



Volume XXVII.

Number 4




O.A.C REVIEW

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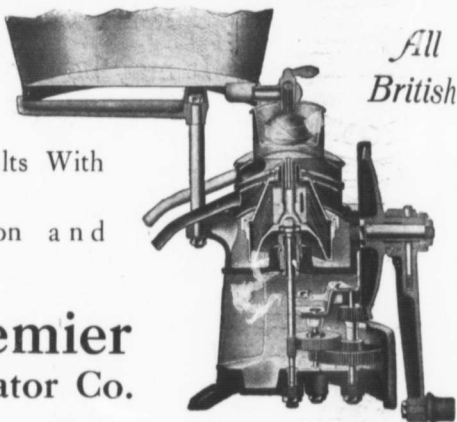
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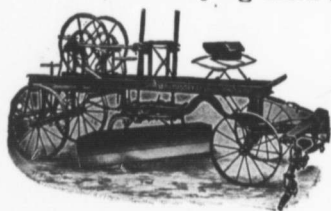
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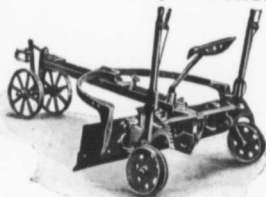
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HON. J. S. DUFF,
Minister of Agriculture, Toronto, Ont.

H. A. MACDONALD,
Director of Colonization, Toronto, Ont.



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

Annual subscriptions—Students, \$1.00; ex-students, in Canada, 50c; others, \$1.00; single copies, 15c; Advertising rates on application.

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THE O. A. C. REVIEW

THE DIGNITY OF A CALLING IS ITS UTILITY

VOL. XXVII.

JANUARY, 1915.

NO. 4



PRESIDENT G. C. CREELMAN

WHO LEFT IN JULY AND RETURNED FOR CHRISTMAS, VISITING NEW ZEALAND, AUSTRALIA, THE PHILLIPINES, CHINA AND JAPAN. WE HOPE TO GIVE OUR READERS A DETAILED ACCOUNT OF HIS TRIP IN SUBSEQUENT NUMBERS.

Past and Present

The Y. M. C. A. at the O. A. C. 1888-1915

IN THE late fall or early winter of '88-'89, Professor C. A. Zavitz on a business trip to Toronto visited Toronto University and arranged for a visit of two University men to this College. The visit was paid on Saturday, February 2nd, 1889. As a result of this visit, a second visit was paid in March, when on Saturday evening, March 9, 1889, a meeting was held in Lecture Room, No. 1, which was located where the President's and Bursar's offices now stand. At this meeting, the Young Men's Christian Association of the Ontario Agricultural College was organized. The reading of the first Association minute book still in use affords some very interesting information.

On the first Executive Committee were E. A. Rennie, of Hamilton, President; C. A. Zavitz, '88, Vice-President; H. L. Hutt, Secretary, while J. P. Thomson, now Veterinary Surgeon at Billings, Montana, Nelson Monteith, Ex.-Minister of Agriculture, C. F.

Whiteley, of the Dominion Cow Testing Association, Ottawa, and L. B. Linfield, now Director of the Experiment Station, Bozeman, Montana, were on the Committee. Other well known names appearing on the early minutes of the Association are R. Harcourt, H. H. Dean, J. B. Reynolds, W. R.

Graham, G. A. Putnam, Geo. Harcourt, Deputy Minister of Agriculture, Alberta, T. G. Raynor, Seed Department, Ottawa, H. A. Morgan, Director of Experiment Station, Knoxville, Tennessee, and others.

Several interesting and amusing things appear in the minutes. For instance, the first meetings were held in the "non-smokers' Room," which is now the official Reception

room at the main entrance. The Association was then supported by the weekly envelope system. It is also recorded that after due deliberation, the Budget Committee for 1889-90 brought in their estimates, totalling \$9.00, whereupon a Committee was duly appointed to collect the necessary cash. Among



A. MACLAREN, B.S.A., '09.
Student Secretary Y. M. C. A., O. A. C.

other interesting things recorded are the following: Ex.-President Mills lead the first Association Bible Class. Hon. Charles Drury, Ontario's first Minister of Agriculture, was one of the first speakers to address the Association. Dr. John R. Mott spoke to the Association in November, 1890, about the beginning of his career as a world famous missionary student leader, the first Y.M.C.A. room was presented by President Mills in 1890 and was situated where it is now located, the first hand book was published in 1891-2 and paid for by advertisements at a sale price of ten cents each—the first delegate appointed by the Association to go to Northfield Student Conference, was Professor J. B. Reynolds, in 1894.

These few brief extracts reveal the conditions under which the Association was first launched at the College. They also show that this College Association was among the first student Associations formed in Canada. It has had steady growth and this year has attempted the most enterprising move in its history, viz: the engagement of a full time Student Secretary, in the person of A. Maclaren, B.S.A., a '09 graduate in Dairying.

This new move was considered necessary for two reasons; first, to properly care for the extensive executive work connected with such a vigorous and growing Association and second, that the College Association thro' its Secretary, during the summer months, might carry the Association movement to the country boys throughout the Province of Ontario. The Secretary's time, during the summer, will be spent in promoting the social, mental, physical and spiritual welfare of rural boys throughout Ontario.

The work of the Young Men's Christian Association, wherever met with in North America, deals with the deve-

lopment to the fullest extent of all sides of Christian manhood, physical, mental, social and spiritual. They have adopted as their emblem the triangle over a circle, symbolizing the development of body, mind and spirit into the all round manhood. Usually it promotes athletics, physical training, educational classes and clubs, debating, Bible classes, etc. In an institution such as this College, the physical and mental sides of a man's nature are fairly well looked after. The function of the Association in this matter is to see that every student makes the most of his opportunities for self-development and expression along those lines thro the Literary Society, lectures and College athletic association. A beginning has been made in this direction thro institution of coaching classes and personal visitation. Its function is also to see that the proper clean manly expression is given to these phases of life and as a consequence, they stand for clean speech, clean sports and clean living. Any considerable body of young men gathered together as the students are at College needs to have the right kind of leadership, or else their inborn impulses will find the wrong outlet. It is the duty of the Association to furnish this kind of leadership. The success of the Association can only be judged according to the measure of improvement in the moral and social tone of the College. It is here to uncover and expose to right influences any evil tendencies which may appear in the student body and to foster and help all good tendencies until they become the habitual expression of the student body. It believes in all the organizations within the student body but only as they contribute to the upbuilding of true Christian manhood and is prepared to do all in its power to promote their

welfare and the extension of their influence.

It has however, been given the special responsibility for a specific side or phase of the student's life, viz: his relationship to God and his duty towards his fellow man. On entering College, the student usually comes with a simple faith and belief in things pertaining to the deeper life which have never been questioned or reasoned out for himself. He immediately plunges into the study of natural science and does not go very far, before his beliefs are undermined. Now there is only one thing he in justice can do and that is to go to the sources of knowledge regarding the things that pertain to God and his service of his fellow man and thro careful study on his own behalf formulate for himself a basis of faith and belief. The man who simply accepts his belief from the hands of another has not a faith which will stand adversity, he who throws overboard his old faith and refuses to investigate the matter at its sources on his own account adopts an unscientific illogical stand and only he who frankly and with an open mind investigates and weighs the claims of Jesus Christ on his life for himself can fairly claim a right to be heard.

It is to give this last class of men an opportunity to study Bible teachings and Christian history that the Association conducts its Bible study groups and holds its public meetings from time to time. The Association desires to place this study on the same plane as any curriculum subject and secure the same amount of study for it. No man can claim the right to speak authoritatively unless he has given the matter careful investigation. The Association this year has enrolled 200 out of 240 students in the residence, in Bible study. It has also co-operated with

down town classes in reaching out of residence students. Various speakers from time to time have presented the ways in which Christianity is expressing itself and demonstrating its power in different walks of life and other countries of the world.

Christianity means nothing if it cannot be applied to actual conditions of life in the country and thru its regenerative power bring greater satisfaction into country life and rectify adverse conditions as they exist today. That students may see how this can be done groups are organized to study "Rural Life in Canada." In these groups, the economic, social, labor, recreative, religious and other problems of country life are studied and various possible solutions presented.

Two outstanding and pressing needs in rural life today are undoubtedly leadership and the spirit of unselfish service and co-operation; no one will deny that. With the purpose of discovering and developing the latent powers of initiative and leadership among the students a Service Bureau has been established, thru which fifteen men have been put to work teaching English to foreigners, nine men have tutored groups of students in different curriculum subjects, fourteen men have led Bible classes, seventeen men have been presidents of groups, seventeen men have been secretaries, five men investigated and collected facts regarding the boarding-house situation. These few methods of leadership development only begin to show the possibilities of putting numerous men to work to develop their own latent powers.

The spirit of co-operation is one of the roots of rural progress and success, and the plans of the Association include the visitation and organization of debating clubs in rural sections and

the promotion of the play and recreation life of the country communities of Ontario. We believe that the most fruitful method of producing the co-operative spirit is thru the organization of team games. Many other features of life in the country will be promoted, including boys' clubs, boys' camps, Sunday School groups, leadership training classes, debating leagues, community play days, community Sunday School field days, and other plans which will bring all the people of a community together and develop a community spirit.

In order that the policy and plans of the Association for its Summer work may be wisely laid, a conference on Rural Life and Work in Canada, is planned for the end of January at the College. This conference will be based on the information collected in the

questionnaires lately distributed among the students. The conference program will be divided into five sections. 1st. The Home, and Woman's Place on the Farm. 2. Social and Religious Factors in Country Life. 3. Educative Factors in Country life. 4. The Labor Question. 5. The Economic Question.

The Association at this College had a humble beginning and has had a wonderful growth. Who can say how much it will yet mean for the boyhood and future manhood of Ontario. It will be limited only by the faith and loyalty of the students of the College. At this time of year it is well for us to look back and then with our shoulders braced and our heads up, resolve to "live greatly." The voice of the Carpenter of Nazareth sounds down thru the ages "according to your faith be it unto you."

Co-operation in Advertising

How the Ex-student May Help the Review

EVERY man who has solicited newspaper advertising has soon found out that the real proposition he is up against is convincing the advertiser that his paper will bring results. This is an age of advertising, and every business man is fully awake to its advantages in a general way—that is, if he belongs to the present century. When the representative of your magazine calls on the manager of The Unlimited Supply Co., he doesn't begin to talk of his wife's relationship to the manager's first cousin, he doesn't even waste time in reading the weather report, but he shows as quickly and as clearly as he can how many people he can make tumble over one another to buy the goods of the said Company if

Mr. Manager will only tell the people about these same goods.

To point out to the subscribers of *The Review*, all the benefits they derive from their subscription would be impossible in a short article. Let every student imagine, for a moment, what he would miss if the magazine were eliminated from College life. Would he be so interested in his work, and in the various athletic and social functions at the College, if he did not have a record of them to take with him as mementoes of his grand old College days and is not the feeling of ownership, which he has in the journal, something to be proud of?

The ex-student and general subscriber of *The Review* receives many

times the worth of his subscription in the form of information and special articles on topics of interest to every agricultural man. Does he ever stop to think who pays for the rich-looking paper, the excellent cuts, the postage and the general office work necessary to furnish him such a magazine? Does he suppose that one dollar covers the cost of the article that is sold to him at that price? Of course, he does not, if he thinks about it at all.

Who then pays for this outlay? Why, the man who announces that he has for sale a separator that will make your cow yield more cream; farm machinery that will cut your present labour bill in two; a food that will fatten your animals quicker and cheaper than the ration you have been feeding them; materials for the construction of your new buildings and repair of your old ones; a fertilizer to replenish the energy of your soil; a camera to obtain interesting records of your work and pleasure; books for your information and entertainment; a typewriter to make your letters legible; and a host of other articles for use in the home and in the field.

And what does the advertiser expect in return for his expenditure that has

produced such a useful magazine? Does he expect the subscriber to pay him five or ten dollars towards the cost of his advertisement? Not at all. He is quite satisfied if you read his announcement about his goods, examine these goods when you are in the market for purchasing, and give him a square deal in the placing of your order.

The Review carries advertisements of the best firms in Canada, in various lines of goods. The subscribers could render an inestimable service to the paper, without any cost to themselves, by writing these firms, when they want to buy or want information about the articles advertised. The more advertising the paper receives the better value can be given the subscribers in the way of articles, illustrations, statistics, etc. A campaign is being started to double the usefulness of the magazine, both with subscribers and advertisers. This is a game in which everybody can win.

All that *The Review* asks from its readers is to show that they are interested in the journal by mentioning it whenever opportunity offers and seeing that the *Review* gets the credit of such purchases as are made from its advertisers.



The Saskatchewan College of Agriculture

By *W. J. Rutherford, Dean of Agriculture, University of Saskatchewan*

ON THE third of April, 1907, the Act establishing the University of Saskatchewan was passed. It provided for a Convocation consisting of all graduates of any University in

His Majesty's dominions, who were actually residing in the province for 3 months prior to the first meeting and who applied for registration. Four hundred and thirteen names were placed on the register.

Convocation was held on October 16, 1907, for the purpose of electing a Chancellor and a Senate, the latter comprising twelve members. The Senate met on the 18th of Jan., 1908, and elected five members of the Board of Governors; and on March 25th of the same year, the Lieutenant-Governor-in-Council appointed three members to the same board. On the 20th of October, 1908, Walter C. Murray, Professor of Philosophy, Dalhousie University, Halifax,

was appointed president. At a meeting of the Senate, on January 20th, 1909, it was decided to establish a College of Arts and Science and a College of Agriculture in the University.

The Board of Governors met on the 5th of April, 1909, and selected a site for the University in the City of Saskatoon. Classes in Arts and Science were opened in temporary quarters September 28th, 1909, the teaching faculty consisting of President Murray and four professors.

In the same year the College of Agriculture was organized with a staff including the writer, Profs. A. R. Greig and J. Bracken. Prof. Greig was made Superintendent of Buildings and Professor Bracken put in

charge of Field Husbandry work. The corner stone of the main building of the College of Agriculture was laid July 29th, 1910, by Sir Wilfred Laurier, and on October 27th, 1912, the College



DEAN RUTHERFORD,

An O.A.C. graduate who has been lecturer in Animal Husbandry in Iowa Agricultural College; Professor of Field Husbandry in Manitoba Agricultural College; Deputy Minister of Agriculture for Saskatchewan, and is now administrative head of the new Agricultural College at Saskatoon.

of Agriculture was opened for students. Thus, in quick succession transpired events which resulted in the establishment of the Saskatchewan College of Agriculture.

The site comprises thirteen hundred and ninety-three acres of good land, a chocolate loam with deep clay subsoil. Two hundred and ninety-three acres is reserved for buildings and campus. About one hundred and sixty of this is devoted to the agricultural buildings, including the barns and paddocks, poultry yards and gardens. One hundred and sixty acres is devoted to experimental work in Field Husbandry and eight hundred and eighty acres comprises the College farm on which is grown wheat, oats, barley, flax, winter rye, pease, alfalfa, western rye grass, turnips, mangels, carrots and potatoes. All are fed to stock except the wheat and flax, which are sold for seed purposes.

