

Do you intend to run

arm Boys

What Are Your Plans For The Future?

your own farm; to use better methods than the average farmer; to raise better crops and better stock; to keep your farm in better condition; **To Make the Farm Pay?** Unless you do, what satisfaction is there in farming? Now is the time to lay the **Foundation** of your life's work; to learn something of soils; fertilizers; drainage; plant and animal diseases; insect pests; varieties of grains, roots and fruits; breeds and types of animals; marketing of farm produce; methods of cultivation; carpentry; blacksmithing, etc. Get an insight into the innumerable problems

that every farmer has to face and should know about.

#### **???? HOW ????** By Taking the Two-Years Course at The Ontario Agricultural College GUELPH - ONTARIO

This course is designed to meet the requirements of our country boys.

YOU can come to College for two years

BECAUSE Ordinary Public School education is sufficient for admission to the course.

The College year begins September 19th, and ends April 15th, so that boys from the farm may return to their homes to assist in the spring and summer work. During this period many boys can earn sufficient funds to defray College expenses for the following year.

Tuition fee for Ontario students is only \$20.00 per year, while board and room in residence is obtained at the rate of \$3.50 per week.

A portion of the cost during the first year is defrayed by work on the farm and the various departments of the College.

N.B.—If you wish to continue to the work of the Third and Fourth Years for the degree of B. S. A., you are not required to have matriculation standing. Students are accepted for this course if their standing on Second Year examinations warrants it.

COLLEGE OPENS SEPTEMBER 18TH, 1914.

For further particulars write for regular course calendar.

G. C. CREELMAN, B.S.A., LL.D., President.

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

# TWICE A DAY FOR SEVEN DAYS

You use a binder or a mower just a few days in a year, but you use a cream separator (if you have one) twice a day, seven days in the week, every month in the year. The separator is one of, if not THE most important machine on the farm. Great care should, therefore, be observed in the selection of this important machine, as the size of your daily cream profits depend on the closeness of its skimming. Big cream profits are realized by users of the

# ANDAR

Cream Separator, because this separator skims down to .01

Cream Separator, because this separator skims down to .01 per cent. and often less. That is, it loses but one pound or less of butter fat in every 10,000 pounds of milk we also invite you to run the Standard alongside of your present cream separator and compare results by the Babcock Tester. We know of no other way that so completely demonstrates the superiority of the Standard separator. Write and tell first, just ask for a conv.

RENFREW MACHINERY CO., Limited, THE

HEAD OFFICE & WORKS, . Sales Branches at Sussex, N.B., Saskatoon, Sask., RENFREW, ONTARIO. Calgary, Alta. Agencies Almost everywhere in Canada.

# 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 English

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.

Commisions in all branches of the Im-perial service and Canadian Permanent Force are offered annually.

The diploma of graduation is considered by the authorities conducting the examina-tion 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 9½ 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 examination 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.

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### THE O. A. C. REVIEW -110001-

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# **Investments For Farmers**

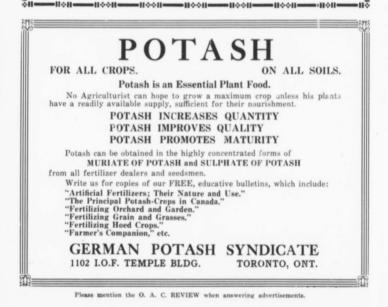
Discriminating farmers, in these days of speculation, are more and more seeking investments that are "safe and sure." In this class, Endowment Insurance ranks among the very first. The stability of Life Insurance Companies is almost unparalleled in any other form of commercial enterprise. In life or death, the Endowment Policy forms a sure and certain estate. placed with

### The Manufacturers Life Insurance Company

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GENERAL AGENT

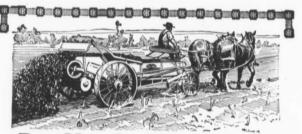
FLORA ONT.



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#### **Best-Hated of** Farm Tas

N the spreaderless farm the thought of the great heaps of manure piling up constantly in barn yards,

stables, and stalls, is a gloomy one. Those piles mean much disagreeable and hard work. Three times every bit must be handled. It must all be loaded onto high wagons. It must be raked off in piles in the fields. Then every forkful must be shaken apart and spread.

Compare that old-fashioned method with the spreader way. You pitch the manure into the spreader box, only waist high, drive out and - the machine does all the rest.

And, far more important, if you buy an I H C spreader, one ton of manure will go as far as two tons spread by hand, with the same good effect on the soil, and it will all be spread evenly.

# anure Spreaders

#### Deering and McCormick

are farm necessities. The man who uses one will get the price of it back in increased crops before its newness has worn off

back in increased crops before its newness has worn off I H C spreaders are constructed according to plans in which every detail, every feature, is made to count. They are built to do best work under all circumstances, and to stand every strain for years. They are made in all styles and sizes, for small farms and large, low and high machines, frames of braced and trussed steel. Upfill or down, or on the level, the apron drive assures even spreading, and the cover-ing of corners is assured by rear axle differentials. In all styles tho rear axle is placed so that it carries near three-fourths of the load. This, with the wide-rimmed wheels with Z-shaped lugs, makes for plenty of tractive power. Winding of the beater is prevented by large diameter and the beater teeth are long, strong and chisel pointed. A thorough examination of the I H C spreader line, at the store of the local agent who sells them, will interest you. Have him show you all these points and many more. Study the catal-gues you can get from him, or, write the

you can get from him, or, write the

International Harvester Company of Canada, Ltd **EASTERN BRANCH HOUSES** At Hamilton, Ont.; London, Ottawa, Ont.; St. John, 1 Ont.; Mon

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## Build a Better Silo and Save Money

BUILD the kind that will keep your ensilage always at its best. Build the kind of silo that does not have to be repaired or painted every other year. Your dairy herd will show its appreciation in the additional quantity of milk it gives. The best silo, by keeping ensilage perfect, increases output and soon pays for itself.

## A Concrete Silo

is the dairyman's surest dividend payer. It keeps ensilage in just the right condition and does not permit it to dry out or get mouldy. A concrete silo cannot leak, rot, rust or dry out. It has no hoops to replace. Requires no paint and needs no repairs during an ordinary lifetime.

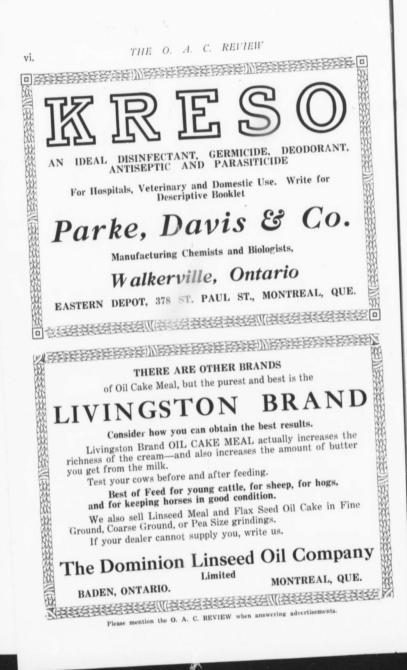
Send to-day for this free book "What the Farmer Can do With Concrete." It tells how to build a concrete silo and many other things on the farm that will save you many dollars. Farmers' lakermation Bureau

Canada Cement Company Limited XI Herald Building, Montreal

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v.





CHILDHOOD—The Springtime of life 's the period of happy-golucky irresponsibility.

YOUTH-Life's Summertime-is usually spent in acquiring an education and a trade or profession.

MANHOOD—Is the third of life's fleeting seasons. It is the strenuous period during which the heavy burdens of life must be supported.

**OLD AGE**—The Winter of Life—should be given to rest and the enjoyment of the comforts which the toils, struggles and sacrifices of earlier life have provided.

LIFE INSURANCE lightens the burdens of manhood and relieves the disabilities of old age. All approved plans are issued by

Mutual Life Assurance Company of Canada

Head Office, Waterloo, Ont. George Chapman, District Manager, OFFICE, 8 DOUGLAS STREET, GUELPH, ONT.

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### Your Studies

In practical dairying will be more interesting and helpful if you make yourself familiar with the Louden Equipments, consist-

ing of steel tubular cow stalls and stanchions, and steel feed and litter carriers.

## LOUDEN STABLE EQUIPMENTS

Represent an intense and intelligent endeavor, spread over 45 years, to make farming easier and more profitable, and to improve conditions for man and beast.

> Send for the Louden Catalogue-"Complete Barn Equipments." See Louden Equipments at the O. A. C.

LOUDEN MACHINERY COMPANY,

Guelph, Ontario.

To Live In

To Work In

ONTARIO

To Make Money In

## is still the best Province in the Dominion

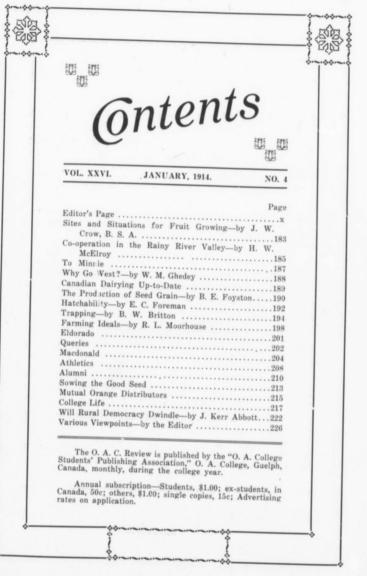
Ontario has great agricultural opportunities for fruit farms, dairy farms, mixed farms, or for very cheap farm lands in the clay belt. In planning your future and in talking to your friends keep these things in mind.

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

H. A. MACDONALD,

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

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# THE EDITOR'S PAGE

ONE of the greatest drawbacks to the success of a college magazine is the constant change of editors. In the case of this institution, where but few if any can lay claim to literary scholarship, the evil is intensified, and in the search for a new editor little is left but 'Hobson's'' choice.

Notwithstanding, it is the aim and aspiration of the *Review*, not only maintain its reputation as the best college periodical on the continent, but also to enter the field of agricultural journalism, and to cater to the tastes of such antipodal readers, as the practical working farmer and the highly scientific graduate.

With such a man at the helm as Justus Miller, the Review bid fair to attain its object. In him we have lost an idealist, who never faltered in the struggle to reach the ideal, a hard worker, a straightforward writer and—equally as important for the welfare of this magazine—a man of journalistic instincts and experience.

Justus Miller has raised the standard of the Review, and left behind him a solid foundation on which to build either a lasting monolith or a stucco tomb.

It is my ambition as a humble and at present bewildered, trespasser in the field of journalism, to follow where he has led, and to do my share in making this paper not only a trustworthy mouthpiece of student affairs, but also a readable agricultural journal of interest to all its subscribers.

In so striving, I crave the condescension, charity and help of all our readers, and the united support of my co-editors.

The "Review" wishes all its readers A Prosperous and Happy New Year.

# THE O. A. C. REVIEW THE DIGNITY OF A CALLING IS ITS UTILITY

VOL. XXVL

# Sites and Situations for Fruit Growing

By T. W. CROW, B. S. A.

HE editor has asked me for an article dealing with "Sites Situations for Fruit and Growing." In undertaking to prepare the subject I find so much of interest that I shall probably not get further than a discussion of the first part of the subject, and it is probable that I can only cover part of this in the present article.

case the actual subject under discussion might be stated to be "The Ecology of Fruit Trees." Now it goes without saying that I cannot expect to cover more than a small part of the subject, but I think there is material here which would interest the readers of the O. A. C. Review and at the same time present to them interesting and profitable lines for further study.

One of the most interesting and in-

structive lines of study has to do with the effect of environmental conditions on plants and animals. This branch of science is called "Ecology." The literature of Plant Ecology goes minutely into such matters as the effect upon plants of: Sunlight.

Air Temperature. Soil Temperature. Air Movements. Atmospheric Moisture. Soil Moisture.

Plant Food.

I find that the study of sites for fruit growing purposes is to a large extent a study of the effect upon fruit trees of such matters as have just been mentioned. In fact, I find I am studying what the botanist would call "Ecology," so that in this particular

How many of us consider the full effect of environmental conditions upon our fruit trees? Read what Prof. Crow has to say and avoid mistakes. Blunders mean narrow profits.

This is the first of a series of articles dealing with various phases of horticultural endeavour.

Does it pay to spray? Look over the figures that R. S. Duncan will submit in the near future, and decide for yourself.

"Site" for fruitgrowing purposes means the particular spot, situation or location occupied by a fruit plantation. The site may possess:

NO. 4.

1. Elevation.

2. Aspect.

3. Gradient.

The site may also be materially influenced by the topography of the surrounding country or by the presence or absence of bodies of water, such as

ponds, rivers or lakes.

You will observe that the problem is broadening out somewhat. It becomes further complicated by the fact that in fruit growing we are dealing with a considerable number of species of plants and that different species require different conditions or are differently affected by the same environmental conditions. In some cases, too, the age of the plant becomes an important factor, and it is probable also that individuality of different plants of the same species would also repay a careful study.

As general observations it might be stated that the distribution of species of plants the world over is influenced more by soil temperature than by any one factor. Air temperature, of course, is important, but it is remarked by authorities on Ecology that plants have no means of protection against either extremes of heat or cold. The factor which limits the northerly and southerly distribution of species is not air temperature, but some form of drouth. Drouth is not simply a desert phenomenon or one which occurs only in hot dry summer conditions, but occurs also in winter. In fact, winter is a period of drouth for all trees and woody plants. The temperature of the plant itself is so reduced as almost entirely to check the absorption and transmission of moisture. Evaporation from twigs, branches and all exposed surfaces is practically continuous and at times may result in such a marked reduction of the already depleted water content as to cause actual injury. In fact, most of the winter injury common to trees is due to drying out and not to the degree of cold experienced.

It will thus be seen that measurements and calculations of climatic factors become extremely difficult. "Annual mean temperature" may signify nothing so far as climatic adaptability of any given plant is concerned. The most accurate measure of climatic factors is the tree or plant itself, and meteorological records require to be supplemented by extended observations before one can make de-

finite statements regarding the suitability of any given plant to the climate of any given situation.

As showing the extreme difficulty of recording meteorological conditions in such a way as to give a basis for field operations in fruit growing, we might illustrate by mentioning the requirements of certain fruit plants. The factor which limits the northerly extension of commercial grape growing is "the sum of efficient temperatures" throughout the season. An additional factor is the occurrence of summer or early fall frosts, but in a practical sense it is simply a question of receiving heat enough during the growing season to mature the fruit. In currants and gooseberries the matter of late spring frosts is of importance because the plants bloom early, but a factor of broader importance is the occurrence during the summer season of days of extreme heat. It is probably not necessary to point out that in these two cases the practical procedure is to put grapes in northerly localities on warm soils and on protected sunny slopes. On the other hand, in latitudes or in districts where currants and gooseberries are injured by extreme summer temperatures the practise is to locate them on northern slopes or in partial shade, such as an orchard of tree fruits affords.

With certain tender trees, such as the Baldwin apple, the danger point seems to be sudden change in winter temperature. The tree is not particularly tender so far as actual ability to withstand cold is concerned, but it does seem that sudden changes in winter temperature are more injurious to this variety than to most other varieties of apple. This fact brings to mind a common but erroneous method of measuring the adaptability of certain trees to certain localities.

Minimum temperatures seldom give any intimation as to what trees can be commercially grown in any given locality. For instance, there are many localities in Ontario where peach trees will grow and continue to live for a fair number of years but in which it would not be wise to undertake their commercial culture. In some cases the limiting factor is winter or spring injury to flower buds, and this is more often caused by too much sunshine than by too much cold. In other cases the important point is the duration of the cold spells. A few days at zero may do more actual damage than an occasional dip to twenty below for a short time. (To be Continued.)

# "Co-operation in the Rainy River Valley"

#### By H. W. McELROY.

B EFORE dealing with the work of the Rainy River Potato Growers' Co-operative Asso-

vailing idea in older parts of Ontario that the Rainv River district is a wooded wilderness. where the prospective settler must hew for himself a small home in the woods. True, it is that the Rainy River Valley is a wooded country, but the land is very easily cleared and there are at present many of the finest equipped farms in Ontario found in this section of Ontario. Many farmers have from one



hundred to one hundred and twentyfive acres of well-fenced clearing, but the average farmer's clearing is much smaller. The soil is of a dark clay loam and is very fertile. Three hundred bushels of potatoes to the acre

G. CRAWFORD, Mgr. R. R. P. G. A.

farm produce grown in the Rainy River Valley was large enough to justify the formation of a co-operative association I will give a few details of the

sugar beets and the

larger varieties of

silage corn give ex-

ceptional yields.

while the cereals

are, as a rule a good

crop, the wheat is

not as hard as is

grown in Manitoba.

shown to the reader

that the amount of

Now that I have

Mgr. R. R. P. G. A. workings of the society here and the

benefits derived from it by producer and consumer alike.

Co-operation has been preached through the press in this district by energetic local press men for many seasons, but no definite steps were taken until the summer of 1912, when District Representative F. C. Beaupre dropped off the train in this district. Mr. Beaupre began to look into the market conditions, and it took only a glance to see that they were very bad. The farmers for many years had been at the mercy of local buyers and business men and had to accept prices offered or none at all. In many cases the price offered would not pay for the handling, and each year several thousand dollars' worth of No. 1 table potatoes and other farm commodities were fed to the pigs.

