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February-March, 1916.

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No. 3.

*Macdonald Students
and their friends*

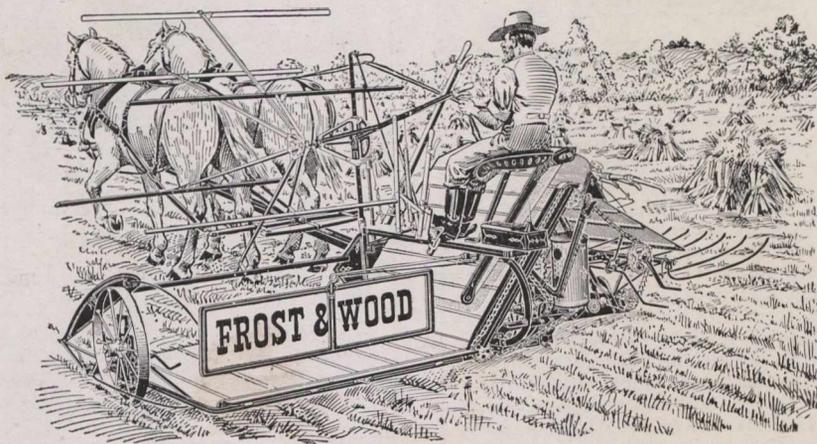
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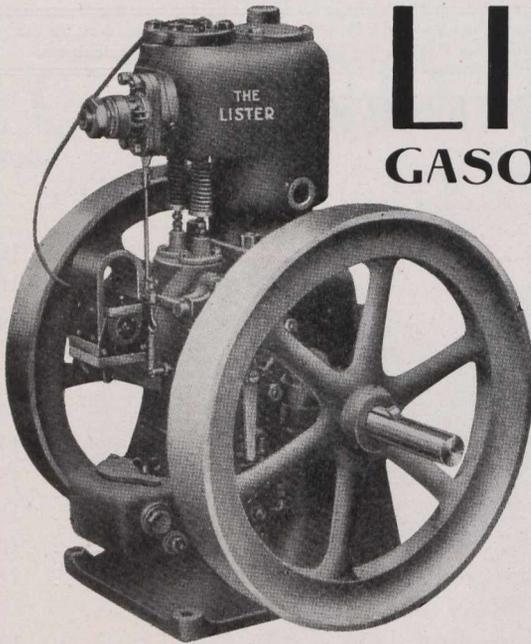
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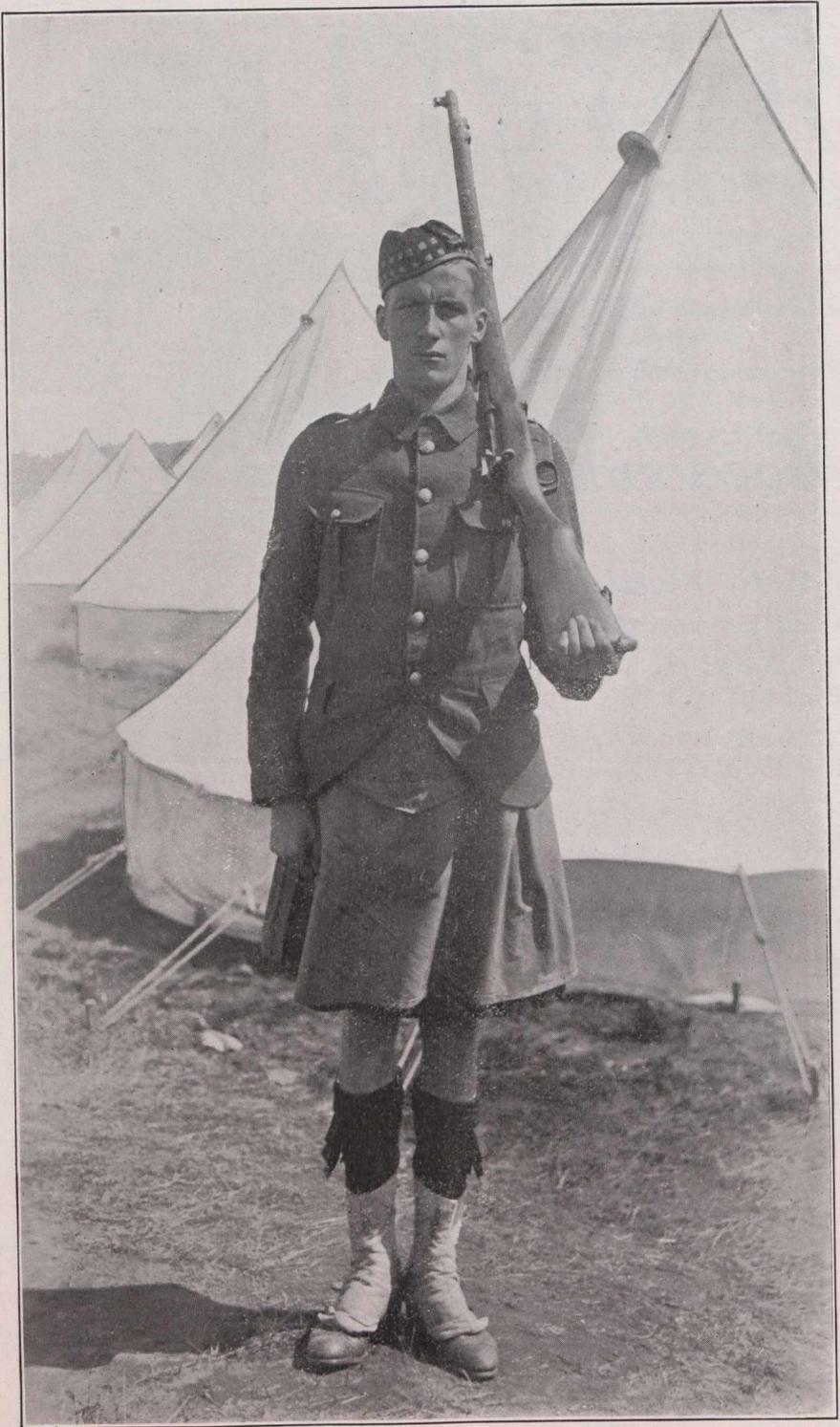
HACKSHAW, Private Cecil, No. 487470, 5th Universities Co. Reinforcements
to P.P.C.L.I., Molson Hall, McGill University, Montreal, Que.