The College building and the residence are built of limestone found within three miles of the site; the power house, agricultural engineering building and judging pavilion are brick; the barn has a stone basement; the sheep barn, piggery, hen houses, implement sheds and boarding houses are of wood stained to harmonize with the other buildings.

The work of the College is of a three-fold nature—experiment, and research at the College and in different parts of the province, teaching the regular college courses, and extension teaching.

Two courses are open for students. The certificate course corresponding to the Associate course at Guelph is intended for young men on the farms from sixteen years of age up, who wish to spend five months during the winter studying English, Arithmetic and accounts, Civics, Elementary science, Field Husbandry, Animal Husbandry

and Veterinary Science, Farm Machinery, Farm Buildings, Dairying, Poultry, Gardening and Tree Planting. No entrance standing is required except that the student be physically fit, of good morals and able to read and write sufficiently well to profit by the lectures given. The course lasts three years. English and practical work are continued throughout the course and more of the sciences is given in the third year. The other is a four year course leading to the degree of B.S.A. It opens in September at the same time as Arts and Science. Matriculation is required—the equivalent of a second class certificate with French or German and three Sciences. Students taking this course are required to spend their vacations either working on a farm or at such work as is approved by the Dean. Arts students and also students in theology elect agricultural subjects. Students preparing to teach agriculture in Secondary and other schools are encouraged to take a six year course leading to the degrees of B.A. and B.S.A.

Short courses are held at the College in the winter time for farmers; in June for engineering and domestic science; and in July for rural school teachers. Short courses are also held at various places in the province lasting from two to four days.

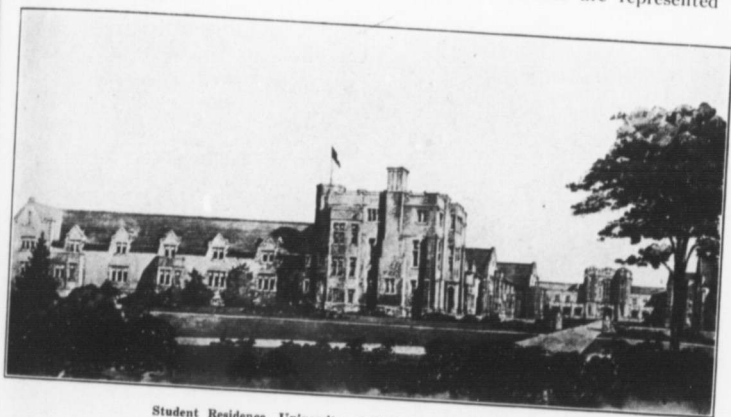
The Extension Work is carried on quite largely through the Agricultural Societies, of which there are one hundred and twenty. The work of these societies is directed by our Director of Extension. The annual meeting is held at the College and is made an occasion for lectures and demonstrations intended to stimulate better agricultural methods. Plowing matches, standing field competitions, seed grain fairs, summer fairs, poultry shows and school garden competitions are

some of the activities of the agricultural societies.

The women on the farms and in the villages and smaller towns are organizing themselves into what are known in Saskatchewan as the Homemakers' Clubs. The work is directed by Miss De Lury, a member of the College extension staff. The clubs number one hundred and twenty-six to date. The annual meeting of the Homemakers is held at the University in June.

and Engineering spend about one third time in Extension work and the balance at teaching and research.

As far as possible the students live in residence. Half the rooms are allotted to Agriculture and half to Arts and Science. The residence hall is now too small and a new one is in course of erection. Practically all parts of the province are represented in the student population. While thirteen different nationalities are represented



Student Residence, University of Saskatchewan, Saskatoon.

The staff comprises five men in Animal Husbandry, Veterinary Science and poultry; two in Field Husbandry; two in Agricultural Engineering; one in Dairying; one in Natural History (weeds insects and birds); one in English and Arithmetic; one in Physics; two in Chemistry; one in Biology; and one in Economics. The degree work in Mathematics, Language, History and the Sciences is taken in the regular University classes along with the students in Arts and Science.

Members of the staff engaged in applied sciences, Animal Husbandry and Poultry, Field Husbandry, Dairying

more than half the students enrolled were born in Saskatchewan.

The classrooms and laboratories are already over-taxed. The barns and other outbuildings are becoming crowded. The demands on the services of the staff from the people of the province are greater than can be met with its present strength. All of which indicate that the Saskatchewan College of Agriculture has found a place and is fast becoming a factor in helping to solve the many problems incident to the settlement and the development of the resources of a new country.

Environment a Factor to Success in Poultry Keeping

By A. C. McCulloch, B.S.A.,

DURING the last four years, the attention of those engaged in poultry experiment work, and poultrymen generally to a lesser extent, has been focused upon the inheritance of egg production. The prevailing idea seems to be that the ability of a bird to produce eggs in large numbers during the winter months is largely a matter of heredity. Some have gone even to the extent of predicting what percentage of a males' female offspring will produce over thirty eggs during the winter months, when his breeding is known, providing this offspring is hatched, reared, and maintained under favorable environment. This is an acknowledgement of the fact that environment plays a very important part in the success or failure of poultry raising. What is favorable environment?

No attempt will be made here to deal fully with environmental problems but attention will be centred mainly on the question of housing and the range required for growing and laying stock. With the advent of the modern incubator, which could be used to hatch chickens before the natural hatching season, is associated the birth of the brooder or foster-mother to care for such chicks during cold and damp spring and early summer months. These brooders were of various shapes, sizes, and designs, but usually about three feet by six or about four feet square, probably one and a half or two feet high from the floor to the roof and their accommodation fixed at 100 chicks. Almost without exception,

coal oil was used as a source of heat. The idea was hailed with the approval of farmer and poultryman alike. Under the protection of this artificial mother the chicks would usually thrive well for a short time and then their interest in life would often decline and cease entirely. This has led to a marked change in the accommodation afforded the young and growing chicks and the portable colony house, is fast replacing the once popular indoor and outdoor brooders.

Several styles of colony houses are in popular use and proving successful. The minor differences depend largely upon individual preference. A common style of house is one six feet deep, eight feet wide, six feet high in front, four feet high at the rear, with a shed or shanty roof. On one side of the front is a door two and one-half feet wide, and on the other side a large window two and one-half by three feet, above which is a large opening covered with wire netting and a cotton frame to permit of ventilation. The door is likewise composed of a frame covered with wire netting and cotton for the same purpose. The walls of the house are only single boarded, the cracks battened. The floor is of wood, draught proof, and the whole structure is built on two scantlings to which a horse may be hitched at any time to move the house to a fresh location.

In the very early season two portable hovers heated with coal-oil may be used in each colony house and removed later when the weather becomes warmer and the chicks larger. Obviously a

building of this type will overcome the difficulties against which it was designed. For the same number of chicks it has approximately three times as much floor space as the ordinary brooder and is much more spacious and airy. The cotton frames in the front admit of plenty of ventilation and at the same time protect the chicks from cold winds and rain. After the hovers are removed low flat perches are arranged in the house and the chicks take kindly to these which prevents crowding or bunching in the corners. The houses can be easily moved as often as desired

ing birds with perfectly satisfactory results.

Speaking in a general sense the essential features of a good poultry house are comfort, convenience, sanitation and economy. These points though at first thought perhaps absolutely distinct are closely related. For instance, the use of unnecessary fixtures renders the house less convenient, often more unsanitary, and certainly less economical, or housing too many birds on a given area of floor space usually lowers the degree of sanitation and also the comfort of the birds. Ordinarily a



Open-Front House for 100 Birds.

to any part of the farm which might be more favorable for the growing birds. The cost of rearing may be materially reduced by moving the birds to the grain fields after the harvest is removed. The birds may be safely guarded against vermin which may worry them at night. All parts of the building may be readily cleaned and disinfected in case it should become infested with mites. Above all it may be built for a nominal sum of not more than \$25, or about one-half more than an out-door brooder. In addition it may be used as winter quarters for about ten or a dozen lay-

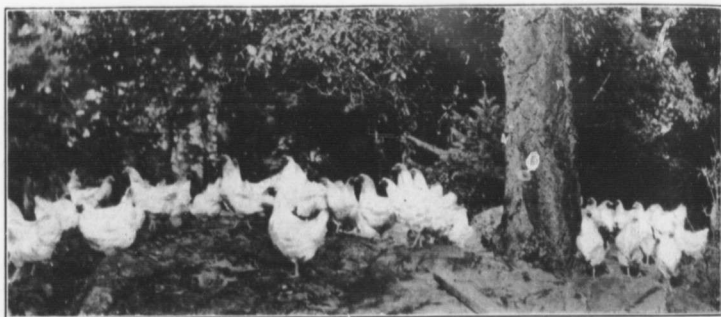
bird requires from four to seven or eight square feet of floor space depending on the size of the flock, the variety kept, and whether they are confined at all times or not. As a rule the smaller and more active the variety, the larger the flock, and the greater the range allowed, the less floor space per bird is required.

With the idea of meeting the requirements stated, the "Open Front" style of house has been evolved. To date, the idea is largely applied to houses accommodating about one hundred laying birds. This building is twenty feet square, three feet high in front,

four and one-half feet at the rear, seven feet at the centre, and rests on a cement foundation. In the East end is a door about three feet by six, and in the west end a window about four feet by five and hinged at the top. At the bottom of the front is an eight inch board to keep the litter in, and at the top a four inch board to which wire netting, which covers the opening, may be nailed. The two ends and the rear are single boarded, cracks battened, and the house complete, with a cement floor, costs about one hundred dollars or one dollar per bird—a very reasonable

Where possible it is usually advisable to allow the birds, either growing or laying stock, considerable range. Too many people make the mistake of keeping young and growing chicks confined to ill kept houses or very small filthy yards which are little else than automatic incubators for the producing of disease germs. Chicks cannot be allowed too large a range.

Very often where laying hens have access to a large yard the egg production is lower than when confined to a suitable house, but it is only reasonable to suppose that they are much stronger



On a B.C. Poultry "Ranch." Nature Plays Her Part.

figure. Sometimes, especially with varieties of poultry with large combs, it is advisable to cover a part of the front with alternate glass and cotton. That this house is inexpensive and extremely well ventilated are important facts which commend it to the average farmer and poultryman. With insufficient ventilation, moisture usually collects on the walls and ceiling, making the building damp, unsanitary and unhealthy. A draught blowing through the house generally results in an attack of roup. Both these unfavorable conditions the "Open Front" obviates to a great extent.

in constitution and superior for breeding purposes. The accompanying illustration shows a flock of White Wyandotte hens owned by Mr. George Adams of Victoria, B.C. These birds were housed, but allowed free range in a rocky wooded lot which gives them every advantage that nature allows. In this flock is the Third Prize hen in the second egg laying contest under the direction of the B.C. Department of Agriculture. In addition, Mr. Adams informed the writer that a hatch of less than about eighty-five per cent. of the eggs set is considered a failure, and that in one case of one hundred and six

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eggs set only one failed to hatch. Such phenomenal results we can attribute in part at least, to the fact that the value of favorable environment is fully appreciated by our B. C. poultry fanciers. Their boast is that they can produce more eggs per hen per year

than the Eastern breeders, and that in a very few years we will be placing our orders with them, if we insist on ordering where the highest fertility and strongest vitality prevails. Wherein lies the reason? They say, Environment.

Athletics

RUGBY



"BLONDY" WILSON
Captain Rugby Team, 1914.

O.A.C. vs. VARSITY, 47-11

The return game at Guelph against Varsity III, was expected to provide a good exhibition of Rugby, as O.A.C. had only one point of a lead on the game in Toronto. Both teams appeared to be in good condition when they stepped on the field, Varsity having a slight advantage in weight.

Play was fast from the beginning and Varsity surprised the college team by getting a touch down early in the first quarter. This put "ginger" into the Red and Blue and almost immediately College equalized the score with a "touch," which was not converted. From then on College had things pretty much their own way, bucking through Varsity's line for long runs several times, while O.A.C.'s numerous "trick" plays completely fooled Varsity. College wings were on the ball at the time and as a result, at least three touch-downs were made by College from picking up "loose balls." Varsity lacked team play, altogether having put on several second team men in hopes of beating O.A.C. Their whole game as a result consisted of bucks and kicks and the final score of 47 to 11, in favor of O.A.C., indicates the success which attended the change.

NOVEMBER 14th

O.A.C. vs. KINGSTON COLLEGIATE INSTITUTE.
K.C.I. 10; O.A.C., 4

The College team left Guelph, Friday the 13th, in the best of spirits and confident of the result which would attend the game the following day. But they returned in a very different mood. Many were sore in more ways than one, but all were determined on one point, namely, that there would be

a different tale to tell when K.C.I. came to Guelph. The chief difficulty at Kingston was the "interference rule," O.A.C. having been playing O.R.F.U. and not Intercollegiate rules and as a result K.C.I. broke away several times for 30 and 40 yards runs.

The K.C.I., though lighter and younger, than O.A.C. were trained and coached to the last word, and were a much faster team than the College. O.A.C. were up against something new and as a result were just outclassed. Final score, K.C.I., 10; O.A.C., 4.

O.A.C. vs. K.C.I.—22-0

A week of hard work, chiefly getting acquainted with the "interference" rule found College team confident and "out for business" when they lined up against K.C.I. at Exhibition Park, in a field covered with "3 or 4" inches of snow.

That the 1st half was keenly contested is shown by the fact that half time score was 1-0, in favor of O.A.C. Both teams had difficulty in getting the ball "heeled out" on account of the snow and there was as a result a good deal of loose play. College, however, had all their "trick" plays to pull off and in the second half, these along with the "pile driver," a species of "tandem buck" composed of Messrs. Delahay, Morse and Evans, proved too much for the lighter team. Evans was especially noticeable carrying the ball repeatedly for "yards." In the third quarter "Husky" Evans, Munro and Morse went through for touch downs, none of which were converted.

In the last quarter, K.C.I. pressed a little and only good dodging by Agar and Raymond prevented them from obtaining several rouges. Munro again got through for a touch on a trick play and Raymond converted, making a final score of 22 to 0, in favor

of O.A.C., or 26-10 on the round. This gave College the Junior Intercollegiate Championship of Ontario.

DECEMBER 5th

O.A.C. vs. LONDON WESTERN UNIVERSITY, 23-9

As the winners of the Quebec Junior Intercollegiate Series did not challenge O.A.C. for the Dominion Junior Intercollegiate Championship, it was awarded to the College by default.

December 5th saw the College squad in London for the Junior Dominion Finals, with a few College men and the Guelph volunteers at London, to root for them.

College won the toss and elected to play against the wind, which was blowing from the N.E. length wise of the field.

The first quarter was very even, half backs on both sides doing a lot of kicking, Raymond out punting Ross of London, even against the wind. London tried "end runs" but could not get away, Welton and Forman stopping them all the time.

Second quarter.—London early obtained a rouge and O.A.C. equalized in less than two minutes. The tackling of Munro and Pawley was especially noticeable, the former saving O.A.C. a touch down by a splendid piece of work. London, however, were near enough to make a rouge, which made half time score 2-1, in favor of London. The first half was good, clean football, as far as could be seen from the side line and was very exciting to watch. In the third quarter, London had the wind and Ross made a drop kick and a rouge in short order. Culham made a long run and in the scrimmage following Pawley was seriously hurt and had to be carried off being replaced by Graham. Raymond soon after made a beautiful drop kick but on the kick off

following a muff, London obtained the ball and went through for the first touchdown. The London team added another rouge before the whistle blew for the last quarter.