Mr. Beaupre came at a very opportune time. The farmers said, "We can grow the crops, but we can't find a good market." Mr. Beaupre and Mr. Pilkey, of Lavallee, outlined a cooperative system of marketing. Most progressive farmers fell in line, and the first branch was organized at Lavellee, and in five months five other branches were organized throughout the district.

Knowing that the district was admirably suited for the production of high-class seed potatoes the first move of the association was to secure a carload of good seed, to be distributed among the members, with the idea of working up a trade in the East for seed potatoes in carload lots. By following a process of selection this seed will be put on the market as registered seed in a few years. Two varieties were chosen-the Delaware and Early Eureka. Previous to this time the local market for Rainy River produce had been spoiled by indiscriminate producers, who sold any kind of produce as long as they could get their money for it. The association decided to grade all their produce and sell through a manager. Accordingly at a meeting of the District

Board in June, 1913, A. G. Crawford, of Emo, Ontario, was appointed manager, working on a commission basis of 5 per cent. on sales.

Since his appointment as manager, Mr. Crawford has been indefatigable in his labors to make the association a success. At time of writing he has sold practically all the produce of the members at prices hitherto unheard of in this district. The local prices have been raised considerably, due to the association, but this present season the association prices have ranged from 10 per cent. to 25 per cent. in advance on the prices of the local buyers.

At the beginning of the season Mr. Crawford had considerable difficulty in impressing on purchasing agents of wholesale houses, lumber and mining companies, etc., the value of graded produce. But after a trial shipment, orders began to pour in, and on several occasions the manager had to buy outside of the association to fill orders. The grade, producer's number and inspector's number was placed on the tag that goes on every shipment, so that if the shipment proves unsatisfactory the consumer needs only report to the producer's number, and in referring to his book he knows who shipped the article and the dishonest producer must suffer the loss.

One of the great advantages the association has brought about in this district is the co-operative shipping of live stock. By following this method they have cut out the small buyer's commission, which in most cases was much larger than the commission of the large buyer. On Friday, October 24th, the association shipped \$2,400 worth of stock from Emo and the farmers received the top market price because the buyer had no trouble in collecting the shipment. He arrived in Emo on the afternoon train and found two carloads of stock already weighed and in the stock yards. He loaded his stock and in two hours was on his way to another shipping point.

As an example of the commission that local buyers were in the habit of receiving I would like to state the following instance. On the same date as this shipment was made in Emo a now member drove a steer into town which had been bought by a local buyer for \$75.00. He was induced by a member of the association to weigh the animal and he weighed 1,702 pounds. Selling through the association at 6 cents per pound the animal would have brought \$102.12, and after deducting the commissions, the manager's commission of 5 per cent. and the 1 per cent. that goes to pay running expenses of the association he would have received \$96.00, which made \$21.00 that he lost on the one animal. He joined that night.

At the present time the association is running very smoothly, and under careful management it is going to be a great boon to the district. Even if the association produce did not sell at a higher price than the now members' produce the fact that it is uniform, graded and can be shipped in quantity will find for it a ready market.

A day does not pass without bringing in new members to the association, and I think it is only a matter of a few years until one man, and that man the farmers' sales agent, with a few assistants, will be handling all the farm produce in the Rainy River Valley, and each branch will have a storage warehouse at their shipping point.

#### TO MINNIE.

#### With a Hand Glass.

A picture frame for you to fill, A paltry setting for your face, A thing that has no worth until You lend it something of your

grace.

I send (unhappy I that sing Laid by awhile upon the shelf) Because I would not send a thing Less charming than you are yourself.

And happier than I, alas! (Dumb thing, I envy its delight) 'Twill wish you well, the looking glass, And look you in the face tonight. —R. L. Stevenson.



# Why Go West?

By W. M. GHEDEY.

SPIRIT of mental unrest is rampant in the land; the swift commercial pace breeds discontent, and with the growing pains of a young and prospering nation urging her people to strenuous effort there is born a longing to participate in the opportunities afforded in the development of the nation's natural resources. Let him who is tired of twentieth century luxury journey to the great hinderland of Ontario, where the air is free from murky atmosphere, from bitter strife and petty social conventionalities. Here he may breathe the oxygen of Nature's sylvan solitudes and partake of the blessings of health and happiness, 'midst scenes of natural beauty and growing industry.

The great Clay Belt opens its gates to the enterprising youth of the province and welcomes him to the opportunities of an agricultural area with a glorious future. Eighteen million acres of excellent farm lands await the axe and the plow of the pioneer; and when the present supplies of timber and pulp-wood are gone, and his little home built and furnished with the proceeds, the world will point to one of the finest live stock centres in the province.

Nearly all the Clay Belt is south of the 44th parallel, which geographically is 60 miles south of the latitude Winnipeg. Chemical analysis and fertilizer experiments prove the plant food content of the soil to be superior in many respects to the soils of the older part of the province.

The land is supplied with an abund-

ance of pure water; there are no severe droughts or storms; remarkable yields of coarse grains are obtained; vegetables are grown everywhere with pronounced success, and small fruits abound in profusion. The soil is particularly well adapted to the production of alfalfa, clover and timothy, and but for the fact that the live stock industry requires a little more capital than the average settler can yet afford, it would immediately become the staple industry of the North Country.

The forest consists principally of spruce, but there are large quantities of poplar, balsam, tamarac, cedar and The low areas contain large pine. quanties of tamarac, which are dead but well preserved and excellent for railroad ties. Much of the spruce can be manufactured into lumber, and the settler finds a small portable sawmill of his own a very valuable asset. He can manufacture his timber into a finished product and obtain handsome returns for his labor. Spruce balsam and poplar are used for pulp, unless charred by fire, when it has to be cut into lumber or firewood. Much of the cedar is large enough for poles and the rest is valuable for fence poles. With the establishment of a pulp-mill at Iroquois Falls and the possibility of another near Linkeard the market for pulp will be greatly enhanced and much better returns obtained than formerly, when much of it had to be shipped by rail.

The season is not all that could be desired at present, but we know positively that as the country is cleared and surface drainage established the

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season will lengthen and become quite as constant as that of the older part of the province. It is true that the climate may be severe, but it is a well-known fact that there is practically no "winter" killing of clover, alfalfa or fall wheat at the present time.

The soil is Glacial drift and uniform in distribution for the most part. It has the distinct physical properties of clay, although containing a fair percentage of quartz. The sand is very fine in most cases and has probably been reduced to its present condition by severe glacial action. There is an abundance of lime in the subsoil, however, and the upper layers can be kept in excellent tilth by bringing a portion of the subsoil to the surface. There is plenty of surface drainage to the land as soon as the forest growth is removed, and while certain areas are covered at present by from one to three feet of muck or partially

decayed organic matter, it is only a question of time until these areas are drained and the muck will either decay or burn and leave the soil in good condition for agriculture.

Northern Ontario is a land of permanence and stability. It does not flash into prominence every harvest moon and depend upon railway advertisement to attract a horde of 'suckers' to help it out of the hole. The penniless workman can journey to the Clay Belt perfectly assured of annual employment at a profitable wage. The laborer's sun does not set behind the looming shadow of a gigantic elevator. nor the whistling blizzard remind him that his excursion ticket has about expired and is no longer needed. A man's ability to succeed in Northern Ontario is measured by his capacity for honest effort and his success is limited only by his competence and application.

# "Canadian Dairying" Up-to-Date A Review of the 4th edition of Prof. H. H. Dean's well known book.

T HOSE interested in dairying will be pleased to learn that a fourth edition of "Canadian Dairying," by Prof. H. H. Dean, Professor of Dairy Husbandry at the O. A. C., has been recently published.

The new edition is written much after the manner of the previous edition, but is a more complete treatise on the dairy industry than any hitherto given. Many illustrations have been added, while some sections have been eliminated and replaced by more up-to-date material.

The book is composed of two parts.

Part I treats of farm dairying and discusses dairy stables. Many illustrations of stables and fittings are given, as well as valuable suggestions concerning them. One chapter is devoted to the breeds of dairy cattle and the characteristics of each breed. The management of the herd, the care of milk for the butter and cheese trade also receive considerable attention. The city milk and cream trade is more fully discussed than in the previous editions, thus keeping pace with the growing importance of this phase of the industry.

Part 2 is devoted to co-operative dairying. Instructions are given for the proper organizing of a co-operative dairy association, also advice regarding the most successful methods of managing such associations. Numerous illustrations accompanied by very lucid descriptions of the most up-to-date building and machinery for the manufacture of butter and cheese are given. Cheddar cheese making and butter making are discussed at considerable length, and the proper methods of marketing these.

A chapter is devoted to the describing of various systems of paying patrons and the recommendation of those systems which come nearest to giving each farmer his just due.

Much new material has been added on the manufacture of special and fancy cheese, the au hor having recognized that this phase of the industry will no doubt become more important as people gradually become educated to eat more cheese and less meat.

A chapter on condensed milk and ice cream has been added; illustrations of up-to-date machinery for the manufacture of the ice cream are given; also recipes to make the various flavors.

The book as a whole is as clear and concise as any text book ever written on the subject. It deals almost entirely with the practical side of the industry, and hence should be of intense interest to those engaged in dairying throughout Ontario and elsewhere. Prof. Dean's name alone is sufficient guarantee of its practical value to the student and farmer.

# The Production of Seed Grain

#### By B. E. FOYSTON.

#### It Pays.

THERE is a growing demand for pure seed grain. The value of sowing the proper kind of seed is now generally recognized. Unable or unwilling to produce such seed, there are many people who are willing to pay a comparatively high price for it.

While out judging on Field Crop Competition work this past summer the fact that impressed me most was the small percentage of grain fields that were true to variety. In many grains, especially oats, it is difficult to distinguish varieties. In such cases an intimate knowledge of varieties under consideration is necessary.

#### Drain.

In the first place, it is no use pro-

ducing pure seed grain unless it is going to be good seed grain; that is, a good sample. Therefore, the land must be in a good state of cultivation. Then the value of early spring sowing cannot be overestimated, especially for oats. And early sowing means good drainage.

#### Sowing Their Wild Oats.

Many men this past summer were surprised to find they had wild oats or similar noxious weeds, in their competition fields. They had neglected to pick their fields over. They said they had no time for such work. But I am unable to see any way out of it, if you are going to produce pure seed grain. It is a price that has to be paid, but in return it will pay you.

#### Do Unto Others.

Some say, "How can I keep my farm clean with dirty farms about me?" Their case is parallel with that of the man who says it is no use spraying for San Jose scale when your neighbors do not. Prof. Carson will tell you it has been proven that careful spraying each year will keep your own orchard free of scale even in a badly-infected neighborhood.

#### Every Mickle Weed Makes a Muckle Mischief.

Our own farm, in Simcoe County, is

especially barley in oats, or vice versa, as it is almost impossible to separate these grains with the fanning mill.

### Mind the Threshing Machine.

In the seed grain business threshing time is an important one, for it is then that grains are very likely to be mixed and much trouble given later.

Stop the threshing machine on the road, before it comes on the place, and sweep it as thoroughly as possible. Also put the first dozen bushels of grain threshed apart from the rest, and this should likewise be done after



Seed Plots on Mr. Foyston's Farm.

situated just above the Nottawasaga Valley. Threshing time in the valley, for some years past, gives one the impression that winter is approaching. But it is the most troublesome of all snows, namely, seed of the Perennial Sow Thistle. The result is that we find each summer in going through the grain a stalk or two of Sow Thistle in previously clean fields. The product of a few stalks of any weed pest left undisturbed for a few years and you have a weed pest to combat. hand picking is the remedy. Watch closely for off varieties of grain.

changing from one grain to another.

### Using Your Heads Fills Your Pockets.

This year we found a single oat stalk in the O. A. C. No. 72 variety which stood about five inches above the remainder of the field. It bore 177 grains, which is at least 20 more grains than the average plant bears. There are possibilities in that stalk, for it is as a result of selection that many of our new varieties of grain are produced. In going through almost any grain field one will find at least a few superior individual stalks. The straw in such stalks is stronger, the heads larger, the grain plumper. Select enough of these heads to sow oneeightieth of an acre in a separate plot and in two years you will have seed enough from this plot to sow a fair sized field. Selection practiced in this manner will give you a quality of grain that cannot be obtained by the fanning mill method.

In regard to experimental plots, they are certainly necessary. Your own individual selections are propagated there, as is the grain sent out from the College. Watch the work of Prof. Lavitz. Obtain the varieties he recommends, for those are the varieties that will be in demand.

Results will not come in a season. It takes time to build up any business worth while. Establish a reputation for SQUARE DEALING and live up to it.

After all the question we come back to is: "Will it pay?" Guaranteed O. A. C. No. 72 oats are selling this year at \$2.00 a bushel. IT PAYS.

## **Confirmative Evidence**

When it comes to seed we must examine the crop as it grows. Have we done this? If not you will observe on going through the field there is wheat and wheat. Some of the wheat will have long well-filled heads; some of it will have short well-filled heads and some of it will have short heads filled

with grains that are small and shrunken. Take a walk through your wheat field and pick out a sheaf or two with long well-filled heads. Thresh these and sow them by themselves and very soon you will have a selected wheat that will yield double as much as your old wheat with the short heads would ever yield. It will not take long and is no expense.

The very least we can do is to clean the seed through the fanning mill in the best possible manner. If we will look at the annual report of the Ontario Agricultural College for 1911 on page 182 we will see a table showing the value of sowing nothing but the large plump seed. This class of seed yielded on an average 46.9 bushels per acre, while the small plump seed only 40.4 bushels per acre and the shrunken seed 39.1 bushels per acre-During the same time the split seed gave only 9.3 bushels per acre. Do you see it? Have you yet wakened from your lifelong sleep to look these figures squarely in the face and see what they mean? If you have not, just ask yourself, "How under the sun can I get 40 bushels per acre when the heads are short and grain small and shrunken if I do not use the fanning mill to clean the seed ?" The farmers who are doing what is implied in the foregoing question are thieves and robbers and those who are suffering worst are themselves! Wake up!-T. H. Binnie.

# Hatchability

## The Prime Factor for a Healthy Flock is Healthy Eggs

By E. C. FOREMAN, G. A. C.

**O** NE of the most difficult problems which face the poultryman is that of securing good hatches. The cause of poor hatches can generally be traced back to the breeder's carelessness or bad management, and oftentimes to both. The investigations so far carried on in this branch of poultry culture clearly show that good or poor hatches lie, to a great extent, in the hands of the breeder.

By hatchability is meant the power of the fertilized germ to develop into a strong chick, capable of leaving the shell. The factors which influence the hatching power of the egg may be divided into two classes, viz., the internal factor, which shows the relation the physical condition of the hen bears to hatchability; and the external factor, the relation the conformation and condition of the egg, has on its ability to hatch. Both of these factors can be influenced by a little care and judgment on the part of the breeder.

#### Exercise.

It is a well-known fact that the percentage of eggs which hatch during the winter and early months of spring is considerably lower than that of the summer months. This great difference can doubtless be attributed directly to exercise. The hens take sufficient exercise while on the range to keep in good physical condition; but when in confinement, as they are during the winter, the tendency is to get their food with as little exertion as possible. The result is, that the hens become too fat, and fatness always means very weak vitality in the chick. Lack of exercise also tends to weaken the system, hence weak germs.

There is more danger of low vitality and weak germs due to lack of exercise in the heavier meat breeds than in the lighter birds of the Mediterranean class. The difficulty of giving sufficient exercise to hens in confinement can be overcome by feeding the birds whole grain each morning in a litter of straw, shavings or some other material which will not pack too closely.

It is also advisable to give the hens which are being used for breeding purposes more floor space than is required for egg production. Exercise is necessary to maintain physical vigor, and the results of the hatch in every case correspond with the physical condition of the hen.

#### Green Foods.

When selecting foods of any kind four our breeding stock it must be managed with a great deal of care, as our aim is to secure a sound constitution and good physical development. Generally speaking, green foods have a very beneficial effect towards securing high hatchability. At the present time cabbage, sugar beets and sprouted grains are giving the most satisfactory results. Fresh, clean silage also makes a good succulent food.

The results obtained from feeding mangels to the breeding stock are proving somewhat detrimental, so it is advisable to leave this root out of the ration altogether.

The breeding stock should be given green foods once daily, preferably the noon hour meal.

#### Animal Foods.

A large number of our animal foods appear to have a detrimental effect on the hatchability of the egg. The byproducts of milk are giving the best results with all breeds, while beef scraps give the most unsatisfactory results, more particularly in the case of the medium weight and heavy breeds. Buttermilk is probably the only animal food which gives good results with all breeds from the hatching power standpoint. It keeps the digestive system in a sharp, clean condition. Experiments conducted at the A. O. C. Poultry Department showed that more satisfactory results were obtained with the American breeds when fed no animal food at all. Both dried beef scraps and green cut bone gave poor hatches with these breeds. When feeding animal foods to the heavy fowls it should be given in very limited quantities.

The Leghorns and Hamburgs can be fed these animal foods without showing any bad effects. In some cases it is necessary to give these foods to keep the birds from feather eating and such other habits which are caused mainly through lack of animal foods.

#### **External Factors.**

Besides the above-mentioned internal factors which influence the egg's hatchability, there are also several external qualities which are probably not so important but are worthy of some consideration.