JACK, Miss Charlotte (Teachers 1907-08), Nurse in Military Hospital in
France.

MABE, Miss (H. H. Sc., Winter Short Course, 1913-14), Nurse in France.

THOMPSON, Corporal Horace, No. 121436, D. Co., 69th Battalion, St. John, N.B.

HAMILTON, Private J. Y., Signalling Corps, 148th Battalion, 197 Peel Street
(Old High School), Montreal, Que.



THE LATE CORPORAL HUGH R. BAILY.

Hugh Reginald Baily.

Macdonald College Students, both past and present, unite in tendering their heartfelt sympathy to Baily's relatives.



THE deep sense of the loss which we feel at the passing of our fellow-student, Hugh R. Baily, cannot but be tempered with a deep sense of pride at the manner in which he met his death. He was shot while carrying a wounded comrade back to the lines.—“Greater love hath no man than this, that he lay down his life for his friend!”

Baily was an “old boy” of the historic English Public School of Malden, England, but early in life he decided to change his place of abode, and thus we find him entering for the course of agriculture here at Macdonald College in the fall of 1910. Some time later, in the fall of 1913, Baily joined class '16, and it was during these short months that we had the pleasure of his company. Unfortunately for us and with the sacrificing of all the ambitions and chances of success on his part, the course was abruptly brought to an end. Baily enlisted. Of the undergraduates Baily was the first one who left the campus to join the colours. This has almost a weird significance in so far that he has been the first of us to give his life for that Empire of which his and our college is a part.

Baily was a unique character. He had his own ways about things. He did as he liked and as he thought right. Very few of the students became intimate friends of his, probably for the

reason that they did not know how to value him. The writer was fortunate enough to become closely acquainted with him. When I look back on years gone by, I recall many a pleasant time, many a delightful hour spent in his company. As I came to know him, I soon discovered that he took a keen interest in caricaturing things which he found of interest. He had, indeed, unusual aptitude for caricature, and his facile way of portraying the situation with his pen was clearly demonstrated in the numerous sketches that appeared from time to time, of which some, much to my sorrow, never reached the Editor of the MACDONALD COLLEGE MAGAZINE. Those of us who were here will, undoubtedly, recall his humorous satire—Citrus Fruits—on the college reception. Baily was a humorist and his humour added that necessary spice to many an otherwise somewhat prosaic meal. He ever proved himself to be an ingenious phrase-maker. It can never be said about Baily that he was a plagiarist, for he was original in word and deed. In spite of this, the cynic might have thought or said, had he met Baily on a hot summer day in July, arrayed, as was his wont, in the white suit of spotless flannels, “Here comes Mark Twain the Second.” We might add that to the fair daughters of Eve he was at once an enigma, a dread and a delight.

A passing acquaintance might not

have credited Baily as being over-concerned with the deeper things of life. To such a one he was as a book whose pages were uncut. But a closer knowledge of the man revealed the inner self; the authors and the literature of his choice portrayed the lover of the beautiful, of the aesthetic. He read much and he read well; and methinks that in the presence of his books he came near to the problems of the great unknown. The absorbing interest he had in the smaller things of life, as witnessed by the size of his handwriting and his high standing in the bacteriology class, was so plain that he who runs may read. Baily took an active part in the athletic movement here at college, but was a specialist rather than a supporter of every phase of sport. He was, without exaggeration, the best gymnast the college has ever had. With both the foil and the glove he was a man after Sergeant-Major Sharpe's own

heart. As a swimmer he was as enthusiastic as he was proficient, and few we have had who could match him at his best in the turbid waters of the Ottawa.

On the fields of Flanders is a part of us, a part of that college we call our *Alma Mater*.

"Blow out, you bugles, over the rich
dead!
There's none of these so lonely and poor
or old,
But, dying, has made us rarer gifts than
gold.
These laid the world away; poured out
the red
Sweet wine of youth; gave up the years
to be
Of work and joy, and that unhop'd
serene,
That men call age; and then who would
have been
Their sons, they gave their immor-
tality."

To a Canadian Lad Killed in the War.

O noble youth that held our honour in
keeping,
And bore it sacred through the battle
flame,
How shall we give full measure of
acclaim
To thy sharp labour, thy immortal
reaping?
For though we sowed with doubtful
hands, half sleeping,
Thou in thy vivid pride hast reaped a
nation
And brought it in with shouts and
exultation,

With drums and trumpets, with flags
flashing and leaping.
Let us bring pungent wreaths of balsam,
and tender
Tendrils of wild flowers, lovelier for thy
daring,
And deck a sylvan shrine, where the
maple parts
The moonlight, with lilac bloom, and the
splendour
Of suns unwearied, all unwithered,
wearing
Thy valour stainless in our heart of
hearts.

Duncan Campbell Scott.

Corporal Hugh Reginald Baily.



SINCE Hugh Baily was officially reported "missing," after the great battle of Langemarck, various rumors have been circulated as to his having been killed while working the machine gun of which he was one of the detachment; as to his having been taken a prisoner of war to Germany; and, what was hoped at the time would prove true, that he had been seen by a Macdonald College student amongst the wounded at a military hospital in England. Enquiries were made through the Minister of Militia and Defence, Canada, the Canadian Red Cross Society, etc., but definite and authentic information has at last come through his father, Mr. Herbert M. Baily, Barrister, 7 King's Bench Walk, Temple, E.C., London, England, who, after nearly eight months of persistent enquiry and tracking down of every traceable man of the 13th Battalion, Royal Highlanders of Canada, has ascertained that Hugh was instantly killed at about 9.35 a.m. on April 24, 1915, while the second retreat was in progress at the Battle of Langemarck, by a bullet through the base of the skull, while helping to carry wounded to the dressing station. His comrades buried him where he fell and made a little wooden cross and placed it on the grave. Hugh belonged to the machine gun detachment of L.-Corp. Fisher, V.C., who was killed with his men on April 23rd.

