and her productive dairy and fruit districts are attractive to not the farm laborers alone, but to many city dwellers. They are willing to undergo the necessary hardship of training in order to own and occupy a farm directly under the Crown. The achievements of those already in the country are the allurements; the mere fact of young men, after living in Canada



in vogue since the Norman first entered Britain, is gradually passing out of existence. Estates are being broken up and sold; and the buyers

for three or four years, coming home to spend a winter, which means an outlay of sixty to one hundred pounds, is a marvel to the laborer. At once people are interested in a country which offers such possibilities. Hundreds of middle-aged people are anxious to go, not so much for themselves, but for their families: they dream of futures for their sons and daughters, which they seldom divulge except in offices such as this. Thus conditions in both countries aid the movement. The idea that Canada is too far distant is rapidly becoming an argument of the past: "eight days from St. Paul's" has its effect, especially when compared with the voyage to Australia.

In every country there are men and women who are no credit to the community, and England is no exception. It must be remembered that while London is the centre of the financial world, and one of the centres of the commercial world, it is also one of the centres which are free for any to enter, no matter from what land or conditions they come. Strict regulations are being enforced when choosing who shall, and who shall not enter Canada; occasionally one has to be deported who has managed to evade every precaution. However. Ontario does not need, nor can she assimilate, and she does not intend to have all who apply.

The Government of Ontario has at 163, Strand, an office for the purpose of placing before the people of Great Britain the opportunities in the Province for bright, energetic and honest men and women. Last year over 1,000,000 pieces of literature were distributed; and advertisements in magazines and newspapers were arranged, and are still in existence

throughout the entire country, including Ireland. Short newsy items, giving prominence to some particular features are sent out every week and appear in hundreds of papers. In the shop window, products of the Province are always displayed and attract a good deal of attention. In the busy season, fifty and sixty people per day are interviewed; these consist of domestics, farmers, business and professional men. Thousands of agricultural and business enquiries are answered by mail in a year.

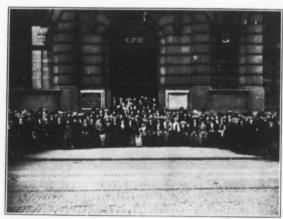
The actual arranging for the ticket is done by the booking agents, who co-operate very closely with the office. Every assistance is given them in securing large numbers of suitable settlers-they advertise and distribute literature locally. These men receive their commission from the transportation companies, and in addition receive for every domestic and farm laborer a Dominion bonus of five dollars; and the Ontario Government gives a five-dollar bonus on every domestic who gives satisfaction. Thus it is a good business proposition from the booking agent's standpoint.

Many men are existing and endeavoring to keep families on wages ranging from fourteen to twenty shillings per week. The saving of enough money to pay passages to Ontario is a serious proposition, and thousands of the men who would make the very best settlers are prohibited in many instances. To partially overcome this handicap, the Government loans £4 to every domestic or farm laborer with good references, and who is between eighteen and forty-five years of age; this sum will pay one-half the passage. References are secured by the office. These are from late

employers, and are reliable in almost every case. The booking agent gives a guarantee to the Government concerning the loan; and he in turn secures himself by two guarantors who are friends of the applicant for the loan. In this way, if the settlers do not repay, then their friends are called upon to do so. The loan is repaid to the Director of Colonization at Toronto at the rate of \$5 per month. This system practically guarantees a good settler in every case.

Conducted parties are rapidly com-

in Ontario has a remarkable influence upon the letters which will be sent back to the homeland—the character of such letters may influence dozens either way. We cannot afford to allow any other than favorable reports to be sent into England. An idea that a girl or boy who leaves England for Ontario will bear cheerfully unkindly acts or unreasonable terms is very erroneous. We are getterms some of the best from the Old Land; many will make grand futures and be credits. The fact of their



Ontario Government Conducted Party-Empress of Britain, November 1st, 1912.

ing into favor. The young women especially who have travelled but little are anxious; but when placed in the care of some interested person, then a great deal of worry is prevented. Luggage and emigration officers at the landing ports offer no difficulties. They feel that someone is interested, and after being met at the port by an official who gives every necessary aid, their first impressions of the New World are good.

The attitude of the first employer

having to work is no disgrace. By giving the incoming settler a hearty welcome and a chance, the resident can do a great deal for the cause of good emigration.

It must not for a moment be imagined that this work is carried on without opposition; all Canadian provinces are actively engaged. Australia is in the field, and is spending fabulous sums of money. The booking agent may influence a settler in any direction; this man must be met

on his own ground, and suitable arrangements made. Not only do the settlers need support, but the Government needs the support of every man in the formulating of the emigration policy, because it is a national and not a political issue at all. We must remember that if Ontario is to secure the best class of labor she must pay for it.

Prospects for Ontario are exceptionally bright at the present time. The people in Great Britain are at last beginning to realize that Ontario has a good climate, is peopled by English, Irish and Scotch; has excellent educational institutions; and resources in soil, timber and minerals which offer inducements to any good thinking man. They realize that social conditions are analagous to

those in England and that the opportunities for the development of social centres are numerous.

The word "emigrant" is passing away. The new idea, the Imperial idea, is replacing it. The going to Ontario is just moving to a Britain over the sea—they are still under British laws and institutions, and under the protection of the same Union Jack.

Note—At the office, Ontario papers are kept on file; and the principal Canadian reference books are to be seen by the public. Ontario visitors are welcomed, and every assistance is given so that they may see the interesting places in London. All mail forwarded to the office is carefully held.



QUERIES



Editor's Note—This department is open to our subscribers. We can obtain expert information on practically any branch of agriculture, at first hand here, and shall be pleased to answer any queries submitted.

Question.

Bothwell, Jan. 31st, 1913. Query Department, O. A. C. Review:

Sirs,—I have a Shorthorn heifer about four months old. For first two months she was fed from the pail about four quarts of whole milk, and a handful of low grade flour with the milk twice a day. I then began to add skimmed milk, lessening the quantity of whole milk until she was four months old, when she was receiving four quarts of skimmed milk. About this time she broke out on neck and shoulders with something like shingles. I have been treating it with Zenoleum, and it has formed a scab, which seems itchy. Can you

tell me what caused the trouble and how to treat it?

Answer.

It would be difficult to say what caused the trouble in this case. The disease is probably eczema. Treat it with ointment made of zinc oxide. This may be obtained from any druggist.

Question.

Cowley, Alta., Jan. 24th, 1913. The Editor Query Department, O. A.

C. Review:

Dear Sir,—I have an irrigated hay meadow (40 acres) seeded down to timothy and brome grasses, parts of which are becoming infected with

wild barley (Howewin jubatum). which pest is unfortunately indigenous to any alkaline spots or sloughs in this vicinity. The seeds ripening early are spread broadcast by both the water, and the prevalent west winds. I make a practice of mowing all heavy patches of this pest early, and burning the bunches in site when raked; and, three years ago, I very carefully fallowed the meadow and reseeded it to timothy after taking a crop of green oats off the land. However, in spite of this, thanks to the wind, the wild barley seems to have disseminated itself fairly evenly over the field in the proportion of about one of the wild barley to 10 or 12 of timothy. This makes it most difficult to eradicate. Summer fallowing entails the plowing out of all the lateral ditches and some of the main irrigation ditches, the replacing of which entails much labor and considerable expense. Were it not for this wild barley I intended to have left the meadow in hay permanently, as by manuring and irrigation it is easy to maintain the fertility. hay is all fed to stock. What is the best method to adopt to rid this irrigated land of this pest? Thanking you in anticipation for an answer in the Review. Yours very truly,

C.E.

Answer.

Sir,—The best way to manage this weed is to run a short rotation of crops, in which case the barley will cause you no trouble. If, however, you leave the field in hay permanently the best course to follow is to cut your hay early before the barley is ripe. In wet seasons it may be necessary to cut it twice. If you do this and keep seed from being carried onto the field from other sources you can control wild barley.

Question.

St. Marys, Ont.

Query Department:

Sir,—In cutting a field of corn with a harvester is there anything gained in time by cutting in lands or strips, not counting the time taken to throw out the sheaves? Understand the corn is in rows and you cut on only two sides of the field. J. H. R.

Answer.

Yes; the narrower the lands or strips the more time there is gained.

Question.

Sir,—Can you suggest a simple, yet effective, remedy for wind-sucking in a stallion?

Answer.

The best remedy we know is to put a strap round his neck. The strap should be wide and it should be buckled rather tightly. If there are metal points in the strap on the under side next his jaw it will be all the better.



Summer Occupations

C. P. R. Station Gardens

sunshiny days in which one feels the pleasure of life in every moment. Clear, cool nights conducive to peaceful sleep after a day of healthful work. An insatiable appetite. The satisfaction of knowing you are a small factor in an organization which has as its object making the world more beautiful. These are my chief recollections of a summer's work in the forestry department of the Canadian Pacific Railway in Western Canada.

This department has under its administration the forest lands of the railway, land suitable for reforestration, the beautifying of station gardens; and nurseries at Springfield, Manitoba, and Wolesley, Saskatchewan. The superintendent of this department is Mr. R. D. Prettie, a for-

mer O. A. C. boy, and under him are several old boys known to the present students, including Strong, '10, Boyd, '12, Munroe, '13 and Waterhouse, '14.

During the summer months there are openings for several students in the different branches of the work. The railway furnishes transportation from Guelph and return. Tents are supplied, and two fellows can board themselves for about ten dollars each per month. The pay ranges from fifty to seventy-five dollars a month, according to experience. The work is pleasant, profitable and healthful, and affords an excellent opportunity for Easterners to see more of their own country, and at the same time save money for their College course.

-G. G. Brambill.

Assisting the District Representative

The work of the assistant district representative gives to a College student, a better training in scientific agriculture than any other line of work open to him. In no other occupation does he get such an opportunity to put into practice the information acquired at College, while it is still fresh in his mind. The work of the district representative not only brings him in contact with all farm problems, such as pruning, spraying, insect pests, underdrainage, fungus diseases, etc., but he is constantly meeting and having to deal with different types of men, and as he dis-

poses of each type, he is receiving a training in the art of diplomacy, a quality so essential to success in all phases of agricultural work.

The assistant representative, perhaps, does a little more manual labor than is actually necessary to keep the body in good physical condition. But as the work in chiefly out of doors, it appeals strongly to anyone who is not afraid of lime, sulphur, Bordeaux mixture, or the handle of a hoe.

One of the most pleasant features of the work is in connection with the rural school fairs. Seed of the various crops is distributed to the children in the rural schools early in May. This seed is planted in plots by the children on their home farms under the supervision of the teacher and the district representative. Cash prizes are given for the best tended plots, and for the best samples of seed grown on the plots. It is very gratifying to note the interest taken

in the work by teachers, parents and children.

In conclusion, I would say that except from a remunerative standpoint, I do not know of a more congenial, or profitable summer work for any one student than that offered by the district representative.

-H. M. McElroy.

Work on the Drainage Department of the College

Just a word by way of introduction. Each year the Provincial Government appropriates a sum of money to carry on farm drainage work through the drainage department of the College. This amount of money covers the cost of office staff, salaries of drainage experts and their instruments. The farmer who makes application for the survey pays the travelling expenses of the surveyor and boards him while at the work.

At the close of the College in April, the ten or a dozen men who are to compose the staff for the summer are given a two weeks' course in surveying by the drainage department. This supplements the course already received in the second year. Then, having tucked away a few pointers, they are sent out in twos the first trip, then singly, to learn much more. Among the rocks of the east or the north, or the bogs of the west they turn watery wastes into arable and productive land.

The experiences of the drainage expert are extremely varied, and, fortunately or otherwise, cannot all rehearsed It is the farmer's be busiest season, and naturally he wishes to lose as little time as possible, although anxious to have the survey made. This is your chance to get in right. Adopt his hours and then walk him off his feet-you can do it, being accustomed to the work and he is not-and make him go the limit until the survey is completed; then, if you are tired, rest while making the plan.

The successful drainage man works hard while he is at it, needs to do no night work except in unusual cases, and can afford to take off half a day occasionally. Early in the season learn your game thoroughly and while you are playing it, get as much as you can out of what you see, and the farmers you visit.

C. F. Neelands.

Getting Back to the Farm

It isn't the most enjoyable thing in the world, especially if one is going to some one else's farm and must assume the humble position of a "hired man." But, after all, nothing is so essential to an agricultural student as an intimate knowledge of practical agriculture. The

problem is to master circumstances and transform your Sahara into an Eden.

It is imperative that the city boy coming to the school should become acquainted with the soil, with plant growth, with live stock and with farm crops, and there is no possible method of doing so other than this. It is advisable for such a student to spend one summer on a general farm and his remaining time on farms which specialize in his particular hobby. To a student who has been "raised" on the farm, the summer after his first year can be very profitably spent at practical work, but in succeeding vacations, other experience will be more valuable.

A little study during the summer can be profitably put in. The writer found it an excellent plan to retreat to the shade of a tree each noon-hour armed with "Gides' Political Economy." A few pages of this classic invariably exercised a beneficent soporific influence, and the harsh cry of the "boss," "Wake up, there!" at one o'clock sharp was the usual conclusion. But if the farm happens to be in an isolated position, there is practically nothing to do in one's leisure time but read, and the opportunity should not be missed.

Wages are not munificent. student of ordinary energy, who is centent with twelve hours work per diem, will receive \$20 to \$30 per month and board, while one of more moderate ambition will be satisfied with less. But the experience is worth considerably more. If a fellow will put his mind on his work, use and develop his powers of observation, and read more or less on his subject, he will, if not already blessed with a love of farm life, assuredly possess it ere the end of his first summer

J. H. Winslow.

A STORY WITH A MORAL.