#### Selection of Eggs.

In many cases poor hatches can be directly attributed to carelessness in the selection of eggs for setting. When selecting eggs for this purpose they should be normal in shape and size, as extreme types tend to produce abnormal chicks. All eggs that are defective in shell should be discarded because they generally will not hatch. The eggs should be fresh and clean, the older they are the more the vigor of the chick is affected. They must not have been subjected to extremes of heat or cold and also must be handled carefully, as jarring often proves disastrous.

In selecting our breeding stock to insure good hatchability the birds should be fully matured, healthy and in good physical condition.

Pullets that have been fed stimulants for high egg production should be left out, as their eggs will not, as a rule, hatch nearly so well as those from pullets which have not had this drain upon their system.

It is supposed that hatchability in an hereditary quality and that it is transmitted chiefly through the female line. If this is the case the females from which we breed should be given special attention and care taken all through the breeding season.

# Trapping

By B. W. BRITTON. "Necklaces of ermine tracks Deck the bosoms of the snow. Loud the frozen forest cracks O'er her silent aisles below."

T HE days of trapping are numbered, and the latest feature on the programme of Canadian progress is "Fur Farming." This new industry promises larger returns than any other known type of farming.

During the last twenty years the prices of fur pelts have increased 100 to 580 per cent. At the same time the supply has decreased about 100 per cent., in spite of the fact that larger catches were made, due to more efficient methods of trapping and

-Gyp.

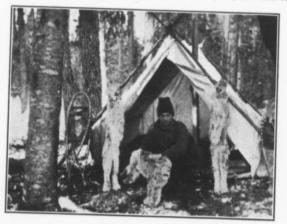
keener hunting induced by higher prices.

With the onward march of civilization the wild animals are either driven away from their haunts or exterminated by the white man. To supply a growing demand the alternative is "fur farming." In the passing of the days of trapping an industry is left behind wrapped in the history and romance of our country.

Not a trapper would experience any

their camps, make their toboggans from a standing tree, manufacture the snowshoes, and keep themselves very much alive.

When all of the traps have been set there may be about 150 steel traps out and a few dead-falls. These must be visited once a week, and at times more often, should there be a big storm to snow them up. The two partners travel together while the traps are being set, and then each will



A Day With the Lynx.

pleasure from the capture or killing of a domesticated fox or marten. There is something more than cash return that lures the trapper on to bear hardships and hunger on the cold and lonely trail. But the suffering is soon forgotten, and the first frost calls him again to the hunt.

The trapper's life is no easy one, but is full of adevnture and excitement. He learns to use what nature provides, and often with crude tools to fashion his necessities.

The two partners must depend entirely upon themselves. They build go out on different trap-lines, often being away from the main camp for several days. One day each week must be spent in camp to bake bread, cut wood, wash, sew, stretch, flesh the skins, and repair the outfit.

To run a line of traps the trapper leaves camp before daylight, when the temperature is down near 30 degrees below zero and everything seems to be frozen into absolute silence. Enough grub for several days has been packed on the toboggan with blankets, tea pail, fry pan, axe and rifle, and leaving the cheerful little cabin the trapper steps out into the wintry night. He slips his moccasined-toes into the snowshoe thongs and fastens the toboggan rope across his shoulders.

In a little while he is alone on the open lake, facing a keen frosty wind and swinging into his usual snowshoe stride. The toboggan glides easily over the hard, frozen surface. The light snow swirls about him, and he might easily feel that he is alone, the only life in a world by himself. Slowly the darkness fades and then through the pine trees the sun sends long shafts of glittering light across the snow.

A few miles further the trail leads away from the lake and follows a vallev, where a small river is now buried deep beneath the snow. At the edge of the valley a trap has been set for mink, and as the trapper approaches he quickens his steps and watches for "sign." Near the trap-house there is evidence of a struggle. Large foot prints in the snow tell of a big and powerful fisher. The trap has gone, but the trail in the snow is quite plain, and the trapper follows it carefully through the thick wood. Here and there the tally-pole has been entangled in the brush, but always pulled free again.

For a hundred yards the trapper follows, prepared at every turn to face the animal. Then, on a little knoll, he finds the empty trap twisted around a small birch. The fisher had escaped, leaving only a little black fur and some blood stains in the snow. The trapper returns to the toboggan and resets the trap, placing a fresh bait in the trap-house. He goes on to the next, wondering what to expect.

As the trail leads up the valley the easier way is to follow the course of

the stream, which has been frozen over and is covered with snow. But in some places the ice has been worn away by the current, leaving the snow covering intact. Rather than "highbank it" the trapper takes this risk, and on crossing a weak place sud denly finds himself plunged down into the cold water. With the aid of the toboggan he is able to climb out onto firm snow, but before he can reach the woods his clothes are frozen stiff and his feet are numb.

Matches are always carried in a safe place, and with birch bark and pitch pine a good fire is soon started. Some dry clothing from the toboggan relieves the trouble, and the trapper is ready to go on. The next few traps yield nothing more than a whiskey-jack and a squirrel, which is not encouraging, but to be expected.

About noon the trapper watches for a sheltered place for his mid-day meal. He starts a small fire and places balsam brush in front of it so that his moccasins will not become wet from snow melted by the heat of the fire. The bread is frozen hard and must be thawed out before it can be cut. Snow is melted to make tea and a chunk of fat moose meat placed in the fry pan. The meal is a quick one, as the days are short and the solitary traveller must make a camp before dark.

During the afternoon he passes through a stretch of "big timber," and sees lots of "sign" of marten. Some dead-falls and steel traps have been set here, and as martin are the most innocent animals he feels sure of one or two. He finds a dead-fall down and there, beneath the heavy log, a beautiful dark martin is crushed and frozen stiff.

At a trap another marten is found hiding behind the trap-house. He is pulled out by the chain and killed by a quick tap on the back of the head.

The short northern day soon ends, and the trapper knows he must choose a good place to make camp while the sun is still above the hills. In a spruce swamp he finds shelter and plenty of wood and brush. He selects some dry tamarack and green birch trees to cut into fire wood, sufficient to burn all night.

When a good fire is made the extra

dows are cast by the flickering flames and the nearby trees. After a quiet smoke the trapper banks the fire with green wood, rolls up in his blanket and is soon sound asleep.

When the fire has burned low the cold seems to creep in about the sleeping man. The blanket near his face becomes frozen, and from semi-consciousness he awakes to pile more wood upon the fire. The cold is intense, for the trees are splitting with



A Start from Main Camp.

wood is piled near by and the trapper proceeds to build his shelter. On the windward side of the fire the snow is tramped and a thick layer of balsam boughs laid down. Back of these a semi-circle of poles are stuck into the snow, slanting towards the fire, and the toboggan-cover is stretched over them, forming what is known as a "buckwan." The trapper now prepares his evening meal.

The night sets in clear and cold. The wind has dropped and the fire sends bright sparks straight up among the tree-tops, and weird shaloud reports as the frost penetrates the wood. When he awakes again it is nearly dawn and time to be on the trail.

The trap line follows a chain of small lakes a few miles further north, then bears off to the west, and finally returns to the lake trail leading to main camp.

country affords good browsing. The trapper notes all these signs and ponders over them as he traps along, for fresh meat is badly needed at main camp.

Many animal tracks cross the snow,

receiving the traveller's notice, and revealing a story of the woods. A fox has passed here, a fisher has been running there, rabbits are plentiful in another place, a lynx has been after the rabbits.

Some tracks lead out of the bush,

The trapper expects to reach camp before sundown, but never knows what may happen to delay him.

When well on the the trail and after visiting two traps, only to find them undisturbed, he comes across a number of moose tracks, and a little farther on sees where four moose have spent the night lying in the snow. They have trailed away to the west, where some second growth made by a deer running hard, and the cause for its hurry is not far off, for there are the foot-prints of two wolves in pursuit. Down the lake they go, the wolves evidently running abreast the deer. Then blood stains are noticed as the end draws near. Just around the next point a dark object is seen on the snow, and there the deer lies dead. The wolves have eaten their fill and departed.

At noon the trapper makes a short halt to make tea and eat; then presses on, stopping at each trap to rebait and reset, and at a few to secure the animal which has been caught.

At one trap-house the trap is gone, but the tell-tale prints in the snow leads him to where a lynx is sitting very patiently waiting to be released.

He observes that the lynx is held only by half of one paw in the trap, so he must be careful not to cause it to make a sudden spring.

The safest way will be to shoot, but the fur must not be injured, so, taking his rifle from the toboggan, he aims directly at one of the big yellow eyes, which are watching hint 30 closely. He fires and the lynx rolls over dead. It is quickly skinned and the pelt tied to the tobbogan.

The trapper is now nearing the end of his trip and, cheered with his success, he swings along through the bush and across the lakes, down the valleys and over the hills at his best speed.

There are times when the traps yield nothing; when the snow is deep and so powdery that the snowshoes sink deep at every step, and the loaded toboggan seems to drag instead of sliding. The trapper wonders if he will ever reach camp, for he is just able to move one snowshoe over the other as he matches himself against the forces of nature.

The night is quickly closing in again as the trapper reaches the trail leading up from the lake to their camp among the pines. Then most welcome of all sights; through the 'rees he sees a light in the cabin window and smoke curling up from the chimney. A good meal is ready, for his partner is there to welcome his return.

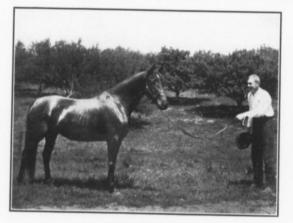
## Farming Ideals Best Three-horse Team: Energy, Knowledge, Intelligence. By R. L. MOORHOUSE.

I is often puzzling to those who understand the real joys of farm life to know just why this occupation is evaded as it has been in the past. Much has been said and more has been written on the subject of "rural population," some hitting wide of the mark, others nearing the solution. Whatever the reason we know that many have farmed and failed, but their failure was due, in large measure, to a lack of knowledge regarding the work they were endeavoring to accomplish. A man cannot be a successful farmer without in some way gaining knowledge of his business, any more than a doctor can make a success without first studying disease and medicine.

Men entering business professions in our towns and cities who have had to struggle for success often neglect the physical man and find it necessary to go to "Dame Nature" for a rebuilding of the body. Just here is where These are they, who, by their mode of life, build the man that must lead the masses.

It is on the farm that the lad has a chance to develop his inherent powers. It may be in the old tool shop, in the garden or in the forest where the young get their first idea that later on spells success. These are happy days for the young and they are spent with profit.

Of course, like all other professions, farming has its ups and downs. The



Health and Happiness.

the man who lives on the farm scores a strong point. Where can man get more fresh air or live closer to nature than on the farm? It is not necessary for him to spend time and money at a health resort. He has this right at home and all the time.

From where do we get our strong, stalwart men, men of brains and men with ambition, that leads to success? From our villages? From our towns? From our cities? No; but from those lads you see hastening up the sideroad to the country school house. pioneer labored exceedingly hard for small returns; but agriculture in this country has undergone such a complete change that drudgery in farm life is almost an unknown quantity. Now, don't let that statement carry you to the seventh heaven and say: "Farming for me; it's easy." Drudgery means work, but work may not mean drudgery. Work, interesting work, the farmer has to perform, but love for it makes it easier.

It still requires muscle and energy to produce wealth from the soil, but it also requires more. The problems of the present-day farmer are vastly different to the problems that confronted the pioneer. Fertility of the soil never entered the heads of our forefathers, who, with their crude machinery, tickled the soil and reaped a bountiful harvest. But what of it now? Can a man, without a knowledge of soil, chemistry, without a knowledge of fertilizers and the requirements of plant life, successfully build up a depleted farm or even maintain the fertility of the same?

We might enumerate many things, such as plant diseases, noxious weeds, and insect pests, that the tiller of the soil of bygone days knew little or nothing about, but which mean much to the present-day farmer. Enough has been said, however, to prove that knowledge properly directed and coupled with energy is necessary to make a success of farming.

To the man who has a thorough knowledge of the business of farming should not his work be at least interesting? Now he may be battling with, now against the elements in nature; this method of cultivation giving results, that method failing to make its impression; here a crop that is peculiarly adapted, there one that will not produce.

No doubt many of you have heard of the beautiful Muskoka Lakes. On your voyage over the waters the eye feasts on lovely scenery, which, from the peculiar formation of the lakes you expect soon to end, when, there, just rounding a heavily wooded point a new scene opens to view, a large expanse of water, more beautifully wooded hills and just to the left of the hills, an island. Such changes as just described take place rapidly as you motor through the waters. This frequent change of scenery makes the trip intensely interesting. And so it is with farming. New ideas creep into our mind. We carry them into effect, and the result is success. Old methods that have become monotonous through all long usage are passed by and new methods requiring greater skill in their application, more interesting in their uses, are adopted.

An insect pest comes to our section and destroys a crop; but we soon discover the cause and take preventive measures, which check it effectively, or perhaps nature herself takes care of the pest. The pioneer left such things to Providence.

There are many duties on the farm that are pleasant, and we must also admit that sometimes there are unpleasant duties to perform. There are those tasks that to one man are very unpleasant, while to another they are a source of real pleasure. There are cases where an unpleasant duty might be made pleasant. For instance, there is Jones, driving that beautiful team of horses in the pink of condition, that respond so well to word and line, the product of care and good handling; while his neighbor, Williams, has a pair equally well bred, but which are unsightly and dirty in appearance, that give but little heed to work or line, the product of poor care and indiscreet handling. I hardly need ask which of these two men enjoys his work with his horses.

It makes but little difference what has to be done on the farm, from the smallest task to the greatest, we must first know how and then do it. The crops we grow in our fields thrive under careful attention, just as our stock respond to feed and care. Then why should it not be a pleasure to work with these?

The man who has harvested a first class crop of corn or wheat has a right to be as proud as the one who has raised and broken a good team of horses or bred and fitted a prize-winning animal. If the same spirit that prevailed in Jones is only grasped by you then your work will be a pleasure. While, on the other hand, if you work in a haphazard manner, not knowing how or why, and caring little about the results, your life and work on the farm will be most miserable.

Perhaps the most interesting part of farm life is the goal toward which you work or the ideal to which you endeavor to attain. To the farmer of fertile brain farming has no limitations. He need not cater to the likes or dislikes of this one or that one, nor need his energy flow in a single channel. The possibilities of his work are yet unknown and give him an incentive to work in a field like this. In his endeavor to attain his highest ambition there is no one to molest him. The whole matter rests entirely with himself. His energies cannot even be thwarted by the "powers that be."

Even here with all its allurements his utmost ideal will not be reached, and well for him that such is the case. But the moulding and fashioning has been going on all through the years. And that man will leave behind him no empty epitaph on stone or brass, but a vital monument to his memory, whether it be but some few acres of wilderness transformed to a garden or an improvement in the stock of his district.

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## Eldorado

Gaily bedight, A gallant knight, In sunshine and in shadow, Had journeyed long. Singing a song, In search of Eldorado.

But he grew old— This knight so bold— And o'er his heart a shadow Fell as he found No spot of ground That looked like Eldorado. And, as his strength Failed him at length, He met a pilgrim shadow— "Shadow," said he, "Where can it be— This land of Eldorado?"

"Over the mountains Of the moon, Down the Valley of the Shadow, Ride, boldly ride," The shade replied, "If you seek for Eldorado!"

-Edgar Alen Poe.

## Answers to Correspondents

breed.

Minesing, Oct. 28, 1913. Editor Query Department:

Q.-I have a field which has a deep black muck soil. It has been in sod for some time and was recently broken up. Will you please advise me as to the best rotation of crops for this land.

Ans. - The following four year rotation would probably be the most satisfactory: 1st year. Turnips or rape; 2nd year, Barley, and seed down with timothy, 4 lbs., red top, 3 lbs., alsike 3 lbs.; 3rd year, Hav: 4th year, Hay and pasture.

London.

Editor Query Department:

Q. — I have a large farm in Middlesex which is suitable for pasturage. I would like to go in for sheep raising. Of late I have noticed in the press a few references to a

We number among our professors some of the greatest experts in their own line of work in the Dominion. An encyclopoedia of Agriculture could be compiled from their knowledge alone, and every one of these gentlemen are willing to aid our Query Department. There is therefore no reason why you should not get the value of your subscription. and far more than the value, from this department alone.

We are this year instituting a NEW FEATURE. Queries of general interest will be inserted in these columns as herelofore, but all queries in agricultural or allied subjects will be answered promptly by post, whether of general interest or not.

If you have weeds you want identified. fruit diseases you want cured, co-operative organization methods that you want explained or any answer you want for any agricultural question. send straight to this department and no pains will be spared to satisfy your want.

Address all letters to the Query Editor, care O.A.C. Review, O. A. College.

formation you can regarding this Yours, etc.,

#### J. W. B.

Ans .- The Karakule sheep are an Asiatic breed, and are native to Southern Russia, Persia and Afghanistan. They are used chiefly for the production of that valuable fur known 28 Persian lamb. used so widely in the manufacture of caps and coats.

An American investigator claims to have imported into the United States Karakule sheep which he hopes will enable the people of America to produce this much - prized fur themselves.