Fourth quarter.—Soon after the game got going again, Keirstead had to be carried off and Sullivan replaced him. London made another touch from a long run, the only time the London halves really got away. From this time on till the end of the game, repeated stops were made for injuries, Raymond and Forman being taken off halfway through the last quarter, only to be followed by Munro; Dempsey, Creelman and Roy Wilson replaced them. London made another touch down, but it was followed by a rally of the O.A.C. team, Agar making several fine runs. The same player made a drop kick from 40 yard out, also kicked behind the dead line for 2 rouges. College finished fresh as far as wind was concerned, but could not stand the "bruising" tactics of four or five of the London team, shown by the fact that two men were left in the hospital at London and that in the last quarter, five spares were playing of necessity.

Sometimes there is more glory in defeat than in success and the college team deserves great credit for their "grit" and pluck. They were out weighed 15 to 20 pounds per man and played easily the cleanest game the writer has seen a college team play in the last three years.

Our one regret is that they didn't win the Dominion Championship for they most certainly deserved it.

Raymond was easily the best punter on the field, while Agar's runs and Forman's splendid tackling should not pass unmentioned. However, the whole team played a game which was a credit to themselves and the college, which they represented. The final

score was London, 23; O.A.C., 9.

O.A.C. Line-up:

Outside Wings—Welton (v), Forman.

Middle Wings—Morse (v), Carncross

Inside Wings—Delahay, Evans.

Scrimmage—Langley, Pawley, Rawson.

Quarter—Munro.

Rover—Keirstead.

Halves—Culham, Raymond, Agar.

Spares—Creelman, Graham, Dempsey, Roy Wilson, Sullivan.

SOCCER

The Soccer Team had a very good season this year, considering the difficulty which manager Curtis had in arranging games, as demonstrated by the fact that the league started so late that it was found necessary to play sudden death games in the latter part of December in order to finish the league.

Several exhibition games were arranged, however, and the team held its own in every case although the score perhaps, would not show this.

The first game was with McMaster in Toronto and a good clean game was played, McMaster winning by one goal to nothing. The following Saturday, the team played Toronto Teachers here in Guelph and drew, the score being 1-1. In the league, the team went to Toronto to play against the Toronto Teachers.

The game was a good one from start to finish. O.A.C. scored in the first 15 minutes and Toronto equalized in a very short time. The score at half time was 1-1.

In the second half, the O.A.C. pressed all the time and had the best of the game but somehow, the forwards did not seem to be able to shoot and many excellent chances were missed. This has been the weakest point with the team and next year it will have to be

remedied by more practise at shooting from a distance out. The tendency in all the games was for the forwards to try to take the ball right through instead of shooting.

During a scramble in front of the O.A.C. goal, the Toronto Teachers managed to score in the last five minutes and they held O.A.C. down till the whistle blew. The score being 2-1 in favor of Toronto Teachers, meant that the O.A.C. team was out of the league.

The Line-up:—

Goal—Boulton.

Backs—Brown, Cotsworth.

Halfbacks—Patten, Smedley, Culp.

Forwards—Abraham, White, Pullerine, Corbett, Cowan.

INTER-YEAR BASEBALL

The preliminary series of Inter-Year Baseball was carried out in the Gym this Fall, and several exciting games were played.

The second Year won out having won three games and lost none. The Fourth Year came second, having won two and lost one. The Third Year were third, with one won and two lost. The First Year were last losing all three games. At none of the games were the years represented by their strongest teams, and as the teams are very evenly matched, baseball is going to prove one of the most exciting sports at the college during the winter. All the teams are out to win, and an excellent series is promised for the winter.



O. A. C. Rugby Team and Manager, 1914.

THE O. A. C. REVIEW

REVIEW STAFF

A. M. McDERMOTT, *Editor-in-Chief*

R. D. COLQUETTE, *Agriculture*

B. E. FOYSTON, *Experimental*

R. W. DONALDSON, *Horticulture*

J. P. HALES, *Poultry*

R. H. ABRAHAM, *Query*

W. H. HILL, *Alumni*

S. B. STOTHERS, *College Life*

T. B. COTSWORTH, *Athletics*

C. L. RAWSON, *Artist*

W. MALCOLM, *Locals*

GLADYS MANNING, *Macdonald*

Editorial

FOR ALL of us, there have been in the past year at least some few occurrences which afford pleasant recollections; we are bound to greet the New Year with confidence until we find him unworthy of it. And so to all our readers, we extend the old time wish for a happy and prosperous New Year.

With this issue the editorial pen again changes hands. This is unfortunate for the *Review*, but such changes must occur frequently in a magazine managed and edited by college talent. The *Review* has had most talented and public spirited men at the head of its editorial staff up to this time and all honor to them for the success they have made of the work.

DEDICATION

Your editor has taken the sacred oath of office, signed and sealed the necessary bonds and occupies the editorial chair with due formality. A more healthy enthusiasm than ours, for the success and prosperity of the *Review* during this year could scarcely exist.

Everything we can do to help attain perfection—if such there be in this regard—will be done. Our watchword, "Service."

OUR POLICY

The *Review* is essentially a college magazine, published by the students of this college, and circulated among ex-students and graduates of the college and the general farming public of Ontario. It is the medium between these two elements. We shall endeavor to make our pages spicy, instructive, interesting, and entertaining. Best of all, if we can stimulate a real interest in rural life, idealized by the application of our college work and thought to it, we shall be well content. The old boys must be kept in touch with their Alma Mater, and with one another. Rural Ontario must be kept in close touch with the institution which, perhaps more than any other, has their interest at heart. We aim to do our part in making Agriculture a profession, worthy, attractive, and remunerative.

COLLEGE LIFE

If you are a student, perhaps this department is of first interest to you. So long as this is a College magazine, it is bound to give the college student opportunity to give us all the benefit of his ideas; but we claim that support. It is not a privilege, it is a duty. The Editor is human; he is harmless; and would welcome your ideas on topics of interest to the *Review*. If you are not a "Knocker" but believe that severe criticism is due the editor and his staff, the proper place to make that criticism is in the *Review* office.

We wish we could trust ourselves to describe this palatial residence of the staff; in all its beauty and convenience, its elaborate systems, its modern ventilation, its staff and management, the most even tempered, punctual, and industrious personages one could imagine—in short the only thing lacking is the musical sound of a modern printing press. We have visions of—what editor hasn't? We are off to a good start in 1915.

WHAT DO YOU SPEND

Where do you buy? Other things being equal do your business with our advertisers. You will find in our pages names of concerns who will be glad to do your business at an advantage to you and to them. We neither solicit

nor accept, advertising from firms whom we cannot recommend to our readers. These goods may not be better than their competitors', but they are as good, and these men have our interests and the interests of our college at heart, else, their ad. would not appear in our pages. Repay them well by spending your money with them, and as you enjoy the privileges they have made possible for you about the college, use your influence for the betterment of our advertisers. Read our article on succeeding pages in this regard.

YOU ARE AT COLLEGE

Perhaps because you are making a study of some special line of Agriculture; perhaps because you believe you have a call to higher Agriculture as the ideal life—we hope so. If the latter is the reason, and you haven't mistaken some other noise for a call to Agriculture—and in fact, whether that is the reason or not, let us have your written ideas for these pages. Let the *Review* be a real college publication. If you can see a point worth while in an article, a cartoon, or a photograph of your own production, the possibility is the rest of us could see it, too, and it is worth publishing. Let us have it anyway. You may be hiding your talent under a bushel.



College Life

"SENIORS ARE INTER-YEAR CHAMPIONS"

The last meeting of the Union Literary Society for the fall term was held in Massey Hall, on November 28th. At this meeting the Seniors annexed the Inter-Year Championship for debating during the term. The debate read—Resolved: That the Ontario Government should place the unemployed of our cities on Government owned farms, supervised by Agricultural Experts.

The affirmative was taken by Messrs. S. E. Percival and J. C. Neale of the Sophomore year, and the negative by Messrs. R. A. Finn and E. K. Hampson of the Senior year. The judges decided that no change should be made in the present methods of caring for the unemployed.

Hon. President Prof. S. F. Edwards made an address in which he bade farewell to the Society, as he is leaving the College at Christmas. Prof. Edwards is going into commercial work at Lansing, Michigan, and is followed by the good wishes of every member of the Literary Society.

The following additional program was rendered:—

SELECTION	- - -	Orchestra	-
SOLO	- - -	Miss M. Kelso	
SELECTION	- - -	Octette	
SOLO	- - -	P. D. Vahey	
READING	- - -	Miss C. T. Black	
SELECTION	- - -	Orchestra	

This was the first appearance of the College Octette. This is a new organization of which we hope to hear more during the spring term.



"PHILHARMONIC SOCIETY'S ANNUAL CONCERT."

The Philharmonic Society held their annual concert in the College Gymna-

sium on November 20th. This was no exception to the standard of good things set by this organization, and was appreciated by a large audience, composed of visitors from Guelph, and students.

The Dramatic Club under the direction of G. E. Patton, presented the farce: "A Regular Fix," and the Choral Club with E. M. Shildrick as conductor rendered several pleasing choruses. These were assisted by the College Orchestra and Estelle J. Carey, of Toronto.

PROGRAMME

GOD SAVE THE KING

1. Selection by Orchestra—
March—Sons of the Empire.
2. Choral Club—
(a) Anchored.
(b) Canadian Flag Song.
3. Song—"Spring"
Estelle J. Carey.
4. Orchestra—
Selections from "The Merry Widow."
5. Choral Club—
(a) Soldier's Glorious Duty.
(b) The Violet and the Bee.
(c) His Majesty, the King.
6. Song—"Daddy"—
Estelle J. Carey
7. Orchestra—
"Sounds from England"
8. Choral Club—
(a) The Old Brigade.
(b) When my Ships Come Sailing home.
9. Song— (a) At Dawning
(b) The Fairy Pipers
Estelle J. Carey
10. Orchestra—
Chanson du Couer Brise
11. Farce—"A Regular Fix."

Cast of Characters in "A Regular Fix":—

- Hugh de Brass - - O. Boulton, '17
- Surplus (a lawyer) G. J. Spencer, B.S.A
- Chas. Surplus (his nephew) H. Pulleine, '17
- Abel Quick (head clerk) G. E. Patton, '17
- Smiler (a sheriff's officer) R. K. Bryden, '18
- Porter - - - - C. Rawson, '17
- Mrs. Surplus - - Miss E. Dickinson
- Emily - - - - Miss R. Rocher
- Mrs. Carter (the housekeeper) Miss E. Hannah

Matilda Jane (the housemaid) Miss G. Manning



"ELECTIONS"

The semi-annual elections of officers for the various college organizations were held on Saturday, December 5th. D. G. Laird, president of Students' Council, acted as returning officer, with R. A. Finn, M. Jones and S. E. Percival as poll clerks.

The following are the results:

ATHLETIC ASSOCIATION

- Honorary President, Prof. G. E. Day.
- Honorary Vice-President, W. R. Reek, B.S.A.
- President, E. E. Carncross.
- Vice-President, I. B. Martin.
- Secretary, D. G. Fidler.
- Treasurer, W. Bisset.
- Foot Ball Manager, S. H. Gandier, B.S.A.

Soccer Manager, H. M. King, B.S.A.
Track Manager, H. S. French.

Y. M. C. A.

- Honorary President, W. J. Squirrel, B.S.A.
- President, F. B. Cotsworth.
- Vice-President, C. Meek.
- Secretary, W. G. Scott.
- Treasurer, C. A. Bradley.

- Librarian, G. Michael.
- Chairman Bible Study Department, W. H. Scott.
- Chairman Mission Study Department, C. D. Ferguson.
- Chairman Service Department, P. L. Fancher.
- Chairman Church Relationships, D. R. Schuyler.
- Chairman Religious Meetings, J. L. Dougherty.
- Chairman Musical Committee, G. W. Legatt.

LITERARY SOCIETY

- Honorary President, Prof. J. W. Crow.
- President, F. C. Patterson.
- Secretary, H. B. Steckley.
- Treasurer, D. Elliott.

O.A.C. REVIEW

Editor-in-Chief, A. M. McDermott.
Alumni Editor, W. H. Hill.

PHILHARMONIC SOCIETY

- Honorary President, Prof. J. B. Reynolds.
- President, E. Culp.
- Vice-President, J. C. Fuller.
- Secretary, C. W. Jakes.
- Treasurer, E. S. Snyder.
- Choral and Choir Manager, E. Snyder
- Orchestra Manager, C. W. Duff.
- Dramatic Manager, G. E. Patton.
- Leader of Rooters' Club, L. H. Malory.



AUCTION SALE

The undersigned has received instructions to sell by public auction at Room No. 98, on Jan. 31, at two o'clock, p.m. sharp, the following valuable students' chattels:

- Several boxes of "Old Chum."
- 1 Bee Smoker.
- 1 Useful Wife (Joe).
- Two bedsteads and mattresses.
- 10 Cigar Boxes.

Complete set of bedroom crockery.

Full complement of trunks and suit cases and many other useful articles, such as insect collections, mounted weeds and some real old fashioned, antique, New Year's resolutions. These latter are a particularly choice set and should interest every one.

No reserve as the owner has lost all faith in human nature, and especially the ladies. Terms: \$5.00, and under, cash. Over that amount, three months credit on approved joint notes. The only acceptable security will be E. Atkins and E. J. Fitzgerald.

R. J. SKELTON, J. KERNIGHAN,
Proprietor. Auctioneer.

NOTE.—No one admitted without a copy of the *Review* on or about his person.

♦ ♦ ♦

RUBY—"I spent my vacation at Sault Ste. Marie and a young man of the Department of Agriculture tried to kiss me. He said he had never kissed a girl in his life."

ANNA—"What did you say to him?"

RUBY—"I told him I was no Agricultural experiment station."

(The editor asks for volunteers for a body guard to protect him when W. P. Macdonald sees this.

IN MEMORIAM

Erected to welcome the late J. H. McCulloch; late of M. A. C.; Late for Physics; Late for English; Late for any early morning lecture.

Weston is an absentee who is present this morning.

♦ ♦ ♦

HONOR ROLL

We are, this month, opening this column which is to hold the names of those whom we consider worthy. To have his name appear on this honor roll, a man must be at least five feet tall and weigh one-hundred and twenty pounds.

It is intended to be a real "roll of honor" and the man whose name appears must have achieved some note-worthy feat. The following are eligible: Any man who has "fussed" for the first time; Anyone who makes a really original joke; Any man who skates all winter without casting himself on the ice in front of a young lady; Any man who has not missed breakfast during the college year; and any person who is recommended by at least three competent and intelligent persons as worthy of mention. The hearty co-operation of every student is asked that we may recognize true worth and be thoroughly impartial in our awards.

NAMES IN ORDER OF MERIT

D. R. SANDS—(who was brave enough to enter Grub Alley when the inhabitants "spake roughly to him.")

P. L. FANCHER—(who did not swear when dumped out of bed.)

E. E. CARNCROSS—(who always pays a bet).

♦ ♦ ♦

HOW ABOUT THE PLUGGER?

By "Ex."