A student who was too unpatriotic to subscribe for his university paper, requested his visiting brother to borrow a copy from a neighbor. In his haste the brother slipped on the stair step, falling into a large bevel glass hall mirror. The brother hearing the crash of falling glass started from his study, over-turning a pipe rack containing two \$7 meerschaums, breaking them beyond repair, and rushed into the hall, breaking his

glasses and cutting a gash in his forehead, when he encountered another roomer. He ruined a \$6 pair of trousers, catching the pocket on the corner of the banister. Reaching his brother, who was covered with blood, he picked him up and laid him on the davenport, ruining the fancy cover, costing him \$25.

The doctor dressed their wounds for \$30, and sent both boys home for the rest of the year.—Daily Iowan.

When the month seems kinder gloomy,

And the chances kinder slim, And the situation puzzling, And the prospects awful grim, And perplexities keep pressing; Till all hope's nearly gone, Just bristle up and grit your teeth And keep on keeping on.

-The Argosy.

Horse Breeding in Ontario

C. F. BAILEY, B. S. A.

HAT Ontario is admirably suited to the breeding of horses is a foregone conclusion—with her abundance of pure water, fertile soils and vigorous climate, she is in an unexcelled position to supply all that goes to the building up of a strong, vigorous animal. It only remains for the horse-breeders of this province to use good judgment in the selection and feeding of their breeding stock in order to

It depends, however, largely upon the class of farming practiced in the district and the liking a farmer may have for any particular breed or class of horse. For instance, a man who is particularly fond of one of the lighter breeds is not at all likely to succeed to the same degree in the breeding of heavy horses.

It is evidenced by the great variety of type and breeds represented on the average farm that farmers in



Brood Marcs at a Provincial Show-Note Conformation and Quality of the

maintain the prestige she now enjoys.

Among those who have made a study of the horse-breeding industry, it is generally admitted that the average farmer should breed draft horses; they can be made to earn their own living by doing light work on the farm after they reach two years of age; they are more easily handled, and, consequently, they require less horsemanship, and also they are valued more for their weight, so that slight blemishes do not depreciate their value to the same extent as in the lighter breeds.

general do not take sufficient interest in the breeding of their horses. The breeds have been crossed and recrossed-the lighter breeds with the heavier breeds-to such an alarming degree that the progeny are often found to be very nondescript in character. Horses produced as a result of this breeding-standard bred or roadster type with the markings of a Clydesdale, pony draft horses, large, ungainly, general purpose horses, and other undesirable types -are all too common. It is therefore quite apparent that there is a great room for improvement in the

horse-breeding industry of the province.

The first requisite to the success of the industry is that the breeder decides upon the type of horse in which he is most interested, one that is suited to the class of farming practised—and be a consistent breeder. Once this is decided, the next consideration must be the selection of suitable breeding mares. The mares need not be highly bred animals, but will be all the more valuable in being so. They should, how-

portant requisite is the selection of a suitable stallion. In the first place, it must be a pure-bred animal of the desired breed. Then it should possess the qualities that go to make up a well developed animal; and above all it should possess masculinity—the latter is important for the reason that it indicates the animal's prepotency, or, in other words, its ability to beget colts like itself. It is not enough, however, that the animal be a pure bred or happens to be a good specimen of the breed. For



The Result of Using Grade Shires.

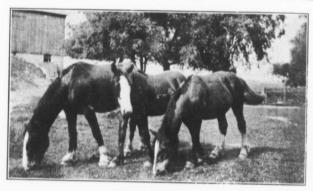
ever, be well developed, possessing a strong constitution, good quality and action, and free from hereditary blemishes. A mistake made by many is to breed mares after they have fulfilled their usefulness on the farm, or after they have become blemished in such a way as to make them of little value—the impression being that anything will do for a brood mare. This practice cannot be too severely condemned in the best interests of horse-breeding.

A third and probably the most im-

instance, a horse of pure breeding with an ancestry composed of animals of an undesirable type is not likely to be a desirable sire, even though he himself happens to be a high class horse. On the other hand, a horse with a pedigree indicating an ancestry composed of horses of excellent quality, and not possessing these qualities himself, coupled with a masculine appearance, will, in all probability, prove a prepotent sire and be the means of improving the type and quality of the horses in the

district in which he travels. Unfortunately, we find that the selection of stallions is too often regulated by the service fee. A horse of good breeding and quality is naturally a valuable animal, and it is necessary for the owner to charge, whereas mongrel or crossbreds lacking in quality and in many cases unsound receive a fee of from \$3 to \$5 and sometimes as high as \$8. The breeder is too much inclined to think of the first cost rather than the actual result. While \$5 to \$10 may be saved through retaining the services of a

estimate that forty per cent. of the colts put in the stables last fall will weigh less in the spring than they do at the present time; in other words, they are not growing during the winter months, and very often it is well on into the summer before they lose their old hair and begin to recover from their winter treatment. In many cases this is a means of stunting the growth of our horses and developing a class of undesirable animals that might have been of special merit had they been properly treated. We also find that some of



The Three Twins.

cheaper animal, it will be invariably found that the pure-bred stallion will produce a coit worth from \$50 to \$100 more at two years of age. Not only that, but we will have improved the breeding of our stock through the infusion of this pure blood and increased the tendency for uniformity of type in future generations.

The fourth and last point, but by no means the least important feature in connection with horse-breeding, is the necessity for our breeding stock to be well fed and cared for. The treatment of the colt is of far more importance than a great many people seem to realize. It is safe to

these colts have been sired by good horses, and their owners are inclined to criticize the sire rather than themselves for the product as a result of their treatment. The liberal feeding of colts, therefore, cannot be too strongly recommended.

Thus in brief the writer has tried to point out some of the main weaknesses in our horse-breeding operations and to suggest a few important features which should receive more serious consideration on the part of the breeder. We know that the province has provided her share towards the highest success. Are the breeders doing their part?

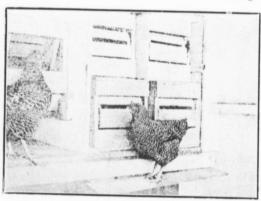
Bred-to-Lay Barred Rocks

Rules to Observe in Building up a Two Hundred Egg Strain, and How Successful Results Have Been Achieved at the College

F ALL the varieties of poultry, there are probably none as popular as the world-famed Barred Plymouth Rocks. Utility and actual worth are the basis of this popularity and combine to make this the bird of destiny—a breed that has come to stay.

It must not be inferred that all Barred Plymouth Rocks are good layers. It has been proven by exin the strictly utility branch. Consequently, he aimed to develop a laying strain of Barred Plymouth Rocks. The bred-to-lay strain is noted for prolificacy, early maturity, vigor and compactness.

In order that a poultry plant should make the greatest profit, it is nccessary that all the females be prolific layers. Hence, any sure methods of increasing prolificacy



Bred-to-Lay Barred Rock Female.

periment that strain or family plays an important part in prolificacy and general utility. It is a well-known fact that all poultry keepers are not striving for the same ideals. Some consider shape and color all important, and these breeders have developed the exhibition Barred Plymouth Rocks. Professor W. R. Graham saw, besides this suitability as an exhibition breed, unlimited possibilities

will mean much to the poultry keepers of Canada. One means of securing heavy layers is by breeding from females which have been trap nested and show the best records at the end of the year. The disadvantage of this system is the extra labor which it entails. There is also a difference between strains of the same breed or variety as far as egg production is concerned. Some

strains lay very much better than others. In fact some strains require exceptionally good care and feeding to secure even a fair egg yield.

Information from our Department of Agriculture reveals the rather startling fact that the average egg production is about one hundred eggs per hen per year, and that the greater number of these eggs are laid during the months of March, April and May, when eggs are comparatively cheap. It is not unreasonable to suppose that as more intelligence is used in breeding, feeding and housing our poultry, we will increase the average egg production per hen from one hundred to one hundred and thirty eggs per year or even more. This applies to flocks of a few hundred hens. In smaller flocks we may secure as high an average as one hundred and eighty eggs per hen.

An essential in breeding any class of live stock is strength of constitution. In poultry, this is indicated by a broad head, stout, sharply curved beak, a full bright eye and an active disposition. Under no consideration should one breed from a narrow headed bird or one that matured rapidly and is fine boned. The results of using unsuitable breeding stock may not be noticed the first year; but it will prove disastrous in the end.

The mere fact that a female produces two hundred eggs in a year does not warrant her use as a breeder. Many two hundred egg females produce very weak offspring and are therefore undesirable as breeders. It is advisable to breed from a female which combines high egg production with the power to transmit great vitality to her offspring. Further, the

chicks should mature quickly and the pullets lay well.

Professor Graham has secured remarkable results by the use of the fellowing system. The hen must be a good winter layer and lay one hundred and fifty eggs per year, eighty per cent. of the eggs must be fertile and ninety per cent. of the fertile eggs must hatch. Of the chicks hatched ninety per cent, must live to five months of age and the cockerels weigh six pounds. Lastly, the pullets must be good layers. If the hen and the offspring comply with these conditions, the best cockerels and pullets are retained as breeders. The males are also tested as to vitality of offspring.

The use of a system such as the above-mentioned entails too much labor for the average breeder; but if he will only aim at producing strains which will produce eggs high in hatching power, and high vitality in the chicks, he will have rendered a great service to our poultry industry and to himself.

The careful breeder may develop a good strain by selecting the best females he has and mating these to a male which has been strong and vigorous from a chick and has matured to normal size at a fairly rapid rate.

Professor Graham in 1910 reared twenty-three bred-to-lay females from the exhibition barred rocks which had been bred especially for shape and color. The chicks from both pens were hatched between April 12 and May 3, and were carefully leg banded. Both lots of chickens were reared under exactly the same conditions, and in every way treated alike. Late in September the

forty-six pullets were put in a twopen house, the twenty-three bred-tolay pullets in one pen and the twenty-

three exhibition pullets in the other.

The following table gives the re-

Egg Records of 23 Bred-to-Lay vs. 23 Exhibition Barred Rock Pullets

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	АрТ	May	June	July	Aug.	Sept.	T't'
Exhibition pullets		66	190	132	169	224	354	334	274	265	247	227	2482
Bred-to-Lay pullets	101	337	296	179	201	308	396	449	323	324	288	312	3514
	101	403	486	311	370	532	750	783	597	589	535	539	5996

FEED CONSUMED BY 23 BRED-TO-LAY AND 23 EXHIBITION BARRED ROCK PULLETS

	Whole Grain	Rolled Oats	Butter- milk	Grit	Oyster Shell
Exhibition pullets Bred-to-Lay pullets	1,324 lbs. 1,238 lbs.	762 lbs. 502 lbs.	2,414 fbs. 2,415 fbs.	34½ lbs. 25 lbs.	41 ½ lbs.
	2,562 lbs.	1,261 lbs.	4,829 lbs.	59½ lbs.	815 lbs.

The bred-to-lay pullets matured earlier, laid 1,032 more eggs than the exhibition pullets and consumed less feed. This no doubt was due to the fact that the exhibition pullets weigh from six to eight pounds each, while the bred-to-lay weigh from five to six pounds. This means that the exhibition strain does not mature as early as the bred-to-lay strain and ordinarily egg production does not commence until maturity is reached.

Five females in the bred-to-lay pen died, four of them from having a yolk burst in the bowels, the fifth from the excessive heat.

Three exhibition females died, due to having a yolk burst in the bowels.

Not one bird in the exhibition pen laid over two hundred.

Not one bird in the exhibition pen laid over two hundred eggs during the twelve months, five laid over one hundred and fifty eggs each, ten laid over one hundred and less than one hundred and fifty and five laid less than one hundred.

Four bred-to-lay birds laid over

two hundred eggs each, eleven laid over one hundred and fifty and under two hundred, the remaining three birds laid over one hundred and less than one hundred and fifty.

The following table illustrates what may be accomplished by careful breeding and selection.

Leg band	Number	
number.	of eggs.	Average.
2080	282	
2064	268	
2084	256	
2058	256	259.5
2079	252	
2097	243	

These excellent results secured by Professor Graham are the result of an expert's work, but if we, as interested poultry keepers will only introduce system into our breeding methods and strive for higher production surely we will be rewarded by some measure of success at least.

J. P. Hales, '14.

Hints on Plums

Stocks Used for Nursery Trees

L. B. HENRY, '13

I N order to obtain first hand information regarding this matter I sent letters to most of the principle nurserymen in the Province to find out what variety of stock each one was using in his particular locality.

Undoubtedly the most used stock for plums on the American continent is the Myrobatan. Until recently it has been an easy matter for nurserymen to obtain an abundant supply at reasonable prices from the growers in France or Germany, but within the past two seasons the supply has not equalled the demand. This stock will produce larger, thrifty trees in two years from the bud, and it is easy to bud with most varieties, being used in the southern counties for Japanese and European varieties.

Stocks belonging to the American and Nigia class are also used for varieties such as Milton, Weaver, Stoddart, De Sota and other varieties of the American species, which are not grown commercially in the southern counties, but which are the hardiest of our plums. They are used entirely by the Ottawa nurseries, as Myrobatan is not a reliable stock in that district.

Peach stock is not used in Ontario for budding plums on, but is used extensively in the Southern States, and growers claim that Japanese varities grow better when budded on that root. However some varieties of European plums, such as Lombard, Damsons and Yellow Egg will not unite with this stock. It is

claimed that trees budded on peach roots make a more rapid growth, but on account of their extreme tenderness they are not recommended for use in Ontario.

The St. Julien is a stock which is also used to some extent in the States and nurserymen claim that trees on this root have not such a tendency to sucker as have Myrobatan roots. The trees do not make a strong, rapid growth and consequently are not used in this Province.

Marianna stocks are used by some Rochester nurserymen, but this variety is not well known in Ontario.

Grades of Stocks.

All nurserymen agree that a oneyear old No. 1 is the best to use, but they differ a little in their selection of the diameter. Some require a 5-6 mm. size, while others select 5-10 mm., 5-9 mm., 7-9 mm. and 6-10 mm. grades. Evidently individual nurserymen have their own ideas regarding this matter, but 5 mm. seems to be the minimum and 10 mm. the maximum for the best stocks.