According to this investigator there are several varities of Karakule sheep, some of them having a considerable admixture of a fine wooled strain which is very objection-

new breed known as the Karakule. Will you please give me all the in-

able. If animals of this type are imported for Karakule sheep breed-

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UERIES ETE ing the result will be a failure. The right kind of sheep from which the genuine Persian lamb is produced are the Arabi and the Doozbai. These are closely related, but the latter is larger.

This investigator affirms that his experiments have proved that by crossing a good ram of one of these breeds with a ewe of some long-wooled variety, such as the Lincoln, lambs can be obtained with a more lustrous and a more tightly curled fur than if both sire and dam were Karakules of an inferior kind.

There is some prospect of the new industry being established in Prince Edward Island, with headquarters at Charlottetown.

I see no reason why you should not be able to make a success of raising these valuable sheep, providing you get the best strain and exercise reasonable care.

#### Goderich.

Q.—Will you please give me youn opinion of the variety or varieties best suited, from all points, to plant with Spy for cross pollenation? Some advise me to plant Ben Davis, others Snows or McIntosh.

#### H. K. R.

Ans.—Replying to your query fo: best varieties to plant with Spy for cross pollenation, would say you may take your choice of the following: Blenheim, Greening, Baldwin, Ben Davis or Tolman. I do not think Mc-Intosh or Snows would be satisfactory. In most seasons Grennings cr Baldwins bloom close enough to Spy to follinize satisfactory. In other seasons the other varieties mentioned will be found better.

Zephyr, Ont.,

Dec. 1, 1913.

Q .- My blackberry patch is affect-

ed with a very peculiar disease. The canes have on them a rough, warty excressence in irregular rows. This extends about two feet up the cane. Will you please let me know what it is and the best method of controlling the disease?

#### Yours sincerely,

#### J. M.

Ans .--- Judging from your descrittion of the diseased canes and the appearance of the sample which you forwarded, we diagnose the disease as crown gall, a very contagious bacterial disease, which attacks many species of plants, but particularly raspberries, blackberries, peaches, apples, pears and roses. In this disease the causal bacteria, Ps. tumefaciens, are present in only small numbers in the affected tissue and are most generally found within the plant cells bordering the healthy and the visibly affected part. The products of their activity within the plant cells stimulate these cells to rapidly proliferate. or to multiply abnormally. This abnormal multiplication of cells constitutes the warty excresence of which you write. When these warty excresences are large or numerous the plant is very much weakened and its fruit or flower-bearing capacity much reduced. These excresences or galla may be on the root, stem or branches. but they are most frequently found near the ground; they may be hard and continuous from season to season or soft and recurrent, sloughing off at the end of a season to develop again the next season.

To control the disease it is essential to destroy by burning all affected plants. As the causal organism can live over in the soil it is advisable not to plant similar or nearly related trees in ground from which affected stock has been removed, at least for three or four years. The causal organism usually finds entrance to the plant through wounds made during planting or cultivation. Nursery stock with any signs of the disease should not be planted, but burned. The disease known as "hairy root" is also caused by the same organism and should be treated in the same way for eradication.

#### Queenston, Ont.

Q.—I noticed that some of my peaches, principally among the Elbertas, were affected with a disease I never saw before. One side of the peach—rarely a whole fruit—would be all dry and cracked and of a yellowish color excepting toward the outside, where it was reddish. Kindly let me know what this disease is, its cause and a remedy for it. S. M. D.

Ans.-Peaches similarly affected have been seen at Grismby and a few other places this season, but in no case were many trees or many peaches on a tree affected. Evidently there is no fungus or bacterial disease at work, and the cause may be attributed to weather conditions. It is probably a form of sun-scald, due to the sun on very hot days beaming down upon the wet surface of the peaches in a sheltered part of the orchard at a time when there was no wind. In this case only the side of the fruit that was exposed to the sun's rays would be affected.

This may not be the correct explanation, because there has been no good opportunity to study the affected trees. We do not think this matter should cause you serious anxiety.



## A Trip to Berlin

O<sup>N</sup> Wednesday morning, October 28th, Macdonald Institute senior class set out for Berlin to visit the button, rubber and sugar beet factories. Prof. Harcourt and Mr. Galbraith chaperoned the party and acquitted themselves in that respect with much credit.

The trip to Berlin was most delightful. All Guelph trains seem to have a most enjoyable little habit of shunting back and forth so that they will not be able to leave on time in case they should miss tardy passengers. This train was no exception.

A little later the people of Berlin saw a company of most intelligentlooking, sedate young ladies quietly wending their way up the street towards the button factory—not giggling and tittering and jumping over mud puddles the way some girls in a similar condition would do. No! the Macdorald girls were out for knowledge and wherever an opportunity afforded itself they drank deeply—of the fresh air outside the factory.

They next visited the sugar beet factory, and as it was the main object of their journey they were most interested when they first entered there. Now if any humble reader chooses to think that he understands the mysterious changes that a dirty-

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looking root undergoes before it becomes the dainty lump of sugar we drop in our cup of afternoon tea, let him go through the factory under a guide, a word or two of whose explanation he may catch now and then above the thudd, thudd of the machinery. The experience of the Mac' girls was such that it was,

Theirs not to reason why, Theirs not to make reply, Theirs but to hear and sigh, As thro' the sugar beet factory Marched our poor Seniors.

The girls dined at the Walper House and a little later journeyed on to see the rubber factory. After dinner they noticed an unwonted quietness amongst some of the members of the party. Surprised and wondering they looked into the matter and there, on the fourth finger of the left hand of one of the most respected and responsible Seniors, was a small sample of amorphous carbon encircled by a shining band. On investigation five others were found to be in a similar sad plight. Berlin possesses a 10-cent store, but surely no Senior would be so small as to deceive her class mates on such a tender subject. We hope that future trips to Berlin will not result so disastrously.

After the rubber factory some Seniors spied a picture show as they walked down town—others an ice cream parlor. It may be true that they went into the picture show duly chaperoned or it may not be—you never can tell. At all events, the whole party was at the station in due time, and the tired educators of the future generations were glad enough to accept the accommodation provided by the G. T. R. to Guelph.

#### Sports Night.

On Friday night, November 14th,

Macdonald Hall held its Sports Night.

The Faculty and their wives, the O. A. C. athletic committee, and two representatives from each year were the invited guests of the evening.

The evening was opened by the Sir Roger, in which some of the guests were invited to take part. The rest of the programme consisted of class stunts, races and a splendid basketball game, which resulted in a tie. The class stunt prize was won by the Junior Normals and they deserved it beyond all questions of doubt, as their stunt — the "Ghosts' Walk" — was most original and very entertaining.

On outstanding feature of the evening was the yell. It was given most sonorously and with much volume under the direction of Miss Helen Oldham. Hitherto we admit that the O. A. C. boys have had occasion to laugh at our yell, but now that we have proven ourselves we trust that with their usual courtesy they will forget the "Hippety Hus," which is a chapter now erased from the annals of Macdonald Hall.

Miss Watson presented the prizes. We appreciate the interest which the Faculty showed in Macdonald sports. The committee was gratified that such a large number were present.

The refreshments were unique, being coffee and doughnuts. After the serving of these one short hour was spent in dancing, and then the guests bade us good-night.

#### Hallowe'en.

"Apples hanging in a row, Flaming candles all aglow, Witches flying everywhere, Magic music in the air; There'll be mischief now I we'en On this mystic Hallowe'en."

There is perhaps no night in the year which has such mysticism attached to it as Hallowe'en. This is the night when the most practical of us has the desire to call "spirits from the vasty deep" and peer with them into the land of fascinating uncertainty—the future.

Even though we did not sew hemp seed, pull a plant of kail, or burn nuts at Macdonald this year, the same mystic feeling was over each one who found his way, through a maze of quaint costumes, to the favorite meeting place, the gymnasium. By means of hundreds of pennants, ferns, palms and the characteristic Hallowe'en decorations in orange and black our commonplace "Gym" was turned into a veritable fairyland.

On all sides were heard surmises regarding the many interesting characters to be seen. A dainty little peasant girl smilingly prevails upon a Crusader of the Middle Ages to aid her in disposing of her wares. Now we see the courtly King Charles paying homage to Lavender and Old Lace, and demure little Quaker girls slyly resisting the wicked glances of the harmless Mephistopholes.

Among the members of the younger set, Little Dorothy was perhaps the most popular. Through the throng of lark, steathly Indian girls ,happyfaced peasants from Holland and Italy, cowboys and jesters, we threaded our way nearer to the stage at the end of the room.

A novel feature in this year's entertainment was introduced in the form of a Tableau Competition. The Seniors of Macdonald joined with the O. A. C. Seniors; the Homemakers with the Second Year, and the Short Course girls with the Freshmen. The latter one, representing "The Artist's Studio," was presented first. The central figures are Grecian models, a fam-

ous goddess in the act of bestowing an honor on Achilles, several friends of the artist, and the Duchess of Marlborough as a possible purchaser, complete this pretty scene.

Then followed the Senior tableau, "The Sleeping Beauty," in two acts. In the first act, the heralding of trumpets and the lowering of the drawbridge announces the arrival of the Prince, who finds the entire court asleep. In the second act all have awakened. In keeping with a court scene the staging and costuming were regally splendid, and each member of the caste deserves special praise for the manner in which his or her part was taken.

The last tableaux, given by Homemakers and Sophomores, represented a scene from Lallah Rookh. The Prince, disguised as a minstrel, captures the heart of Lallah, the beautiful Princess. Three charming harem girls and two slaves in typical Eastern costumes formed a fitting background for this gorgeous scene.

The tableaux were judged according to originality, staging and presentation; and, after careful consideration of these points, the members of the Senior year were awarded the coveted red ribbons. While the tableaux were being presented was found to be a very opportune time to discard masks, and many were the exclamations of surprise when we recognized our old friends, whose identity had puzzled us so long.

For those who did not dance the Y. W. C. A. and Y. M. C. A. committees had arranged games and music in the Library and Drawing-room, where a very jolly time was spent. This was not all. In a wigwam in the lower hall the mysteries of the future were revealed to any anxious ones for the exhorbitant price of a pleasant smile.

But everyone was impatient for the principal part of the programme to begin, and it was not long ere the strains of the "National Spirit," played by the Tony Cortese orchestra, floated through the air. No need to waste words on this part; it was "simply scran, my dear Gas." But in passing, just a word of appreciation for the moon and harp waltzes. Refreshments were served about midnight on the third floor. When nearing the 20th number on our dance card the one regret echoed from heart to heart -has this, our only dance of the term, to end so quickly? About 2 o'clock, after singing the National Anthem, "Good-bye" was said. The members of the Second Year and the Macdonald Committee reserve great credit for this most enjoyable evening.

"Wi' merry sangs and friendly cracks I wa' they lid na weary,

Wi' unco tales and funny jokes

They parted aff careerin' Fu' blithe that night."

E. H. M

#### A New Year Resolution.

It seems so easy at the last of the year to make resolutions for the New Year. We've all done our share at making them and breaking them, too, at the first chance. This year will prove no exception. But there is one resolution we should all make and not break: "Resolve to be a lifter—not a leaner." There are only the two classes of people in this world—the lifters and the leaners. So rest assured, if you're not a lifter you are a leaner, and someone else is doing the lifting for you.

## Much Ado About Nothing

Miss McDougall in chemistry—"As I was going over Jordon last night I came across para-Casein."

Junior — "When do your callers come to the Hall?"

Senior (confidentially) — "Wong brings them every Wednesday."

One of the Freshmen wants to know how long girls should be courted. We're advised to tell him just the same as short girls.

#### In the Chemistry Lab.

One Sr.—"Look, Mr. Stanley is smiling. He must see something funny."

Second Sr .- "He's looking at you."

The supply of noise exceeds the demand—at Mac Hall during study hour.

#### Overheard at the Girls' Open Gym Night.

Sr. Normal—"I expect those lights to go out in a minute."

Mere Man—"Gee! I wish they would."

A worthy 2 in 1, plugging foods for exams, was quite puzzled because soap was not included in her classification of foods.

Miss W.—"'I'm sick of hearing of the 'survival of the fittest' in our biology lecture."

Miss B. (shocked)—"Why that quotation is from the Bible, isn't it?" KA KA KA KA KA KA KA KA KA

### **Basketball**

ATHLETICS

By W. W. BAKER, Manager.

"The Battle Is Not to the Swift." Last year the College made a very creditable showing in basketball. True, we did not win our district, but we came mighty near winning it. And

we came mighty hear to be runners up in a district of the O. B. A., with the standing which the league now has is no small honor.

This season we hope to do as well, or even better than last. We have lost two strong men from last year's team, but we have old men who are getting better and new men who are good, to replace them.

The College team is entered in the Intercollegiate grouping of the In-

termediate O. B. A. This district conconsists of Varsity Seconds, Western University of London, O. A. C. and possibly St. Jerome's College of Berlin.

If the trip to St. Anne is made this year we hope to give Macdonald College a good game on their own floor. We have never lost to them in basketball, and "our grandsires drew good bows at Hastings." We should have

a strong second team, and if the Athletic Association can afford the expenditure we would like to arrange a couple of games for the Seconds as a reward for their services in training the First team.

I take this oppor-

tunity to remind

all basketball men

that condition

counts in this sport

probably more than

any other. In bas-

ketball a man is

moving all the time,

and it is the team

which can move the

fastest at the end of

the game, as well as

at the start, which

wins. Many games

are won in the last

ten minutes of play,

simply because the

losing team is done,

even though it may



DR. SANDS, Pres. A. A., 1914.

be composed of players more scientific than their opponents. Get into shape. Combination cannot win without condition.

#### BASEBALL INTER-YEAR GAMES.

#### Well Done, Sophomores.

Baseball during the Fall term created considerable interest. A regular schedule was drawn up, in which

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four Years were represented. The majority of the games were close and only one went by default, that in the case of Fourth Year defaulting to Second.

#### Fall Term Standing.

										Won	Lost
П	Year									3	0
IV	Year				,		,			2	1
Ι	Year									1	2
III	Year	,								0	3
Inton Voon						n				11 (1	

#### Inter-Year Basketball Games.

The preliminary inter-year games last term were somewhat of a failure, owing probably to the fact that neither the Third or Fourth Years entered teams.

Only one game was played and that between First and Second Years, which was won by the later. The First Year have some good men and will give the Second Year a hard run for class honors this term.

#### CROSS COUNTRY RUN.

#### (H)all Right.

Mr. E. R. Hall (III Year) won the Cross Country Run last November, with O. Robb a close second. The winner did it in fast time considering the course, much of which was over ploughed land.

The event this year was more evenly contested than it has been for the past few years. There were five contestants lined up at the start, all of which made a showing.

The cup, which is the prize for this event, is held by the winner for one year. In order to hold it permanently the runner must win it three times in succession.

#### A. A. REVISED CONSTITUTION.

The change in the Athletic Association constitution drawn up last spring under Mr. C. F. Neeland's presidency, has resulted in a very short term of office for the retiring executive. Now the executive is elected for the year at the Christmas elections, whereas previously it was elected in the spring.

There is considerable work in supervising O. A. C. athletics, and the new system will allow the students holding athletic office one term of this work in each of two College years; thus the regular studies of those on the executive should not be interferred with as much as in former years.

#### INDOOR BASEBALL.

#### (By G. C. Duff.)

Indoor baseball is, with some slight modifications, practically the same as the outdoor game. Hence, every year we find an increasing interest being taken in this now popular winter pastime.

Last year's College team was good, and this winter we hope to have a team of similar calibre. The battery of last year's team—an exceptionally strong one—is lost, but practice games have left no room for doubting that we will again be strong in that department. Some heavy batters have gone, but that setback will be offset this year by the addition of a little more speed and skill on bases.

From present indications the College will be playing in the City League. More through bad luck than through poor playing we managed last year to finish a good second. This year, however, we intend finishing a notch higher.

The annual game with Macdonald College must also be remembered. For two consecutive years we have defeated our eastern friends by the same score—16-13. Although we have to play on their diamond this year the O. A. C. should come out on the long end of the score.

These predictions cannot, however, be fulfilled without the support of the student body. Though only nine men can play on the team it is up to the baseball players in general to see that each member of the team is made to work for what he gets. The boys have been turning out well to practice and working honestly. Such work augurs well for the future success of the team.

#### A WORD IN SEASON.

(From A. H. MacLennan.) I would like to bring this point to the attention of the students: that while many may hope to make the team and will be disappointed, we expect to give every one a fair chance and all the hockey he wishes before spring; and while only seven men can play on the team, every other man should be a booster, even if his personal ambition is thwarted. We have a new rink this year which must be financed. We can all help by making a strong hockey team, either by playing with the second team or by our loyal support at the games. Concerted cheering, even when the game is against us, will aid the boys who are playing for the honor and name of our college.



### A Fowl Missionary

Archie Slater is one of the many O. A. C. graduates who go abroad to spread the gospel of better farming. He was very successful while at College; was said to be very popular with his co-eds; was editor of the experimental department of the Review; was mission study leader, and won the oratorical contest in 1907. He went from College to Trinity College at Port Hope as science master.

He is now in the northwest of India, and is encouraging chicken raising as a method of raising the natives out of their present intolerable poverty. It is said that the Christian houses can be told by the chickens about them. He is not satisfied with the present state of affairs and desires 800 male birds to improve the present flocks. The cities of Delhi, Agra, Lucknow and Cawnpore are all within 200 miles of him, and furnish an excellent market. One hotelman at Lucknow writes: "Please let me know if you can supply me with 75 birds and 300 eggs daily for nine months a year. If so, state your own terms."