"O you hanged old plugger." Then he goes up to you, rubs your head, asks you what you are studying and altogether makes you feel rather uncomfortable. You close up the book, lean back in the chair and try to explain that this is the first night you've studied for two weeks, and how little you've done all term. In short you try to excuse your present attitude and endeavor to make your caller believe you are a clever chap and do not need to study. It is generally believed that the fellow who goes thru college with the least study is getting the most out of college life. Plugging is thus looked upon with disfavor, the plugger being accused of setting too high a standard at examination time and as one who is,

generally speaking, an unsociable individual.

Pluggers may be divided into two classes—those who really have to do much real hard work to make sure of getting their year and those who plug in order to head their year at exam time.

In regard to the first class, there is some excuse for them. Perhaps they have been out of school for some time or some subjects are naturally difficult. At any rate, they have to do a lot of work. They feel it's up to them to "make the grade," and generally do it. These fellows will in most cases develop a stick-to-it-ness that will mean success later on in life. They will undoubtedly miss quite a bit of college life in other phases at first, but if they continue along in the course, studying will come easier. They will get to know how and what to study to the best advantage. Then they will probably emerge from their hibernation and begin to take in a little real life.

Except in exceptional cases, there is no excuse for the fellow who absents himself continually from college functions or social affairs in order to study. He is denying himself an opportunity, the like of which he will not in after years have the privilege of availing himself, and at the same time neglecting an important part of his education. There is much expected of a college man socially. If one goes thru college and fails to improve himself in this particular, (if such is possible) then he has failed to that extent.

A fellow endeavoring to head his year at exams has pretty nearly got to be a plugger, good previous education or none. He must feel that he has every subject well in hand in order not to miss a single question that may be on the bill of fare. In obtaining this var-

ied information, he will miss many of the distractions that make college life worth while, but if successful in his endeavor, will get something in return, namely, the satisfaction arising from an accomplished purpose and the honor due him for his position. Then too, a man is judged according to his class standing by the outside world, the majority of people not realizing that proficiency in writing an examination paper is but one part out of the three or four that go to make up the all around man. Usually the best men are not those that rank the highest, though some of the best will undoubtedly stand well up. High standing is generally associated with a natural aptitude for study, a good previous education and may be attained without previous practical experience on a farm. Some of the best men in a year may stand fairly low or even fail in one or two subjects, owing to offices held in college societies requiring much work. They are, however, gaining valuable executive experience, besides doing necessary college work.

It may be asked: Is the extra knowledge of a subject, gained by reading the assigned literature likely to benefit one so much after all? We must admit that outside reading on some subject is necessary in order to obtain a proper grasp of them. Lectures on such subjects are merely outlines to be filled in with reading by the student. Granted then, that the plugger obtains a wider knowledge of such subjects. But then the most important subjects to a graduate say, who is taking up District Representative work are those of a practical nature, largely obtained from the class room or from straight practical work. Again, if the majority of students undertook to read all assigned literature, it would be farewell to most forms of recreation, provided

by the college. It would certainly be goodbye to St. George's square. Not that assigned reading is to be thought unnecessary. Far from it. The more we do up to the point before the law of diminishing returns begins to operate, the better for us.

A certain amount of study must be done if the student is desirous of finishing either a two or four years' course. The individual student will know whether he is doing enough study to insure himself getting through every subject on his time table. He is foolish if he allows any other phase of college life to interfere unduly with this—his main business. But it can be accomplished without plugging. It can be accomplished by doing a certain amount of study and doing it consistently. Twenty minutes study a day for a week would be equivalent to a one night study period. Some follow this catch study plan with much success and though they appear to do but little work, yet they really make up many lost study periods by utilizing

odd moments, with an occasional midnight oil burn. Besides, this plan induces a habit of quick concentration—a valuable habit to acquire.

One hour of concentrated study is worth two or three of the rambling sort and it is much easier to concentrate your mind after indulging in some form of exercise, if not too strenuous. This will also keep one from becoming "stale," a state brought on by too much study, usually near exam time, and a reason why pluggers sometimes fall below expectations.

In the final analysis, this question of the amount of study to be done and how it is to be done must largely be settled by the individual. As no two are constituted alike, no two will therefore study alike. Each has his method which will probably agree with his temperament. If your method gives you results and allows you five skating periods a week, all college functions, literary nights, one night a week down town * * tell us about it.

Alumni

"The winning of honour is but the revealing of a man's virtue and worth without disadvantage."—BACON.

PROFESSOR JAMES MURRAY

JAMES MURRAY, B.S.A., '02, was born in Simcoe County, Ontario, educated originally for the teaching profession, but later decided to follow agriculture by taking a degree course at this college. He graduated in 1902 as a Field Husbandry specialist, when he was appointed head of the Seed Laboratory in the Dominion Seed Division at Ottawa. Two years later, Mr. Murray was made Seed Commissioner for Western Canada, having full charge of this work for two years. He resign-

ed this position and was made superintendent of Fairs and Farmers' Institutes under the Saskatchewan Department of Agriculture.

In 1907, he was appointed superintendent of the Dominion-Experimental Farm at Brandon, Manitoba, which position he held successfully until 1911. In that year, he was offered the managership of probably the largest farm in America, that of the Canadian Wheat Lands, Limited, which is situated at Suffield, Alberta, and consisting of 66,000 acres. This vast area of land

was under his direct care and management, there being nearly 12,000 acres of the "Bonanza" farm at present cultivated under dry-farming conditions.

Mr. Murray has just recently been appointed Professor of Agronomy at Macdonald College, Quebec; he takes the chair vacated by Professor L. S. Klinck. Our sister college gains a man of vast experience in the work along field husbandry lines.

We wish him every success in his new sphere of activity.



PROFESSOR L. A. MOORHOUSE, M.S.A.

L. A. Moorhouse was born at Maple Wood Farm, Lambton County, Ontario. He entered the O.A.C. in 1898, graduated in 1902 as a specialist in Field Husbandry. The same year he was appointed as lecturer in Soils and Crops at the College of Agriculture and Mechanical Arts, Stillwater, Oklahoma; this position he held until 1905, when he resigned to take up post-graduate work in soils at Illinois University.

Upon completion of his course and being granted his Master's degree, he was made Professor of Agronomy in the Oklahoma Agricultural College, he occupied this position for the next four years.

The United States Government recognized in Professor Moorhouse a man of great ability and experience by making him Field Agent of the office of Farm Management in their Department of Agriculture, with headquarters at Denver, Colorado, for the next two years.

In 1912, the Manitoba Government offered him the Professorship in Field Husbandry at the Manitoba Agricultural College at St. Vital, Winnipeg, which he accepted.

Last October, Professor Moorhouse resigned this position to return to the

office of Farm Management, U. S. Department of Agriculture again.



H. S. FRY, B.S.A.

H. S. Fry, or "Harold," hails from across the line, being born in Buffalo, New York State, but his early life was spent in Lincoln County on his parents farm. He entered college in 1909, graduating last spring with Class '14. During his college career he showed great business ability, which was soon to be recognized by his fellow students. His various appointments upon college society executives proved highly successful, chiefly as Business Manager of the O.A.C. Review, and president of the Students' Co-operative Book club. These positions gave him an ideal medium in which to use his abilities to the best advantage. His appointment as Lecturer of Pomology on the College Staff has been already much appreciated by the present students.



F. M. CLEMENT, B.S.A.

Mr. Clement graduated from this college in 1911, specializing in Horticulture. After his graduation, he acted as District Representative for Elgin County, with headquarters at Dutton.

Later, his services were acquired by the Macdonald College, Quebec, as instructor in their Horticulture Department. This position he held until last spring when he received the appointment of Superintendent of the Ontario Experimental Fruit Farm, at Vineland, Ontario. May he produce more good fruit as the result of his labors there; we wish him all kinds of success.

PROFESSOR L. S. KLINCK

L. S. Klinck, B.S.A., graduated from the O. A. C. in 1903. His career since graduating has been marked by great

progress up the steps of fame, resulting from his keen and thorough work in promoting his special branch of the science of Agriculture.

For the last 9 years he has been energetically organizing the Cereal Husbandry Department of the Macdonald College, Quebec. The Department has gained in strength in every way, until to-day it closely rivals our own department. This phenomenal progress is due no doubt to the thorough training obtained in Field Husbandry whilst at this college coupled with his natural energetic and persevering spirit. Mr. Klinck has recently been appointed as Dean of the College of Agriculture in the University of British Columbia, which is to be built at Point Grey in that Province. Thus British Columbia's great gain is Quebec's great loss, but, however, he has given his best to the cause and the best has come back to him.

MISS B. M. PHILIP.

Miss Bessie M. Philip has been added to the staff of Macdonald College as Instructor in Household Science. Since graduating in 1912 from Macdonald Institute she has been teaching in the Braeman School, Vancouver, B.C. In her new position she will still be a "Macite", so we wish her every success.

W. C. MCKILLICAN, B.S.A.

Mr. McKillican was born at Vankleek Hill, Prescott County, Ontario; entered this college in 1901, graduating in 1905. Immediately upon graduation he was appointed as Seed Commissioner of the Dominion Seed Branch, doing Seed Inspection and field crop improvement work in Alberta and British Columbia, having his headquarters at Calgary, Alta.

In 1911 he was appointed Superintendent of the Dominion Experimental Farm at Brandon, Manitoba. Since

then he has been carrying on experimental and investigation work for the improvement of grain and other field crops suitable for Western conditions. He is well liked by the farmers of the Brandon district, and is much sought after as a speaker at farmer's meetings. He has assisted on the Manitoba Seed Special Trains, for the past two years, in connection with the Manitoba Agricultural College Extension work



"Bunny" Wearn, '11, has joined the London Field Artillery and is now in training at London Mobilization Camp.



E. C. Hessel, '16, "Si" has gone to London to train for an officer, hoping to get a commission.



G. Garlick, '16, or "The Owl" has received an appointment in the intelligence Branch of the Militia, with the 2nd Contingent.

x



Leslie Lord, '16, is also training at London for officer's commission.



A. C. Cleeves, '14, "Alfred" has been appointed Trumpeter-Serg.-Major to 2nd contingent.



Norman Stansfield has joined the Army Veterinary Corps.



THE WINTER FAIR

By the Agricultural Editor

The Ontario Winter Fair—the Great Object Lesson, is over. The awards have been made, the prize money distributed and at least that part of it which came to the students has been spent. A record, in detail, of

the events of the fair has appeared in the daily press and needs no repetition here but it is hoped that a few remarks regarding the part played in it by the students and graduates of the college may be of interest to readers of the *Review* and it is felt that some recognition should be given in these pages of the work they are doing in connection with Canada's greatest fat stock show.

Among the graduates who are now holding prominent positions who contributed to the lecture program were H. S. Arkell, Assistant Live Stock Commissioner; Prof. Barton, of Macdonald College; W. J. W. Lennox, Toronto; P. S. D. Harding, Perth, Ont., and F. C. Hart, Toronto. Among the former graduates who assisted in various capacities were D. McKenzie; '08, J. M. McCallum, '00, and C. C. Rebsch '12. President W. J. Black of Manitoba Agricultural College was present as a visitor. He was the first student to represent the O.A.C. at the International, where he succeeded in gathering in a large number of the individual prizes that were then given. The promise of his student days has been amply fulfilled by his achievements in the agricultural world since graduation. Another prominent visitor was Hon. Duncan Marshall, Alberta's Minister of Agriculture, who has an international reputation as an orator on agricultural subjects. His stirring address on the education of the farm boy will not soon be forgotten by those who heard it. Though not a graduate of the O.A.C. his name deserves special mention on account of the system of Agricultural Schools which he has devised for his province and which was thoroughly explained in an article written for the October *Review* by one of his able assistants. R. S. Hamar, '07, who was on the team which brought the Bronze

bull from Chicago; W. Jackson, '09, Secretary of the Ottawa Winter Fair; W. A. Brown, '08, Chief of the Poultry Division and C. F. Bailey, '09, our well known and popular Assistant Deputy Minister, attested their continued interest in live-stock by their attendance at the ringside.

The chief interest of the students centered, of course, in the judging competitions. Their interest was prompted by various motives: mercenary, sporting and a love for the animals. The champion judge was P. Vahey, '16, who got away with two firsts in poultry and dairy cattle, and a second in horses. The Inter-Year Judging Trophy, which goes to the year making the highest number of points, the five men of each year taking the highest number of marks in each class constituting the team of that year and the marks of these only being counted, was won by Year '15. Last year the graduating class won the cup for the third time in succession and it became their property, but a new one has been given to be competed for on the same terms as the old one.

Considerable confusion was caused in the horse-judging competition, because one of the animals in the three-year-old class, otherwise an outstanding winner, had received a kick on the off hind leg, which was badly swollen in consequence. Whether to overlook it and put her up or condemn her for it and put her down was a question over which there was and still is considerable difference of opinion among the competitors and the students who watched the judging from the ringside.

The names of the students and others who got into the prize-money, are as follows:

Horses:—1st, R. Skelton, '16; 2nd P. Vahey, '16; 3rd, W. M. Kedey, '15; 4th, J. A. Steel, '16; 5th, F. Fenwick, '17; 6th, W. M. Croskery, '15; 7th,

A. G. Clarry, '17; 8th, A. W. Locke, '15; 9th, R. A. Templar, Burford, Ont.; 10th, J. C. Fuller, '17.

Beef Cattle:—1st, J. P. Sackville, '15; 2nd, W. J. Bell, '15; 3rd, A. C. Lane, '17; 4th, W. R. White, '15; 5th, R. A. Finn, '15; 6th, R. W. Gregory, '17; 7th, J. P. Hales, '15; 8th, J. A. McArthur, '17; 9th, E. F. Neff; 15; 10th, W. C. Cox, '17.

Dairy Cattle:—1st, P. Vahey, '16; 2nd, D. J. Frejd, '15; 3rd, C. Bush, Nanticoke, Ont.; 4th, A. F. Simmons, '17; 5th, E. K. Hampson, '15; 6th, W. E. Wood, '17; 7th, R. B. Hinman, '15; 8th, F. D. Cotsworth, '16; 9th, R. S. Watt, '17; 10th, L. H. Mallory, '17.

Swine:—1st, E. E. Reilly, '16; 2nd, M. E. McPhail, '17; 3rd, R. S. Watt, '17; 4th, W. E. Wood, '17; 5th, C. Elder, '17; 6th, R. B. Newman, '17; 7th, A. B. Baird, '16; 8th, R. E. Cumming, '15; 9th, R. D. Colquette, '15; 10th, R. Murray, '16.

Sheep:—1st, B. E. Foyston, '15; 2nd, D. E. McEwen, '18; 3rd, D. J. Frejd, '15; 4th, R. D. Colquette, '15; 5th, J. Coke, '16; 6th, W. R. Shaw, '16; 7th, R. C. Elder, '17; 8th, M. J. McQueen, '15; 9th, R. B. Hinman, '15; 10th, P. B. Slack, '17.

Poultry:—1st, P. Vahey, '16; 2nd, W. Bennet, '16; 3rd, E. G. Hogarth, '15; 4th, J. A. MacAdam, '18; 5th, B. E. Foyston, '15; 6th, B. W. Ware, '18; 7th, G. R. Wilson, '18; 8th, J. P. Hales, '15; 9th, J. C. Roger, '17; 10th, E. F. Neff, '15.