Practically all nurserymen in Ontario import the Myrobalan stock from France, receiving it in late winter, usually about February and storing it in frost-proof cellars until spring, when it is planted out in nursery rows wherever the permanent block of trees is to be. Budding is done in mid-summer when the bark slips the best, the usual method of shield budding being used as with most other commercial fruit trees.

An Unnecessary Evil.

The practice of selecting buds from

the nursery row cannot be too severely criticized, as by this method many evils are increased from year to year. Buds may be used which have had no bearing parents for many years and thus there is a tendency to lose their bearing habit. Then again every year there is the complaint that trees have turned out not true to name, which is discovered after they have been set out for a number of years, and have had a great deal of time and money spent on them. The trees may turn out to be entirely worthless or some variety with which the

agine the number of Imperial Gage there will be in the next generation. Methods of Storing.

The trees are usually dug when two years old, and if they have been properly handled will be large, thrifty trees by that time. Nurserymen differ in their methods of caring for them just before selling. In the past few years many of the growers dug the trees in the fall and store them in frost-proof cellars throughout the winter. This facilitates rapid handling in the spring, which is a necessity in a large nursery, as the



SPRAYING MADE EASY.
A young plum orchard in the Niagara Fruit Belt,

grower is already over-stocked, and therefore cannot grow profitably. One can easily understand how this evil is increased when buds are taken flom non-bearing trees. Out of a block of two hundred trees planted for Reine Claude, of which I know, fifty trees turned out to be Imperial Gage, which is of course an enormous percentage of misnamed stock. Only the year before these trees came into bearing a nurseryman went to that same block and cut buds for true-toname Reine Claude. So one can im-

length of the shipping season is rather short.

In some nurseries the trees are corded, that is they are piled up with moss or excelsior over the roots and allowed to remain in that condition, taking care that the moss is kept damp. Another method is to trench them in and thus keep the roots damp with earth. Both practices are giving good satisfaction, but the former requires a great deal less floor space. Some men dig their stock in the fall and "peel" it in trenches out-

side, giving the trees a slant of about 45°, and being careful to cover all the roots with earth to a depth of 1½ feet or more. Two inches of sand may be put on top of this. The trenches should be enclosed with boards about two feet high as a protection against mice.

A few of the smaller nurserymen leave their trees in the nursery row all winter, and this plan is alright where the quantity is small and can be shipped and planted before the season is too far advanced for safe and reliable planting.

reasonably sure that you have what you want. (Of course you may get trees not true to name), besides saying freight delays and avoiding danger of drying out in transit, which sometimes happens. If a man was planning a large orchard to be planted two or three years in the future, it would be a wise plan for him to buy the stock and have it budded with scions from parent trees, which he knew to be good bearers and true-to-name, thus avoiding one of the most aggravating disappointments that can befall a fruit grower.



A QUARTER MILE OF PLUMS. Below the Mountain near Winona.

If the proper temperature is kept in a frost-proof cellar trees will be in better growing condition in the spring than if they had been in the nursery row all winter because they have not been subjected to varying extremes of weather. Of course proper ventilation and a certain amount of humidity must be maintained to prevent the trees from drying out.

Where Shall I Buy My Trees?

If possible secure the trees from a nearby nursery by going there and selecting your own trees, thus being Select a medium-sized tree with a good fibrous root system. Beginners usually pick out the largest trees that they can find, but these are not as good as their size would lead one to believe on account of the increased surface they present to the wind and the danger of them drying out before root action becomes established.

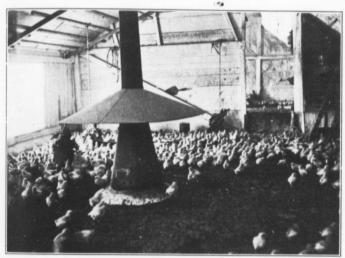
Trees to be planted in northern sections of the Province should be budded on American or Nigra roots, while in the southern counties Myrobalan roots are the most satisfactory.

British Columbia Poultry

ASSOCIATIONS AND CO-OPERA-TION.

THERE are some twenty-four poultry associations in the Province of British Columbia at the present time. Most of these are affiliated with the Provincial Association. This represents a membership of several hundred breeders. In 1910 there were only five or six affiliated associations. In 1911 there

handled later after the associations have secured a good footing. One association has bought a mammoth incubator and it is the intention to practise community hatching in that district. The results will be worthy of interest, and the example will no doubt be followed by other associations. Exceptional markets for all kinds of poultry products await the producer. With the ever-increasing



A Room Brooder on a Plant in British Columbia.

were nine. In 1912 there were twenty-two affiliated and some four or five others pending affiliation. Still notwithstanding this the industry is considered to be only in its infant stages.

The idea held in view by all these associations is co-operation. The buying of different feedstuffs is taken up first. The marketing end will be

demand for poultry products and the high cost of other foodstuffs, the supply can never keep pace with the demand for good produce. The prices offered are very good and are higher and better in many respects than in the eastern markets.

In some parts of the Province the breeders resort to egg production alone. Especially is this true on Vancouver Island, where mostly lightweight breeds are kept. There are some exceptional strains of lightweight varieties found in this district that do what many eastern breeders would say was almost impossible.

Owing to the high cost and also the unreliability of the labor to be had, it has been found that the greatest success is obtained on a ranch where all the work is done by the owner himself.

Several of our poultry breeders are selling day-old chicks. One sold 68,000 last season, most of which were kept within the Province.

Water fowl, especially ducks, find a good demand among the Chinese population. Turkey raising is profitable in many parts of the Province, but as yet little has been done either in turkey raising or with water fowl.

H. E. Upton.

Provincial Poultry Instructor.







Press Notice

As a means of furthering the policy of developing the poultry interests of the Dominion in which the live stock branch of the Department of Agriculture is actively engaged, the Live Stock Commissioner is anxious to secure the name and address of each breeder of poultry in Canada who is systematically endeavoring to improve the quality of his stock, particularly from the standpoint of increased egg and meat production.

The information is desired in order that the Live Stock Branch may be brought more closely in touch with progressive poultrymen throughout the Dominion and with those whose names might be eligible for inclusion in a Dominion Poultry Directory.

As a means of securing this information, in part at least, all those who are interested are requested to write the Live Stock Commissioner, Ottawa, indicating:

- (a) The breed, variety and strain or family of poultry they are breeding.
- (b) The extent to which selection for increased egg and meat production is being practised.
- (c) A brief but specific statement of what has been accomplished.
- (d) Whether or not they are actively engaged in trap-nesting at the present time. If not, what means are being used to select the most desirable individuals for the breeding pens.

Letters giving the above information should be addressed to the Live Stock Commissioner, Ottawa. Such communications do not require postage.

Agriculture in the Schools

(Contributed by the Director of Elementary Agricultural Education for the Department of Education).



S. S. 23, Enniskillen Tp., Lambton Co.

Miss Margaret Macdonald, Teacher; Mr. Jos. Maw, Secretary. The school garden is located on the far side of the school grounds. A good wire fence separates it from the play ground. Note the well-constructed platform about the pump and the protection from surface drainage.

The following interesting account of pioneer work in introducing the teaching of agriculture into one of the country schools of Lambton County will be read with pleasure by those who look forward to the subject of agriculture winning a place in all our schools. Miss Macdonald took the Normal Teachers' Course at the College in the spring of 1911. She has kindly consented to allow us to use her report, believing as she does, that the work is "worth while."

Wyoming, October 22, 1912.

Dear Mr. McCready:

Have intended sending in a report of my garden for some time, but

decided to wait until it had proved a success or failure.

While we had no active opposition to combat, having won the consent of the trustees, yet our project was the subject of much discussion and doubt. Many of the parents, however, were sympathetic, some even enthusiastic, and the generous government grants given for the work offset opposition to a large extent.

The trustees, having consented to have a garden, gave us their active support. Our school ground was one-half acre in area. They bought an adjoining half acre, drained it thoroughly, and fenced it well. They fenced off one-eighth of an acre for a garden. The garden was plowed on the first of May, and a heavy crop of clover turned down. It was afterwards disked twice. The clover, while possibly adding to the fertility of the garden, caused us considerable work later on.

The older pupils measured the garden, submitted plans, and, after one was selected, assisted in making stakes and lines and in laying out They enjoyed the work and I found that it furnished paths and plots. abundant material for school-work, especially in arithmetic and oral composition. I had the markers made, but we painted them, and the pupils made their own corner stakes. We divided the garden into sixty plots, thirty-six individual and twenty-four experimental plots. As the garden faced the road at the front, the plots were of uniform width-five feetbut varied in length from ten to six feet according to the ages of the pupils to whom they belonged.

We had a half day off to work up our plots, and the children worked willingly at recesses. Each pupil planned his own garden and made out his order for seeds from the catalogues. I ordered and distributed the seeds, some of which we got from the O. A. C., some from seed firms.

On the 10th of May we had another half day off and planted our seeds. Our seeding was almost immediately followed by heavy rains which flooded our garden. This somewhat delayed germination, but the children were much interested in watching for the first sprout.

For the most part the children chose only the common vegetables and flowers, but in some gardens peanuts, peppers, okra and sugar peas were grown.

We tried all the O. A. C. experiments in flax, barley, sorghum, lettuce, onions and peanuts. We also tried the pasture mixture of sorghum, oats and clover. Some of our neighbors sent samples of new things they were trying and we had a plot of each. The O. A. C. alfalfa experiment was a great success. Although we were late getting it in, we got a good catch and cut it twice. We left one plot, hoping it would go to seed, but it didn't. A farmer who has great success with alfalfa told us that he never saw better first year alfalfa than ours.

The sorghum was also very successful. What we planted in the pasture mixture did not do so well but what we planted alone in hills grew to a height of ten or twelve feet and has beautiful heads full of seed. One of our neighbors tried a field of the pasture mixture at our suggestion and is delighted with it.

Our barley plots which were intended to illustrate differences in dates of sowing were not very successful. The first sowing, May 23rd, yielded a fine sample of barley, with fine long straw and good plump firm seeds. The later sowings were not so good.

The flax yielded splendidly. We haven't threshed it yet, but the fibres

were good and the heads seem well filled with seed.

The seed onion experiment did not prove very successful. We had some very fair onions, but when the owners compared them with others grown from sets, they were disgusted. I remember having the same experience in my garden at Guelph.

The trees which I received from the nursery nearly all died. I planted them just before the dry spell in June and only five survived. however, are very sturdy and, I think, will live.

The pupils' individual plots, which were next the road, were really beautiful. They were well kept and the paths were kept neat and clean. The pupils were much interested and most of them came up once a week during the holidays to attend to their plots. They arranged each week for the next, brought their lunches and had a good time.

As we had plenty of rakes and hoes, watering cans, etc., we had no trouble getting the work done. We had no trouble with our neighbors' fowl nor with interference from the boys in the section as was first feared.

The garden became a centre of interest in the community and in the surrounding sections. I think everyone was anxious that it should prove a success.

Mr. McDougall, our Inspector from Petrolia, inspected the garden in May and again in September. He was much pleased with its appearance and encouraged us greatly. He asked us to make an exhibit at Petrolia

Fair on September 20th, as prizes were to be offered.

We sent sheaves of cured alfalfa, O.A.C. No. 21 barley, black and white oats, sorghum and flax. We sent tomatoes, potatoes, beets, carrots, onions, peppers and corn from the vegetable gardens and many bouquets of flowers. One of the most interesting parts of our exhibit was the peanuts, which we washed carefully and sent in on the vine. Our exhibit looked very well and we got first prize. The children and I were much elated and we immediately began to plan an addition to our library, but the prize so far has not been forthcoming, and our ardor has been somewhat dampened.

The children have enjoyed the whole thing from beginning to end, but no part more so than the carrying home of the fruits of their labors.

Four of the older boys have contracted with the trustees for the snading of the plots, as it is very difficult to get a good man. Everyone is so busy. So far they are making a fine job. We had intended having it plowed, but did not want to have our alfalfa plots and young trees disturbed.

An hour of our session at convention in Petrolia in September was given to discussion of school gardens. As this has not been done here before, I think it proves that the work is appealing to both teachers and inspectors. Mr. McDougall is very much interested and is very kind and encouraging.

Miss Crone, of Mandaumin, who is a graduate of the last July summer course, teaches near me, and we often compare notes, and occasionally

see each other's gardens.

I liked very much your suggestions that the teachers interested in teaching agriculture should hold a gathering at the O. E. A. next Easter. I do hope it can be arranged for.

If you would care for a fuller report on any part of the work, I would be pleased to send it in.

Thanking you for many helpful suggestions I have received and for your kind encouragement.

Yours sincerely,

Margaret Macdonald.

S. S. 23, Enniskillen, Lambton Co.

PHILANTHROPY.

Let me live in my house by the side of the road,

Where the race of men go by,-

They are good, they are bad, they are weak, they are strong, Wise, foolish-so am I.

Then why should I sit in the scorner's seat,

Or hurl the cynic's ban?-

Let me live in my house by the side of the road, And be a friend to man.

-Anon.

THE O.A.C. REVIEW

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C. A. WEBSTER, Poultry.

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CHAS. A. GOOD, College Life.

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A. CORY, Artist.

J. E. LATTIMER, Alumni.

H. P. HORROBIN, Locals.

Editorials

LETTERS TO THE EDITOR.

The Editor.

O. A. C. Review.

Sir .-

Recent incidents in connection with our athletic events have induced me to write to you with the object of enlisting your support in establishing a better idea of sport at the College.

I suppose a criterion of any country's culture is the tone of its colleges. While the tone of an institution may not be viewed with much importance by some of the inmates, yet the absence of good tone to people outside is very conspicuous.

We all acknowledge the stimulus democratic ideas give to a country, but because a country is democratic it would be unfair to assume it to be regardless of authority. In a Canadian college it is only to be expected that in sport democratic ideas prevail, unlike older countries where professional athletes are boycotted by better circles and where class distinction demands the social equality of players in certain games, but there is no reason why the rules of a game should be disregarded as, Sir, we have too often seen them disregarded by our own players. I suppose a sportsman may be defined as one who makes the best of circumstances, and it is quite obvious that a five minutes' argument with the referee

or display of temper on the field is not likely to ameliorate the already poor idea of sport so prevalent at our matches, nor by any means is it making the best of circumstances.