### James Charlton Donald.

#### R. E. P.

Very few of the students of 1885-87 will have forgotten J. C. Donald, or "Little Donald" as he was called. He was one of an interesting and inseparable trio who usually took their walks together, and represented perhaps the highest plane of classical culture in the college halls at that period. The others were J. G. Scrugham, First Silver Medalist '87, and W. J. Gilbert.

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Vancouver papers report the finding of Mr. Donald's body in the water near the city of Vancouver on November 30th last. It appears from the published accounts of the sad affair that on October 16th Donald started to row across English Bay to the Golf Club. Nobody appears to have seen him after he left the boat house, but later the boat with one oar missing was found floating in the harbor, and it was feared that Donald had been drowned. A reward of \$1,000 was offered for the recovery of the body. Six weeks later it was found.

Donald was born at Picton, N. S. During his College course he distinguished himself in his literary studies, and was perhaps the best debater and erator of his class.

After graduating he went West and spent some years in California. Later he moved to Vancouver, where for a time he was editor of "The Province." About ten years ago he resigned the editorial chair and formed the real estate brokerage firm of Corbet & Donald. The firm prospered and about three years ago was dissolved. the members having amassed considerable wealth. Mr. Donald then kept an office in the Bank of Commerce Building, where he handled special orders for clients and looked after his personal interests.

Mrs. Donald, a particularly charming lady, survives, and will have the heartfelt sympathy of all her late husband's old colleagues and friends. There are no children.

#### The American Association of Agricultural Colleges and Experimental Stations.

At the recent meeting of this association at Washington, D. C., the O. A. C. was well represented. Besides Dr. Creelman, who was on the programme, a number of other O. A. C. men attended, including:

F. B. Linfield, Director of Experimental Stations Montana; Andrew M. Soule, President of the University. Athens, Georgia; Robert S. Shaw, Director of Experimental Stations. Lansing, Mich.; W. L. Carlyle, Dean and Director of Experimental Stations, Moscow, Idaho; G. I. Christie, Superintendent of Agricultural Extension Purdue University, Lafayette, Ind.; J. H. Grisdale, Director of Experimental Farms, Ottawa, Canada; W. J. Kennedy, Director of Agricultural Extension, Ames, Iowa; Prof. C. K. Graham, Director of Agriculture, Hampden, Virginia; J. J. Scrugham, University of Nebraska, Reno; H. A. Morgan, Dean and Director of Agriculture University of Tennessee, Knoxville; F. R. Marshall, Comus, Ohio.

#### More Bells.

A pleasing event took place in Harriston at high noon on the 10th of December at the home of Mr. Alex. Riach, it being the marriage of his daughter Jemima to Mr. Alfred Howes, a prosperous young farmer near Harriston.

Rev. W. T. Pearcy was the officiating clergyman. The bride was becomingly attired in pale blue silk with white trimmings. Only the immediate relatives of the contracting parties were present.

The many pretty and useful presents received testified to the popularity of the bride.

After a dainty dejeuner, Mr. and Mrs. Howes left for a short honeymoon at Guelph.

Alfred came to O. A. C. with the '07 class and was very popular with his classmates, who will be glad to hear of his choosing a life partner to help him put in practice the knowledge gained at College. All join in wishing the happy couple a prosperous wedded life.

#### Like a Bad Penny.

R. B. Cooley again comes to our notice. He has appeared quite often in our columns, but must appear again if we are to keep pace with his rapid rise.

He was born on a farm near Belleville, Ontario, and matriculated at Albert College, after which he attended O. A. C. for three years. He then spent a season as Assistant Representative.

Returning to the College in 1909 he was chosen president of the Union Literary Society, and will be remembered by the students, both for his success in that capacity and as a Y. M. C. A. worker.

On graduation in 1910 Mr. Cooley became registrar for the Dominion registration of sheep and swine. During the same year he became assistant to Prof. Barton, of the Animal Husbandry Department of Macdonald College.

In the spring of 1912 Professor Cooley resigned his position on the College staff to become live stock inspector for the Canadian Pacific. Now Professor Cooley has charge of the Animal Husbandry Department of the State College of Rhode Island. The Alumni wish him continued success.

#### Multum in Parvo.

(Gamey) Unwin, who was resident master for two years and then assistant in the English Department, and whose resignation was so greatly regretted by his numerous friends, is now on the Seed Department at Calgary. P. Keegan, of '13, is also on the same department.

E. D. Howes, B. S. A., an O. A. C. graduate and for a time principal of Macdonald Consolidated School, is now principal of the Provincial School of Agriculture at Vermillion. Since leaving this college, Mr. Howes has taken several post-graduate courses at other colleges, and the new Agricultural School is starting under favorable auspices.

"Tiny" Hopkins, '11, has been taking the science work at Vermilion since September, when he resigned as District Representative for Peterborough County.

Howard Hodgins, who took a twoyear course at this college and was silver medallist in '98, has been spending most of his time with the "Wood Product Company," of Donald, Ont., and at present is managing the supply store for that company.

L. Stevenson, B. S. A., of class 1912, has registered in the Graduate School of the University of Illinois. He is doing his major work in animal nutrition. Steve's experience while Professor of Animal Husbandry at Nova Scotia Agricultural College impressed upon him the fact that the "Feed End" of Animal Husbandry is the important end.

Mr. and Mrs. Frank Clark announce the marriage of their daughter Euphemia Boyd to John Spencer Hall, Wednesday, the 8th of October, 1913, at their residence, "Kirksyde," Elora, Ont. At home after December 1st, "The Meadows," Ariss, Ont.

Mr. and Mrs. George A Campbell announce the marriage of their daughter Edna Mary to Mr. Harold A. Dorrance, B. S. A., on Thursday, December 25th, 1913, Orangeville, Ont.

## Sowing The Good Seed An O. A. C. Missionary Enterprise.

#### Foreword.

M ISS BARKER entered the Teachers' Spring Course in Agriculture for the purpose of equipping herself better as a teacher of the Indian children in her school school at this place since then. As the picture shows she has been pioneering in agricultural education at James Bay. From the supplies of seed which she took back with her and other supplies sent in since she has



Agriculture at James Bay. One of the pupils in Miss Barker's school and a cauliflower grown from O. A. C seed, 1912.

at Fort Albany, Hudson Bay. Previous to entering the class she had taken special training in Toronto in nursing. Owing to the extreme weather and travelling conditions prevailing at the time of her return in the fall of 1911 she was not able to reach Albany but had to remain over at Moose Fort. She has been teaching in the

been able to create quite an interest amongst her pupils in gardening—a very desirable thing for the Indian population in that country.

As the following letters show Miss Barker's classmates associated themselves with her in her work by subscribing a fund to assist her. For 1911 \$277.00 was subscribed. Of this

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\$120.00 was to be used to support two Indian boys at the mission school for one year, \$50.00 was to be for the personal use of Miss Barker and her associate, and the balance was to be used as an emergency fund for procuring necessary medicines, delicacies for the sick and such like.

#### The Secretary's Letter.

Nobleton, Dec. 11, 1913. Dear Friends of the O. A. C. Class:

For the past two years you have generously subscribed money in aiding Miss Barker in her work. Your first year's subscription amounted to \$277; last year to \$165. This year I have written to the various secretaries regarding another canvass for this year. Some of us did think of making a final appeal, and yet some of the girls we know are anxious to keep it going from year to year. We know there are other demands; it grows more difficult every year to find you all.

I do not need to recommend Miss Barker or her work. You all know her and I am sure almost feel yourselves in her presence once more as you read her letter. Should any of you feel you cannot make another subscription would you notify your secretary to that effect when you send your subscription?

> Yours sincerely, Ada V. Neelands, General Secretary.

#### Moose Fort, via Cochrane, June 21, 1913.

My dear O. A. C. Friends:

I have just received from the Royal Trust Co. the acknowledgment of your splendid gift of \$165 paid in by Miss Neelands. It is really very good of you to give so generously to this part of the Master's work, and I felt so pleased to think that again I will be able to give assistance to many of our needy sick folk. Last year we were able to assist a good number of cases by your kind.ness. I should like to tell you about one or two of them.

The wife of our old mission servant was very sick for months and he himself was far from well. They had four children and when his wife died we were able to assist him to take his children inland, where he could get fresh food. He himself improved in health for a time, but caught cold and we have heard since that he has passed away. We expect his four children down by the boat and we will be able to render them help by your kindness.

Another case I was able to help this year was the father of one of our expupils, who has been on the decline for years; he had been failing rapidly since Christmas, and through your kindness I bought all the tinned milk I could get and kept him supplied as long as he was able to take it, as fresh milk was very scarce at the time. He has left behind two boys, one of sixteen and the other of seven, who has a very bad eye, and always has to keep it covered. His poor wife is far from strong and has hard work to bring her wood. When her husband was so sick we brought her some, as it was more than we could stand to see the poor woman hauling a heavy sled when the eldest son was off hunting. Our nearest dry wood is at least two miles from here across the river, and it is far from pleasant getting it at 40 degrees below zero and a wind blowing.

It is in such cases as these that we feel so indebted to you in enabling us to render such assistance. We were also able to give the children a treat at Christmas, having ordered the

things out by the ship in good time, and now we will be able to renew their pleasure this coming Christmas through your generosity. So that when you are having a good time at Christmas you will feel the happier to think that you are making many happy at the same time in this isolated land of ice and snow.

It is at these special seasons, too, that we have our own little luxuiries to make us feel more like being a home; the work is lightened when we think of the many kind friends who supply us with those luxuries for our own table.

Your two little boys have been keeping very well and learning English nicely. Besides other things they can say the days of the week, which is a great achievement for our little Indian scholars. At present they are on a holiday with their relations, but we expect them back by our steamer very soon.

I heard that the stocking knitter which I ordered out with my last supplies was left at Montreal and that I will get it this year, all being well. I have the wool for making things reading waiting, so I hope to begin work on its arrival.

I heard from Fort Albany that my boxes are all packed, so that I will soon get my things, after nearly two years. It will be quite a treat to unpack all the things I left behind me in 1910, before I attended the Agricultural College.

I have received a number of personal letters from some of the girls and will answer them very soon. We shall have other people going out to the line (the Grand Trunk Pacific) this summer who will carry letters for us.

Thanking you all again very much on behalf of those you help through.

Your humble servant. Lucy I. Barker.

## Mutual Orange Distributors

Porterville, Cal., Nov. 1, 1913. Dear Frank:

I suppose you feel some faint interest in the career of your old - time pitcher and neighbor, so I write to assure you that, although I descended to the saloon quicklunch stage in 'Frisco last week, I have not yet starved to death. I carry such an excessive amount

of fatty tissue around with me as a rule that I can mercifully subsist on nit for two weeks without any other solid nourishment, and it is to this fact that I owe my existence today. Jimmy Creelman and I loafed around San Fran. all last week

A copy of a letter received from ye former-Editor of ye Review. I thought it would be of interest to Windy's and Creelman's class-mates to know what the brick-headed boys are doing.

FRANK PALMER.

I have only green table.

and part of the week before, and know every square inch of sidewalk and pavement on Market Street, as well as the individual peculiarities of the pool tables in the Y. M. C. A., where we spent the residue of our time. one thing to re-

joice over, i.e. that I came out victorious in the week's play at the

R. M. W. and Mr. Kidston met us last Saturday morning, and I kindly accompanied them to interview several people around the city and the University of California; by so doing, of course, adding considerably to the respect with which they were received. Wickson (my old friend, who is no Senior Professor of Horticulture at the U. of C.) was delighted to meet my brother, and assured me that even YOU would be welcome if you had the seal of my approval on your visit. As for Etcheverry, the irrigation expert, and Pratt, the cold storage man (although it must be confessed, I treated them rather condescendingly), they could not answer Roy's queries quickly enough. Needless to say, Mr. Kidston, who is on the B. C. Agricultural Commission, and Roy were gratified at having so opportunely arrived in 'Frisco at the same time as myself, and Roy even went to the length of lending me a small sum in consideration of the prestige which my introduction had given him among the thinking men of the Pacific Coast.

I shall now lead the bull outside and tie him there for a few minutes and get down to facts, as I have to hie away to a dance in the immediate future. Creelman and I pulled out of San Francisco last Sunday afternoon, pursued by a bevy of 'Frisco's fairest ones imploring us to stay just a little while longer, but, closing our ears with a chew of Spearmint, like Ulysses of old, we dashed for the ferry, leaped the quickly-widening gap of fifteen feet while carrying two suitcases each. and gracefully landed on the deck amid the envious cries of our fellow passengers.

Curse it! I meant to tell the truth

for a few lines, but failed. As a matter of fact, we escaped in disguise, I as a lunatic with a gun and Jim as my keeper. It was the best of good fortune that when we went up to the boarding-house on Sunday afternoon to pack up, the landlady was away, and it accelerated our process of packing wonderfully and rendered unecessary the otherwise undignified. but convenient, escape by the rear stairs. Jim went over to the experimental farm at Davis, where he is to deliver a series of lectures on the social problem in San Francisco as seen by a transient, but including one on the subject, "If I Were Secretary of Agriculture for the U.S." He has not written to me since he arrived there, doubtless being beseiged by members of the W.C.T.U., Y.W.C. A. and kindred organizations for pointers on these matters.

On the other hand, I came down to this burg, which is about half way to Los Angeles, and the centre of Northern the California orange trade, and succeeded in meeting the district manager of the firm using this brand of letter-head, and securing a position as assistant. I am in the office part of the time and out on the road with him the remainder. He has a double-seated motorcycle, and we induced this machine to go 50 miles per hour yesterday, although not for a whole hour, of course. We were hitting off 30 this afternoon on a wet road, but a few skids soon reduced this speed, and we finally had to slow down to a walking pace and return thus ignominiously to town.

Hope that you will tear me off a few lines in your spare time, Frank.

Your sweetly affectionately friend, J. H. WINDY.



### College Spirit

By J. W. CHARLESWORTH, M. A.

#### Man Realizes Himself Only in Association With His Fellows.

NE is, nevertheless, tempted to speak of the discipline of hard work conscientiously done. and this for several reasons. The requirements of magazine-making bring it about that though these paragraphs will not appear in print till January they are written in November, just after some of us have been considering Carlyle's gospel of work as the dispeller of doubt and the means whereby a man is to be revealed to himself. Nor is it possible to think of any valuable influence of the college upon the individual student that is not based upon the foundation stone of work. We may single out and consider separately other influences that affect us, the mutual action and reaction upon one another of several hundreds of men leading in some measure a common life and having common interests. But to be influenced for the best by the spirit of such an institution as this one must be in sympathy with that spirit, and unless a student comes here prepared, indeed eager, to work, not spasmodically but steadily and earnestly, he will both lose the increase in knowledge and faculty which ought to be his reward, and will miss the best of those other important though indirect benefits that accrue to him who is in touch with the

spirit of the institution whose common life he shares.

A common life and common interests. It is because the college gives us those that it does most for us. whether in work or in those other activities that, along with work, make up what we think of as college life. It not merely equips us with a considerable accumulation of information as to the science and art of agriculture, but it helps to make us what we are. If we could in imagination spring forward ten or a dozen years from the day we shall leave the college with diploma or degree, and from that point of view try to estimate justly the influences that are moulding us now while we are in the college we should of course admit the value of the specialized information we acquire and of the methods of investigation in which we are trained as a preparation for our larger work outside the college. And perhaps from that imaginary and still distant view-point we might be willing to admit the value of some of that work which we do, as it were, under protest, doubtful of its utility. If we were only certain what utility is! But to pursue this would lead me from the line that the editor wished me to follow.

That endeavor I spoke of to estimate justly the influences that are now moulding us would show us that not the least valuable factor in our development is the pervading and gently compelling influence of that common college life in which we learn to know something of ourselves and of others. For man is a social being and it is only in association with his fellows that he realizes himself.

It does not seem necessary to particularize the agencies, the various college societies by which this is accomplished; they will at once occur to mind. The point I wish to emphasize is, that in them the student who wishes to do so has an opporassociation in the common student life of the college than in the more formal relations of lecture room and examination hall.

But if not Fate at least the editor stands ready with the shears. I must not close, however, without showing that I am aware the student must be not merely passively but actively connected with this common life I have spoken of; he must come not merely to receive but also to give. College spirit is a potent influence, but college spirit itself modified by the reaction upon it of those on whom it



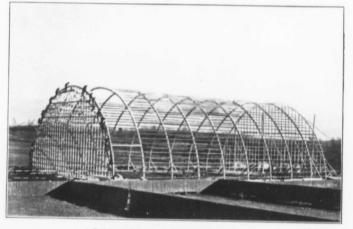
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tunity to pursue experimentally his study of the noblest object of mankind's study-man himself. To know ourselves and our real capabilities better, to know how to respect the views, even perhaps, the prejudices of others, to be able to distinguish between the essential and the non-essential in our opinions, and to sacrifice the non-essential for the general good of the whole body to which we belong-this is knowledge or ability not of the same kind as that of the scientific agriculturist, but equally useful to the good citizen. And it is knowledge that is acquired more by acts. The student who while here does what he can to make prevalent in college life those ideas of generosity, justice, fair-play and broadmindedness that we feel are the ideals for a society of those who have received or are receiving a liberal education will find that his course at the Agricultural College has helped him to be both an agronomist and what is better a man.