His comrades of the 13th, who supplied this information, L.-Corp. W. O. Gowdy, Pte. M. T. MacRae, No. 24385, and Corp. G. H. Taylor, No.

24305, express their admiration and affection for Hugh in terms as follows:—

"Your brother was not only a comrade-in-arms, but also a friend of mine, as he had from the time of enlistment always been in my platoon until transferred into the machine gun section. He was ever cheerful and most willing.

"It is impossible for me to express the great sorrow I feel on the loss of a trusted friend."

Private MacRae says:—

"I knew your son very well when he was corporal in B. Company, before going to the machine gun section, and was with him till the last."

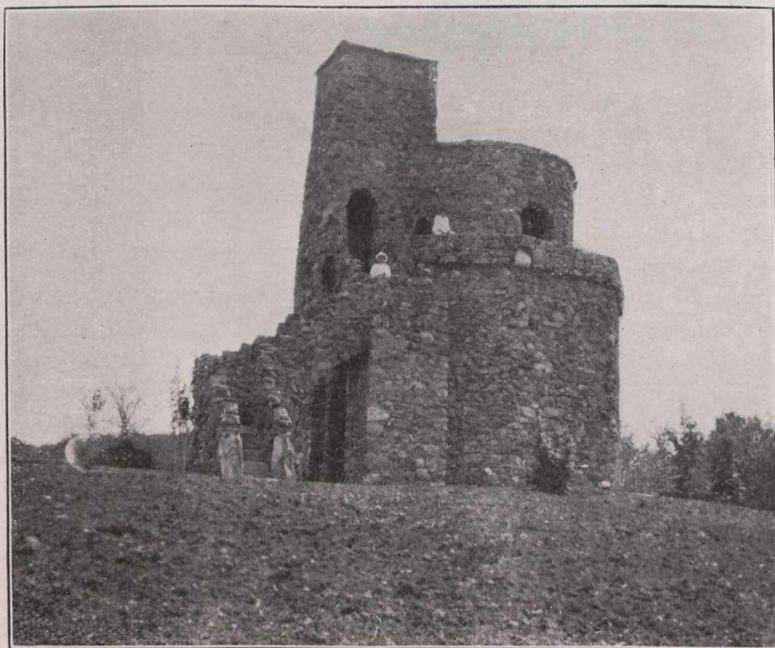
The following further particulars taken from Corp. Gowdy's letter will prove of special interest to Baily's friends:—

"After our first retreat we lost several guns and L.-Corp. Fisher, V.C., was killed, and our gun teams were mixed up, owing to our losing so many men. When we made our second stand, your son was with me in a pit we dug ourselves, with two other boys. Then we got the order some hours later to retreat again. All this time we were constantly under heavy fire. When we left our dug-out I saw your son get safely out; then I was next. All the boys went in different directions, taking cover where they thought best, as we were still under heavy fire. Your son was one of the boys who never returned. All that got back were 13 out of 53."

Baily's response to the call of duty was immediate; he joined one of the first battalions raised and was included in the 1st Canadian Contingent. We are fortunate as a College, after so many months of war and with upwards of one hundred—in some way connected with us—on active service, that Baily is the first and only one reported as having made the utmost sacrifice. It is difficult to realize, after all the months of uncertainty as to his welfare—which were

not unmingled with hope—that definitely we know that he will never return. We had looked forward to his coming to complete his course at Macdonald, and the members of the staff, as well as students past and present, genuinely mourn for him and sympathize with the family who have lost so good and worthy a son and brother. But the souls of brave men departed are not lost—they make the nation.

F C H.



Morgan's Tower.

The Canadian Building

at

The World's Fair, San Francisco, 1915.



THE year of our Lord nineteen hundred and fifteen has passed. Its record has been a full one; and for many and various reasons it is a year that will long be remembered by the people of this generation. Though historical events have transpired during the year, yet, by Californians and by hundreds of thousands of tourists from all parts of the civilized world, it will be spoken of in the future as the year of the great World's Fair at San Francisco.

Much could be said in praise of the many very fine exhibits at the fair, but it was generally agreed that the finest of the national exhibits was that of Canada.

The Canadian Building had a splendid location, easily the best stand of all the national buildings on the fair grounds. There was no possible chance of its being overlooked by visitors to the fair, as three sides of it were on the main streets.

From an exterior view, the Canadian Building was quietly imposing in size and stateliness of architecture. Around the whole building the cornice was supported by great Grecian pillars, and every entrance was guarded on each side by magnificent lions couchant. With the exception of the California Building, the Canadian Building was the largest among the Exhibit Palaces.

On passing through the large entrance one saw that the main part of the exhibit was divided into three corridors. These

were 220 feet long, the central one was 40 feet wide and the side ones were each 30 feet wide. The whole building was well lighted by large windows in the roof; these were covered with a white cloth material and cast a softened light which gave an effect both restful and beautiful, and in no part of the whole building was there any instance of over-crowding of exhibits.

Tourists from all over the world and Americans themselves acknowledged that the interior decorations were "a revelation in the decorative art." These decorations consisted entirely of grains, grasses and large pictures of forest and country landscapes. In the main corridor, the upper part of the walls was hung with a festooned tapestry wonderfully woven from Canadian grasses. Beneath this, and above the specimen cases, were pictures of Canadian farm scenes made entirely from the seeds of plants and grains of our land. In the side corridors the decorative scheme was mostly carried out with pictures. The upper part of each wall was impanelled with large pictures of uniform size, these portrayed the life from East to West, North to South, on mountain and plain—everywhere throughout our great Dominion.

From the moment one passed into the main entrance of the Canadian Building the whole attention was held in thrall by the number of intensely interesting objects to be carefully observed. "Keep to the left," the sign-board read, so, passing to the left, one gazed with

fascination upon a spectacular panorama of Dawson City under the light of the midnight sun. On the opposite side of this same entrance was another panorama scene showing Cobalt, its past and present.