Several of the students officiated in various capacities during the fair and no doubt accumulated large volumes of experience. W. J. Bell, '15, as ring clerk was on the job all the time and moved among the stockmen with the air of a man who was just in his element. J. P. Sackville, '15; assisted in the ring and also got the cattle

classes out at the proper times. W. R. White, '15, marshalled the horses in an efficient manner. P. L. Fancher, '16, assisted Mr. Reek, who had charge of the dressed meat display. S. W. Freeborne, '15, J. P. Hales, '15, C. F. Francis, '15, W. Bennet, '16, and many others assisted at what the poultry fanciers agree was the finest and all others agree was the noisiest exhibition of poultry ever seen at the Winter Fair.

The afternoon lectures did not seem to attract as many students as they should have done. Men accustomed to hearing four or five lectures a day may feel more or less "fed up" with that particular kind of mental pabulum, but such fresh, crisp statements of affairs as they stand with the Canadian farmer are just what the students need. As examples of straight-to-the-point speaking, the addresses of Robert Miller on the condition of the horse Market and Prof. G. E. Day on the prospects of the swine industry are seldom equaled. Many other men, in close personal touch with the live-stock industry as a business, contributed to a program of lectures that was well worth the time of anyone to attend, even of a student within a week of examinations.

And everywhere, in the office, at the ringside, on the lecture platform, among the dairymen, was to be seen R. W. Wade, '05, veteran, live-stock expert, and Secretary and Manager of the Winter Fair, who conducted it all and whose autograph adorned the lower right-hand corner of certain slips of paper which students who were successful in the judging competition found readily convertible into cash at the offices of the money-changers.

ECHOES FROM THE RINGSIDE

"Colonel" White should now be able to qualify as commander of a brigade of cavalry.

Anyone who has seen the expressions on Bell's face in both places will have a pretty fair idea as to whether he would sooner be in the ring or in the chemistry lab.

If the fourth year horse judges could only find the horse that kicked that filly on the leg they would buy it and

present it to the War Office, with instructions to have it sent to the firing line immediately.

"The average farm boy's impression of a calf is that it is a mouth on four legs."—*Hon. Duncan Marshall.*

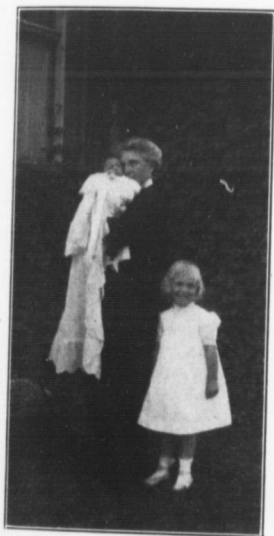
The nutritive ratio of that champion chicken would be at least one to six.



Macdonald Hall

THE Y. W. C. A.

DURING the past term, eleven Sunday evening meetings have been held with an average attendance of 59. The Bible Study Class, conducted by Professor Reynolds, has met from week to week, with increasing interest and an average of 35 present.



Mrs. Fuller, Cecil and Louis

The Mission Study Class has just been organized with a membership of 55.

At the close of Professor Harcourt's address at the last meeting of the term, Miss Kelso, the President of the Society, made a few remarks concerning the work just completed, and also outlined the plans for the coming term. She also expressed her appreciation of the co-operation of the executive, and the

splendid spirit shown by all the girls in their ready response to any suggestion for furthering the work.

The various contributions of the Society since September, are:

Missions.....	\$13 50
Benevolent Purposes....	5 00
Red Cross.....	29 18
Belgian Fund.....	50 00

Total.....	\$97 68
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In addition, through the enthusiasm of Mrs. Fuller and Miss Dickinson, the girls of Macdonald Institute, have contributed \$100.00 towards the Patriotic Fund and \$42.00 towards Field Comforts. The total contributions are thus \$239.68.

During the coming term, the meetings for the most part, will be entirely conducted by the various classes in turn. Some of the following subjects will be considered.—

New Year's Resolutions, Junior Housekeeper.

History of the Y. W. C. A., One Year Normal.

Settlement Work, Junior Associate. Immigration and Women's Relation to it, Senior Normal.

Social Service, Senior Housekeeper. Definite Opportunities for Service for Woman, Junior Normal.

There will be three Missionary Sundays for which the Mission Convener will make arrangements.

Before closing this report, we would like to express our appreciation of Miss Kelso's splendid work for the Y.W.C.A. both in organizing, and in successfully carrying out the program for the past term.

A RED CROSS TEA UNDER THE AUSPICES OF THE Y.W.C.A.

By E.S., '16

On Saturday afternoon, November 21st, a decidedly successful tea was held at Macdonald, by the Y.W.C.A. The tea rooms were very effectively decorated with yellow and white "mums."

At about five-fifteen, the spectators of the Rugby match began to stream in. Their method of showing appreciation was truly characteristic.

"Now good digestion, wait on appetite.

And health on both."

Misses M. Kelso and E. Hannah presided at the tea table and were assisted by a bevy of pretty "Mac" girls. It was noted that the Freshies performed their duties as cup-bearers with surprisingly few mishaps, considering the magnitude of the honor thrust upon them. A cup more or less, is not worth consideration anyway. To the Seniors was entrusted the privilege of seeing that the callers lacked nothing and this they did with an unselfishness and a fidelity truly remarkable. Ahem!

Mr. Spencer made a very successful auctioneer and must be congratulated on the ease with which he converted the remaining "cakes into dough"—a truly remarkable feat for a man not versed in the fine arts of Domestic Science. It is rumored, he even succeeded in eliciting bids from a couple of ladies, which is, as remarked, "going some," even for Mr. Spencer.

During the afternoon vocal numbers were rendered by Misses Kelso, Hughes and Scavern, of Toronto, and were greatly appreciated.



HOMEMAKER'S FAREWELL PARTY

Such noise and confusion as there was in Macdonald Hall on Friday

night, not even the thought of the examination time-table, which had appeared on the bulletin board that very morning, marred the excitement, the children were going to a party. The invitation from the girls who were leaving at Christmas, or at least are already sure of leaving, had been posted up in the morning inviting one and all to dress as children and come to the gymnasium at eight o'clock.

Long before eight, the noise began, ribbons and sashes had to be hunted up for the girls, skirts had to be shortened or their hair had to be curled in a dozen ringlets, collars and ties had to be found for the boys, but what child is ever late for a party, and eight o'clock found them on the way to the gymnasium.

There were girls with pink dresses, girls with blue dresses, girls in middies, and girls in white dresses, with bright colored sashes and hair bows; some with their hair in curls, others with long braids which naughty Jack delighted in pulling much to the chagrin and disgust of his sister. Poor frail little Pete, and his sister Repete, had brand new woolly caps for the occasion and could not be persuaded to take them off during the whole evening. Buster Brown and Mary Jane arrived slightly late, Buster to have the finger of scorn pointed at him and fussed! sissy! smarty! yelled in his face by two saucy waifs who, hearing of the party came in their ragged clothes, their hair in many pigtails, their stockings chiefly holes and their shoes without laces, their faces were smeared with jam, but a broad smile lit up their whole face, for they, if anyone, were happy.

Everyone entered into the games of "Pom, Pom, Pull Away," "Drop the Handkerchief," and all the other games of childhood, or between the games enjoyed a little dance. The refreshments

had to be brought on early, for, of course, they were children and the nurse felt that her baby at least, ought not to be kept out late. Each was given a canly cane and a huge apple and then the party was over, all regretting that they could not remain as children during the coming two weeks.



BASKETBALL AT MACDONALD HALL

The girls of Mac Hall again saved their names in the Basketball game on December 11th, when the Collegiate girls, preceded by an illustrious name, visited our Hall, determined to "do or die."

In the first half, which was played according to Macdonald rules and refereed by E. Hannah, the Guelph girls were rather at a disadvantage, not being used to the rules of the game and the ball was continually spirited up to the Mac goal when the forwards had little trouble in getting it in. Score at half time was 13-5, in favor of Mac Hall.

The second half, played according to Collegiate rules, was exceedingly exciting and provided much amusement for the spectators. The ball could not be seen a great deal of the time on account of the girls piled on top of it. Guelph girls slowly gained in this half being more accustomed to the game, but when the referee's whistle blew, the Mac girls were still ahead by a score of 18-15. Miss Hilliard, from the Collegiate, ably refereed this half.

We should be glad at some future time to play a return game with the Collegiate.

The line up for Mac Hall was as follows: Forwards, B. Conrad, M. Gooch; Centre, I. Cochrane; Defense, G. Carleton, E. Hopper. Umpire, Dr. Ross.

Referees—Miss Hilliard and Miss E. Hannah.

"AFTER THE PLAY"

After the greatest show of the season on the evening of November 20th, the Philharmonic Society whose attendance was unusually large and the whole caste of "A Regular Fix," assembled in the Macdonald Hall dining-room for supper. Mr. Shildrick, musical instructor of the society, made an appropriate speech, thanking Mrs. Fuller for her help and congratulating the members on their good work. R. J. Griffin, the President of the Philharmonic, addressed the company.

"Stage Manager Patton," was then called upon to thank those who had taken part in the play for all their hard work and the splendid way in which each member of the caste arose to the occasion.

A vote of thanks was extended and "Three Cheers" given for Mrs. Fuller, who was always ready with helpful suggestions and certainly most kind to play all the accompaniments at the practices and on the night of the performance.

'Hero' Boulton delivered a few well-chosen words, which were "amidst the gathering thunder-clouds." Then after joining hands and singing "Auld Lang Syne," the party broke up. As usual, many of the guests did not succeed in finding the front door until lights were out. Really, the front door of the "Mac" should be enlarged!



"THE STUDENT'S DREAM"

The "Merry Wives of Windsor" told "King John" that "Two Gentlemen of Verona" were injured in "The Tempest" on the "Twelfth Night." "Timon of Athens" and "Titus Andronicus" told "Cymbeline" that it was "Much Ado About Nothing" and for this should get "Measure for Measure." "The Merchant of Venice"

said you may take it "As You Like it," for at the time the "Two Gentlemen of Verona," together with "Troilus and Cressida" were attempting the "Taming of the Shrew." "Romeo and Juliet" agreed with "King Lear" that it was a "Winter's Tale" while "Antony and Cleopatra" said the whole matter was a "Comedy of Errors."



AS SUNG BY C. GWYN AND B. CONRAD AT THE "OPEN GYMNASIUM"

"Mandy, Pandy, Dingo Brown

What you going to do when exams come round?

What you going to do, what you going to say?

Never plug till the break o'day

You know, I know, pass means plug.

We've never passed without we dug.

So Mandy, Pandy, Dingo Brown,

What you going to do when exams come round?"

The success of the song was so obvious that when next we heard of the same young ladies, they were playing the role of "Disturbers" in the old drama: "Ten nights under the night light."



KATHLEEN D.—Sadly coming from the Apartments—"Where is happiness found?"

JEAN B.—"In the dictionary."



THE EXCUSE THAT PASSED

MISS ROGERS—"What was all that noise in your room, Miss Stewart, after the lights went out."

MARG. STEWART—"Oh, nothing—Just one of the 'Two-in-Ones' left their false teeth on my pillow and they bit me."



JUNIOR CHEMISTRY

The Juniors are wonderful. They

tell us: 1st, Chemistry is the Science of how to burn your hand without fire.

2nd, That the great thing on the Christmas Exam was to make nothing cover two pages. Do you wonder that four of them made 100.



THE OLD JOKE MIGHT APPLY

ETHEL H.—"Have you seen Arthur?"

HELEN E.—Innocently—"Arthur who?"

ETHEL—"Our Thermometer."



The girls have remarked that Pulliene's and Mallory's new hair cut has a "hair-raising effect."



AT THE PHILHARMONIC

FRANKIE A.—Behind the scene—Do look at Mr. Goodman; he seems a thousand miles away from Guelph."

MR. ARNOLD—"He's probably wondering if he will get his Wadges."



PRIVATE CHAPTER OF THE SUNSHINE CLUB

For young Englishmen out of work and desiring something to eat or advice on Platonic friendship. Apply to Miss Rocher, College Heights. Hours. 12 to 12. No chaperon necessary.



Mrs. Fuller and the girls of the Hall were sorry to say Au Revoir to Lieut. Tommy Atkin on Monday, December 14th, when he left for Camp in Toronto.



A FAREWELL PARTY TO DR. ROSS

Miss Boughner entertained the Seniors in her rooms on the 11th. Dr. Ross was the guest of honor; it took her just ten minutes to put restraint to the winds. The editing of a newspaper was the feature of the evening. Everyone turned in to make a success

of it. The various departments and columns were so personal and of such a nature that it was impossible to have it sent to the press for fear of recall or development to the law court. "Big feet. Big kicks." Although it was the third night of exams, there was very little shop talk. The floral decorations of the tea-table was very effective and in keeping with the refreshments Miss Kelso sang while supper was being served and the party joined in the chorus whenever possible.



THEATRICAL TEA

Katherine Howe Cunningham, "chief end chorus lady," entertained the Caste and Chorus of "A Regular Fix" at the little Dutch Inn, on Tuesday, November 24th. A delightful hour was spent at the Tea Table. The party numbered twenty-five. Mrs. Fuller and Miss Cunningham were the Tea hostesses.



The Mac Girls are anticipating the usual night(s) at the rink. Don't for-

get assistance in filling programmes may be had at any time by phone or personal interview between one and two



THE ATHLETIC SOCIETY'S
FAREWELL TO DR. ROSS

Dr. Ross was asked by the Society to present the winning basket ball team pennants. With this as an excuse, the Society made use of the opportunity to give the Doctor a token of their appreciation of all that she has put into the Society. Miss Bradley on behalf of the Society, said a few words and presented a silver-mounted umbrella. Miss Dickinson seized the moment as the best time for the Girls of the Hall to show their esteem and respect for the Doctor and came forward with a club bag. Dr. Ross's reply was made with much feeling.



Mrs. Fuller spent Xmas with her daughter in Fort William.

THE PASSING OF THE THIRD FLOOR—

NAME	What she told her Ma she would be	What her Ma wanted her to be	What she ought to be
Florence Irwin.....	Ballet Dancer	Deaconess	Encouraged
Marion H.....	Musician	Famous	Sat upon
Mildred Gooch.....	Chorus Girl	A perfect Lady	Spanked
N. Fisher.....	A reg. dare-devil	Economical	Removed from
N. Horning.....	A 2nd Falstaff	Something worth while	Bad influences
M. Williams	Orator	Teacher	Clever
M. Hanna.....	Cook	Sensible	A good sport
Grace Conover.....	A shop girl	Literary	Held down
			Fatter.

Locals

NEW YEAR'S RESOLUTIONS

Why write about them? We all know all there is to be said on the subject. Who has not made and broken them a dozen times at least, and some of us more than that. All of us can sympathize with the two men who, on New Year's Eve, made a firm resolution to give up drinking. Two months later one wrote to the other: "Are you still on the water wagon? *Neither am I.*" Are not we all weak enough—aye and old enough and young enough too, to understand dear old Omar Khayyam, when he says:

*"Indeed, indeed Repentance oft before
I swore—but was I sober when I swore?
And then, and then came Spring, and
rose-in-hand
My threadbare penitence apieces tore."*

But it's a long cry from Omar and Spring to the Mac and New Year. Still New Year's Resolutions, even though like pie-crusts they are made to be broken, may, also like pie crusts (presuming, of course, that we still remember what those are like) do us good and it's no harm to make them. Some of the celebrities evidently think so. Here are some of the gentle whispers overheard by the proverbial little bird.