Upon request I have written the following paragraphs concerning the benefits a student at this college expects to receive from his two or four years here. Space is precious, however, and this subject a very broad one, so I will deal mostly with other things than work.

#### CHURCH RECEPTIONS.

Three more receptions were tendered the young ladies and boys from the Heights by the town folk. The first one was given by Knox Church on of various nations and college pennants. The floor was excellent, and the superb music helped to make the evening a huge success. Refreshments, which seem to be an important item on every programme, were tastefully and daintily served. Besides members of the club, there were a number of other students present. The guests of the evening included members of the faculty, townfolk and a few outsiders.



A Promissory Note-O. A. C. Skating Arena, Dec. 5. Photo by H. K. Lund.

Oct. 30th, and the next two by Cahlmers and St. James, both on Nov. 3rd. A large number were present and throughly enjoyed themselves in each case.

#### COSMOPOLITAN CLUB DANCE.

#### Above All Nations is Humanity.

The Cosmopolitan Club held their annual dance at the City Hall Wednesday, Nov. 12th. The hall was very appropriately decorated with the flags

#### STUDENT BODY MEETINGS. Co-operative Society Meeting.

A second important meeting was held by the student body on Friday morning, Nov. 7th, after roll call, to discuss the formation of a new society, namely, the Student Co-operative Society. Discussion on the subject was so prolonged that the meeting was adjourned until Tuesday evening at 3 o'clock.

This meeting was well attended, and by 6 o'clock the laws governing the new society had been passed. The most important ones were that (1) The society shall have a stated fee; (3) It shall have as its three branches the Book Club, Skating Rink and the O. A. C. Review.

#### Empowering the Council.

The student body held a meeting after roll call on Friday morning, Oct. 31st, and passed a new set of laws under which the student council The main points, or the shall act. ones which attracted most attention. were: (1) That students will hereafter be placed upon their honor and any offenders will be dealt with by the council; (2) That the council has the power to authorize the establishment of any new societies. Discussion on both sides was warm for a long time, the opposers arguing that it gave too much power into the hands of a few. This opinion was not at all general, however, because when the vote was taken the new constitution passed with an overwhelming majority.

#### Philharmonic Concert.

Who all were there? Where? At the annual concert of the Philharmonic Society, held in the college gymnasium on Friday and Saturday, Nov. 21st and 22nd, of course. Why, to be sure, every person was there on one of the nights and some on both. The attendance on both occasions was large and the concert deserved it, for seldom is it possible to hear better music, both vocal and instrumental, and to see better amateur drama than was given on those two evenings.

The Choral Club, which has been training under the leadership of Mr. Ernest Shildrick for some time, displayed the results of their careful

preparation in the selections given. Their pieces were rendered in an excellent manner and elicited encores on every occasion.

The Dramatic Club presented a musical extravaganza adapted from the drama, "Meg's Diversion." It was presented in two acts, and was a complete success. The company, which consisted of members of the faculty and student body, took their parts well. The plot of the play worked out smoothly and ended satisfactorily to every one.

A large orchestra was present, which accompanied both the Choral and Dramatic Clubs during their parts, and also gave several selections by themselves. Their music was throughly enjoyed and it added much to the effectiveness of the other parts of the programme.

#### UNION LITERARY MEETINGS.

#### Backing the C. P. R.

A union meeting of the O. A. C. and Macdonald Hall Literary Societies was held on Saturday evening, Nov. 1st. The audience was large and contained many freshmen, who were there to support their representatives in a debate against the sophomores, which constituted the main number on the programme. The following selections were also rendered: Vocal solo, Miss Eckert; reading, Miss Whittaker; vocal solo, Mr. A. Fulton; address, Mr. F. Bailey, B.S.A.; vocal solo, Miss Hess.

Miss Hess kindly consented at the last moment to give a selection in place of the Philharmonic Society's number, they failing to appear.

The debate, the subject of which was, "Resolved, That the Immigration into Canada as carried on at the present time is detrimental to her best interests," was contested by Messrs. M. Jones and E. Carncross, of the Second Year, on the affirmative, and J. Hamilton and J. Fuller, of the First Year, for the negative. The argumentation and speaking were excellent and the rendering of the decision, which was given in favor of the freshmen, was a difficult task for the judges. Prof. Geo. E. Day acted as critic, and his remark, "Come, but come on time," might be well considered by a few.

#### The Joys of a Rockefeller.

A union meeting of the O. A. C. Alpha and Macdonald Hall Literary Societies took place on Saturday evening, Nov. 15th. The main feature of the evening was a debate between Macdonald Hall and O. A. C. The following selections were also rendered: Instrumental. Mr. H. Black; vocal solo, Miss McLeod; instrumental, Miss Cockburn; vocal solo, Mr. G. Hirst.

The subject debated was, "Resolved that wealth causes more unhappiness than poverty," the affirmative being upheld by Messrs. S. H. Hopkins and J. N. Allan and the negative by Miss A. Marcellus and Miss E. Dickinson. Although the debate was splendid the young ladies outpointed their opponents in every respect and thereby won the decision with comparative ease.

#### We Want Beer.

The last union meeting of the O. A. C. and Macdonald Hall literary societies, for the fall term, was held on Saturday night, November 29th. The debate for the evening, which decided the championship of the college was between the third and first years. During the evening the cross country cup was presented to E. R. Hall by Mr. E. W. Kendall. Between the above, a fine musical programme consisting of the following numbers was given:

Selections ......College Orchestra Vocal Solo .....Mr. P. D. Vohey Instrumental Duet .....

......Misses Madge and Cline Vocal Solo ..... Mr. A. Fulton The subject of the debate was, "Resolved, that local option, as applied to the liquor question, is in the best interests of the people in Ontario," the affirmative being taken by Messrs. W. F. Malcolm and S. E. Percival, of the first year, and the negative by Messrs. W. J. Bell and R. A. Finn, of the third year. The debate was characterized by brilliant speaking and excellent argumentation. The judges, after lengthy consideration, decided in favor of the third year. Professor R. Harcourt acted as critic.

#### The Freshman's Nightmare.

The syngenious character of the pulmonary circulation enables us to dissociate the ions between the hook and pin bones at a temperature of from 45 degrees to 50 degrees if "Heredity" and "Environment" have been put to roost without draft at an elevation of 20. x Ur2, till John Ridd "Rings Out Wild Bells" and Ichabod Crane does student labor at Mac Hall.

## Will Rural Democracy Dwindle

There is a Growing Feeling that All is not Well with Rural Ontario.

By J. KERR ABBOTT.

THE Rural Educational Conference recently held at the Ontario Agricultural College is one more indication of the existence of a growing feeling that all is not well with rural Ontario.

There is ground for that feeling. All is not well with rural Ontario. The

question as to what is lacking in the case required to put things right can be answered in one word - People. In the last 20 years. the Dominion Census Commissioner informs us, rural Ontario has lost 100,000 in popula-The official tion. showing would be still worse had it not been for the large increase in the population of the mining districts of Northern Ontario, a population which. although really urban, is classed as rural. There are many townships in

Ontario which hold fewer people than they held 50 years ago. There are many that have declined in population by 25 per cent. in the last 25 years. This falling off in number is not due to decreasing need for men to till the lands. Modern systems of

farming call for more hand labor, despite the development of labor-saving machinery, than was required when the forest was being cleared away. It is not surprising, then, that from the concession lines there arises a constant cry for help; it is not surprising that farmers and their wives

Editor's Note--A leading writer of Canada, under this pen name. tells his impressions of the rural situation, after a long acquaintanceship with rural conditions. and the week's visit to Guelph in August. He lives on an Ontario farm. He is intensely interested in seeing a strong rural life kept up. The drift to the cities and the call of the less man-making industries, to which so manu farmer's sons yield, is, to him, a tragedy. His views may meet with opposition. In fact, they may appear very pessimistic, but they are worth every reader's perusal

so burdened are with toil that practically no time is left for their social which pleasures are so necessary to lighten toil. It is not surprising that the church languishes alike from lack of financial support and from the enthusiasm of numbers and that the rural school rooms give daily illustrations of the meaning of the phrase, "a beggarly array of empty benches."

#### Why do the Young Folks Leave?

Why is it, when people are so need-

ed in the townships, that they are not there? Plenty of babies are born on the land. Why do they not remain there after they grow up?

These questions cannot be answered in a word or a sentence. Various causes, some minor and some major, assist in producing the effects noted.

One of the not altogether minor causes is found in the fact that boys and girls in the country are given a wholly incomplete, and therefore incorrect, view of city life. The boys read of the poor lad who went to the city and in time became head of a great corporation, a successful speculator in real estate, or possibly a Finance Minister. The girls read of the smart gowns worn by social leaders at the races or at receptions. They see expensive motors, filled with city folk, touring rural highways in summer. They, not unnaturally conclude all this is typical of city life. They can hardly be blamed, in the absence of real and true knowledge of many city lives from entertaining the belief that this apparent success and like pleasures await them as soon as they can join the throng moving cityward. These young people do not read or hear of the great mass in the city. that is hard set to keep above the bread and butter line. They are unaware of the large number always in danger of falling below that line. They do not see the steady possession of men, still far from old, moving towards the junk pile because of hair turning grey. They are wholly ignorant of that most to be pitied class of all-the class formerly social and business leaders, as a result of business reverses, or the death of the bread winner, are eking out a mean existence, their lives the more bitter because of memories of that which is past. Herein, in the absence of a complete mental picture of all the conditions in the case is found one of the causes why the country does not hold more of its own.

#### School, Church and Press to Blame.

Another cause, and a very potent

one, is found in the teaching of the rural school, in what is heard from pulpit and platform, and what is read in the current literature of the day. many of these great agencies of instruction, in dealing with human activities are constantly, consciously, creating the impression that the only life worth living, is that which is lived in the cities, that the only work which really counts is that which is done in the cities. The accomplishments of the captain of industry, the words and actions of the political leader, the gains of the real estate speculators are spread over columns of space, copiously illustrated by skilful artists. The fact that agriculture is, after all the basis of everything, that unless agriculture is assured at least, a reasonable measure of prosperity all else perishes, is forgotten. Consequently the work of those who are helping to advance agriculture by wise breeding, by careful seed selection, by intelligent cultivation. passes almost unnoticed. Since human nature is as it is, since we all like praise, since we are all cheered by notice and encouragement, is it to be wondered at that the drift of population is toward those centres of activity which are always in the limelight?

#### The Lure of House Conveniences.

A third cause of the movement of population to the city is found in the fact that even the meanest of city homes are supplied with conveniences which many of the best of country homes lack. The greatest of these conveniences is in the form of hot and cold water under pressure and all that goes therewith. This service means all the difference between comfort and lack of comfort, between comparative ease and irksome, because needless, toil and still no habitable country home need be without these things. The roof will collect the water necessary therefor, a windmill or gasoline pump will elevate the water to a tank that will supply the pressure. A hot water tank can be attached to a range in the kitchen in the country as easily as it can to a city range. The cost, including the necessary piping need be no greater than that incurred in the needless furnishings of a seldom used parlor.

#### Economic Reasons the Chief.

But the chief cause of the movement to the city is economic. Various agencies have conspired to give the city air artificial advantage over the country. We have a few great central banks with innumerable branches scattered all over the country. These branches are mere collecting agencies by means of which the savings of the country are poured into the great centres. Industries naturally develop where the capital on which they depend is located. Railways centralize their activities and means of employment at the same points. Governments spend at the same centres, in ornate buildings, and in the employment of an army of civil servants, the revenues collected in all quarters. All this tends to the upbuilding of the city. It all helps to furnish the opportunity of that modern counterpart of the lily-the one who neither toils nor spins and yet is arrayed in a splendor surpassing that of Solomon -The Land Speculator.

A still greater artificial advantage has been given to the city by the fiscal and railway policies which, without regard to changes of Government have been followed in Canada for a generation past. A tariff on imports running anywhere from 15 to 75 per cent, has made imported necessities used by the farmer unduly costly. It has enabled domestic manufacturers to charge for their products a price equal to fair value plus the amount of duty on corresponding goods imported from abroad. The natural effect of such a system has been at once to rob the farmer of a fair share of the results of his toil and to give to the manufacturer a profit he has not earned. Incidentally it has enabled a few men to amass great riches simply by bringing into combination a number of home manufacturers who might otherwise have competed with each other, and showing them how, by combination, to secure for themselves all the advantages the tariff offers. In the case of the steel industry we have added a direct bounty to tariff protection. We have paid to this one industry, in cash, out of the Federal treasury, Seventeen Millions of Dollars in as many years. Railway promoters we have endowed with land grants equal in area to a small European kingdom. We have given them in cash subsidies sufficient to form an annual income equal to that of a small European state. Most of all the burden involved in this policy has fallen upon the farmers. Labor, through its unions has increased its wages so as to largely offset its share of the burden. Professional classes, through the equivalent of labor unions, have followed a like course. The farmer. without union and faced by the worldwide competition, has been unable to shift the burden.

#### Will Foreigners People Our Farms?

If a drastic change is not speedily effected disaster is certain. The land will not be permanently deserted but the character of the occupants will be changed, just as the character of the land holders are already being changed in the Eastern States. The present educated population of Anglo-Saxons, trained in the methods of popular government will disappear. In their place will come a people from Southern and Central Europe who, for one generation at least, will accept conditions as they are because these at their worst are at least better than their people have been accustomed to in the land of their nativity. These people are not educated as ours are. they have not been trained for generations in the working of government by the people and for the people, they will bring with them the mental attitude of the peasant towards governing auhority. Democracy demands for its sustenance an educated people, a free people, a people who are free to do their own thinking and to act to the limit in accordance with their convictions; a people who know their rights and knowing, dare maintain.

#### Democracy Thrives in the Country.

The great cities of Canada do not contain such a foundation for democracy to-day. There are in these a few great corporations and armies of employees more or less under control of their corporations. The situation is aggravated by the presence of vast colonies of recently imported aliens who do not understand the English language and are still more ignorant regarding the proper working of our systems of government. The one hope for Ontario, the one hope for Canada, rests on the possibility of maintaining on the land the sort of population we have there now. If that disappears there will disappear with it the very corner stone of Democracy's foundation.

Let us then, reverse our attitude and reverse our policy. Let press, school, platform and pulpit unite in magnifying agriculture, let us present before the minds of the young the whole picture of city life—the slums as well as the palaces. Above all, let us unite in removing some of the artificial handicaps which have been placed upon agriculture. Give to the farmers, in full measure, all that is involved in the Rooseveltian phrase of "The Square Deal."

Given a fair chance, the farm can hold its own. With the law-made burdens that have been placed upon agriculture removed the country will hold the population, and the right kind of population, required for its development. The natural advantages are all on that side. There is a beauty in the golden field of ripening grain bordered by the green of the orchard which no city avenue can equal. There is a majesty in the setting of the sun behind the dark rim of cedars, that no city temple can approach. Deeper, sweeter, and fuller of real meaning is the melody of the night wind in the spruce tops than that of the cathedral organ under the hands of a master. In the uncontaminated air, found only where the vision is bounded by the distant horizon, do mind and body read their fullest development. For why? God made the country while the city is the handiwork of puny man.





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## THE O.A.C. REVIEW

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J. N. Allen, Experimental.

C. A. Good, Horticulture.

J. E. Bergy, Poultry

J. A. Neilson, Query.

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Florence Irwin, Macdonald.

N. R. Martin, Circulation Manager

H. S. Fry, Business Manager.

Various Viewpoints

#### By THE EDITOR.

There are at my disposal a few pages in which I intend not only to discuss current and other topics, such as may annoy, bore, or, perchance, amuse my readers, but also to invite discussion on such issues as may from time to time arise.

#### FRENCH VS. GERMAN.

And now that my purpose is duly introduced to you, what are your views on this French vs. German business? Should a choice between these two languages be allowed, or should only one of them be taught at the college, and, if so, which?

Many are in favor of their both being placed upon the curriculum, and either taken at option. In any case, it is far from likely that any budding B. S. A. will learn more than a smattering of either within the time at his disposal.

Granted a complete ignorance of both languages, then surely French is the easier tongue to acquire, besides being socially and internationally the more generally useful. Any man too hard-up to buy a translation—and nearly every German science book of world-wide value has its English translation—could spend his summer in the vicinity of Berlin. Ontario, as a hired man. This would possess the advantage of teaching him all varieties of German, from Austria-Hungarian to Choctaw.

I may be laboring under a delusion, but is there not a proverb, "Scratch a Russian and you will find a Frenchman?" I think I must be right, however, as I once sat on a Russian's hat in a Port Said billiard-room. It was an indiscreet thing to do; and mistaking me for a Levantini Jew or something else equally obnoxious and polyglot, he said "Sacre nom d' un pipe" and "tonnerre blen," quite peevishly, several times. It was rude of him, but it just shows how very useful a deep knowledge of the French language can be. I understood him

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perfectly. But if he had used naughty words in German that sounded like three spits and a runaway lawnmower, I should have thought him ill, offered him a drink and lost money.

#### Lights Under a Bushel.

There are men in this college who, shrinking from the ordeal of public speech through mental timidity and lack of self-confidence, can yet express themselves roundly and forcibly on paper. It is from such men as these that I wish to get contributions.