I think, moreover, that it is a disgrace to tolerate men in our teams who have not had the habit of sulking eliminated in the nursery.

The clubs, in the countries in which some of the best rugby is played, have ruled that in a league match any player voicing an objection to the decision of a referee shall be suspended from playing in league games for the rest of the season, and I have known instances in which players displaying temper have been suspended for life. It is worthy of mention that the best players are generally those most willing to abide by the rules.

Again, it is a deplorable fact that some of the players are encouraged by college spectators to "Get even with him X-."

Assuring you that this would never have been written were I not confident that the recent events alluded to are not in keeping with the past reputation of the institution, I am,

Yours faithfully, Hubert Leppan.

There's many a true word spoken ir earnest.

"We print below letter from Mr. O. C. White regarding the question of 'Study vs. Outside Work.'"

Dear Editor:

The point you raise is one which presents itself to nearly all of us at some time or other during our course.

In considering the question I take it that a student should recognize:

1. An obligation to himself.

2. An obligation to his fellow students.

3. An obligation to those whom he may serve after graduation.

Every fellow owes it to himself to get as much out of the course as his limitations will permit. A fair proportion of the positions held by graduates requires administrative ability or other special qualities in addition to a knowledge of their primary business-agriculture. When a college organization offers an experience along any of these special lines, it would appear to be a wasted opportunity if the student who could afford the time would not accept it. The college organizations were in the main instituted for the benefit of the student body as a whole. Their conduct in most cases necessitates a sacrifice of time on the part of someone. To the fellow who, because of his qualifications, is asked by the other students to fill a certain position, the call amounts almost to an obligation.

One cannot afford to lose sight of the fact however, that a graduate is expected to have above all things a thorough knowledge of his chosen line of work. Without it he is of limited usefulness to those whom he may serve, and of doubtful credit to himself and the institution which tried to educate him. It should be then, in my opinion, the first aim of a student to know well every phase of his own work, and most of us will agree that even to approximate this, would require more time than the whole four years' course allows.

The above arguments appear to lead to the conclusion that we should devote our whole time to the college course proper, and at least a part of it to what is commonly called "outside work." It is obviously impossible to do both full justice. I have argued that we are under a certain obligation to each, therefore it seems to me that each must suffer.

What is called for, then, is a division of time between college and organization work so that our obligation to both would be at least partly fulfilled, and so that we would receive from both a large measure of the best they have to offer.

Just what course a particular individual should follow to obtain this end would depend upon such factors as his ability, his opportunities, or his future field of work. but generally speaking I should regard it as of doubtful wisdom to allow "outside work" to interfere with one's studies in the fourth year, or to any great extent even in the third year. In the first and second years it seems to me that the training offered through the different student organizations is sufficient justification for the sacrifice of a few places in class standing. It would mean a wider education, and surely would result in a "broader" minded man more capable of looking at things from other than his own narrow standpoint, and hence better able to grasp and deal with the big problems that he may sometime have to face. O. C. White.

The Air Question

February, 1913.

To the Editor of O. A. C. Review:

Are we going to have air in our classrooms or CO₂? We have had CO₂ usually—for at least the last two years. Some think and even go so far as to say that an excess of this gas should not be tolerated in rooms where we have to sit and listen to lectures often interesting, frequently otherwise.

The architect of some of our small, low, unventilated class-rooms, not being satisfied by crowding students on the level, has, by tilting the floor theatre fashion, has I say, increased the seating capacity about 25 per cent., while at the same time lowered the available air space by about 20 per cent. -truly a display of brains. This condition of affairs may be found in the Physics, Biological, Chemical and Horticultural smothering rooms-veritable "black holes." By way of suggestion I might say that rooms in general and lecture halls in particular, will, I say, hold 50 per cent. more if the floors are tilted up facing a passage in the middle of the room.

If a superior being were to enter one of

our class-rooms, for example the Live Stock class-room, during the last period before noon. The oxygen has long since been used up and the CO, made and remade scores of times by the four successive classes of carbon-dioxide machines. Some students drowse and turn pale, some curse, others sleep, 10 per cent. pay good attention, while in everyone the dry vituated air can be heard whistling through dry parched nostrils, like the rasping note of a breeze through ripened grain. He would, in all likelihood, think that this was some sort of a grim and ghastly scientific endurance test or a part of our fiendish examination system-he would be correct in both these surmises-for the man whose brain can withstand the most respiratory abuses, other things being equal, will get most from the lectures, and so be better fitted for the final test of-life.

Probably to our observer we should appear like Tennyson's "Lotus-Eaters."

"And around about the keel with faces pale,

Dark faces pale against the rosy flame,
The mild-eyed, melancholy lotus-eaters
came." G. N. Cooper.

An Explanation

THE CAMERA CLUB.

The Editor O. A. C. Review:

Since you referred editorially, and in no uncertain terms, to the Camera Club as having "coolly locked the doors of the college dark-room, which had to that time been open to all students," I thought it advisable to clear the misunderstanding which certain students seem to be laboring under.

Previously the college dark-room was open to all students, but this led to trouble. The lights were taken, developing trays were spirited away, and the solution and measuring glasses could not be kept, thus necessitating that everybody have a separate photographic outfit. What was more, it was not safe to leave films or prints to dry as many had been stolen.

The boys really interested in photography were disgusted at this state of disorganized affairs, and a number of them decided to rectify matters. But to have

new lights furnished, to rewire the place, to put in a new lock, and to get keys made was beyond the funds of a small club. Accordingly it was agreed that if the dark-room would be taken under the control of a club, which would keep the place locked and only admit its members, the college would pay for the expense of refitting and also, under these conditions, Mr. E. J. Zavitz promised to give some assistance. Thus the Camera Club came into being. The dark room has been refurnished, and to keep out those who were not interested, it was thought advisable to charge an admission fee.

The dark-room, then, is open to all those who are interested enough in photography to pay the membership charge of twenty-five cents, which fee covers the whole four-year course. Surely this is not closing the room to a favored few, as is implied in your article.

C. A. Good, Sec. Camera Club.

Our Latest Success

The Review stands as a link between the great agricultural movements of the day and the farm community of Canada. Each new feature of the work that will in any way make farming more enjoyable or profitable has our intense sympathy. Hence we have watched with everincreasing respect the development of the work undertaken by the Lands Committee of the Dominion Committee of Conservation. We have done more. We take pride in announcing ourselves the official organ of this committee. We have made the necessary arrangements and the work will be explained by the best writers it is possible to secure. The first article is that by our old friend F. C. Nunnick, published in this issue.

And now a few words of the committee itself. Since its formation in 1909, it has organized and is operating one of the finest systems of organized aid that the modern spirit of

progress has developed for the conservation of the natural resources of This committee has as Canada. chairman the noted Dr. J. W. Robertson. To his intense interest and untiring work is due the rapid expansion of this department. To conduct the research a specialist was required who thoroughly understood practical conditions, who had a scientific knowledge of agriculture and who had an imagination to lead to a wider and nearer vision of the "new agriculture." Such a man was secured for this position in the person of F. C. Nunnick, who is a graduate of this College and an ex-editor of the Review. Mr. Nunnick has conducted the agricultural survey and has located the illustration forms during the last two years.

THE EXTENT OF THE SURVEY.

This survey extended over all Canada. It sought to analyze conditions as they actually exist. The rotation of crops, the standard of seed grain, the handling of manure and the application of fertilizers, the prevalence of weeds and of insect pests and the condition of the water supply were all carefully studied in every Province.

The next step is to raise the standard, to make farming more profitable

and more enjoyable. To effect this end the illustration farm scheme has been devised. On these farms the farmers who always have been working their farms will continue to do their work with very little financial assistance. It is to be shown that the same man on the same land with the identical labor, implements and fertilizer, but with a knowledge and with the employment of more advanced methods can make a larger profit and have a finer farm. No attempt is to be made at a "show" farm—the showing is to be made in increased crops, fertility of soil and larger profits.

Such farms form an important part of the agricultural policy of Denmark and have been instrumental in developing the farmers of that land from among the poorest, to perhaps the richest, farming class in Europe. The three objects are: first, to make farming more profitable; second, to make it more pleasant; and third, to develop a stronger community feeling.

Just how these are to be accomplished—and are right now being accomplished—we will leave the conservation experts to explain. We trust this movement will be considered with live attention as its progress is reported in our columns.





Conversazione

The Annual Conversazione, which is always given by the Junior Year, held at the Macdonald on the evening of Friday, Jan. 31, was undoubtedly the best and the most original of all such functions given in the Hall. Such were the feelings, at any rate, of over a thousand people who came from far and near to attend the annual reunion.

From the time of their reception by Dr. and Mrs. Creelman in the drawing room until two o'clock, when the last car to the city was boarded, everyone enjoyed the evening to the fullest extent.

The rendezvous were six in number. "Japan" was the prettily decorated east end of the second floor, while "Under Two Flags" was situated at the well of the same flat. "Winter Sports" and "Summer Sports" were retreats at the west end of the second and third floors respectively. The

dining room was decorated to represent Canada, the west end corresponding to the Western Provinces and the east end to the Eastern.

The gymnasium, where the musical numbers were given was decorated to represent Holland. At one end of the room was draped the Dutch flag, while a large painting, depicting a landscape in the Netherlands covered the opposite end. The small lights suspended from the ceiling in rows were enclosed in paper boxes upon which were painted Dutch scenes and figures. The alcove was in representation of the interior of a Dutch house, and the platform was changed for the time being into a veritable flower garden.

The dining room representing Canada was indeed well decorated with flags, pennants and evergreens. Each alcove was plentifully supplied with chairs and cushions, which with the decorations made one desirous of remaining peacefully settled in one of the cozy corners.

On the first floor just beneath the well, upon a platform, although they were almost hidden in a profusion of flowers and palms, Tony Cortese's London Harpers played. From here the music ascended up to all the floors, allowing everyone to hear it, without the inconvenience of crowding.

Three buglers announced the termination of the promenades, while a huge moon, suspended over the well on the second floor, gave the number of the "prom." At twelve o'clock the promenades ceased and dancing commenced, the dances taking place in both the gymnasium and the dining room. The Harpers supplied the music, and the number of extras called for is ample evidence of their popularity.



THE 1913 CONVERSAT COMMITTEE.

Rear Row—S. G. Freeborn, J. E. Lattimer, J. H. Winslow, C. F. Neelands, A. McLaurin.

Front Row—F. Strong, Miss Wilson, H. R. Hare, Miss McMurtry, G. C. Duff.

The concert numbers in the gymnasium, given by Miss Estelle Carey, soprano, Hamilton, and Mr. Russel G. McLean, baritone, of Toronto, took their audiences by storm and many encores were called for. Among the most appreciated of these were "Cuckoo Clock," and "Haymaking," by Miss Carey, and the duet, "I feel Thy Angel Spirit," by both the singers.

Refreshments were served on the third floor until the dances began.

Great praise is due to the "Conversat" committee which had full charge of the preparation. It consisted of Mr. H. R. Hare, Misses E. Wilson and H. McMurtry, and Messrs. J. H. Winslow, W. F. Strong, S. G. Freeborn, C. F. Neelands, G. C. Duff, A. E. McLaurin and J. E. Lattimer.

Freshmen vs. Sophomores

To arouse a greater interest in the literary meetings, Mr. G. G. Bramhill, the President of the Literary Society, has changed the by-laws of his society so that whereas formerly the debates were between the divisions of the major society, they will henceforth be of an inter-year nature.

The first of these was held on the evening of January 28th. The programme was as follows:

Speech—Prof. H. H. Dean. Solo—Miss Jean Sinclair.

Debate

Selection—Miss Hill, Messrs. C. R. and Douglas Crowe.

Solo-Mr. Blayney.

The subject for debate was: "Resolved that a direct contribution to the British Navy is preferable to the establishment of a Canadian fleet." The First Year, represented by Messrs. M. Jones and E. Carncross, upheld the affirmative, while their opponents, Messrs. A. Neilson and D. G. Laird, held the fate of the Sophomores in their hands. But Fate was unkind to the Second Year, as the Freshmen were able to prove that Canada's best policy is a direct contribution.

During the meeting the Day Trophy was presented to Class '14. This is a cup presented by Prof. G. E. Day to the class that succeeds in obtaining the maximum number of points in the judging competitions at the Winter Fair for three years in succession. The present Third Year has won it the last two years.

Union Y. M. C. A. and Y. W. C. A.

The union meeting or the Y. W. and the Y. M. held in the Massey Hall on the evening of February 7th, was well attended, and evidenced a growing interest in these meetings.

Mrs. (Canon) Plumtre, of Toronto, gave a short address on the selecting of ideals to guide our path through life. Mr. R. D. Robertson, also of

the Queen City, spoke for some time of the great influence one could exert by reaching the Chinese students, who are seeking for enlightenment, both in their own country and at the universities in Tokio.

Miss L. Griffin gave several selections on the piano, and Mr. T. Blayney gave a vocal solo.

The Dairy Short Course

In the hustle and excitement of college life we are too apt to lose sight of our nearest neighbors. Only a short distance away, at the Dairy School, is an enthusiastic short course in dairying, consisting of 35 members. Shortly after coming to Guelph, they organized a Literary Society, with Mr. T. J. Viveash as President. At the meetings held

every Saturday afternoon at 1:30. debates, speeches and songs fill the programme, and a very enjoyable time is passed.

Although the interest so far has been rather slack, it is growing, as the members are realizing what an encouragement it is to the executive to have a full attendance at the meetings.

"The Private Secretary

Mr. Hart had sufficient confidence in his players to announce that an "all-star cast" would present the above mentioned comedy. His confidence was not misplaced. We learn semi-officially that two members of the company have already been offered stellar roles in a coming production of the Schubert theatrical syndicate; it is quite easy to believe.