The mineral exhibit was the most extensive and occupied the central corridor and a part of the main entrance. This exhibit contained splendid specimens of the many valuable minerals from our Canadian mines; especially noticeable were the exhibits of gold, silver, asbestos, nickel, mica and coal. With these was also shown a good collection of building stones. Above these exhibits one read many striking signs, viz.: "Canada's undeveloped known coalfields are the most extensive in the world," "Canada has a greater variety of economic minerals than any other country," "Canada produces eighty-five per cent. of the world's supply of asbestos."

The fishery exhibit was interesting. It showed in a very life-like condition the many kinds of fish caught in Canadian waters, both along the ocean shores and in the inland streams and lakes.

The resources of the Canadian forests were illustrated by splendid specimens of hard and soft woods from all parts of Canada; some of these were rough and others polished so as to show the beautiful natural grain of the wood. Along with these were planks and sections from the large trees of British Columbia. Another of the resources of our forests, the pulp industry, was represented by logs of the different kinds of trees from which pulp is made, and with these were glass jars containing pulp in its different stages before being finally made into paper.

Canada's wonderful water-power resources were shown by means of a large topographical painting of the

Dominion with numerous models of power plants arranged to show that every industrial centre throughout its length and breadth has an abundance of cheap power. Among these models were the Coquitlam-Buntzen plant, the Calgary Power Company's works and the Iroquois Falls Development.

In the corridor to the left of the main entrance were panoramas that attracted a great deal of attention; they were: "The City of Vancouver," and "The Transportation of Canada." These clearly indicated the facilities of Canadian transportation from East to West. By means of miniature trains, worked by electricity, it was shown how the great wheat crops of the western provinces are carried eastward from the elevators on the prairie to the twin cities, Fort William and Port Arthur, at the head of Lake Superior, there stored in the large elevators, which striking signs proclaimed had a total capacity of grain storage of 35,000,000 bushels. Other interesting panoramas, in the corridor to the right, portrayed "The Past and Present of Canada, and "The Sportsman's Paradise."

Perhaps one of the most attractive exhibits shown was that supplied by the Canadian apple growers. Excellent specimens of many varieties of apples were to be seen. These were brought from Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia, the greater quantity being from British Columbia. These apples were of splendid size, shape and colour, and their fragrance was a source of temptation to visitors to that part of the building. Just behind the display of apples was a panoramic scene of an orchard in fruit-time, where the fruit grower and his men were picking and packing the ripened apples.

Quite worthy of notice, in this same

part of the building, was an exhibit of jams and jellies made by the Canadian canneries.

Here and there through the mural decorations of the building one noticed the maple leaf; and in a little artificial lake, formed by a beaver-dam across a tiny stream prattling over moss-covered stones, were to be seen two sturdy beavers paddling in and out of a real beaver house. These beavers had been supplied by the provincial government of Quebec and had had a fifteen days' journey from the northern part of our province to San Francisco. It was amusing to hear the conjectures of

Americans and foreigners as to what kind of animal these might be. One lady was overheard to exclaim, "Oh, see the skunks!"

On entering the exhibit of their country, Canadians felt a thrill of pride in seeing their flag float over such a splendid edifice; on leaving the exhibit, it was with a feeling of exultation that one belonged to a country of such wonderful resources, and a country that, with the whole world as judge, could put forth the "best exhibit" at the Panama Pacific International Exposition.

EVA F. BRADFORD, S. for T., '12.

Retrospect.

(A Sonnet.)

Twelve heavy months and more have
 passed away
 And borne their burden; 'tis the richest
 love
 That ever the world's gloom and
 splendor wove
 In human texture, since the awful day
 When love's Creator hung upon the
 Cross!
 The earth is emptied, and the powers
 of Light
 Speak in their epic tongue to the
 wasted night
 And chaunt a holy triumph o'er our loss.

We stand in mute amaze; and dare not
 raise
 Our voice against the storm; eternal
 powers
 Are moving o'er the battle-ground of
 time.
 We can but pray to Heav'n, and mock
 the crime
 By wrestling with it; and in these
 dark hours
 Declare the worth of God's immortal
 praise.

LEO WARD.

THE MACDONALD COLLEGE MAGAZINE

"Mastery for Service."

Published by the Students.

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VOL. VI.

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EDITORIAL.

As we take our pen in hand to write this our first editorial, our mind goes back to the time when as freshmen we sat for our first examination. The same feeling of uncertainty as to our capabilities is attendant upon us, for we know not how this, the first number of the MAGAZINE under the new Editorial Board, will appear in print.

The MAGAZINE Boards which have preceded us have worked faithfully and

well to turn out a magazine which would be a credit to the college whose name it bore. They have succeeded in setting up a high standard, and it is up to us, as a MAGAZINE Board, to do our level best to uphold this standard.

The Magazine Board may be considered as a chain, holding or binding the MAGAZINE up to the standard. Each link in the chain is the work of some member of the Board, and the chain is

no stronger than its weakest link. If one member is negligent, or shirks his or her share of the work, the whole MAGAZINE will suffer. So then for complete success we must have the co-operation of each and every member of the Board, while without this co-operation disaster stares us in the face. Let us then work during our term of office, so that when we have finished we may each be able to say truthfully: "I have done my best."

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We take office at a very critical time in the history of our Empire and of the world at large. We cannot help appreciating the seriousness to us as a college of the great world-upheaval, when we glance back over the last few numbers of our MAGAZINE and see the number of our men who are now on the firing line. They have gone not for glory, nor for the mere love of fighting, but rather have they gone to help uphold the fundamental principles of Christianity—to disillusion our Teutonic neighbours of their belief that "Might is Right." This large Honour Roll is to us a source of pride and gratification. The first of the Macdonald men to meet his death on this field of duty is Hugh R. Baily, whose death has been announced elsewhere in this number. We are proud to have known and to have associated with a man who has given his life so nobly for his country. During our term of office on the MAGAZINE Board great events will take place in the world's history. We hesitate to look into the future for we know not what it may hold in store for us; but this we know, "Macdonald's Sons will ever be ready to answer the call of duty."