If you have a greivance, air it; an idea, voice it; a cartoon, draw it; a criticism, deliver it; a fine negative print it; a joke, perpetrate it; for it is just as much up to you to help this association to score a success as it is to get out on the side line and yell, "Rah!" to encourage the footer team.

Your manuscripts will be as confidentially treated by the editor as are your ailments by the doctor; and if they or the suggestions contained in them lack in general interest or are otherwise unsuitable—as many are sure to be—they will be returned without anybody being the wiser, or will be immediately destroyed.

Although The Review is chronically hard up, we shall, as a special favor and as a species of bonus to contributors, charge nothing for accepting or rejecting MSS.

Being new to this business, I may be in error, but it seems to me that a good article by a fellow-student or ex-student has considerably greater value on account of the personal factor than an article of equal merit abstracted from a back number of the "London Liar." Even an atrociously written article bristling with orthographic errors may contain a nucleus of good, a gem of an interesting idea, that a little dissection or a serious surgical operation may display to advantage.

Even gas may have its uses. Some elephants belong to a howitzer bri gade were crossing a flooded Indian river; they got drowned, but after a few days they started gassing and brought the guns up. Your 'gassing' might bring up a diamond. Try it.

If you can, give us a little fun and quiet humor, as a tango accompaniment to the drowning notes of themes serious, a getting away from "stodge" at all times on all subjects. If you must give us ham, at least put a dainty frill around the ham bone; it sets off the rest of the table, and thereby increases the digestive juices.

#### Freshman's Suffrage.

Turning to a consideration of the meeting held on Oct. 31 to vote on the formation of a new constitution for the Student Council, I find one point suitable for discussion in these columns, namely, the freshman's right to vote on general college questions.

I wish to lay stress on this, as it applies in the case of all general meetings of the student body. Much as they may differ from the views and opinions of Mr. Lindesay in matters affecting the Student Council, several are nevertheless in accord with him in thinking that freshmen should courteously refrain from voting on questions about which they are by dint of their inexeprience of conditions previously prevailing, undoubtedly incapable of forming a correct opinion. I do not imply that the measure in question was carried by a '17 vote; it was not, for it will have been carried just as easily as if no freshmen had been present; nor do I

cast any aspersions on the mental calibre of any first year man at this institution.

The freshman of to-day is the sophomore and senior of the future; but it is not unreasonable to ask him to await his turn in the procession of the "years" before casting his vote on vital college matters. There is a considerable, and not unlikely, danger that highly detrimental measures might at any time be carried, solely by the overwhelming majority held by the first year men. I should welcome opinions on this matter.

It was interesting from a psychological standpoint to note at this meeting the enthusiasm accorded by many students to points in Mr. Lindesay's speech; an enthusiasm only equalled by the acceptance by the same students of the diametrically opposite views of Mr. Hare.

Query—Do these men always vote on the side of the last speaker? If so, it is a strong argument against government by the masses, which in reality means government by that section of the press possessing the most capable circulation managers.

#### A Likely Experiment.

With its new constitution, the Student Council has emerged from the pupal care of its limitations, and no longer remains a mere inert mass, capable only of responding to external stimuli by a series of convulsive and ineffective plunges, but has issued into the glare of the sun, an imago capable of active and voluntary motion. Whether it will prove a noxious or innoxious species we have had as yet little opportunity for observation. We have incubated it with hope; and though it has suffered as a pupa mishandling and even kicks on many

occasions, we watch its first flight with optimism. If of favorable economic importance it will justify its existence and annually reproduce its species. If not there is always the killing bottle.

#### "The Scorners Delight in Their Scorning and Fools Hate Knowledge."

Our circulation manager has recently had a very discouraging experience as regards obtaining subscriptions from the students, especially from those in residence. Well, I believe in plain speaking sometimes, and I do not hesitate to say that the student who refuses to subscribe to The Review, unless he is in actuality so hard-up that he cannot, is absolutely destitute of true college spirit. You may call it a Y. M. C. A. bulletin if you wish to, as one annonymous correspondent was pleased to do lately, and thereby pay to the staff a compli ment which few of us deserve; or you can say there is nothing to read in it which you do not already get in lectures, whereby you show how little attention you pay to that necessary feature of the course; or you may be merely incapable of appreciating a good thing when you see it. Whether you reason, or pseudo-reason may be, you have no plausible excuse. You do not refuse to pay your athletic fees because the teams sometimes fail to win, or your Union Lit. fees because you are not elected to speak or the subjects of the debates do not please you. No, you pay those fees because otherwise you would feel yourself left out in the cold. No one, or very few, know whether you subscribe to The Review or not: therefore I do not hesitate to bet that you read your room mate's copy and get your entertainment from it "on the cheap."

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You should realize that The Review has done more for the student body than all the other societies combined; that The Review practically enabled the Book Club to come into being; that if there had been no Le Drew and no Review you probably would not have had a skating rink worthy of name; that rotten though you may deem it. The Review has set a standard for every agricultural college on the American continent; that its staff uncomplainingly give up their time and their chances of good class standing without any remuneration except the sneers of the wiseacres who read it sufficiently to adversely criticize it without paying for it, and the contumely of those who neither read it or pay for it.

You may believe this or not as you please, but outside of the college you hear little of our football men or our athletes, excellent though they may be, but you do hear quite a bit about The Review. It has been, and I hope it always will be, a credit and an advertisement to the college of its origin. Play the game and support it.

Remember, we are not seeking subscriptions to the "Saturday Evening Post," nor are we pestiferous blind beggars peddling bootlaces. We are only requesting your support for a college society which has advocated your interests in the past, and which is only too willing to help you in the future.

#### For Pity's Sake.

I would like to remark to the "powers that be" that the office facilities accorded to the staff of this journal are totally inadequate. We do our work in a state of absolute chaos. We do several thousand dollars worth of business in an overcrowded rabbit hutch. Some of the staff have never

met except in a crowd and do not know each other by sight. The managing editor can only use the solitary desk when Prof. Le Drew is engaged elsewhere, and the rest of the staff may use the floor when that also is unoccupied. There is no room for manuscripts, no room for cuts, no room to walk, no place to sit, no chance to think, and no use in attempting to attempt anything except swearing, and we cannot have even that relief for outraged feelings, lost manuscripts and trampled corns, owing to the presence of the lady stenographers.

It is not a magazine office at all; it is a cross between a book stall and the Tower of Babel. The only wonder is that such a miserable hybid is fertile.

I would respectfully suggest that when the new dining hall comes into use we be allowed a reasonable space in the old dining hall; that said space be enclosed by suitable partitions and designated "The Editor's Room," and that it be equipped with desks, lockers, pigeon holes and everything else requisite for the proper conduct of a college journal.

#### A Goddess Bereft of Her Altar.

And while they are at it, it would not take very long for the carpenters to fix up a cosy smoking room. It does not seem fair that students should be fined for smoking in residence when there is nowhere else to smoke. Whatever may be the views of some on the question, smoking is not only a perfectly legitimate indulgence but also to some a prime necessity. Civilized man has increased his needs to include smoking, and ultra-civilized men, such as myself, have increased their needs to requiring a smoke as long as they are awake. We already suffer a martydom in lecture time and at church: at least let us commit suicide by slow poisoning under shelter. where we will not shame the institution. The Student Council have been approached informally on this matter. but evidently either failed to take the requisite steps or were not granted their request. Could we not use the staudents' sitting room, at least during certain hours, if a separate room cannot be provided?

#### Matters Worth Considering.

We often hear that trusts are beneficient, in that through their excellence of organization, we obtain goods cheaper, better and fresher. Pete McArthur has evidently different views on the subject, and his remarks in the "Toronto Globe" on free competition show another side of the question seldom so clearly held up to us.

This article has other points of unusual interest, not only to agricultural students at large, but also to every farmer father in the Dominion. What he writes is so much to the point and so evidently sincere that I am constrained to print his article practically "in toto."

Our agricultural colleges were instituted with the laudable intention of turning out a small percentage of brilliant professional men who would advance the science of agriculture by their preaching, and a large percentage of scientific farmers who would pursue it in their practice. Are these colleges failing or succeeding in the purpose for which they were instituted? Some of our readers may have views on the subject, and it is a question which I would earnestly invite you to discuss in these columns. The following is the article to which I refer:

#### Prof. Dean and the Students. (By Peter McArthur.)

In a serious and thoughtful article in the Christmas number of the O. A. C. Review Prof. H. H. Dean makes several statements that are about the most disquieting I have seen in print for many a day. Prof. Dean's article is addressed to the students of the college and is in answer to the ques. tion, "What Shall We Do?" In reviewing the various opportunities before the young man leaving college he says regarding commercial life:

"It is doubtful if an honest man can successfully compete under present conditions of trade."

Before proceeding any further please get hold of the fact that this astounding statement is made by a responsible college professor to young men who are preparing themselves for life in Canada. If it is true, and I have no reason to doubt that Prof. Dean arrived at his conclusion after a careful consideration of existing conditions, then we are confronted by a situation that is nothing short of appalling. What is the good of all our education, teaching and preaching if it is no longer possible for a young man to make his living honestly in a commercial pursuit? I have been told by merchants doing business with China that a Chinaman's word is as good as his bond, and yet we send missionaries to China. If Professor Dean is right there is a great opportunity for missionaries here at home.

. . . There is one one word in Prof. Dean's statements to which I am inclined to take exception and that is the word "compete." Where we have true competition honesty has a chance, for the business man whose methods are entirely honest, provided

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he has ordinary business acumen cannot be driven out of business. The whole history of business tends to prove that the man whose goods are of the quality claimed and sold at a fair profit is bound to thrive. I have even heard it contended that honesty is not a virtue at all, but a sound business principle. Cases might be cited of men almost devoid of moral sense who still succeeded in business because they got a firm grip of the idea that honesty is the best policy. To such men honesty is simply a policy and not a virtue. They know that under proper business conditions they cannot successfully compete with their rivals unless they are strictly honest. If honesty has departed from Canadian business life it is because competition no longer makes itself felt. It has been organized out of existence. When any industry becomes so well organized that there is no fear of competition honesty becomes a negligible quantity. People cannot go elsewhere for what they require. They must take what they can get and pay what they are asked, and if they are cheated they have no redress. If the condition mentioned by Prof Dean really exist. and I am afraid it does, the remedy is not to be found in teaching higher moral standards, but in giving free play to old-fashioned competition.

Yesterday I got a letter from a correspondent near Strathroy, who raises a point that is in line with what we are discussing:

"I was glad to see that article about the poor material that manufacturers put into much of the goods that they send out. Last spring my son was driving four horses on a 16-foot disc when the tongue broke off about a

foot from the butt. The disc had been in use for only two years and had been kept under shelter when not in use. Of course the tongue was cross-grained and beautifully painted over to hide its inefficiency. It is a crime for a firm to put such a tongue on any implement. By a miracle the boy escaped with his life. Two of the horses were cut, one so badly that it died a week later. I think the farmers had better club together and boycott firms who manufacture implements made from shoddy material."

The punishment suggested by my correspondent would not necessary under conditions of free competition.

A firm that persisted in sending out such implements would soon find itself driven out of business; but there is another point that strikes me in this case. It seems to me that if this farmer were in position to have as good a lawyer as is probably retained by the manufacturer of that disc he could recover the price of his horse.

Another paragraph is disquieting in an entirely different way. Its disillusionment is for the father of sons who are sent to the Agricultural College to learn farming. He writes:

"What about the farm? It is unfortunate that the Ontario farm does not offer sufficient inducement for a larger number of graduates in agriculture. To farm as college graduates would wish to farm requires more capital than most graduates have at their command. There is also the doubt whether the return will be sufficient to pay interest on the capital invested in case this were tried, running expenses and a personal salary equal to that which can be obtained in professional or mercantile lines. To return to the home farm means, as a rule, loss of caste. In most farming districts a young man who spends four years at college and does not "land a good sit" soon after is likely to be considered more or less a failure. If a graduate returns to the farm he would be wise to go into a locality where he is not known, into an entirely new section of the country. where he would not be handicapped by prejudices which are about sure to be harbored in his own neighborhood. The farm ought to offer the greatest of all inducements to a graduate in agriculture, but we are afraid that conditions will need to change before such is the case. We would not discourage graduates from farming, but we face a condition, not a theory."

This makes it appear that our Agricultural College is in reality another avenue of escape from the farm. Then there is need of a readjustment. The college should either teach a kind of farming that can be put into practice under present conditions or the conditions should be changed. About the only logical avenue left for a graduate by Prof. Dean's article is teaching agriculture: but what on earth good will that do if it only means increasing the number of young men who cannot farm under present conditions? That Prof. Dean is absolutely correct in his conclusion I most potently believe, and I am glad to have his authoritative utterance on the subject to justify my belief. It is rapidly becoming impossible for a

young man, whether college trained or not to undertake farming in Ontario without an amount of capital that could be more profitably invested in some other line of business not governed by the awful honesty of Nature, which insists that what a man sows that shall he reap. And speaking about sowing, such article as Prof. Dean's convince me that for some time past we have been sowing the wind and are now about to reap an overproduction of whirlwind.

#### An Unappreciated Blessing.

Who said "Knocker"? Well, a knocker if he be sincere and not merely a seeker after notoriety is, I maintain, one of the most useful participants in any meeting. If it were not for the sincere knocker there would be many a measure put through to an accompanied of acquiescent "baas" from the flock that would be anything but salutary. A knocker at heart has the courage of his convictions. He may be mistaken in the main, but he does show up the weak spots of the majority's arguments. This knocking often leads to judicious amendments of the original motion. His interference in any case gives time for thought and checks "railroading." The knocker is an excellent institution. You need not agree with him, but you should not despise him. He is often pluckier than you, and sometimes he happens to be right.



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The average man and woman believe that bread made from wheat is the "staff of life." There are some that do not agree with this. A story is told at the expense of Dr. James Mills, who was for a long time the honored president of the Ontario Agricultural College and who is now on the Railway Commission. In his early years as president of the college the doctor gave lectures in English. and good lectures they were. About this time and even since then the boys who boarded in the college residence were fed a liberal supply of prunes in the various arts of cooking, but chiefly as "stewed prunes." In the English lecture one day the doctor was talking of the "staff of life," when he suddenly picked out one innocent looking young fellow and asked him, "My boy, what is the staff of life?" The land answered in a trembling manner, "Prunes."

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Freshman (reading)—"And grasps the shirts of happy chance."

Prof. Reynolds—"Skirts, my dear boy, not shirts. Skirts are poetical; shirts are not."

Whatever can have caused Leslie Goodman to adopt such very strong views on the "Tango"?







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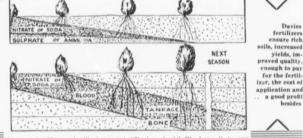
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in such a way that there is a supply present in such a way that there is a supply present in an available form throughout the entire life of the plant. The Nitrate of Soda acts very guckky, and starts the plant off with a vigorous growth. Blood follows next—the Tankage is slightly slower than the Blood, carrying the erop safely through the eritical period of late summer, while the Bone brings it to maturity with a full yield.

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MAN tried to sell me a horse once. He said the was a fine horse and had nothing the mat-ter with I. I wanted a fine horse, but, I didn't horses much. And I didn't how the man very well

either. So I told him I wanted to

Inite targe can be wanted by latitude by latitude by any detail inachine. I know it will wash a tub full of very dirty elothes in Six Minutes. I know hout wearing the clothes. Our "1500 Ghid can run it almost as well as a strong end of the strong end of the work so casy that omain, and it don't wear the clothes due the edges, nor break buttons, the will as a strong end of the strong end of the fabres of the clothes files a force pump might. So, said I to myself, I will do with may togo Gravity'' Washer what I wanted the man togo shift he files. Only low I wait for good the offer every line.

with the horse. Only I wont wait for people to ask me. 110 offer first, and Til make good the offer every time. Let me send you a "1900 Cravity" Washer on a month's free trial. All you don't want the ma-ing own reprove the send in month. Til take it back and pay the freight too. Surely that is fair enough, isn't it. Doesn't it prove that the you of orgood Gravity" Washer must be all that it of yield? And you can pells whole cost in a its months freight that it of what it saves for an and tear on the clothes alone. And then it will save 50 to 75 certs a week over that washer main's wages. If you keep the for it out of what it saves you. The difference is the difference of the saves of you washer month's trial. If let yes you do cents a week, send merfully, and Til whit for my Lacey until the machine fuse i cerns the balance. Door ma a line to-day, and let me send you washes clothes in the difference. Door ma a line to-day, and let me send you washes clothes in the the saves that a bok about the "1000 Gravity" Washer that Address me personally---

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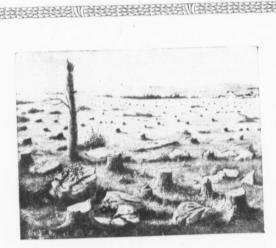
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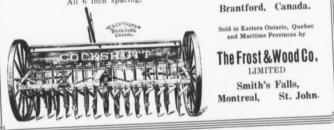
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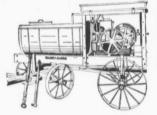


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Agitator is positive in its action and is operated from the top—No holes through side of Tank to leak and cause trouble.