The story of the play is well known. Nearly everyone had seen

scene in the third act with the song, "O Promise Me," was carried off impressively by Mr. Hirst, with Miss Potter as Edith Marsland. Many a young heart in the audience prayed for so romantic a proposal. Mr. Wright as Gibson, the tailor, with an ambition to "soar," produced much amusement.

Of the ladies, Miss Oldham as Miss Ashford, a lover of "spirits," had the heaviest part, and assumed the role



"THE PLAYERS."

the farce before, and the interpretation by our players did not suffer by comparison. Honors were divided between Mr. Unwin as Cattermole and Mr. Peren as the Rev. Spalding. Mr. Peren played the most difficult part in the piece with a finish that has not been equalled in any similar performance at the College. He is a comedian from his "goloshes" to his clerical hat. Mr. Hirst, as Douglas Cattermole, and Mr. Creelman as Harry Marsland, were excellent. The love

with great credit. Miss Creelman, as the landlady acted a difficult scene in the first act, as though she were born to it. The remaining members of the cast, Mr. Curtis as Marsland; Mr. Burrows, as John, a servant; Mr. M. F. Smith, as Knox, the writserver; Mr. Fortier, as the gardener; and Miss Hartman as Eva Webster all ably supported the principals. Mr. Burrow's drinking song brought a round of applause.

The only annoying feature of the

evening was the constant arrival of people during the first act. Some means should be taken, if possible, at all performances, to keep late arrivals in the rear of the gym until a suitable opportunity occurs when they can be shown their seats without disturbing the remainder of the house.

Two performances were given, Fri-

day and Saturday evenings, February 21 and 22, and both attracted large audiences. The second was much smoother in action than the first, and was carried through with a vim and dash somewhat lacking in the other.

The orchestra, slightly augmented, was as usual immensely appreciated by the crowd and filled in the waits between acts handsomely.

Intercollegiate Debate

Great was the excitement of the crowd that filled the gymnasium on the evening of February 15th to hear our debaters strive with those from Macdonald College. We had won two games, and as the St. Annes' boys had trimmed us in hockey, the question was whether O. A. College was to be champion in three out of four contests.

The following was the programme for the evening: Orchestra (College); address, Dr. G. C. Creleman; solo, Miss Jean Sinclair; debate; trio, Miss H. Kelly, Messrs. C. R. and Douglas Crowe; selection, H. H. Reed; orchestra.

The subject for debate was, "Resolved that military conscription of all men from 18 to 24 years of age, and involving six months' training, would be in the best interests of Canada." The visitors, represented by Messrs. D. E. Lothian and A. O. Schafheitlin, upheld the affirmative, while those championing O. A. College were Messrs. G. G. Bramhill and H. M. King.

Dr. A. G. MacKay, B. A., in announcing the judges' decision, tantalized the audience by keeping it in suspense for several minutes before announcing the good news that the negative had won. O. A. College had scored another victory.

CLASS '14 CHAMPIONS AGAIN.

On Saturday evening, February 8th, the representatives from the third year battled with those of the senior class for supremacy on the public platform.

The subject of the debate was, "Resolved that free trade is preferable to protection." The affirmative were Messrs. J. E. Lattimer and J. Brown, of year '14, while the opponerts were Messrs. A. Bland and F. E. Millen. After "careful consideration," the judges decided that the affirmative had the better of the argument.

Prof. Kelly gave a vocal solo and a reading, which were very much appreciated by the audience, as encores were loudly called for.

Study

If you are at all lazy or desirous of avoiding unnecessary work and worry, do good, hard, faithful work

while in college. As the Germans say, "If you would make your life easy, make it hard." The idea which

some college men get that study is a disgrace and a nuisance is not only idiotic but also most dangerous. Bone and muscle will not develop without regular food and exercise, and no more will brain and intellect.

If you want to lead a life without brains, without influence, and without satisfaction or reward, do not study to train your mind. If you do not care to live that kind of life, then be sure that you cannot escape a reasonable amount of study.

Don't be ashamed to be caught in the act. Study regularly and you can study less.

It is better to study one hour before an examination than two after it.

Find some subject or subjects which you can study because you like them. The best results come from voluntary work.

You may think it is better to know your associates rather than your books. There is no law against knowing both.

Learn how to study, and that will teach some other things.

Study to master your subject rather than to pass an examination, and the examination will lose much of its terror.

The more you shirk work in preparatory school, the harder you will be oblidged to work in college. The less work you do in college, the more work you are storing up for yourself when you enter professional or business life. Get your mind well trained at the very start and it will save you a heap of trouble all along the line. The man who has learned to concentrate his mind on what he is doing accomplishes twice as much as other men, and in half the time. Work while you work.

"Study to show yourself approved unto God; a workman that needeth not to be ashamed."

While in college, read a great deal, not too much in any one branch of literature, but extensively, familiarizing yourself with writings of all kinds. Don't put too much time on books whose value is transitory. Read solid books, books whose value is permanent through all time. But read so that you will leave college familiar with the best that has been written in the English language. "Reading maketh a full man."

A man of culture must be well-read. Cultivate a taste for that which is best in prose and poetry.

Don't read literature which poisons the mind or stimulates an impure imagination. You don't have to learn all the filthy details of vice to hate it. You don't have to immerse yourself in a cess pool to appreciate its pollution. Don't be afraid to be ignorant of some things. You will learn enough of wickedness in your life in spite of yourself without purposely investigating it.

Editor's Note—This is one of a series of such articles written by "two recent college graduates" for the benefit of students.





ATHLETICS



MACDONALD'S VISIT.

"Our intermeet is past and done,
And out of three we got but one,
Though Macs the other two did get,
Old O. A. C. will trounce them yet."

—McAleer.

The above is taken from The Review of May, 1911, and bears upon the visit of Macdonald College to us in that year. What a clear insight in the future the author of those lines must have had! How did he know we could win three of four this year, and incidentally go ahead on the series? We have verified his prediction by this year winning all but the hockey game in the annual intercollegiate meet between Macdonald College and the O. A. C.

Our visitors arrived on Friday morning, February 14th, and were met at the depot by the executive of the Athletic Association and escorted to the colleges. Through the energy of Mr. Neelands—Mr. Tisdale being ill—and Mrs. Cunningham, the College did her noblest for the visitors at dinner hour. Dr. Creelman, in a neat address, welcomed the visitors and extended to them the freedom of the college.

The first athletic event took place that afternoon at 4:30, when the basketball game was played. In all fairness to the men from Quebec, it can be safely said that they were completely outclassed. The O. A. C. played the best game they have played this season. Never did they check so well, and never did they shoot with such precision. They played combination right up to the

basket, while the St. Annes boys relied on long shots. The half time score was 32 to 8 and the final score 60 to 18. The teams:

Munro ...left for. ...Wilcox
Wilson ...right for. ...Walker
Culham ...centre ...Evans
W. L. Horobin .l. guard ...Hyndman
H. P. Horobin .r. guard ...Schaftlin

Referee-F. M Clement.

Judge of play-Ad. Burrows.

On Friday night the men from Macdonald were given the opportunity of enjoying themselves at a less strenuous occupation than that of the afternoon—the Valentine dance at the Hall. This interesting function is dealt with in another place in this paper.

Saturday morning the boys from the East showed they could play For the third time in as many years they trimmed us, the score being 2 to 0. It was anything but a good exhibition, and only the fact that the players wore skates warranted it being called hockey. The general tendency on the part of both teams was to play the man rather than the puck, and this helps to account for the low score. In the first half the Macdonald team forced the play, and the College defence, particularly Irvine in goal, gave a splendid exhibition. Finally Kilgour, being in a generous frame of mind. presented the visitors with a goal. In the second half the Ontario boys played stronger hockey, but were held scoreless while the visitors tallied another. The final score was 2 to 0. Young and Evans were the

pick of the winners, while Irvine, Fraser and McElroy were the best of the losers. The teams were:

Macdonald College—Fraser, Smith, Hyndman, Young, Hammond, Evans, Middleton.

O. A. C.—Irvine, Fraser, Kilgour, MacElroy, Madden, Thompson, Herder.

Referee-D. W. Gillies.

Each college then had one event tucked safely away, and more than ordinary interest centered on the baseball game of Saturday afternoon. It was a good game. It was interesting from the very fact that the winners never had a sufficient lead to allow themselves to feel safe. There was little brilliant playing, but there was a steadiness that has seldom been so well illustrated in our gym. The Ontario boys won on their team play and base running. For Macdonald, Roy played a strong game, and Sutton was probably the next best man. For O. A. C., Hales and King excelled themselves, while Pete Forsythe batted in great style. The score:

Macdonald.

Player		A.B.R	Н.	P.O.	A.	E.
Sutton, p		6 2	4	6	3	1
Dash, l. f					1	
Middleton, 3rd					1	2
Roy, c						4

Player	A.I	3.R.	Н.	P.O). A.	E.
Evans, 2nd	 5	1	1	1		1
Walker, s. s	 5	2	3	1	2	
Presley, r. f	 5	1	1	1		1
Hodge, s. s	 5	1	2	1	3	1
Ricker, 1st	 5	1	2	12		ſ
Totals	46	13	22	27	10	9

0.	A.	C.				
Player	A.1	B.R.	H.	P.O	. A.	E.
Burrows, r. f	5	2	2			
Rowland, l. f	6	3	4	1		
Duff, 3rd	6	3	3	•	2	
King, c				4	_	3
Forsythe, s. s	6	1	4	3	2	
Culverhouse, 2nd	6	1	1	2	1	2
Neelands, s. s	5	1	2	1	1	
Palmer, 1st	5	2	3	11	î	
Hales, p	5	1	2	6	2	
Totals	56	16	25	27	9	6

Umpires—Mr. Ness, of Macdonald; Mr. Baker, of O. A. C.

In the debate on Saturday night the O. A. C. were again victorious. A more detailed account of this appears elsewhere. This gave us the series by three to one, and the round by six to five.

Let us now express the wish that Macdonald College will soon visit us again. She sends men who will struggle to the last inch for victory, and who are good sports in defeat.

Basketball

At the time of going to press we do not know definitely how the league in which we are playing is to be decided. An unusual state of affairs has arisen. It is now past the time for declaration of winners, and the three competing clubs, Varsity II., Western Medical College of London, and O. A. C. are tied for the cham-

pionship. The college team has been playing a fast game this season, and in the event of a play off should just about cop the bunting.

Owing to the fact that our first team is in competition with Varsity II. this year they were not allowed to compete in the Sifton Cup series. Consequently the management has organized a second team under the captaincy of Mr. G. G. Bramhill to compete for this cup. The Sifton Cup is emblematic of the championship of the faculties of the University of Toronto.

O. A. C. at Varsity II.

On Friday, Jan. 24, the college basketball team went to Toronto to play the return game with Varsity II. The game was played in West End Y. M. C. A. gym. and resulted in a win for Varsity by 28-19. College lost the game through poor shooting. Several times the basket was misseed when scores seemed certain. O. A. C. was represented by: Forwards, Munroe (Wilson), White; centre, Culham; guards, W. L. Horobin, H. P. Horobin.

London at O. A. C.

On Saturday, Feb. 8, Western Medical College went down before the red and blue, by 34-19. London was at a disadvantage inasmuch that they had defeated Varsity II. in Toronto just the night previous, and were consequently not in the best of shape. The locals played great ball all the time, their combination being exceptionally good. The half time score was 16-4. College line up: Forwards, Munroe and Wilson; centre, Culham;

guards, W. L. Horobin and H. P. Horobin.

O. A. C. at London.

On February 19, the basketball team went down to visit London Medical College, and incidentally play basketball against the bonesetters. The game resulted in a victory for London by 35-15. The poor showing of the O. A. C. team was undoubtedly due to the small gym. It demoralized the long passes which characterize the game of the aggies. College was represented by: Forward, Munroe and Wilson; centre, Culham; guards, W. L. Horobin and F. P. Horobin.

The Inter-Year Games.

Up to the date of writing only one game has been played in the inter-year series. In this game the Seniors surprised the Freshmen by defeating them by 16-14. The play was characterized by hard, close checking, and penalties played an important part in the score. From present indications the Seniors look to have a strangle hold on the championship. The teams were: Seniors—Culham, Tisdale, Palmer. Bramhill, Neff. Freshmen—Wilson, Orr, White, Munroe, Welton.

Baseball

As announced in the preceding issue the College baseball team is playing in a city league. This league is composed of five teams from the city and the College team. At present the College team is tied for first place, having been defeated but once, by the citizens. With three games yet to be played the College has a good chance of winning out.

As yet the inter-year series has

not waxed very warm, although on dope the Juniors should win out, yet either the Freshmen or Seniors are likely to spill the beans and come home in front.

Citizens at O. A. C.

On Jan. 28 the Citizens worsted our baseball team by a score of 17-12. It was a game that the College lost only by the worst of hard luck. For four

innings they could not locate the ball, only one run being obtained in that time. However, in the fifth innings the batting commenced, and the visitors lead considerably reduced. The game reached a happy conclusion, for the visitors, when Hales hit into a double play in the seventh with two on bases and none out. The College team: Winslow, King, Palmer, Culverhouse, Forsythe, Neelands, Rowland, Hales and Duff.

The Freshmen defeated the Sophomores in an inter-year game by 8-5.

The College team defeated St. John's in a city league fixture on Feb. 11 by 21-6.

The College team defeated the Signallers at the Armouries on Feb. 13 by 24-7.

The Juniors trimmed the Sophomores in the second inter-year game by 17-5.

O. A. C. defeated the Bankers on Feb. 20 by 16-13.

Aquatics

O. A. C. at Varsity.

On Feb. 8th, a swimming meet was held in the new West End Y. M. C. A. gymnasium between O. A. C. and Varsity. Owing to the fact that the O. A. C. had not been long in training, and Davies was continually troubled with cramps, due to the coldness of the water, Varsity scored rather an easy victory. However, they found O. A. C. to be their equals in water polo, and only just managed in the last few minutes to score a second goal, which ended the game a draw, O. A. C., 2; Varsity, 2.