♦ ♦ ♦

MISS MILLS—"No, I shall *not* let my imagination run wild this term to play any tricks on the girls.

♦ ♦ ♦

MR. LE DREW—"Certainly the students must have a band at the rink two afternoons each week.

♦ ♦ ♦

MAC GIRL—"I'll keep up with my work every night this term."

FIRST YEAR MAN—"You bet I'll be over early for this Prom."

♦ ♦ ♦

GWYNNIE says she will never swipe anything from the table again.

♦ ♦ ♦

HUGHIE—"Will never no more mistake a first floor window for a third.

♦ ♦ ♦

RESOLVED UNANIMOUSLY—"The Rinkibus Timebus Cupidus Bacilli will have no opportunity to flourish in Mac Hall this year.

♦ ♦ ♦

MR. GALBRAITH—"Never again will I keep those poor girls working till 5:30 on Wednesdays to finish Chemistry experiments."

THE BURDENS OF WEALTH

One Spring, says *Everybody's*, for some reason, old Eli was going round town with a face of dissatisfaction and, when questioned, he poured forth his voluble tale of woe thus: "Marse Geo'ge, he come to me last Fall an' he say, 'Eli, dis gwine ter be a hard Winter, so yo' be keerful, an' save yo' wages fas an' tight.' An' I believe him, an' I save an' I save, an' when de Winter come it ain't got no hardship, an' dere was I wid all dat money es' frown on mah hands!"

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

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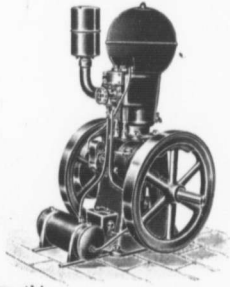
POWER ON THE FARM

The LISTER Gasoline Engine provides the most reliable, efficient and economical power for farm use.

It will drive the grinder, separator, churn, washing machine, grindstone, saw, thresher, ensilage cutter; will fill the silo, pump water or generate electricity for lighting up the farm and outbuildings.

No technical skill is required to start, run or handle the Lister Engine. There is no battery to run down or get out of order, no lamp to adjust, no outside holes to fill, no danger, no extra insurance. Ten Thousand "LISTER" users will confirm this.

Write for Catalogue with photographs of Lister Engines in use on Canadian Farms.



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Local Sales Agents for Guelph and District—S. & G. Penfold.

"The Drowsie Drone"

By Geo. W. Bullamore, F.R.M.S.

The Drone is a gross Stingless Bee, that spendeth his time in Idleness; yet is there such a Necessary Use of him, that without him the Bee cannot be.—"England's Interest," by Sir J. More. (1707.)

BEESKEEPERS who wish to make New Year resolutions might decide to give the drones a chance in the coming season. The present attempts of beekeepers to stop the production of these useful members of the hive is founded on prejudice rather than on knowledge. Ages ago the ancients gave the drone a bad name, and it has clung to him.

I would here like to point out that I use the word "drone" in its strictly apicultural sense, to denote the male of *Apis Mellifica*. Humble bees appear to be entitled to the name also. In old literature I have seen references to the poison sac of the drone, the sting of the drone, etc. The fallacy

that humble bees have no stings is probably due to the "expert" who has told the country people that the *drone* has no sting, and has not explained to them that *his* drone is not the same insect as *their* drone.

The use of the drone puzzled many generations of beekeepers. Unkind things were said of him because he did not gather honey. One of the committee of the British Beekeepers' Association at last hit on an explanation of this laziness. It was because "they have no receptacle for carrying the liquid." Another book, published at the request of the British Beekeepers' Association, states that the drone has no honey bag. Unfortunately for these apologists, the drone has a honey sac—a fact that was known to some of the older writers on bees.

In the past also the drone had his defenders. It was noticed that the stock which produced the most and

earliest drones was the most profitable, and on this was based the argument that the general increase in the worker population of the hive was due to the presence of such a great number of drones. It was noticed, too, that the stock which produced no drones usually came to grief, and the explanation given was that bee bread was gathered, but not used owing to the absence of drones. This bee bread putrified in the cells and rendered the hive distasteful to the bees, causing them to desert it, or to submit to robbers. It was held to be better to kill six worker bees than one drone during the breeding season, and writers gave instructions for the transfer of drones to a droneless stock.

After the research of Huber had established the fact that one drone was the father of all the workers in a colony, the production of large numbers of drones was looked upon as a precautionary measure of nature to ensure as little risk as possible to queens on their nuptial flights. With the introduction of comb foundation a means of preventing the production of drones was at hand, and as they were now looked upon as useless gluttons, it was thought that their suppression would result in increased honey yields. A lessened production of drones was also thought to mean less swarms, and non-swarmer stocks were thought desirable. This appears to be the opinion held by the generality of frame hive beekeepers at the present day.

I find it difficult to accept this view. When the brood nest is limited in extent a large amount of drone comb will restrict the laying of the queen because the drone larvae do not vacate their cells so soon as worker larvae. There are also fewer drone cells to the square inch. The restricted range of the queen may then cause swarming, for which the drones are blamed. But when ample

space for ovipositing is available, thousands of drones may be reared without causing the colony to swarm. If a queen has access to all the drone comb and all the worker comb she cares to occupy, the stock is not likely to swarm, according to my experience. The mere presence of drones does not, therefore, appear to affect the swarming impulse.

But may not the raising and upkeep of drones be a heavy drain on the colony? I doubt that there is much in it. The destruction of drone larvae in time of sudden scarcity is probably because the larval juices are used as food, although the advantage of a saving of food in the future arises from the circumstance. The strain on the colony must be partly in the production of eggs, which entails the giving of an immense amount of nourishment to the queen. There is no evidence that this nourishment is withheld when no drone comb is present, nor that the drone eggs are replaced by worker eggs in the season's laying. Is it certain that such eggs are not wasted?

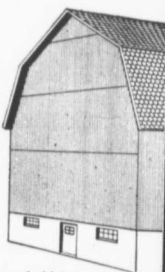
We are to the good, however, as regards a useless excess of pollen, and possibly to a pound or so of honey that otherwise would have nourished the adult drones. But in this respect I do not think anyone has ever proved that the use of drone traps has increased the surplus. As to the disposal of the food that would have been given to the drone larvae we are in ignorance. We cannot say whether the bees utilise it in other ways, or whether they suffer from the lack of physiological outlets for this food.

The advantages of drone suppression seem to be somewhat hazy. The disadvantages appear fairly clear. Under natural conditions the most and the earliest drones are produced by the strongest stocks. Queens which take their mating flights in districts flooded

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Are Famous All Over Canada For Their
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with such drones are likely to find their partners among them. The advantageous qualities of the stock supplying the male parent of a colony are likely to be perpetuated.

By the production of high quality drones, the beekeeper improves the bees in the neighbourhood and in time this must have an effect upon his own apiary. Every drone suppressed in a good stock is a blow struck at the prosperity of future generations of bees.

The production of drones from parthenogenetic eggs is fairly well established.

It is frequently stated that such eggs are produced by the queen at will, but I have never been able to satisfy myself that there is any truth in the statement.

DR. SANDS TO MISS M.—"How do you like housekeeping?"

MISS M.—"This is so sudden."

♦ ♦ ♦

Extract from diary of Messrs. Stothers, Hill and Lewis—"Jan. 8th: Cut my moustache off today by order of your executive. Appreciation of beauty seems really a lost art in our fellows.

"Jan. 9th: Started this morning to grow a moustache again."

♦ ♦ ♦

MISJUDGED HOSPITALITY

MRS. C.—(to Sydney N. Lord noisily descending private stair)—"Didn't you read that notice that this is a private stair?"

S. N.—"Pardon, but when I saw the word private, I was too polite to read any further."



Hotel Carls-Rite

"The House of Comfort"

Opposite the Union Station,

TORONTO

American Plan, \$2.50 per day
European Plan, \$1.00 per day.

W. F. WATT, Manager

PHYSICAL CHEMICAL & BIOLOGICAL APPARATUS

Send particulars of your requirements and we will gladly furnish quotations

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Educational Equipment,

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Are made of sun-dried and carefully-selected lumber. Try our Inter-faculty Specials

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Snow Shoes made of best seasoned material for ladies, gentlemen and children. Mocassins, all sizes.

SWEATERS, HOCKEY PANTS, PROTECTORS, ETC.

WRITE FOR CATALOGUE

J. BROTHERTON

578-580 Yonge St.

TORONTO

10,000 FARMERS WANTED

To Stand Behind the Sarnia Metal Products Co. Limited, and the Organized Farmers in a Great Co-Operative Proposition

We want every farmer in Canada that contemplates using Corrugated Iron, Metal Shingles or any other Sheet Metal Building Materials, to write us at once for information of our new co-operative plan by which we are supplying the farmers of Canada with Sheet Metal Building Materials at the lowest possible cost.

\$25.00 to \$50.00 Saved Every Farmer
QUALITY

We guarantee the galvanized iron used in the manufacture of Sarnia Metal Products to be equal to that of any iron used by any manufacturer in Canada in the manufacture of similar lines of roofing products which they are selling to the farmer, at the time of advertising, at an advance of 25 to 50 per cent. above the prices we are quoting. And please remember that all Sarnia Metal Products are made from galvanized iron of a quality specified by the organized farmers themselves.

PRICE

By an agreement with the farm organizations we have agreed to supply all farmers with sheet metal building materials at a small percentage in advance of the cost of our raw materials, leaving the control of the selling price in the farmers' hands. We have estimated our profits on a very large volume of business, and every order you send us will help in making our price still lower.

SERVICE

Our factory at Sarnia, just completed, is the most modern factory in Canada for the manufacture of the lines we offer, and we carry such large stocks and are situated in such an advantageous location that it is possible for us to make the quickest possible delivery of orders.

A Vital Question

If approached by another company or its agent in an endeavor to sell you Corrugated Iron, etc., simply ask them what they would supply you the same material for if it were not for the Sarnia Metal Products Company, Limited, and its co-operative plan. We have some information in regard to the plan used in the endeavor of others to head off our business, which proves very interesting reading.

If you contemplate the erection of any new buildings or the re-roofing of any already built, please send us a rough sketch, and we will do the rest.

WRITE AT ONCE TO HEAD OFFICE.

THE SARNIA METAL PRODUCTS CO. Limited
SARNIA, CANADA

Our lines are sold and distributed through the United Farmers' Co-Operative Company of Ontario.

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

CANADIAN PACIFIC NEW LIMITED TRAINS

"THE CANADIAN"

Between

MONTREAL, TORONTO, DETROIT, CHICAGO Via CANADIAN PACIFIC and MICHIGAN CENTRAL RAILROADS

via Michigan Central Gigantic Steel Tubes between Windsor and Detroit. Leaving Montreal 8:45 a.m.; Toronto 6:10 p.m., arriving Detroit 12:35 a.m. and Chicago 7:45 a.m. daily.

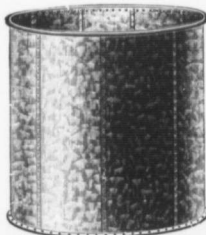
Equally good service returning.

Through Electric Lighted Equipment.

TORONTO—WINNIPEG—VANCOUVER

Toronto-Vancouver Express No. 3 leaves Toronto 5:55 p.m. daily. Vancouver-Toronto Express No. 4 arrives Toronto 11:45 a.m. daily. Manitoba Express No. 7 leaves Toronto daily except Sunday 10:50 p.m., arriving Winnipeg second day. Ontario Express No. 8 leaves Winnipeg 9:25 p.m. and arrives Toronto 5:15 p.m. daily except Tuesday.

For further particulars apply to Canadian Pacific Ticket Agents or write M. G. MURPHY, D. P. A., C. P. Ry., Toronto, or J. Hefferman, C. P. & T. A., 32 Wyndham St.



Wayne Steel Tanks

Do not buy wooden tanks or build concrete ones until you have investigated the WAYNE STEEL TANK.

The WAYNE TANK is moderate in price, and has twice the life of a wooden tank and many advantages over cement.

No fuss or muss. Use it in the barn to-day, and tomorrow put it in the yard if you wish. They do not get water-soaked, and freezing weather has no effect on them.

If your dealer does not handle the Wayne, let us hear from you direct.

WAYNE OIL TANK AND PUMP COMPANY, LTD.
WOODSTOCK, ONTARIO

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

Dentist,

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Telephone 14. Over Dominion Bank.

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

Call at the

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104 WYNDHAM STREET.

Phone No. 688.

Greenhouses

have not until recent years attracted much of the attention of the agriculturist.

However the possibilities of raising many plants under glass and the profits therefrom as well as flower growing are now coming in for a well-deserved study.

Hot-house fruits and vegetables command high prices and are always in demand.

The student will do well to look into this phase of farming carefully.

With all thoughts turned to the "Made in Canada" idea it is interesting to know that we have an entirely Canadian Company equipped to build any sort of greenhouse or to install efficient heating or ventilating systems.

The members of the Company are men whose names are known throughout Canada as an assurance of the best workmanship and most modern designs in greenhouse construction.

The Company has already constructed houses for J. H. Dunlop, at Richmond Hill, and many smaller private growers.

Upon request we will gladly furnish you with suggestions, plans and estimates covering your requirements—write us.

Glass Garden Builders, Ltd.

Dept. A

201 CHURCH ST. - - TORONTO



VIEW of the Dairy Barn at Guelph, O.A.C. covered entirely with PRESTON SAFE LOCK SHINGLES and ventilated with ACORN VENTS.

The rink at the O. A. C., shown in the last month's Review, is entirely covered with ACORN CORRUGATED IRON.

These are but two of the many public buildings which are covered with our iron. Thousands of roofs and complete buildings all over the Dominion are protected by ACORN BRAND products.

Preston Safe Lock Shingles are a guaranteed proof against lightning. We guarantee this IN WRITING over the seal and signature of our company.

Acorn Corrugated Iron is used for a complete covering of the famous MODEL BARN which was shown at the National Exhibition, and which is being used by the best farmers of Canada.

A SPECIAL BOOK FREE

We have just issued a book on Farm Barns and Buildings, showing reproductions of some of the best barns in Canada, together with letters from many of our customers. May we send you a copy free of all charges.

Clip the Coupon to-day and send it to us.

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Send your Free Book as advertised in the O. A. C. Review.

Name.....

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Sheet Music Music Books Victrolas Violins Guitars
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BELL ART PIANOS

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The piano distinguished for its beauty of case and clearness of tone, for its stand-in-tone qualities and for the Bell tone sustaining frame, the most wonderful support ever given to a piano.

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Under the Control of the Department of
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Affiliated with the University of Toronto

Established by Professor Andrew Smith, F.
R.C.V.S., D.V.S., in 1862, under the aus-
pices of the Upper Canada Board of
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COLLEGE REOPENS ON THURSDAY,
OCTOBER 1st, 1914.

Calendar, 1914-1915 Sent on Application.