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The Macdonald College C.O.T.C., with a membership embracing practi-

cally all the men students, has been placed upon a very solid basis since the beginning of the term. One and a half hours a week have been taken from the lecture or lab. work time and devoted to the training of Macdonald's men, so that they may be in a better position to do their bit should emergency arise. The company has been divided into three platoons, each consisting of four sections. Besides the company commander, Major Harrison, we have platoon commanders, platoon sergeants, and section commanders. The proposed course of training consists of one and a half hours a week company drill, one hour a week platoon and section drill, one lecture a week on military strategy, and a regular weekly course in musketry in our shooting gallery. Examinations will be held in the spring, and it is hoped that a number will qualify for lieutenant's certificates. This training will undoubtedly be of great value to those who may enlist in the spring for active service, and will also be helpful to those who remain at home, for they will have that preparedness for emergencies which was so lacking throughout our Empire at the outbreak of this war.

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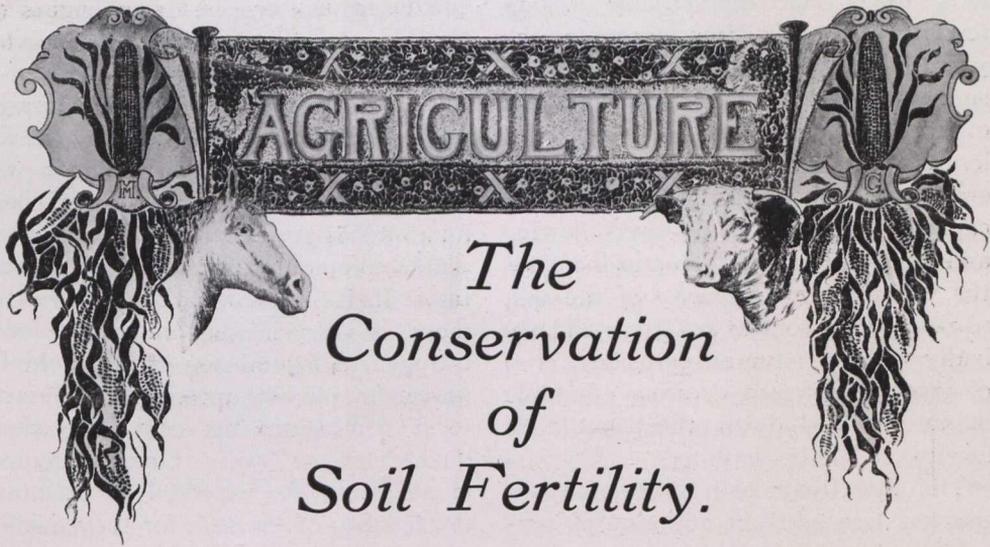
"Canada will send half a million men to the front." These are the words of Sir Sam Hughes, and we believe that the heart of every loyal Canadian is with Sir Sam in this. But we, as agricultural students, must face a problem right here; it is this: "Can the young Canadian farmer serve his country as well by remaining on the farm as by going to the front?" This is a subject which is receiving some discussion at present by farm papers, and rightly so. If this war is to be carried on to a successful issue every man must do his duty. But whether

is it more important that the young farmer shoulder his rifle and go to the front, or that he remain at the more prosaic, but, perhaps in his case, more important occupation of raising food for the army which is already in the field? This is a very real problem to many of our young men. They are regarded as shirkers if they neglect the call of the recruiting station, and, in many cases, they find it easier to enlist than to stay at home producing food, but feeling the rankling of wounds from the sharp tooth of scorn.

Wellington said, "An army fights on its stomach." The farmer is more needed on the land now than ever before, and the agricultural demonstrator is needed to help the farmer produce, for the farmer must supply not only the army, but the navy, the soldiers' and sailors' families, and the refugees from the war-worn country of Belgium. So with these facts before you we leave you to think over this question, "Can the young Canadian farmer serve his country as well by remaining on the farm as by going to the front?"



One of Nature's Beauty Spots.



F all the problems that confront the Canadian agriculturist, that of maintaining and restoring the fertility of farm land is without doubt one of the greatest. By fertility we do not mean mere plant food; but the water, air, sunlight, plant food, temperature, soil bacteria and all the other factors and conditions that make a soil habitable for plants. When we speak of fertility we naturally think first of the manures, fertilizers and other factors of enriching the soil; but the way a soil is handled has fully as much to do with its fertility as its composition or the amount of plant food added to it. While we often hear the term, worn-out soils, applied to those impoverished soils that no longer produce profitably, we must, nevertheless, bear in mind the fact that those soils that we consider poor, contain a vast amount of plant food. But this plant food is "locked up," or unavailable, from two causes. In the first place it may not be in the right form for plants to use; it may be in a form that is distasteful to the plant; or it may be in a form

that is insoluble in soil water. In many cases, especially in parts of western Canada, the amount of water in a soil measures its producing powers as much as the amount of plant food. The tons of plant food in a soil are valueless unless the soil has the power to move water rapidly to meet the needs of the crop. In Eastern Canada, while there is but a small area of what we might call worn-out lands, there are thousands of acres of mis-used lands that need only rational treatment to yield again the abundant crops of their early days. Some of the methods that are most successful in restoring impoverished lands, and also in building up and maintaining fertility in farm lands still under profitable cultivation, will now be considered.

PREVENT LOSS BY EROSION.

Not all the plant food that is lost each year is carried off by the crop, considerable being carried away by the washing of the land. On every rolling farm the loss of fine rich soil is constant and exhausting. The slopes become poor, while the bottoms become unnecessarily

rich. The easily preventable loss of fertility by erosion often amounts each year, on many farms, to many times the sum spent on those farms for all kinds of fertilizing material. To prevent this loss the most practical way of checking erosion is to increase the water-holding capacity of the soil by deep flowing and by adding humus. Humus increases the water-holding capacity of the soil, so that if such soils as erode particularly badly were to have an occasional crop of green manure or dressing of stable manure plowed down, there would be less loss of soil by washing.