"Hexie."

Varsity at O. A. C.
On Saturday, Feb. 22, the Varsity and O. A. C. fish competed in a friendly meet in the local pool. All of the events were closely contested, especially the fifty yards race. In this event Davies beat his man by a very small margin. In points, Varsity made sixteen, to O. A. C.'s eleven. The result:

One hundred yards—1st, E. Davies (O. A. C.); 2nd, Jeffries (Varsity);

3rd, Tilson (Varsity). Time 69 sec.

Long Plunge—1st, Tebbs (Varsity); 2nd, Foote (Varsity); 3rd, Townsley (O. A. C.). Distance 47 feet, 11 inches.

Fifty Yards—1st, Davies (O. A. C); 2nd, Tilson (Varsity); 3rd, Simpson (Varsity). Time, 31 sec.

Relay Race—1st, Varsity, Simpson, Foote, Jeffery, Tilson; 2nd, O. A. C., Hextall, Braithwaite, Vander Byl, Davies. Time, 1 min. 24 3-5 sec.

The water polo game was also won by Varsity. But it was not until after the best possible argument that the O. A. C. boys succumbed to the visitors. All the way through the game was close, the result being ever in doubt. The final score was 7-5. The teams:

Varsity.	O. A. C.
MillenGoal	Townslev
QuaBack	Smith
Foote Back	Harding
Simpson Centre	Davison
Rutherford Forward	Vander Byl
Brant Forward	Davies

Hockey

The followers of hockey have been in a state of uncertainty all season as to just how the College stand in ths sport.

Conditions were against us for a leng time owing to the fact that for a long time we had no ice on which to practice. The College rink was practically useless in this respect.

Then we must admit that our team is not up to the standard of previous years. On this account we withdrew from the O. H. A. and entered in a city league. After playing a few games in this, it was suddenly announced that all the teams were to be put on an equal basis and three sudden death games were to be played to decide the winners.

College were ordered to play the Victorias and on Feb. 20 these teams clashed at the Royal City Rink. The Victorias won, so they say. On the other hand College claims that the score was a tie. We are not in a position to say which version is correct, but the fact remains that the College has protested the game. College was represented by: Jenkins, MacElroy, Fraser, Madden, Gandier, Kilgour, Thompson.

The hockey management deserves great credit for the way they have battled against adverse circumstances. In this connection Mr. Mac-Elroy is to be highly commended for his energy.

Nothing has occurred yet in the line of inter-year games. The mild weather has rendered practices impossible at the College rink, and consequently enthusiasm has not reached the point attained in previous winters. This season the winners will be decided by the winners of the

upper classmen, playing the winners of the lower classmen. It is hard to forecast the probable champions, as all the teams appear to be equally matched.

Koseykornerites vs. Hobbledehovs.

On Saturday morning, March the 1st the College rink was the scene of a great battle. It was the outcome of a challenge by the fourth year to the girls of Macdonald Hall, the former agreeing to wear hobbled skirts and to use their left hand only.

From the moment Referee Hextall faced the puck the play was fast and furious. McElroy made several sensational rushes down the ice, but Miss Thompson and Miss Creelman proved a stone wall of defence. Miss McKinnon and Miss Armstrong made several meteoric rushes and only the brilliant work of Len Henry in goal saved the seniors from a disgraceful defeat. The heavy back checking of Miss Groff and Miss McMurtry completely disorganized the team work of the seniors, while Miss Hotten in goal easily disposed of several shots with the goal label attached.

The last half was characterized by rough play and Referee Hextall kept the benches decorated with offending players. Captain Bessie McKinnon was penalized for five minutes for disputing a decision and raising her stick at the referee. Captain Jenkins of the senior team was unable to play but made an impartial goal umpire. When the whistle blew the score was 3-1 in favor of the Koseykornerites.

Koseykornerites—Goal, Miss Hotten; point, Miss Creelman; ; cover point, Miss Thompson; left wing, Miss Groff; right wing, Miss McMurtry; rover, Miss McKinnon; centre, Miss Armstrong.

Hobbledehoys—Goal, Henry; point, Hood; cover point, Tisdale; rover, Mc-Elroy; left wing, Brown; right wing, Culham; centre, Bramhill.

8

ALUMNI

ham.



N Wednesday evening, January 15th, the third annual reunion of the Ottawa Valley O. A. C. Alumni Association was held at the Grand Union Hotel, Ottawa. The week of the Eastern Ontario Live Stock and Poultry Show has, of late years, brought almost as many students of the college to Ottawa as were in former years to be found congregated in Guelph for the Ontario Winter Fair, and has afforded an excellent opportunity for an annual gathering. Last year and the year before the reunion took the form of a banquet, but, while the former occasions were much enjoyed, it was this year decided to introduce an innovation in order to afford, if possible, an even better chance for the renewing of old associations and for the improvement of acquaintance between graduates of long standing and those of more recent years. Accordingly, an informal evening was arranged for, partaking more of the nature of a smoker with music and light refreshments interspersed and followed by short talks from such distinguished members as Dr. Jas. Mills and Dr. C. C. James.

The results fully justified the experiment and before the evening was brought to a close by the singing of "Auld Lang Syne" it was decided to adopt the more informal gathering on future occasions.

The officers for the ensuing year are as follows:

Hon. President—Dr. Jas. Mills. Hon. Vice-Presidents—Dr. G. C. Creelman, Dr. C. C. James, Dr. J. C. Rutherford, Dr. Jas. Robertson.
 President—L. H. Newman.
 Sec.-Treas.—F. C. Nunnick.
 Executive Committee—Messrs. T.
 R. Arkell, E. S. Archibald, Alf. East-

Those present were:

Dr. Jas. Mills, Ottawa.

Dr. C. C. James, Toronto.

J. H. Grisdale, Director Experimental Farms, Ottawa.

Geo. H. Clark, Seed Commissioner, Ottawa.

J. B. Spencer, Publications Branch, Ottawa.

A. Acres, Ottawa.

E. S. Archibald, Central Experimental Farm, Ottawa.

T. R. Arkell, Live Stock Branch, Ottawa.

Fred Boyd, Merrickville, Ont.

W. A. Brown, Live Stock Branch, Ottawa.

H. W. Coleman, Perth, Ont.

R. B. Cooley, Calgary, Alta.

E. D. Eddy, Seed Branch, Ottawa.

T. Gamble, Ottawa.

R. S. Hamer, Live Stock Branch, Ottawa.

W. Jones, Commissioner of Conservation.

J. W. Kennedy, Apple Hill, Ont.

A. L. Logsdail, Central Experimental Farm, Ottawa.

G. LeLacheur, Macdonald College. T. H. Mason, Live Stock Branch, Ottawa.

C. M. MacRae, Live Stock Branch, Ottawa.

W. Miller, Live Stock Branch, Toronto.

W. D. Monk, South March, Ont.

L. H. Newman, Seed Growers' Association, Ottawa.

O. C. White, Central Experimental Farm, Ottawa.



A. E. Slater, '07, who was editor of the Review for one year and was winner of the Oratorical Contest is now a missionary in India. Mr. and Mrs. Slater have been transferred from the Allahabad College to Etah, where they will have charge of the boarding and day schools. Mrs. Slater is an ex-student of Macdonald Hall.

G. A. Bell, '05, first became connected with the Agricultural Department at Ames, Iowa. Later he spent some time at the college at Orino, Maine. He has lately been appointed agronomist in charge of educational work for a number of fertilizer companies. His headquarters at present is 19 Postal Telegraph Building, Chicago, Illinois.

R. B. Coglan, '11, is seed inspector for the State of Idaho. He is stationed at Moscow, Idaho.

E. F. White, '95, has become one of the celebrities of the American printing industry.

After he was graduated, he studied law, receiving the degree of L. L. B. ir 1906. He formed a partnership with E. A. Powell and entered the printing business. The firm of Powell and White were among the first to install a cost system. Mr. White gave a great deal of thought to the subject and at the St. Louis Cost Congress made his famous speech, advocating what is now known as the "White System" of distributing overhead expense, accompanying it with a practical working out of the principles involved.

Mr. White shares a beautiful home in a suburban section of Cincinnati with Mrs. White and three children. He spends much of his leisure time in a motor boat on the waters of the Ohio.

J. H. Davison '05 class, of McKilligan, Loan, Deachman, Hand and Bell. Davison first became manager of a fruit business in Vancouver. Later he tried other parts of B. C. He did not "stick," but roamed back across the prairie and started raising horses in Southern Alberta. He is near the Crows Nest Pass, where his stock of from 150 to 200 head of horses are readily and profitably disposed of to the miners. His address is Lundbreck, Alberta.

E. A. Howes, '11, after he was graduated, spent some time with the Department at Ottawa. He is now Professor of Agronomy at the Agricultural College at Reno, Nevada.

W. J. Kennedy, '98, who has held the position of Professor of Animal Husbandry at Ames, Iowa, and Vice-Director of the Agricultural Experiment Station there, has been recently appointed Director of Agricultural Extension Work for the State of Iowa.

8

MACDONALD

8

STREET CARS.

THE City of Guelph is duly, perhaps I should say unduly, proud of its system of municiple ownership. It owns its own light and power plant, its waterworks, and its street railway. We who use the cars daily are apt to forget that we are using a Public Utility that is Municipally Owned, but we are. Why, the two big cars that run on the O. A. C. line fairly radiate with the Benefits of Municipal Ownership. Every brass knob, every shining expanse of varnished side says, "Look at me; I am the result of Municipal Ownership." What if the new cars are a bit apt to run off the track, because the track is old and feeble and the cars are young and vigorous? Never mind. The triumphant line-up of glory every twenty minutes (or more) at St. George's Square is enough to gladden the heart of the most pessimistic citizen, or noncitizen.

Here follows my tail.

I am a down-town girl, and from necessity I have reduced car-catching to a science. When I see a car go up the street, I know I have time to eat my breakfast, grab my coat, hat, rubbers, muff and satchel, and just exactly catch it as it comes down.

One day last week I completed these manoeuvres expeditiously, in fact, I had a whole minute to spare. I proceeded in a leisurely way to the corner (I never hurry when I don't have to), and looked up the street

with a bored look to see if the car was coming. It wasn't. I made certain that my watch had not stopped; I counted all my "luggage," and still the car was invisible. About this time I became aware that it was a very cold morning. Then I wondered if I would walk. Then the grocery store on the corner began to show signs of life, so I went in, and the clerk informed me that it was ten below. I decided definitely and finally not to walk.

When I had waited eight minutes, the car came. It was too cold to frown at the motorman, and as I stumbled against the conductor, I forgot to frown at him. I deserve no credit from restraining those frowns. The car was full of the usual half-breakfasted crowd, with a generous supply of Consolidated School Children to fill in the cracks. It was one of the old cars and a bit cold, which did not make it at all cheerful.

When we rocked and bumped down to the junction of the Suffolk Street line, we met the Suffolk Street car. The conductors and motormen all got out and held a consultation to decide our fate. They talked for forty-five seconds, and we were getting later and later. Finally we were ordered onto the other car. There was no hope of catching up to the O. A. C. car, which had left five minutes before, but the Suffolk Street car would get us there in twenty-eight minutes. It did.

Now, why should such disasters occur on a Municipally Owned car line? And why were we counted late when we weren't responsible?

The one consulation to me is that I rode for thirty-four minutes on a Guelph street car for a three-cent fare. I never did it before, and I daresay I never shall again.

G. M. C.

EXPERIMENTS.

The cold grey dawn had come at last, As slow a train of maidens passed, Bearing their note-books, pens and such,

For they must, though they hate it much,

Experiment.

Each taketh her appointed place,
And scowleth at her neighbor's face,
For dancing had been late last night,
And no one loved, at morning light,
Experiments.

One maiden sniffeth at a pan,
One "notes the taste," and, if she can,
"Examines then the residue"
To see what's left, not much, 'tis true,
Experiments!

Another at the microscope
Is watching starch cells, while the
"dope"

A third prepares is made of fruit, Pickled in vinegar to suit Experiments.

They tumble in each other's way, They raise a din, and in the fray Friends will not speak to friends; eyes glare;

There's wrath and even dark despair In Experiments.

"I boiled this syrup half an hour—"
"I don't care, your result tastes sour!"

"I did exactly what it said-"

"For pity's sake, child, use your head!"

Experiments!

At dinner hour, a silent class
Leaves the great kitchen; every lass
Has wounded feelings. Despite that
Much is at last accomplished. That
's Experiments!

-G. M. C.

THE PRESIDENT OF THE ATHLETIC SOCIETY.

To be President of the Macdonald Athletic Society is to have the secret o' perpetual motion. There is a basket-ball game to be refereed today noon, and one to be drawn up for to-



Miss Robina Templeton.

morrow, and a meeting sometime soon, and a snowshoe tramp as soon as the snow comes, and hockey sticks to be found and—the list of her activities could go on forever.

No other girl in the school could have "held down the job" as does Miss Templeton. She takes a practical and active interest in athletics herself, and is a born organizer and manager. Added to this she has a concentration of purpose and a most disarming frankness of manner that have won her the respect and real liking of all those with whom she comes in contact.

Miss Templeton's home town is Belleville, where she received her public and high school education. Her present position, near the top of the class of Normal '13, which she holds in spite of the pressure of outside duties, leads one to hope that her interest in the professional side of Domestic Science will not cease when she receives her diploma as a graduate of Macdonald Institute.



Miss Louise Griffin.

THE PRESIDENT OF THE "LIT."

It was a little late in the fall term of 1911 when Miss Louise Griffin slipped into place in the Normal Class of '13. The first initiation was over and things were beginning to settle down when the new girl arrived so quietly. At the examinations that Christmas she headed her class. Later we found that this was very

characteristic of her. She is so quiet and unobtrusive in all her methods of work, that the first thing one hears of are her wonderful results.

As President of the Literary Society, Miss Griffin has managed, as usual, to get results. Her meetings have been very interesting and entertaining, and everyone is satisfied that the fortunes of the Literary Society are in most capable hands.