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Principal

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Is equipped to produce the best
in **Groups** or **Individual Por-
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at \$1.50 a Dozen.



The Kennedy Studio
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Fateful 1915

The year upon which we are entering is dark with mystery—we cannot forecast the events of a single day of it.

Is it not important that exposed to these uncertainties we should protect our households with “the one thing sure”—a life policy?

For if the future is dark to the supporter of the family, what would it be to his dependents if death should remove him?

There is no bond or treaty in the world more binding than a life insurance policy—no policy more immutable than the one issued by

The Mutual Life Assurance Company of Canada

Head Office, WATERLOO, Ontario

George Chapman, District Manager

OFFICE, 8 DOUGLAS STREET, GUELPH, ONT.

Clean Milk a Perfect Food

The most worthy aim a dairyman or creamery patron can have is to produce milk that is clean. Thus the necessity for keeping all milk containers and utensils clean and sanitary.

Wyandotte
dairyman's
Cleaner and Cleanser

is a cleaning material made especially to cope with such cleaning, sweetening and freshening as is required where milk is handled. That it has no harmful effects on the milk, and that it does just what a dairy cleaner ought to do, is best told in the unanimous praise which it receives from every dairyman or factoryman who gives it a thorough trial.

Indian in Circle



Ask your dealer for a sack or for larger quantities write your dairy supply man.

On Every Package

The J. B. Ford Co., Sole Mnfrs., Wyandotte, Mich.

This Cleaner has been awarded the highest prize wherever exhibited.

\$100,000.00

to

\$150,000.00 Plus

ONE hundred to one hundred and fifty thousand dollars' worth of work in one year is the maximum output of the Advertiser Job Printing Company, Limited.

In this cosmopolitan city of big things this ought to mean something to you, Mr. Advertiser and Mr. Buyer of Printing.

Our present customers know what it means to them—personal attention to all details—careful typography—the best press work—and above all, SERVICE. The kind of service that brings back to us all your future orders for printing.

We specialize in high-grade catalogue, magazine, book and color printing. Let us talk it over with you when you are in the market for more printing.

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SINGLE AND DOUBLE STRENGTH

*Special make, flat
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Therefore see to it that you get Winter Eggs.

Gunns "Shur-Gain" Beef Scrap

Is the best known means to attain this end. It supplies the necessary protein, and is a substitute for the insect life consumed by the fowl in Summer.

Beef Meal	Grit	Bone	Shell
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Always kept in stock.

Gunns Limited, West Toronto

Write for our Poultry book.

Latest Improved Dairying Methods

All readers of The Review will be interested in the newest dairying methods. These are given in detail, in a most thoroughly understandable way in the new edition of

Canadian Dairying

By Prof. H. H. Dean

This edition, just recently issued, has been most carefully revised and brought thoroughly up-to-date and includes photographs and drawings of the latest and best apparatus. It has 299 pages with alphabetical index and is bound in substantial cloth covers.

Price, \$1.00 net, postpaid.

WILLIAM BRIGGS, Publisher

29-37 Richmond Street West

Toronto, Ont.

OFFICIAL CALENDAR

OF THE

DEPARTMENT OF EDUCATION, FOR THE YEAR 1915

February—

1. Inspectors' Annual Reports to Department due. (On or before 1st February.)
2. First meeting of High School Boards, Union Boards and Municipal Boards of Education.
15. Public Library Board to submit estimate to Municipal Council of several sums required. (On or before 15th February.)

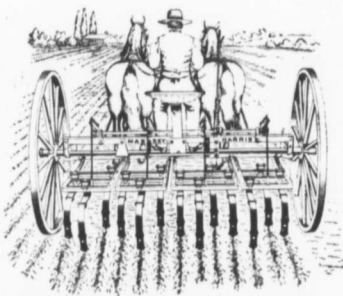
March—

1. School Boards in unorganized Townships to appoint Assessors. (Not later than 1st March.)
- Separate School supporters to notify Municipal Clerks. (On or before 1st March.)
26. Normal School final examination for Grade A students begins.

April—

1. Returns by Clerks of Counties, Cities, etc., of population to Department due. (On or before 1st April.)
- Normal, English-French Model, High, Continuation, Public and Separate Schools close for Easter. (Thursday before Easter Sunday.)
2. Good Friday.
3. Easter Monday.
6. Annual Meeting of the Ontario Educational Association at Toronto. (During Easter Vacation.)
12. High and Continuation Schools, third term, and Public and Separate Schools open after Easter holidays. (Second Monday after Easter Sunday.)
13. Normal and English-French Model Schools open after Easter Holidays.
14. Notice by candidates for Junior High School Entrance and Junior Public School Graduation Diploma examinations, to Inspectors, due. (Before April 15th.)
15. Reports on Night Public Schools due (Session 1914-1915). (Not later than the 15th April.)
20. Inspectors report number of candidates for Junior High School Entrance and Junior Public School Graduation Diploma examinations. (Not later than April 20th.)
20. Notice by candidates to Inspectors due for Senior High School Entrance, Senior Public School Graduation Diploma and the Model School Entrance examinations and the Lower School examination for Entrance into the Normal Schools and Faculties of Education. (Before May 1st.)

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**Kill the Weeds and Conserve Moisture
by using a
MASSEY-HARRIS CULTIVATOR**



Thorough cultivation with one of these Cultivators destroys the most obstinate of weed pests.

It also gives the soil a greater capacity for holding moisture and reduces the loss by evaporation.

Aeration of the soil is another result of cultivation. The oxygen in the air tends to make the mineral matter more soluble, and is necessary to the decomposition of the organic matter.

*It will pay you to call on our nearest Agent,
or write us for further information.*



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CAPITAL PAID UP	\$5,990,000
RESERVE FUND	\$7,760,000

A General Banking Business Transaction

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.

Sweater Coats and Sweaters To Order



Our goods are all HAND-FINISHED. They do not fray at edges and button-holes.

The pockets wear as long as the coats. Write for prices.



Thos. Warren

359 Spadina Ave.
TORONTO



Purina Chick Feed

SAVES Baby Chicks—Makes them sound and healthy

Keep Purina Chicken Chowder

Before them all the time and Watch Them Grow.



Feed Purina Scratch Feed and Purina Chicken Chowder to your Laying Hens
FOR PROFIT

Write us for 1915 Checkerboard Booklet and Learn the Purina Way

THE CHISHOLM MILLING CO. LIMITED, TORONTO

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HOCKEY SUPPLIES

We can supply you with every Hockey requisite from Skates to Toques in many qualities. Let us know your requirements in

**SKATES, BOOTS, STICKS
Pads, Sweaters, Toques**

or any of the other lines of Hockey supplies. Our new catalogue No. 71 describes all these lines, and we will be pleased to mail it to you. Write for it to-day. Special prices for club orders.

HAROLD A. WILSON CO. LTD.

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"I See Bill Erected Another Natco"

—Same old story. Bigger profits, more stock, an additional silo. And why is the second silo always a Natco, too? The reasons why are best appreciated by owners of other silos not built for good, whose walls are not air, moisture and frost-proof, resulting in much spoiled ensilage. The Natco stands year in and year out just as the day it was erected, yielding sweet, succulent silage in all parts, through all conditions of weather. Better benefit by the ex-

perience of others and erect the silo that's windproof, decayproof, fire-proof and verminproof—the

NATCO EVERLASTING SILO

"The Silo That Lasts For Generations"

It's built of hollow vitrified clay tile which will endure forever, and whose glazed surfaces absorb no moisture and totally exclude air and frost. It's reinforced by bands of steel laid in the mortar, and can resist all wind and silage pressures; thus a taller silo with a smaller diameter can be erected for there is no danger of a blowdown. Plan for your new silo now. Send today for a list of Natco owners in your province and ask for Catalog 7

National Fire Proofing Company of Canada, Ltd.
Toronto, Ont.

Made
in
Canada

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

The Royal Bank of Canada

Capital	- - -	\$11,560,000.00
Reserves,	- - -	\$13,500,000.00
Assets,	- - -	\$180,000,000.00

A General Banking Business done. Drafts issued to, or cashed from, all Countries; 374 Branches throughout Canada, West Indies and Cuba, and our own offices in London, Eng., and New York.

Savings Bank Department with separate room for Ladies.

R. L. TORRANCE,

Manager,

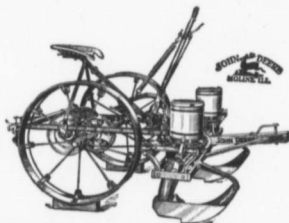
Guelph Branch.

It Makes No Difference

Whether you are growing Corn for Seed or for Ensilage YOU will raise MORE and BETTER CORN with our

JOHN DEERE No. 999 CORN PLANTER

OBLIQUE SELECTION



VARIABLE DROP

52 years ago scientific farmers began using our planters. If it wasn't the right way then how can you explain the fact that we build annually 45,000? Ask for our book, "More and Better Corn."

JOHN DEERE PLOW CO.

77-79 JARVIS ST., TORONTO.

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



A Simple Transaction

The opening and conducting of a Savings Account at this Bank is easily done. Those who are not familiar with banking are welcome at our offices and they will find us glad to show how simple is the procedure in doing business with

The Bank of Nova Scotia

For 83 years we have acted as a depository for the people's savings.

Paid-up Capital	- -	\$6,500,000
Surplus	- - - -	\$11,900,000
Resources over	- -	\$90,900,000

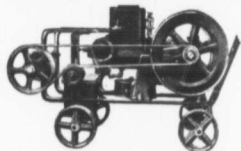
GUELPH BRANCH:
T. G. McMASTER, Manager.



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

"Goes Like Sixty"

Engines, Grinders, Wood Saws
Ensilage Cutters, Spraying
Outfits, Pumps, Washing Ma-
chines, Speed Governors, Etc.



Gilson Engines have special exclusive features which put them in a class by themselves. Every man who gets a "GOES LIKE SIXTY" engine secures for himself

"Safety, Service and Satisfaction"

PRICES RIGHT—EASY TERMS

Write for full particulars and our new illustrated catalogue.

Gilson Manufacturing Co. Ltd.

52 YORK STREET - - GUELPH, ONT.

The Rosery

MISS E. S. MARRIOTT

FLORIST AND DESIGNER

51 QUEBEC ST., WEST
GUELPH

PHONE 966
SUNDAY 355.

The Little Dutch Inn Tea Room

Lunch from 12-2 o'clock.

Afternoon Tea from 4-6 o'clock.

Arrangements made for Special or Evening Parties

OSTEOPATHY

DR. GORDON V. HILBORN

DR. MARY SHERRIFFS

Eyes Scientifically Tested.

10 SUFFOLK ST., W., GUELPH
PHONE 534

A CROP-SAVER AND MONEY-MAKER

That's what every SPRAMOTOR is to its owner. The outfit shown here is only one of many styles and sizes. It will do all kinds of spraying, whether trees, row crops, potatoes or weed killing. The horse does all the work and you simply direct the spray. As many as twelve nozzles may be used, and you can spray orchard trees can get 150 pounds pressure. With this moderate-price outfit, he properly sprayed. We are sole makers of the

MADE IN
CANADA

Spramotor

NO DUTY
TO PAY

It isn't a SPRAMOTOR unless we made it

and we have concentrated on spraying outfits only for the past twenty years. We make SPRAMOTORS from \$6.00 up to \$350.00—to operate by hand, horse or gasoline power.

The SPRAMOTOR won Canadian Government Spraying Contest at Grimsby, Ontario, against all other makes, even other makes. It wins every year in field and orchard against all other makes. Whether you buy a SPRAMOTOR or not, you are entitled to a copy of our valuable treatise on Crop Diseases, fully illustrated, absolutely free. Tells how to spray and when, giving facts, figures and photos.

Write us to-day and get your copy by return mail. If you will state briefly your spraying needs, we will send details of a SPRAMOTOR that will fit your requirements exactly.

J. H. Heard Spramotor
2160 King Street LONDON, CANADA



O. A. C. Students Co-operative Supply Store

A Full Line of

Agricultural Text Books

BOTANICAL SUPPLIES

Plant Mounts,
Labels,
Weed Seed Vials, etc.

ENTOMOLOGICAL SUPPLIES

Insect Pins,
Stretching Boards,
Boxes,
Butterfly Nets, etc.

DRAINAGE SUPPLIES

Paper
Instruments, etc.
Transportation Charges paid
on orders of \$5.00 and over.

STUDENTS' CO-OPERATIVE SUPPLY STORE

O. A. College, GUELPH, ONT.

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

Military Equipment

We are prepared to look after all your wants in military equipment, such as

TUNICS, TROUSERS, BREECHES
GREAT COATS, BRITISH WARM
COATS, FOXE'S SPECIAL PUT-
TEES. LEGGINGS, SPURS,
SWORDS, REVOLVERS, CAPS,
STARS, ETC.

R. W. Waterhouse

MILITARY TAILOR,

36 QUEBEC ST. W.

GUELPH

GEO. M. HENRY

Grinds skates concave and guarantees them not to stick. Give us a trial.

Also see us about hockey sticks.

THE RED FRONT STORE
63 Quebec Street

Phone 398.

H. H. WORDEN

O. A. C. BARBER SHOP

Three Barbers. No Waiting.
St. George's Sq. Cars stop at Door.

PEEP SIGHTS

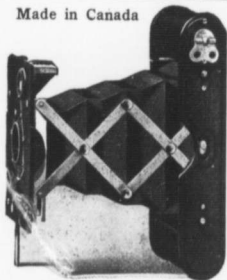
for Farm Drainage Purposes, as designed by Prof. W. H. Day, sent by mail to any address.

H. Occomore & Co.

124-126 Wyndham St.

GUELPH

Made in Canada



The Vest Pocket Kodak

You don't carry it, you wear it like a watch.

It's so small and smooth that it fits snugly in the vest pocket, so dainty that it is perfectly at home in a lady's hand bag.

IT'S THE ESSENCE OF EFFICIENCY.

Vest Pocket Kodak with Kodak Amastigmat lens f.8—\$11.50.

CANADIAN KODAK CO., Limited
TORONTO, CAN.

1914

O. A. C.

1914

STUDENTS should try
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

WONG'S O.K. LAUNDRY

The Students' Laundry, Opposite Winter
Fair Building.

College calls made on Monday, Wednesday
and Friday.

BEST WORK IN CITY.

SKATES GROUND CONCAVE

And Shoes Repaired promptly and neatly
at the

GOODYEAR SHOE REPAIR CO.,
44 Cork St.

Also full line of men's Goodyear Welt
Shoes. Phone 957

PERCY T. KING, Prop.



**Cheaper than
Home-made
Ties**



**25
Cents**
postpaid

Can't Slip
Can't Break


**Strong as two
knots—but won't
bind. Handy as a
snap—but won't break**

If you bought as good rope as
the 1/2-inch Hard Rope that goes
into this tie and fitted it with
snap and ring—a flimsy thing
at best—you would pay more
than the price of Griffith's
Handy Tie.

Griffith's
HANDY ROPE TIE

So simple you can put it on or
off with your mitts on. Strong
and proof against slipping or
binding. Live dealers sell them.
If yours does not, we will
mail one for 25c, postpaid
(30c west of Fort William).
Write to-day. Ask for our
Book of Bargains, full of
money savers, on sale
everywhere.