The loss by erosion is by far our greatest loss and the adoption of soil-holding methods should be urged.

INCREASE THE AMOUNT OF HUMUS IN THE SOIL.

The term "humus" is applied to the black or dark brown material of vegetative origin which gives to surface soils its characteristic darker colour as compared with sub-soils. It is the chief source of plant food, nitrogen, in the soil, and in decaying adds greatly to the supply of beneficial soil bacteria. So important is the presence of large amounts of decaying vegetation in farm soils, that one authority has said, "The key to maintenance of fertility in farm soils is to keep plants decaying in them all the time."

This statement only slightly over-emphasizes the importance of humus in farm soils. Nearly all the so-called worn-out soils are exhausted of humus, rather than plant food. They have become impoverished by a short-sighted system of farming that has returned no vegetable matter to the land. The first step in improving them is not to spread fertilizer over them, but to get a crop of herbage into them, only using sufficient fertilizer to get a good growth of the

soil improving crop. Green manuring, as this practice is called, has a wide usefulness in Canada.

The crops most useful for this purpose are the legumes, because they enrich the soil with nitrogen through the nodules on their roots. Clover, peas and vetches are examples of leguminous plants commonly used for green-manuring. If it is known that the soil is more or less lacking in plant food, nitrogen, a leguminous crop should be grown for plowing under, in preference to a non-leguminous crop, like rape, buckwheat or rye. Green manures alone cannot be expected to maintain the fertility of the soil, for they cannot return to the soil more potash and phosphoric acid than they took from it; however, they do so improve the texture of the soil that plants can use more of the potash and phosphoric acid already there, and in so doing will greatly reduce the amount of mineral food that need be applied.

HOW TO BEGIN THE WORK OF SOIL IMPROVEMENT.

While by preventing erosion and by incorporating humus into the soil, by means of green manures, we can do considerable to prevent the depletion of our farm lands, still another factor worthy of consideration might be mentioned, that of adopting some system of stock husbandry: "Never plowing under any crop that can be fed profitably." And undoubtedly there are a few farms that are exhausted, but most are exhausted physically. They are unproductive, because they have been mismanaged. This mismanagement may have consisted partly in bad handling, such as plowing too shallow, or when the soil was too wet, or in not checking erosion. But it is most likely due most of all to mismanagement as regards

maintaining the supply of humus in the soil. While green manuring is of great importance, it can be made more effective and certainly more remunerative if it can be associated with some system of stock husbandry. The kind of stock to keep is, of course, dependent upon local conditions, but, in a general way, the greatest need is for more dairy cattle and hogs, combined with a rotation of crops which is not exhaustive and which makes provision for a continuance of farm practices that maintain fertility.

BUYING FERTILITY IN SACKS.

This is the easiest way, but usually the least effective and least lasting. It is doubtful if the results, on the whole, justify the expenditure. Not but what commercial fertilizers pay well when used with discrimination, but they have little value for restoring a worn-out soil, if, as is usually the case, the texture of the soil, not its chemical contents, is at fault. They are of far greater value after the soil has been put in good heart by green manuring or by the addition of farmyard manures. As each farm-soil is different in its fertilizer requirements, the ultimate solution rests with the farmer himself. There are two points involved: he must know exactly what kind of plant food each sack contains and its actual value. This is ascertained from the analysis tag; he must also know what the soil needs. This is determined by local field tests and observations. Unless there is accurate information on both these points much of the money spent on commercial fertilizers may be wasted. Because of the almost universal practice of using commercial fertilizers as a main supply of plant food, rather than as an incidental

supplement to farm resources, it is much safer and better to recommend that greater relative attention be given to the other means of increasing fertility.

In the preceding paragraphs an attempt has been made to give a conservative statement of the relative value of the various means of restoring and maintaining fertility. It must not be forgotten that the fertility of the land depends upon the way it is handled fully as much as upon the condition of the soil itself; upon the plowing, fitting and cultivating it receives, as well as upon its fertilizing treatment. The farm practices noted above are the four great highways to the upbuilding and maintenance of farm lands now producing but indifferent crops. Each method has certain advantages, and all must be used more or less. The usefulness of each is an individual problem. I wish, however, to especially urge that the animal husbandry method be followed whenever possible, for it is the most logical in theory and the most economical and satisfactory in practice.

The chief wealth of Canada is her farms. Therefore a man cannot do greater service to the Dominion than the adoption of methods that will increase the productiveness of her farms, and reclaim to profitable husbandry the thousands of acres that are now only producing half what they should. The farmer who can leave to his children lands that have not been robbed, but that yield more abundantly than when he received them, is entitled to the gratitude of the nation fully as much as the man who flies to her rescue in the time of war.

JOHN C. MOYNAN, Agr., '16.

The Horse and His Rivals.



AS the motor replaced the horse in business use? With conditions such as exist at present in the horse industry in this country a casual observer might be led to believe that the extermination of the horse in business use, as has been prophesied at intervals since the first railroad, is now a stern reality. That the horse markets in this country are extremely dull is a fact that cannot be denied; however, that this depression, which we trust is of short duration, be attributed to the displacement of the horse in business use by his rivals, the automobile, the commercial car and the tractor, is to my mind, an erroneous idea.

We will have to admit that the horse has suffered to a certain extent, due to the advent of the automobile—the light horse classes having suffered most in this respect. There is no doubt that the pleasure car is a realized dream whose luxuriousness, although extravagant, pleases the man of means, and has without a doubt replaced, to some extent, the light horse breeds.

The enthusiasm aroused by this class of car has no doubt led to the use of like means in transporting goods; however, those who have carried their love of mechanism into this work are brought face to face with a cold hard question of expense. They naturally dislike to admit that the machine system which they have adopted—frequently on selling agents' estimates—does not make good in competition with horse delivery. So the extra expense is charged up to the advertising which the firm gets from the use of motor trucks, and the poor over-worked, underfed consumer

stands for the burden of the advertising account, to which is charged the extra delivery expense brought about by the use of machines for the sake of display in lines of work where the employment of horse service would be more economical.