Personally, Miss Griffin enjoys a popularity that is well-deserved. While her class standing is a bit terrifying to ordinary mortals whose highest ambitions are to escape stars in this world and gain them in the next, yet on closer acquaintance one finds that she is possessed of a broad sympathy and a brilliant sense of humor that make her the true chum and good comrade that she is.

THE HOUSE PRESIDENT.

The position of House President in Macdonald Hall is one that demands much of the person elected to it. She must have administrative ability, tact, and good judgment. She must be ready at any moment to settle any of the thousand differences of opinion that are brought to her, to visit the sick, and "ssh" the noisy. Her time is never her own, and her patience is supposed to be inexhaustible.

Difficult as the position is, Miss Mary Turpin, our present House President, fills it ably. She is an Ontario girl, born at Hamilton, and educated there and at Glen Mawr College, Toronto. Since leaving Glen Mawr she has led a happy life as "daughter at home," gradually gathering in her daily life that keen knowledge of human nature, which, with her quick sense of humor, forms the chief factor in her success.

Polly is a great favorite among the girls, despite the fact that she is in authority over them. Her level-headedness, and warm-heartedness are bound to win friendship for her wherever she goes. Let us hope that her work will never call her so far that she will not be able to re-visit Macdonald occasionally.

THE PRESIDENT OF THE Y. W. C. A.

Miss Harriet Johnson was born at Upper Stewiack in Nova Scotia, and received her public and high school education there. She graduated later from Truro Normal School, and taught school in Nova Scotia for several years. Before coming to Macdonald, she followed her profession of teaching also in Saskatchewan.

As President of the Y. W. C. A., Miss Johnson is in a place where her personal influence is particularly strong among the girls. Here she shows the practical working out of the high ideals that are such an integral part of her character and sets a high standard in her everyday life that only too few are able to follow.

But "Johnnie" is not too good to be true, and can see the humor in a situation as quickly as anyone can, and more quickly than many of her fellow-students. There are several yarns that would illustrate this—but that would be telling tales out of school. Suffice it to say that her cheery optimism has helped many a sister Macite over a hard bit of the road.

It is with deep regret that we note the continued illness of Miss Walsh. This has proved to be much more serious than was at first feared, and has necessitated her remaining in St. Joseph's Hospital. In all probability she will not be able to take up her work again until next September. Miss Walsh has the sympathy of all her pupils in her illness.

Miss Nixon, who is substituting for Miss Walsh, is a graduate of Macdonald, and has been most successful in her former work at the Consolidated School.

THE FOURTH YEAR DANCE

Friday, February 14th, a still night with just a hint of spring in the air. a wonderful sky of stars, and Macdonald with its hundreds of lighted windows sending out its call, "come and dance and be young"-what could be more perfect? But if the joys of anticipation were great, in this case those of realization were even greater. The presence of the delegates from Macdonald College made things go with an added swing, for we had shown them what superlatively good basketball Guelph could produce, and now we wanted to show them what a superlatively good time the O. A. C. could be responsible for.

The gymnasium was daintily decorated with Japanese lanterns for light shades, and with palms and ferns about the platform which was used as an orchestra stand. Several comfortable cosy corners were arranged as sitting out places, and seemed quite popular. Downstairs in the dining-room a buffet supper was srved at 10:30, and it was remarkable that no one was too busy dancing to eat. The music could not have been better-nor the floor-nor the partners, and we all had, like Aunt Mary, the "time of your life." The thanks of the dancers are due to the energetic committee of the year '13 for a good time that will be one of our happiest memories in times to G. M. C. come.

Much Ado About Nothing

Miss —— was about to dem. on bread, when someone tried to tease her by asking her if she knew yet what bread was.

"Of course, bread is the staff of life, and when it has butter on, it's the gold-headed cane.

ODE TO THE LACTIC ACID BACILLUS.

Hail to thee, germ philanthropic, Greetings, O noble bacillus

Humbly thy help I petition; menaced by early senescence;

Evil albuminoids threaten, while I affrightedly harbor, Phenol ingredients!

Happy the pure protozoan, limpid, intransitive, deathless!

I, with diversified tissues, functionate feebly, and perish;

Harmful intestinal flora, low deleterious indols

Frustrate longevity.

Come, thou acidulous atom, let me absorb and possess thee;

Give thee a dwelling espeptic, feed thee with minimum toxins,

And for thy chosen companions, colonize mild and benignant Glycobacteria!

Come in proliferate power, kind Metchnikoffian microbe!

Stimulate sanative cultures, banish these auto-infections!

Let us go forward, triumphant, immune and aseptic

Unto Millenium!

-Corrine Rockwell Swain, in "Century" for January, 1913.

It was in a lecture—well, in a lecture held across the campus. The noon hour had sounded, and still the lecture continued. Some of the class (and it was a Senior class, too, but don't tell I told) began to fidget.

The Lecturer—"Are you in a special hurry. I didn't suppose this class had to serve dinner."

Voice—"Oh, no, of course not, dear!"

The Class—"Well, who would have thought it of her!"

One day, early in February, a small, sad procession wended its way downstairs in Mac Hall. Two chief mourners, two pall-bearers, and an undertaker, for the occasion was that of a funeral. A small white box held all that was left of the pride of the farmyard, the triumph of the cook, and the crowning dish of the "feed"—a chicken. Reverently and carefully, as the mourners whistled the Funeral March, they laid the small white box in its resting place, the post office.

Now, what we would like to know is, was that box addressed to the Happy Hunting Ground, or was a mere mortal the recipient? If so, who?

L. L. (in dem.)—"I will brush the liquid on the buns with my finger. I shall now proceed to wash the finger."

Class (writing observations) —
"Economy of soap and water showed
a frugal mind."



LOCALS



A Scientist's Proposal.

Sacharine conglomeration of protoplasm, adorable combination of matter and force rarest product of infinite ages of evolution, illuminferous ether is not more responsive to the rays of light than are my nervecentres to the mystic influences which emanate from the photosphere



of thy countenance. As the heliocentric system was evolved from prim-



THE STAIRS WERE VERY POPULAR

ordial chaos by the workings of an inexorable law so was that rarefac-



tion of matter which men call my soul lifted from profound despair by the luminance issuing from thy visual orbs. Deign, O admirable creature, to respect the attraction which draws me towards thee with a force inversely proportional to the square of the distance. Grant that we may be made double suns, describing concentric orbits which shall touch each other at all points of their peripheries.

How About Telephones?

HAVE YOU GOT A LOCAL TELE-PHONE SYSTEM?

If not, you should have one, and if you will write us we will give you information as to what others have done in providing telephone service in their own community.

We will gladly send this information, both in regard to local company organizations and municipal systems.

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Write for our No. 3 Bulletin which tells how lines are built.

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You are welcome to the advice of our competent telephone men.

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We are the largest independent manufacturers of telephone equipment in Canada. Our telephones have made a record for satisfactory



service. They are guaranteed by us, and if you are operating a system now or contemplating building a system, let us submit you prices and samples.

Everything in the way of construction material, including poles, cross arms, wires of all kinds, insulators, etc., and everything in the way of telephone supplies we can supply promptly. We carry a large stock constantly on hand, and prompt shipments are a feature of our service.

Write us for any information in regard to the telephone business.

Canadian Independent Telephone Co.

18-20 DUNCAN STREET, TORONTO

THE ALARM CLOCK.

When your sleeping in the morning—sleeping soundly, sleeping deep;

When the daylight comes a-creeping with its stealthy sort o' creep;

When sweet dreams of peace and comfort in this morning snooze abound;

Arent's you mad when your alarm clock with a buzz starts ranting 'round?

Don't you feel like throwing spasms, when the clock begins to go?

Don't you hand it out some "cuss words," just to sort of ease your woe?

How you scowl and how you grumble, Don't you wish you had a gun?

Don't you swear that it's the biggest pest beneath the shining sun?

That's exactly how it strikes me, when that clock begins to ring;

And I wish that I could lay hold of the man who made the thing.

How I'd kick him! How I'd chock him! How I'd knock him left and right!

That's the way I feel, but still I wind the plaguey pest each night.

-Sent us by "Steady Subscriber."

HIGH SCHOOL NOTES

When the stands are black with people and they yell, yell, yell,

When the whistle shrills the signal for the start,

When the spirit sort of grips me in a potent spell,

And the blood goes dancing swiftly through my heart.

When the rooters are forgotten with their yells and all,

And the joy of battle pulses through my frame.

Then there's nothing worth having but that round brown ball,

And there isn't any glory but the game.

Oh, its good to see the signal and with courage steeled

To go sprinting where the centre tips the ball,

And it's bully to go dribbling down a broken field,

As you dodge and twist and scurry toward the goal.

There's the thump of men colliding, and there's the thud of feet,

There's the play that starts as quickly as a flame,

There's the grit that knows no quitting and won't be beat,

For they all are part and parcel of the game.

Is there anything that thrills you with a zest more keen,

Than to spill your big fat guard right in a pile,

Or to slam the ball with accuracy for a basket clean,

Or to jump and catch a throw in proper style.

It's the game of Anglo-Saxon; it's the hard old stuff;

It's the horror of the timid and the tame.

And it calls for men with daring and with brains enough,

Who are worthy of a chance to play the game.

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WINONA, ONTARIO.

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SMALL FRUITS (Currants, Gooseberries, Raspberries, Etc.).

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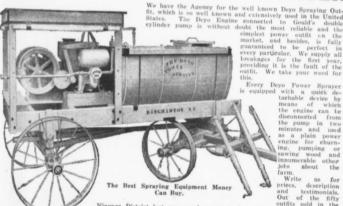
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simplest power outfit on market, and beams, market, and beams, guaranteed to be perfect in guaranteed to be per every particular. We supply all breakages for the first year, providing it is the fault of the We take your word for

> with a quick de-tachable device by means of which the engine can be disconnected from the pump two minutes and used as a plain power engine for churnpumping ing. sawing wood and innumerable other iobs about the farm.

double

Write prices, description out of the fifty outfits sold in the

Niagara District last year we have yet to hear of one complaint. A full line of accessories and different parts of the engine and pump, are kept in at our factory. Orders should be placed as far in advance as possible to insure prompt

delivery. We also have the Canadian Agency and keep in stock Gould's double cylinder hand pump, which is

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Are distinctive—the product of 47 years' of intelligent study of farm problems, Louden equipments are the best known equipments of their kind in the world.

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World's Oldest and Largest Makers of Potato Machinery

LOCALS

(From Minutes of Executive, Sept. 28th, 1911.)

Moved by Miller and Stevenson, that the Business Manager be empowered to take steps with a view to enlarging the subscription list. C. W. S., sec. pro tem.

Montreal may be a bit wicked, but you just ought to hear Damascus.

FOR SALE—IN NOVA SCOTIA.

Good farming property consisting of five or more acres, three barns, orchard and house, which is nicely situated, with all modern improvements, hard wood throughout. Apply to

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The trend of the times is towards Central Hatcheries for each community.



This size holds 1,200 eggs and it is made up of two sections. Larger sizes simply have more sections, added at any time.

Four-Compartment 1913 Canadian Candee

When you think of the hatching that has to be done each year with small machines and uncertain broody hens, you will realize the field there is for a

CENTRAL CUSTOM HATCHERY

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The only equipment needed is a Canadian Candee Automatic Sectional Incubator and a clean cellar.

Write to-day for free Custom Hatching Booklet, giving full directions how to start and operate a Custom Hatchery.

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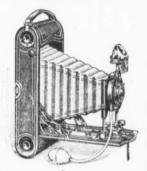
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The



Prize

HANK you, students of the O. A. C., who have submitted answers to the questions in the "Farm Gates" Competition as set forth in the January and February issues of the O. A. C. Review. With but a single exception you have all declared that

"CLAY GATES" are the IDEAL GATES

Your answers have been intelligent. Every paper submitted has been creditable.



Herewith is an illustration of the "Clay" Steel Farm Gate. It is impossible this month to name the prizewinner in this competition, but

The Prize Winner will be announced in the April number of The O. A. C. Review.

Thank you again for your interest in and answers to the series of questions proposed.

J. C. KIRKWOOD

Lumsden Building - Toronto.

LOCALS

Agricultural Education.

We from farms and cities hail, Fill thy halls to pass or fail, Pass we must, no halting wail Haunts the O. A. C.

Sport and study we entwine, Top each list and lead each line, Strength and wit with worth combine Loving liberty.

Wisely we help Nature mix,
Three parts sense with one part
tricks,

Balanced ration, fool who kicks 'Gainst the O. A. C.

Never since Time's earliest dawn, Mixed so well was brain and brawn, Class-room—workshop, linked with lawn.

Welded perfectly.

Continued on Page XXV.





One Man and His Son Made \$12,000 In One Year With Poultry

You will want to read his letter telling how it was done. And best of all any one who will follow the same simple practical rules will be use to make big money with poultry. Every one ho keeps poultry or who is thinking of starting a this business should have a copy of this big

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Official Calendar of the Department of Education

MARCH

- School Boards in unorganized Townships to appoint Assessors.
 Separate School supporters to notify Municipal Clerks.
- Normal School Final Examination for Grade A Students begins.
- Normal Schools close before Easter Holidays. High, Continuation, Public and Separate Schools
- 21. Good Friday.
- 24. Easter Monday.

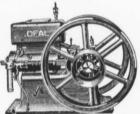
- 25. Annual meeting of the Ontario Educational Association at Toronto (During Easter Vacation),
- Night Public Schools close (Session 1912-1913).
 High and Continuation Schools, third term, and Public and Separate Schools open after Easter Holidays.

APRIL

- Returns by Clerks of Counties, Cities, etc., of population, to Department, due. Normal Schools open after Easter Holidays.
- 15. Reports on Night Public Schools due (Session 1912-1913).

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We also manufacture complete lines of

WINDMILLS

Grain Grinders
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The Royal Military College of Canada

HERE are few national institutions of more value and interest to the country than the Royal Military College of Canada. Notwithstanding this, its object and the work it is accomplishing are not sufficiently understood by the general public.