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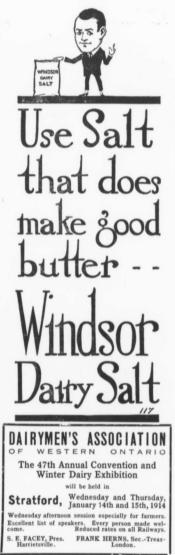
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THAT'S just what a Spramotor does, of bumper crosp by killing weeds, scale rust, lice, beetles, rot, parasites of all kinds. It throws paint or linewash onto buildings so quickly that the line cost is almost nothbure based with disinfectant it protects how based with disinfectant it protects files. Mich cost from lice and tormenting files. Mich cost from lice the conforting spray from a SPRAMOTOR yield an increased supply daily.

### A SPRAMOTOR WILL

reduce the percentage of loss in fruit over 80 per cent, as proven by Government acre. The SPRAMOTOR stands unapproachable in the whole world as an efficiency of the stands of the Canadian Government will use no other. Over a hundred Gold Medals and First apraying machine. Our own in the face of strong competition. Twenty rigidly protected patented features on SPRAM TORS that no other makers can adopt. Write for illustrated treatise on Crop Diseases, FREE FOR THE ASKING.





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

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### Students' Wants

Gymnasium Shoes, Football Boots, Slippers and Rubbers.

The most complete and largest stock of Fine Fall and Winter Footwear in the city.

### Neill. The Shoe Man

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

(On the Corner) Over Guelph and Ontario Investment and Savings Society Bank PHONE 16

#### THE PEOPLE'S CIGAR STORE

#### Macdonald Block.

Newspapers, Magazines and Picture Post Cards. Full stock of Pipes and Tobaccos

HERB. BARBER & SON.

#### CUT FLOWERS

Choice Cut Flowers always on hand. Roses, Carnations, Valley, Violets and all Flowers in season.

#### GILCHRIST'S

Phone 436.

St. Georges Square.

#### R. H. McPHERSON Barber

Get your hair cut at 145 Wyndham street, An extra barber employed at the highest wages for your sake.

> Students' Special In \$1.50 Per Dozen Students Only THE BURGESS STUDIO

You could enjoy yourself for a nice meal and a cup of real American Coffee. Call at the

#### DOMINION CAFE

104 WYNDHAM STREET.

Phone No. 688.

#### HOCKEY BOOTS

We sell the McPherson's Famous Lightning Hitch in black, tan and white leathers. Buy your Skates and Boots here and have skates attached free.

The Big Shoe Store.

J. D. MCARTHUR Bring in your repairing

#### D. M. FOSTER, L.D.S., D.D.S., Dentist.

Cor. Wyndham and MacDonnell Streets.

Telephone 14. Over Dominion Bank.

ERNEST A. HALES, 68 St. George's Square

> Sells the Best Meats and Poultry

Phone 191 **Open** all Day

#### JOHN IRVING "MY TAILOR"

Suits and Overcoats made to order from \$16.50, \$18.50 and up.

Phone 739L 49 Cork St. Guelph

#### THE GUELPH OIL CLOTHING **COMPANY**, Limited

Manufacturers Oiled Clothing, Tarpaulins, Tents, Awnings, Stack and Binder Covers.

#### James н. Smith

Upper Wyndham, Next the Apollo Molasses Taffy, Walnut Cream, and Maple Cream-Best in the City-Fresh every day. LUNCHES SERVED.

#### MIDNIGHT SUPPERS

Bacon, Oysters, Fancy Biscuits, Olives, Pickles, Chocolates, Etc.

#### J. A. McCrea & Son

# BOYS!!

Get your Laundry done FREE for 1 year by sending your work to

## Guelph Steam LAUNDRY

#### ....

Ask for Coupons.

000

We have the only machine in the city giving the most up-todate finish to collars. We also sew on buttons on your shirts.

## "I'm the Guy"

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"And who are you, Little Swell?"

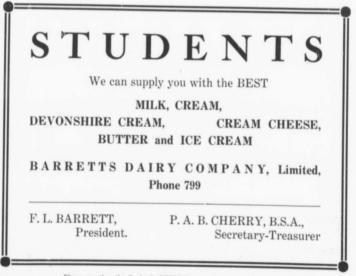
"I'm the Guy that put the WIN into WINTER, I'm Lyons Clothes"

> CLOTHES don't make the man, but they make a whole lot of differance in the way he feels.

> Lyons Clothes have the snap and style that puts the WIN into the man who wears them.

### Lyons Tailoring Company 47 WYNDHAM STREET

Stores In Ten Cities



"Costly thy raiment as thy purse can buy," and see to it that it is bought at

#### Thornton & Douglas' The Students' Outfitters.

\$10.00 to \$30.00 T. & D. Suits, T. & D. Over-Coats \$8.50 to \$35.00

Special attention to Made-to-Measure orders. Furnishings always crisp and complete.

THORNTON & DOUGLAS. Lower Wyndham St.

J. McLEOD. Local Manager

#### WOODEN H. H.

O. A. C. Barber Shop. Three Barbers. No Waiting.

St. George's Sq. Cars Stop at Door.

Finest Pipes, Cigarettes and Tobacco. Students are invited to make my store their meeting place when down town.

JIMMY COCKMAN, Tobacconist, Successor to Sheridan & O'Connor, 45 Wyndham Street.

#### KING EDWARD BARBER SHOP

Newly Remodelled

Strictly Sanitary and Up-to-date.

JAS. SMITH. New Proprietor.

#### THE OLD TOBACCO SHOP

Quebec St., Opposite Bank of Montreal.

Imported Cigarettes, Abdulla, De Reszke, Osborne, Vafiadis, Imported Cigars, Henry Clay, Bock, Up-mann, Otero, Partizar, Romeo Julieta always in stock, B, B, Dipipes a specialty.

E. H. JOHNS, PROPRIETOR, Phone 312.

**Regal Shoes** Sorosis Shoes For Women. For Men.

W. J. THURSTON. Sole Agent THE NEW SHOE STORE, 39 Wyndham Street

LAUNDRY O. K. WONG'S The Students' Laundry, Opposite Winter Fair Building. College calls made on Monday, Wednesday

and Friday.

BEST WORK IN CITY

### Look! Look!!

Suits Pressed	-		-	-	50c
Suits Cleaned a	ind	Pressed	-		75c
Pants Pressed	-		-		15c
Velvet Collars				75c to	\$1.25
Dry Cleaning					\$1.25

MONTHLY CONTRACTS

Work Done by Practical Tailors.

#### C. E. HEWER,

49 QUEBEC ST. PHONE 808

We are agents for the House of Hobberlin.

## The Yellow Front MEN'S CLOTHING

We make a specialty of young men's clothing, furnishings and hats at the right price.

THE YELLOW FRONT.

GARNET K. CUMMING

#### SNOWDRIFT, PEOPLES' MAPLE LEAF

Three Well-known Brands of Flour Ask for them and be sure you get them.

....The... James Goldie Co. LIMITED

> GUELPH. ONTARIO. **Telephone** 99

> > 44 Cork St.

## Jas. K. Readwin

Pants	Pressed		-	-	15c	
Pants	Cleaned	and	Press	ed	- 25c	
Suits	Pressed		-	-	50c	
Suits	Cleaned	and	Press	ed	- 75c	
Suits	Dry-Clea	aned	-		\$1.25	
Velve	t Collars	- 1	75	c to	\$1.50	

Monthly contract, special rate. Goods called for and delivered.

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

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Phone 719

## Fine Job Printing

We execute the finest grades of printing, plain or in colors, promptly. Put us to the test.

### **Kelso Printing Company**

St. George's Square.

Phone 218

#### **Opp.** Post Office

HEADQUARTERS FOR

## HARDWARE

AND SPORTING GOODS AT LOWEST PRICES

G. A. RICHARDSON,

Upper Wyndham St.,

Guelph

## PRINGLE THE JEWELER

O. A. C. and Macdonald Institute College Pins, Medals and Fobs. Magnifying Glasses, all qualities Fountain Pens—Rubber Stamps.

#### "Eclipsed by None."

### Walker's Electric Boiler Compound

It removes the scale or incrustation from boiler without injury to the irons, packings or connections, and prevents foaming.

and prevents ionming. The only reliable boiler compound on the market today. We also handle cylinder, engine and machine Specialty departments, Crystal Separator Oil, Waxine Floor Oil. Correspondence invited.

The Electric Boiler Compound Co., Limited Guelph - Ontario

### BROADFOOT'S Red Cross Pharmacy

#### DRUGS AND SUNDRIES

Fountain Pens, Toilet Articles Nyal's Family Remedies Paterson's Chocolates

ST. GEORGE'S SQ., COR. QUEBEC Phone 381

### R. S. CULL & Co.

#### THE LEADING

### Clothiers and Furnishers

35 Wyndham Street

GUELPH - - ONTARIO

#### Guelph & Ontario Investment & Savings Society (Incorporated A.D., 1876)

Authorized Capita	l,		\$1,000,000
Subscribed Capital,		-	900,000
Paid-up Capital,		-	524,000
	-	-	436,000
Total Assets,			\$3,156,265,08

Debentures Issued in sums of \$100, and upwards, for five years, at five per cent. per annum, payable halfyearly; and for one year at four per cent.

Deposits of \$1.00 and upwards received and interest paid or compounded half-yearly at highest current rate.

By Special Order-in-Council (Ontario Government), Executors, Trustees, etc., are authorized to invest Trust Funds in the Society's Debentures, and to deposit Trust Funds in the Society's Savings Department.

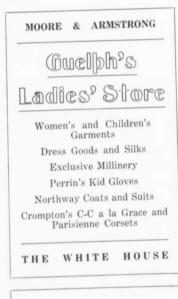
Office:-Society's Building, Corner Wyndham and Cork Streets, Guelph, Ontario, Canada.

> J. E. McELDERRY, Managing Director.

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

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### Our New Line Of

## Society Brand Clothes

For Fall has now arrived and is is quite ready for inspection.

They are the Perfection of Ready-to-Wear Clothes — Don't fail to see them before buying your next suit.

Our new general line of wearing apparel for gentlemen has also come; Shirts, Ties, Socks, etc., all in latest styles.

Visit This Quality Store. D. E. MACDONALD & BROS., Guelph.



### Correct Clothes For Men

Ready-to-Wear and Special Order.

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

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

Our Advertisement, Our Aim and Our Accomplishment-A Square Dea'.

## O. A. C. STUDENTS

Will be well served with thoroughly reliable merchandise at

## R. E. NELSON'S STORE

Everything in Men's Wear, Hats, and Caps, Underwear, Ties, Shirts, Rain Coats, Sweater Coats—Everything the Newest.

We specialize in Fine Ordered Clothing. Large selection of Suitings. Trouserings and Over-Coatings---Made to Measure in the very latest down-to-date styles. All goods marked in plain figures---and one price only.

#### R. E. NELSON 93 Wyndham St.

N.B.-Agent for the Semi-Ready, Made-to-Measure Clothing.

FLOWERS

We have the largest and best equipped plant in Canada for growing flowers under glass, We fill orders for cut flowers anywhere from Montreal to Winnipeg. Give us a trial for your next banquet.

Prompt Service

Moderate Prices.

### Miller & Sons FLORISTS

Lauder Avenue

Toronto

Prof. R. Graham (to class)—"Have you a conscience?"

Class (doubtfully)-"Yes."

Prof. R. Graham—"Well then, if you do anything wrong how do you know it?"

Class (unanimously)—"Fined one dollar."

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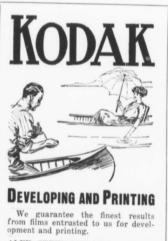
# LOOK!

Is there something in this list you would like to have?

ROGUEFORD CHEESE CREAM CHEESE CLUB HOUSE OLIVES BOVRIL EXTRACT OXO CUBES OYSTERS BISCUITS FRUITS

## Benson Bros.

25 Wyndham Street



ALEX. STEWART'S DRUG STORE, "In Front of Post Office."



Leather Fobs Twenty-five Cents Each

### SAVAGE & CO. JEWELLERS

#### LOCALS

Mr. Galbraith-"In analyzing a compound the result you get is always the correct one."

Prof. Edwards-"Where would you inject the serum of symptomatic anthrax in a steer, Mr. Townsley?"

Townsley (hopefully)-"On the Pacific Coast, sir."

GOODYEAR SHOE REPAIR CO.,

50 Cork St. E., Guelph.

PERCY T. KING Prop. **Telephone** 957

#### LEE LEE & CO.

Best hand laundry in Guelph. Goods called for on Monday and Wednesday and delivered Wednesday and Friday.

#### ASTIGMATISM, STRABISM, DIPLOBIA.

Uncommon words-maybe, but very common causes of

#### HEADACHE

We have glasses that remove these causes and give

#### IMMEDIATE RELIEF

If you have any trouble with eyes or glasses consult

#### A. D. SAVAGE,

Optometrist and Mfg Optician, "Right at the Postoffice." Phone 627K

# By the latest improved machinery in Am- FLOWERS

We carry the best selection of Cut Flowers in the city. When you want something choice call on us or phone 866. Prompt delivery and careful attention to all orders.

#### Florist McPHEE,

#### Wellington Block.



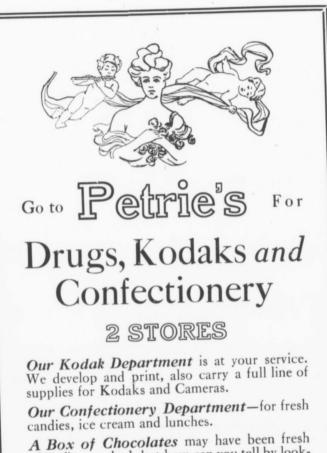
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....The... Royal Bank of Canada With which is amalgamated THE TRADERS BANK OF CANADA Authorized Capital \$25,000,000,00 Paid-up Capital -11.560.000.00 **Reserve Funds** 13,000,000,00 Total Assets 180,000,000.00 Branches throughout all the Canadian 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 The Dominion Bank** GUELPH CAPITAL PAID UP \$5,400,000.00 **RESERVE FUND** -7,100,000.00 A General Banking Business Transacted Drafts bought and sold on all parts of the world Savings Bank Department Special attention paid to Savings Accounts. Interest allowed on deposits of \$1.00 and upwards. Every convenience will be afforded students for the transacting of their banking business.

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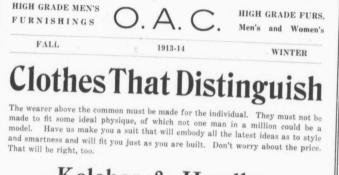
A Box of Chocolates may have been fresh when first packed, but how can you tell by looking at a sealed box? Petrie's chocolates are made in Guelph—fresh every day—shown to you in an open box and are sold only at Petrie's two stores. Cor. Wyndham and McDonald Sts.

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. 1914 1914 Greetings STUDENTS SHOULD BEGIN THE NEW YEAR BY TRYING SOME OF OUR DELICIOUS BON BONS. put up in all sorts of fancy packages - quality unsurpassed WE CATER TO THE BEST CLASS OF TRADE Hot Drinks Lunches Cold Drinks Everything for Refreshment The Kandy Kitchen Please mention the O. A. C. REVIEW when answering advertisements.

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THE O. A. C. REVIEW



## Keleher & Hendley

Fine English Neckwear.

Model Merchant Tailors

Hawes Hats—The Latest Style. Ladies' Golf Sweater Coats.

De Jaegers and Other Makes



Is equipped to produce the best in **Groups** or **Individual Portraits.** 

0%0

A Students' Special in Photos at \$1.50 a Dozen.

The Kennedy Studio 23 WYNDHAM ST., GUELPH Phone 498



# Shaving Lotion

Delightful to use. Allays all irritation caused by shaving. Also a full line of needs for gentlemen who shave — Razors, Strops, Brushes, Mugs, Soap, Etc.

### QUALITY IS ECONOMY

John D. McKee, Phm.B.

The Rexall Store

18 WYNDHAM ST., GUELPH Phone 66.

# Young Men Stay in Canada

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.

Tell your friends to apply for further information To

W. D. SCOTT, Superintendent of Immigration, Ottawa. Or to

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



### Their Great Simplicity

THE DE LAVAL SEPARATOR EXCELS ALL OTHERS not only in thoroughness of separation, sanitary cleanliness, ease of running and durability, but as well in its great simplicity.

THERE IS NOTHING ABOUT THE operation. cleaning, adjustment or repair of a modern De Laval Cream Separator which requires expert knowledge or special tools.

> NOR ARE THERE ANY PARTS Which require frequent adjustment in order to maintain good running or to conform to varying conditions in the every-day use of a cream separator.

THERE IS NOTHING about the machine that cannot be taken apart, removed or replaced by any one who can use a wrench or screw driver. In

Complete gear-Laval Separator as it would appear if removed intact from the frame of the machine. Note the remarkable the machine. simplicity of construction.

fact, the only tool which is needed in the use or operation of a De Laval Cream Separator is the combination wrench and screw driver illustrated

below, which is furnished free with every machine. Visit the local De Laval agent and see for yourself its simplicity of construction.

AVAL

Combination Wrench, furnished with each De Laval machine, which is the only tool required in setting up, taking down or De Laval, the simplest cream separator ever built.

De Laval Dairy Supply Co. Winnipeg Vancouver Montreal Peterboro LIMITED