In 1910 The Boston Work-Horse Parade Association carried on an investigation in order to discover whether there was any basis for the widespread fear that the motor wagon might soon take the place of the work horse. After a careful and systematic study of the problems connected with the subject they reached the conclusion, "that the motor cannot compete with the horse in the short haul delivery work and trucking of the city, but in the long distance service of suburban and outlying delivery the machines are more efficient and economical than horses can ever be."

The chief claim made for the motor truck is that it is a timesaver; however, to offset this we can easily cite a number of items which may make time-saving an expensive matter. The first of these is the first cost, which is high, and the heavy loss in depreciation. Then there is the up-keep, fuel and repairs, which, in spite of the occasional good records, are usually difficult and costly. Thus we can easily see that a wide use of these machines must necessarily be restricted, for small shops and industries cannot afford to lock up such amounts of capital in a single investment that stands a chance of being wiped out at a rapid rate.

The motor has undoubtedly replaced the horse to some extent in long hauls and in suburban delivery; however,

horsemen should not have any quarrel with the machine on this score, for it has relieved him of considerable drudgery which used to fall to his lot. The increasing population of our country will demand motor main lines, but it will also need a heavy supply of horses to fulfill the needs of byway service. In looking over the government reports for the last fifteen years, in which the automobile has been an effective competitor, we find that our horse population has risen continuously, and until about a year and a half ago we were enjoying a good brisk market with high prices prevailing for horses of all usable grades. If the automobile were going to exterminate the horse, such conditions as these would be impossible. To quote a paragraph from *The Breeders' Gazette*: "The automobile has proved to be a business partner of the horse, instead of his rival. Farmers, realizing the distinct circumstances in which each excels, have been quick to avail themselves of the combined services of the rapid distance-eating capacity of the machine and the faithful, intelligent and reliable allegiance of flesh and blood. Wherever prosperity and good roads encourage the use of the automobile, it has proved to be a valuable as well as pleasurable addition to the equipment of the farm, relieving the horse from long journeys, while broadening the territory of the business and social relations of its owner."

Wherein then is the reason for the dull situation in the horse market during the past year? One does not have to look into the situation very closely to see that it is not the automobile but the war and its effect upon commercial activities that is the present rival or, perhaps better still, the enemy of the horse. The effect of the war in this country has been to curtail manufactur-

ing and commercial enterprises with the exception of war supplies. Railroad and other large construction works are at a standstill, and our manufacturing and commercial business has been cut down. This has had the effect of lessening the demand for horses. Large contracting firms and others who have had to stop work have turned over their horses to supply city firms, with the result that the Canadian farmer at the present time finds himself overstocked with horses. Some one says that the war should create a demand for horses, as England, France, Russia and the whole of military Europe are crying for horses for army purposes. But what has it done to help the situation? The total number of horses bought in Canada up to the present time by the Dominion Government is 25,846. The British Remount purchased 6,000 in 1914 and 7,000 in 1915. The French have purchased 3,500 in 1915, making a total of 42,346, which is in direct contrast to conditions in the United States where more than half a million horses and over 100,000 mules have gone for war purposes.

That the interests of the Canadian farmer have been sadly neglected in this respect goes without saying. However, let us hope that Canadian horses of the right kind will soon be moving at a fair if not high price. Let us not forget that the warring nations will need horses for industrial purposes after the war is over, and that as our industries adjust themselves our present surplus will soon melt away. It is just as likely then that the demand will be far greater than the supply, and the farmer who wishes to profit must remember that of all of the breeds of horses that use and fashion make necessary and valuable, the heavy draught horse, from a live stock point

of view, stands first. No mechanical device has yet been discovered that will take the place of this great, powerful and magnificent creature. We have in this country at the present time a lot of valuable material in this line, for which we have paid high prices. If we are to reap a harvest from this money which we have already invested we must not get discouraged at the present state of affairs, but must reproduce this valuable material in such a way as to combine size, weight,

bone, quality and substance, and in such numbers as to supply the demand which is bound to come in the near future. The farmer may be inclined to think that the breeding of light horses would be more remunerative, however, he should not forsake the draft horse for this line of work, for although present conditions would seem to favour this class of horse, the great demand eventually will be for the draft horse.

L. C. McOUAT, B.S.A.

Extension Work in Poultry Husbandry.



N all lines of educational work for the improvement of agriculture, the practical phase must be given due prominence to secure the interest of the farmer. He is apt to look askance at results obtained in a college poultry plant, oftentimes not realizing the necessity, on the part of the college, of conducting the work in an entirely different way from that practised on the average farm. Since the agricultural college exists, primarily, for the benefit of the farmer, it is quite obvious that any work undertaken by the college should be of supreme importance to the farming community. If the college fails to get in direct touch with the farmer, if it fails to enlist his interest and co-operation, the results secured will not be in keeping with the responsibility on the part of the college. The college will have laboured in vain. With this in view and in order to place the Poultry Department of Macdonald Col-

lege in a position to be of the greatest possible service to the poultry producer of the English-speaking sections of the Province of Quebec, a policy of extension service was adopted in 1912 covering various phases of poultry production.

Through its extension work the Poultry Department endeavours to keep in as close touch with the farmer as possible, not only in its work at the college, but more particularly with reference to its work throughout the province. The work is carried to the farmer in an effort to solve the problems on his farm. Nothing appeals to the farmer so much as a practical demonstration, and with this in view the department has arranged several lines of demonstration work to be carried on throughout various sections of the province. In addition to actual demonstration work, an educational campaign is carried on which supplements the practical work.