The College is a Government Institution. designed primarily for the purpose of giving instruction in all branches of military science to cadets and officers of the Canadian Militia. In fact, it corresponds to Woolwich and Sandhurst.

The Commandant and military instructors are all officers on the active list of the Imperial army, lent for the purpose, and there is in addition a complete staff of professors for the civil subjects which form such an important part of the college course. Medical attendance is also provided.

Whilst the College is organized on a strictly military basis the cadets receive a practical and scientific training in subjects essential to a sound, modern education.

The course includes a thorough grounding in Mathematics, Civil Engineering, Surveying, Physics, Chemistry, French and Eng-

The strict discipline maintained at the College is one of the most valuable features

of the course, and, in addition, the constant practice of gymnastics, drills and outdoor exercises of all kinds, ensures health and excellent physical condition.

Commissions in all branches of the Imperial service and Canadian Permanent Force are offered annually.

The diploma of graduation is considered by the authorities conducting the examination for Dominion Land Surveyor to be equivalent to a university degree, and by the Regulations of the Law Society of On-tario, it obtains the same exemptions as a B.A. degree.

The length of the course is three years,

in three terms of 91/2 months each.

The total cost of the course, including board, uniform, instructional material, and all extras, is about \$800.

The annual competitive examination for

admission to the College, takes place in May of each year, at the headquarters of the several military districts

For full particulars regarding this ex-amination and for any other information, application should be made to the Secretary of the Militia Council, Ottawa, Ont.; or to the Commandant, Royal Military College, Kingston, Ont.

H.Q. 94-5.

9-09. Please mention the O. A. C. REVIEW when answering advertisements.

BEES

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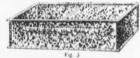
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do not bulge out, then start leaking.

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International Colic Remedy—Cures in 10 minutes, without bad after effects.
Silver Pine Healing Oil—Keeps wounds

clean and heals them quickly.

International Antiseptic Healing Powder

Heals cuts, sores, wounds, galls, etc.

—Heals cuts, sores, wounds, galls, etc. International White Liniment—The surest and most penetrating ever discovered. International Hoof Ointment—Cures contracted heels, quarter cracks, corns and soreness.

International Honey Tar Foot Remedy— A remarkable foot grower and toughener. International Pheno-Chloro — Kills microbes and germs of disease.

crobes and germs of disease.

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International Louse Paint — For Roosts, nests and cracks around the hen house.

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International Gopher Poison—Sure death

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Greatest known cure for curbs, spavins and

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The boulder before the blast.

Are there stumps or boulders on your farm? How will you get rid of them? Will you do it in the antiquated method of burning, chopping, digging or pulling, or will you take the quicker, simpler and cheaper method as used by the most scientific farmer, and explode them?

If you have not seen the results of blasting with C. X. L. Stumping Powder, you cannot imagine the tremendous advantages of this method. One man removed eleven stumps in less than an hour, and all who have used it would not for anything go back to the old methods.

By a similar system of blasting you can get equally satisfactory results in blasting of subsoil, which will increase the yield of your crops 100 per cent. and more.

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Canadian Explosives

Limited

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STOPS

LOCALS

Continued from Page XIX

Many loval men of vore. Gathered here life's priceless store. Truly blessings freely cour From the O. A. C.

Master minds are moulded here. Fired with wisdom year by year, Agriculture's now a peer, Homage bends her knee.

Ever standing in the van, Thine the greatest product-Man-Grand thy part in Nature's plan. Onward O. A. C.

Agricultural men of might. Hold our National rudder right. Canada, thy Future's bright, Wisdom pilots thee.

M. E. Geddes

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From a Bone Spavin, Ring Rone,
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trouble and gets horse going sound. Does
trouble and gets horse going sound. Does
trouble and gets horse going sound borse
and be remove the hair and
horse can be or remove the hair and
horse can be or remove the borne going
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Manilla, Ont., Feb. 22nd, 1908.

Dear Sir .-

I have just used one bottle of your ABSORBINE. I had a three-yearold registered mare that brought on a very bad Bog Spavin, so I started with a remedy of my own, and it was no good. I saw ABSORBINE advertised and got a bottle of it, and in two weeks it took it out clean, and I can sell her for \$300.00 to-day.

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THERE are many reasons why you should use A VERITY PLOW

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In the first place, owing to their excellent scouring qualities, you can often get on the land and start plowing several days earlier than with other Plows. This is an important matter, especially in the Northwest, where a few days' delay may mean the loss of a crop.

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have given satisfact ion to three generations in this respect.
They turn perfect furrows, putting the

ground in the best possible condition for the work which follows.

VERITY PLOWS are light draft and easy to handle—They are popular with both man and beast.

Durability is a strong point in connection with these plows—the improved methods of tempering the Steel Mouldboards and Shares and of hardening cast Shares, together with careful erecting and rigid inspection of all plows, combined to produce a line of plows which look well, work well and wear well.

FOR SALE BY MASSEY-HARRIS AGENTS EVERYWHERE.



LOCALS

J. F. Anderson (at public speaking comparing the O. A. C. with Chicago packing house)—"We have the cattle going in at the beginning and coming out canned."

Castro, acting as critic—"Mr. Bergly's speech was without beginning, middle and end."

Miss C.—"Did you know Miss G—is going abroad?"

Miss R.-No, how is she going?"

Miss C.—"After three times out on Saturday, I guess she will take the Allan line."

Bunny Hare (at breakfast table)—
"I was awake in bed last night till 2 o'clock and awakened again at 5 this morning and couldn't go to sleep again. I don't know what's the matter with me."

Joff (speaking from experience)— "You have the first symptom, Bunny."

McKee, to Boddy (in Chemistry Lab.)—"When analyzing water, what do you determine?"

Boddy—"The chlorine, the free ammonia and the moisture."

Tho deadly germs in kisses hide,

E'en at that price the cost is small; Tis better to have kissed and died,

Than never to have kissed at all.
—Satire.

Hextall, when at home is an enthusiastic amateur poultryman. One day last summer he looked over his garden fence and said to his neighbor:

"Hey, what are you burying in that hole?"

"Oh," he said, "I'm just replanting some of my seeds, that's all."

"Seeds?" shouted Hextall, angrily, "It looks more like one of my hens."
"That's all right. The seeds are in-

side."

"Good evening, my young friend," said Maurice Howitt to a Freshman one Sunday in the post office. "Do you ever attend a place of worship?"

"You bet," replied Booker, "every Sunday night. I'm going up to see her now."

Duff—"Are you going to fuss tonight, Strong?"

Strong—"I don't know yet. I want to try a couple more girls over the phone."

Duff (30 minutes later)—"Well, are you going to fuss?"

Strong (dejectedly)—"No."

True Logic.

Achelles said that all Athenians were liars,

As Achelles was an Athenian, he was a liar,

Therefore, as he was a liar, what he said was not true,

And the Athenians were not liars, Therefore if the Athenians were not

Achelles, being an Athenian, spoke the truth.

-Woodstock Oracle.

LOCALS

J. P. Hales (in debate)—"To quote from Milton, 'eat, drink and be married, for to-morrow we die."

Milton could be distinctly heard turning in his grave.

Lives of football men remind us That their names are writ in blood, And departing, leave behind them, Half their faces in the mud.

Miss—"And how is that friend you introduced me to the other evening?"

Tause—"Oh, Lumsby, when I saw him last he was mending very slowly."

Miss—"Indeed. I didn't know he had been sick."

Tause—"He hasn't been—he was darning the toes of his socks."

A Problem in Physics for the Second Year.

"Swift of foot was Hiawatha,
He could shoot an arrow from him,
And run forward with such fleetness
That the arrow fell behind him.
Strong of arm was Hiawatha,
He could shoot ten arrows upward,
Shoot them with such strength and
swiftness.

That the tenth had left the bowstring Ere the first to earth had fallen!"

If one second elapsed between the discharge of each of the arrows, and Hiawatha shot at his greatest range, show that the hero must have been able to run at least at the rate of 99 miles per hour.—Queen's Journal.

Mr. Elroy, at 4th year dance— "Say, Ted, is your programme full yet?"

Darling—"No, I've only had two sandwiches and a pickle so far."

To a Hand.

O Hand thou wert a lovely Hand!
How beautiful, how sweet!
To think I held thee but last night
So dainty, fair and neat!
Thou pretty Hand, to my sad breast
Didst highest gladness bring,
When gazing long I saw in thee
Four aces and a king!

Let your foot slip, ever so little, and your character hasn't a leg to stand on."

Mr. Wright, in Plant Histology— "One would think this was a Pink Tea instead of a bunch of Seniors studying botany."

Voice-"Bramhill and Henry."

Friend of Family—"I hear your son De la Porte is pursuing his studies at the O. A. C. this year.

Mr. I—n—"Yes, that's very true, but he's a long way behind.

Ode to Hirst on Performance of "Private Secretary."

He told the shy maid of his love The color left her cheeks, But on the shoulder of his coat, It showed for several weeks.

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LOCALS

Fair Co-Ed.—"That man over there is staring straight at my nose."

Second Co-Ed.—"Probably he's on the Review staff."

Fair Co-Ed.—"And why should he stare then at my nose?"

Second Co-Ed.—"They are supposed to keep their eyes on everything that turns up, aren't they?"

"Is Miss T- in?"

Maid—"No, Mr. H—n" (Soph).
"But I just saw her at the win-

dow."
Maid—"Yes, and she saw you."

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Men's and Women's

Clothes That Distinguish

the wearer above the common must be made for the individual. They must not be made to fit some ideal physique, of which not one man in a million could be a model. Have us make you a suit that will embody all the latest ideas as to style and smartness and will fit you just as you are built. Don't worry about the price. That will be right, too.

Keleher @ Hendley

Fine English Neckwear.

Model Merchant Tailors

Hawes Hats-The Latest Style.

Ladies' Golf Sweater Coats.

De Jaegers and Other Makes

Royal Bank of Canada

With which is amalgamated THE TRADERS BANK OF CANADA

Authorized Capital			\$25,000,000	00
Paid-up Capital			11,500,000	00
Reserve Fund		-	12,500,000	00
Total Assets -			180,000,000	00

Branches throughout all the Canadian Provinces, the West Indies and Cuba, also at London, England, and New York.

Travellers' Letters of Credit and Money Orders or Drafts issued payable in any part of the world. Remittance Drafts cashed at ruling rates. Savings Bank Accounts carried for Students and Staff (interest allowed).

R. L. TORRANCE, Manager

GUELPH

Simple Truths Plainly Told

Is our method of soliciting your business. We never resort to exaggerations of any form in our advertising. We sell good goods only, charge fair prices only and seek the trade of those men who appreciate good values and considerate treatment.

Once we have induced you to give us a trial we have no fear about keeping you as a permanent customer. : :

Our New Fall Goods Are GREAT

-YOU SHOULD SEE THEM

R. E. NELSON

Men's Furnisher and Fine Tailoring 93 Wyndham St., Guelph

G. B. Ryan & Co.

Correct Clothes FOR MEN

Ready-to-Wear and Special Order.

Smartly tailored by the best men's clothing establishments in Canada.

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A complete stock of Neckwear, Shirts, Hats, and all furnishings for men.

Our Advertisement, Our Aim and Our Accomplishment—A Square Deal.

To the O.A.C.Old Boys

When leaving college also leave your subscription for THE GUELPH WEEKLY MERCURY—only \$1.00 a year in advance.

The Mercury will keep you in touch with the friends and institutions you have left behind. This medium is noted for its agricultural news and the large volume of valuable farm advertising carried.

SWORN WEEKLY MERCURY CIRCULATION, 5,700

Come to The Mercury's Job Printing Department for Your Job Work. Visiting Cards a Specialty.

The Evening Mercury has a sworn circulation of 2,700.

J. I. McINTOSH, Publisher and Proprietor.

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MOORE & ARMSTRONG

Guelph⁹s

Ladies Store

Women's and Children's Garments

Dress Goods and Silks

Exclusive Millinery

Perrin's Kid Gloves

Northway Coats and Suits

Crompton's C-C a la Grace and

Parisienne Corsets

THE WHITE HOUSE

The Inventor—"That machine can do the work of ten men." Visitor—"Gee whiz. My wife ought to have married it."—Puck.

We Manufacture

Peep Sights

For use on home-made draining levels, as designed by Professor W. H. Day

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M. J. RUDELL, D.D.S., L.D.S.

Dentist
(On the Corner)

Over Guelph and Ontario Investment and Savings Society Bank

PHONE 16

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

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Advise Your Friends to Come to CANADA

Nowhere in the world are to be found so many and such good openings for a career in

Agriculture

FRUIT-GROWING, DAIRYING-WHAT YOU WILL!

The cry now-a-days is "BACK TO THE LAND," and CANADA has got the LAND

The day of CANADA'S PROSPERITY is the day of

Your Opportunity

Do not neglect it. Think this over. You can never do as well anywhere else.

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J. OBED SMITH, 11-12 Charing Cross, London, S. W., Eng.

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Merit Confidence

CONFIDENCE is one of the most important and satisfactory considerations in every act and interest in life.

There is nothing the dairy farmer buys that is of as great importance to him as the cream separator, which SAVES or



LOSES money in quantity and quality of product every time he puts milk through it, TWICE A DAY 365 DAYS IN THE YEAR, and lasts from six months to twenty years according to the durability of the machine.

Hence the importance of only making so serious an investment with COMPLETE CONFIDENCE that you are buying THE BEST and that which will LAST LONGEST.

Every man who knows what a cream separator is knows that this is true of the DE LAVAL, the original and for thirty years the "WORLD'S

STANDARD" cream separator. Somebody may claim as much for some other separator, but no buyer can possibly have equal CONFIDENCE in its being so.

The new 72-page De Laval Dairy Hand Book, in which important dairy questions are ably discussed by the best authorities, is a book that every cow owner should have. Mailed free upon request if you mention this paper. New 1913 De Laval catalog also mailed upon request. Write to nearest office.

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