G. L. GRIFFITH & SON
DEPT. R
Stratford, Ont.




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

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

FRUIT

Benson Bros.

25 Wyndham Street



**Rexall Goods are Made
in Canada and are Not
Costing You a Cent More
than before the War. . . .**

And what is more, a portion of every
Rexall purchase goes to swell the
Canadian Patriotic Fund being raised
by The Rexall Stores of Canada, 400
of the Best Drug Stores in Canada.

Full list of **Rexall Toilet Goods, Rexall
Remedies**, and other Rexall merchandise free
at my store. Get one, and you'll realize how
easy you can help and how much you can
help relieve the suffering caused by the war,
and at the same time help Canadian industry
as well, by purchasing Rexall Goods at
my store or any other Rexall store in Canada.

McKees Drug Store

The Rexall Store

GUELPH - - - ONTARIO

KULTUR

ROWLAND—"What does 'pois' mean?"

AITON—"I don't know what it means in English, but in French it means take all the butter."



F. C. PATTERSON—(to Miss B., endeavoring to hear the program in the gym. at the Literary at Home)—"Can we squeeze in here?"

Miss B.—"I'd rather not, here."



BEE JAM

Atkins, reading at his tea,
Noticed not a roving bee,
Swallowed it among the jam—
"Hives" now cover "Cum Sum Sam."

DIAMOND
and SHIELD
O. A. C. PINS

Leather Fobs
Twenty-five Cents Each

SAVAGE & CO.
JEWELLERS

WAR! WAR! WAR!



Be Patriotic—Patronize the
Britisher, not the
Foreigner

We call for and deliver regularly, twice weekly. Special discount to O. A. C. Students.



Guelph Steam
Laundry . . .

"Ours Is Sanitary."

C. E. Hewer

49 Quebec St. West

Cleaning, Pressing & Repairing.
Goods called for and delivered.

Phone 808

Pants, pressed	\$0.15
Pants, cleaned and pressed	.25
Coats, pressed30
Coats, cleaned and pressed..	.40
Suits, pressed50
Suits, cleaned and pressed..	.75
Dry Cleaning Suits.	1.50

Monthly contracts for Students. Moderate charges for alterations.

MOORE & ARMSTRONG**Guelph's
Ladies' Store**

Women's and Children's
Garments

Dress Goods and Silks

Exclusive Millinery

Perrin's Kid Gloves

Northway Coats and Suits

Crompton's C-C a la Grace and
Parisienne Corsets

THE WHITE HOUSE

Phone 719

44 Cork St.

Jas. K. Readwin

Pants Pressed	-	-	15c
Pants Cleaned and Pressed	-	-	25c
Suits Pressed	-	-	50c
Suits Cleaned and Pressed	-	-	75c
Suits Dry-Cleaned	-	-	\$1.25
Velvet Collars	-	-	75c to \$1.50

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

Regal Shoes
For Men.

Sorosis Shoes
For Women.

W. J. THURSTON

Sole Agent

THE NEW SHOE STORE,

39 Wyndham Street

CUT FLOWERS

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

GILCHRIST'S

Phone 436.

St. George's Square.

FLOWERS

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

McPhee, Florist

Wellington Block.

R. H. McPherson

Barber

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

M. J. Rudell, D.D.S., L.D.S.

Dentist

(On the Corner)

Over Guelph and Ontario Investment
and Savings Society Bank

PHONE 16

SHOES REPAIRED

By the latest improved machinery in
America, Promptly and Neatly at the

Goodyear Shoe Repair Co.

50 Cork St. E., Guelph.

Telephone 957. PERCY T. KING, Prop.

The Guelph & Ontario Investment and Savings Society

Incorporated A. D. 1876.

Capital Subscribed \$1,000,000.00

Reserve Fund - \$524,044.00

Assets - - - - \$3,415,877.19

Debentures issued for One Hundred Dollars and over, for five years at 5 per cent., payable half yearly.

Deposits of One Dollar and upwards received and interest paid, or compounded half yearly.

Office: Society's Building, corner Wyndham and Cork Sts., Guelph, Ont.

J. E. McELDERRY,
Managing Director.

College Printing

Is A Specialty With Us

Every order receives the personal attention that ensures the delivery of the better class of work. Consult us about your printing.

We have an exclusive range of Novelties for

College Functions

Something that will please you. Come in and see the samples.

The Guelph Herald

PRINTERS AND DESIGNERS
OF GOOD PRINTING

Herald Building, - Douglas St.

GO TO

PETRIE'S

FOR

Drugs, Kodaks
and Confectionery

2 STORES

Our Kodak Department is at your service. We develop and print, also carry a full line of supplies for Kodaks and Cameras.

Our Confectionery Department—For fresh candies, ice cream and lunches.

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 by Petrie's two stores.

COR. WYNDHAM AND McDONALD STS.

Fine Job Printing

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

Kelso Printing Co.

FLOUR

SNOWDRIFT - - Manitoba Patent Flour

PEOPLES - - - - Blended Flour

DICTATOR - - - - Pastry Flour

Made from the choicest of Canada's Wheat

We will ship to any place.

Write us immediately for prices.

THE

James Goldie Co., Ltd.
Guelph - Ontario

FALL AND WINTER SUITS
AND OVERCOATS AT \$15.

"MY TAILOR"

49 CORK STREET

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

WHY HE WOULDN'T SHOOT

A deputation of three soldiers once came to the late Dr. Lueger to make some kind of a request in their behalf. The burgomaster of Vienna turned to one of the soldiers with the following inquiry: "What would you do if the Kaiser commanded you to shoot the burgomaster?"

"I would shoot him," said the soldier.

"So!" exclaimed Dr. Leuger, "and what is your religion?"

"I am a Protestant."

Dr. Leuger spoke to the second soldier.

"What would you do if the Kaiser commanded you to shoot the burgomaster?"

"Then I would shoot him," said the soldier.

"And what is your religion?"

"I am a Catholic."

The burgomaster turned to the third soldier.

"Would you have shot me if the Kaiser commanded you to do so?"

"No," said the soldier.

"And what is your religion?"

"I am a Jew," he answered.

"What!" exclaimed the burgomaster.

"Do you not know that I am the greatest anti-Semite in Austria? Tell me, why would you not have shot me?"

"Because I have no rifle; I am the drummer of the regiment."—*Jewish Chronicle*.

TORONTO'S FINEST FAMILY HOTEL.
HOTEL WAVERLEY EUROPEAN PLAN
 Phone College 781
 Rooms, Single or En Suite with Private Baths.—
 Telephone in every room.
 ROOMS WITH PRIVATE BATHS \$1.50 UP.
 ROOMS WITH RUNNING WATER \$1.00 UP.
 Special Weekly Rates.
 482-488 SPADINA AVE. (at College).

Day Old Chicks Eggs for Hatching STOCK

Nothing But O. A. C. Bred to Lay Strains.

1,000 Barred Plymouth
Rocks.
1,000 Single Comb
White Leghorns.
100 Single Comb Rhode
Island Reds.

Free Range



FARMS

Pekin Ducks.
Bronze Turkeys.

Shade and Spring
Water.

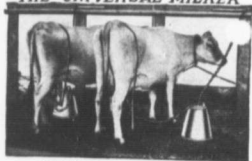
Eggs \$1.50 per 15; \$6.00 per 100; \$50.00 per 1,000; Duck Eggs \$1.00 per 11;
\$7.00 per 100. Day-old Chicks 15 and 20 cents each. Turkey eggs, 30 cents each.
Ducklings, 25 cents each. Write

E. F. MONTGOMERY, ST. WILLIAMS, NORFOLK COUNTY, ONT.

HINMAN

THE UNIVERSAL MILKER

HINMAN
THE UNIVERSAL MILKER



"MADE IN CANADA"

The MILKER Chosen by the
Shrewdest Buyers.
250,000 Cows Milked every day
with the HINMAN.
Price \$50.00 per unit.

H. F. BAILEY & SON

Sole Manufacturers for Canada
GALT, ONT. Dept. H.

MELVIN GAYMAN

LIMITED

INVESTMENT BROKERS

St. Catharines, Canada



We have over Three
Hundred Fruit and Grain
Farms on our lists for sale

It will pay you to get in
touch with us before
buying

CATALOGUE FREE ON REQUEST

PEERLESS-PERFECTION



Fencing for All Purposes

There is scarcely a fence requirement that we cannot fill directly from our stock, no matter whether it be farm, poultry or ornamental fencing. We carry the largest stock of fencing and gates carried by any one company in the Dominion.

Every Rod Fully Guaranteed

PEERLESS Fencing is well known for its non-rusting qualities. Many of our customers have testified to this fact. Examine any piece of PEERLESS Fence in your neighborhood. Compare it with fences of any other make. You will find little or no rust on the PEERLESS. The longer you can protect a fence from rust just that much longer will it continue to stand up and do business. Send for our literature and learn about this high grade fence. Probably your dealer handles it. Dealers wanted in unassigned territory.

Banwell Hoxie Wire Fence Co.

Limited
WINNIPEG, MANITOBA
HAMILTON, ONT.



The Empire Typewriter

SAVES YOU

\$40 to \$60

BECAUSE IT'S

Made in Canada

With three exceptions every
Canadian Chartered Bank
uses 50 or more Empires

"THERE'S A REASON"

Empire Typewriter

18 Adelaide Street West
TORONTO, ONTARIO

STONE'S FERTILIZERS

Do you realize that there will be a largely increased demand for Food Stuffs this year? Are you preparing for the higher prices by increasing your production?

STONE'S FERTILIZERS

will help you to get the most out of your land. They will pay you a large dividend on their cost.

BIGGER YIELDS,

BETTER QUALITY

Brands for every crop. Write for particulars.

William Stone Sons, Ltd

Head Office: Woodstock.

Branches: Ingersoll & Stratford.

Live Agents wanted.

Tile and Pipe

Concrete Tile from 4 in. to 24 in. always in stock,

Also

Sewer Pipe from 8 in. to 60 in.

Pipe all made from crushed stone and vaporized 48 hours.

R. Blair Co. Ltd.

Woodstock, Ontario.

Standard Steel Tube Posts

FOR THE UP-TO-DATE FARMER.

The Steel Tube Post outlasts the wooden post five to one. Dampness won't rot it, insects can't weaken it, and it takes one-third the labor to erect.

Standard Posts and Standard Woven Wire Fencing make a combination that ensures the Farmer using them the best job possible in fence erection.

There's an Agent in your vicinity. If you don't know him, write to us and we will send you full particulars.

Standard Tube & Fence Co.

LIMITED

WOODSTOCK, ONT.

Makers of STANDARD WOVEN WIRE FENCING, FARM GATES and STEEL TUBE FENCE POSTS.

RENNIES want to send you their Seed Book - *Sent Free.*



IT describes more than 1500 of the best varieties of Vegetables, Flowers, Shrubs, Vines, Fruits and Hardy Plants suitable for all parts of Canada—scores of varieties of Asters, Pansies, Petunias, Phlox, Sweet Peas, climbing and dwarf, Roses, Dahlias, Gladiolus, Pæonies and Phlox Plants, etc., for beautifying the home grounds.

It offers many rare, new and most desirable kinds—many of them not obtainable elsewhere — at

prices no greater than you are accustomed to paying for sorts everybody has.

You Will Like Our Seeds, Bulbs and Plants.

"BACK TO THE LAND."

Our Nation is at War. Never before in the history of our country has there been a more urgent call to till the soil than NOW. The seriousness of the European situation demands prompt action by the Gardeners and Farmers throughout Canada to grow an abundance of Foodstuffs, Vegetables, Roots and Fodder—and make ample provision for the supplies that will be required. We have large stocks of fresh, pure, honestly tested Seeds, Bulbs and Plants, and we are maintaining low prices — within the reach of all.

**LET US SEND YOU OUR
NEW BOOK FREE**

Write a post card to-day to
our nearest address.

WM. RENNIE CO., Limited

Adelaide and Jarvis Sts. - **TORONTO**
190 McGill St. 394 Portage Ave. 1138 Homer St.
MONTREAL WINNIPEG VANCOUVER



UNION BANK OF CANADA

50 YEARS IN BUSINESS

Capital Paid Up, \$5,000,000.

Reserve, \$3,400,000.

Total Assets (Over) \$85,000,000.

HEAD OFFICE, WINNIPEG

John Galt, President.

G. H. Balfour, General Manager.

H. B. Shaw, Assistant General Manager.

London, Eng., Branches, 6 Princes Street, E.C.,

and West End Branch, Haymarket, S.W.

The Bank, having over 310 Branches in Canada extending from Halifax to Prince Rupert, offers excellent facilities for the transaction of every description of Banking business. It has Correspondents in all Cities of importance throughout Canada, the United States, the United Kingdom, the Continent of Europe, and the British Colonies.

Collections made in all parts of the Dominion and returns promptly remitted at lowest rates of exchange. Letters of Credit and Travellers' Cheques issued available in all parts of the world.

FARMERS' BUSINESS

Special attention given to accounts of Students, Farmers, Cattle and Hog Dealers, Farmers' Notes Discounted and Farmers' Sale Notes cashed or taken for collection.

SAVINGS BANK DEPARTMENT

The advantage of a Savings Bank Account is that it earns you 3 per cent. interest night and day, and you can always get your money any time you want it, and every day your money is deposited with us we pay you.

The Dominion and Provincial Governments have large sums of money on deposit with this Bank and this should assure the public that your money is absolutely safe, as we are one of the oldest, largest and strongest Banks in Canada.

We want your name on our list, and we also want to meet you personally, when you call. \$1 will open an account. Office old Traders' Bank building, next door to post office.

F. D. ANDERSON, Manager,

GUELPH

ONTARIO

Young Men Stay in Canada

Advise Your Friends to Come to
C A N A D A

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.**



Attractive De Laval Exhibit at National Dairy Show, Chicago, October, 1914

DE LAVAL

BUTTER BEST AS USUAL

AT THE GREAT 1914 NATIONAL DAIRY SHOW

BUTTER made from cream separated by De Laval Separators made the usual clean sweep of all highest awards at the great National Dairy Show held in Chicago last October, as it has always done at every convention of the National Buttermakers' Association or a Dairy Show since the beginning of these important annual contests in 1892. The Sweepstakes and Gold Medal awards in the various classes were as follows:

Whole Milk Creamery Butter

The highest award in the Whole Milk Creamery Butter Class was made to Thomas Sadler, of Oelwein, Iowa, upon butter made with a De Laval Power or Factory Separator—score, 96½.

Quality of cream is just as important as quantity. De Laval users are assured of both in the greatest possible degree.

Gathered Cream Creamery Butter.

The highest award in the important Gathered Cream Creamery Butter Class was made to the United Dairy Co., of Chicago, which uses both De Laval Separators and Milk Clarifiers, the prize winning butter being made from cream gathered mainly from farm users of De Laval Hand Separators—score, 96¼.

Farm Dairy Butter

The highest award in the Farm Dairy or Home-Made Butter Class was made to Austin C. Higgins, of Andover, Mass., who happily is not only a De Laval user but a De Laval Local Agent—score, 96.

DeLaval Dairy Supply Co., Limited

MONTREAL PETERBORO WINNIPEG VANCOUVER

50,000 Branches and Local Agencies the World Over