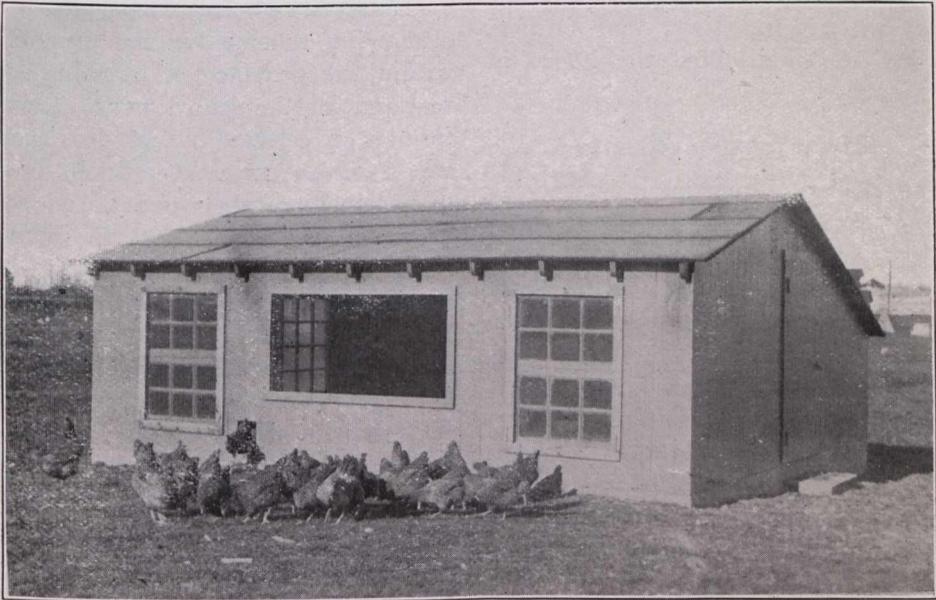
LECTURES AND DEMONSTRATIONS.

In conjunction with other departments of the college, the Poultry Department provides short courses at various places in the province. These short courses are held usually in January of each year, when lectures and demonstrations are given relating to the more important problems of the average farmer. A short course, lasting three weeks, given at the college in February and March, is intended to assist in supplying the demand for practical knowledge com-

plemented by dressed poultry cooling racks, egg cases, shipping boxes, incubators, brooders, and many other models of apparatus used in the poultry industry. Various charts, showing the ideal types of the different breeds of poultry, feeding rations and house plans, are also shown. By means of such educational exhibits farmers are enabled to learn much of the value in commercial poultry raising.

DEMONSTRATION POULTRY HOUSES.

Six demonstration houses of three different types have been erected in



The Macdonald Type of House

bined with a lecture course on the important phases of poultry culture. Addresses and demonstrations are given at institute meetings and farmers' clubs.

EDUCATIONAL EXHIBITS.

The department provides educational exhibits at the larger poultry and agricultural shows held annually. These exhibits are comprised of models of poultry laying houses, brooder houses, trap nests, fattening crates and batteries,

different parts of the province to determine the best type of laying houses for this province. These houses are located on the following selected farms with the purpose of making the demonstration of as local a nature as possible: in the county of Huntingdon, at Athelstan, on the farm of Mr. E. C. Boyd; in Compton county, at Cookshire, on the farm of Mr. E. N. Chaddock; in Missisquoi county, at Dunham, on the farm of Mr. G. M. Beach; in

Sherbrooke county, at Capelton, on the farm of Mr. W. G. Loomis; in Pontiac county, at Yarm, on the farm of Mr. Bert Hodgins; and in Rouville county, at Rougemont, on the farm of Mr. Edgar B. Standish.

The main object of this work is the improvement throughout the province of farm poultry housing. The conditions of management of these houses are made as comparable as possible. Careful records are being kept for at least three years concerning the management of the poultry plant and expenses and receipts. The houses are open for inspection at any time, and farmers are invited to examine the house in their district.

RURAL SCHOOL WORK.

The Poultry Department is working through the rural schools to improve poultry conditions by encouraging the children to take an interest in the work on the farm. The method employed by the Department is the distribution of hatching eggs to the school children and the holding of rural school fairs. This work was started in 1913, when one hundred settings of hatching eggs were distributed free to school children in three counties of Quebec. In 1914 there were 425 settings distributed in nine counties of the province, while in 1915 there were 610 settings distributed in eleven counties of the province. These eggs were supplied free of cost to the most deserving pupils, who were selected by the college demonstrator, located in the county, with the co-operation of the principals of the academies and teachers of the rural schools. The conditions under which the eggs were supplied were simple. Each applicant agreed to do the best possible with the chicks hatched and to show them at a

rural fair provided for the same. At these fairs prizes are given, and up to the present time this line of work has been a success.

This work is creating a greater interest in the poultry industry, and is resulting in an improvement in the breeding work in the various districts. It has led to the establishment of community breeding centres.

COMMUNITY BREEDING CENTRES.

In order to further encourage standard-bred poultry raising in the various districts, the Poultry Department has outlined a scheme for the production within the province of hatching eggs required for the school work. Certain farmers are selected in each district who will agree to certain conditions in the management of their flocks, and agree to furnish the college with the number of hatching eggs it may require at a stated price. The conditions required by the college is that the farmers chosen must buy their breeding cockerels from the college, and that their female flock may be of satisfactory breeding as judged by the inspector, an extension man of the college. The farm selected must be open for inspection by the farmers of the district so that the work will be of direct benefit to the community.

POULTRY SURVEY.

The college is preparing to take surveys of poultry conditions in the various counties of the province. Through this line of work the college hopes to be able to learn of the actual conditions in the country in order to be prepared to assist the farmer in the most practical and efficient manner.

This work was started in Pontiac county because of the industry there

being fairly well advanced, and the conditions being good for future development. The report shows that the average number of hens per farm is low, and the system of marketing the finished products is poor. One hundred and twenty farms were visited personally, and as a result of this work, with due consideration to the more important features of housing, feeding and marketing, the poultry industry should be one of the leading branches of agriculture in Pontiac county.

The Department's extension work

being decidedly educational, is doing a great deal for the development of the poultry industry in the province of Quebec, and is forming a good basis for future development. This work was started three years ago, since which time there has been a marked improvement in poultry production. As a result of this work the farmers are taking a greater interest in the poultry department, and are beginning to realize the profits to be derived from it.

W. A. M., '19.

An Unexploited Field.



THE value of the axiom "breed only from the best" has been largely restricted by farmers to the improvement of live-stock. But this principle is equally effective, more cheaply applied and is sooner productive of results when applied to crop improvement.

To attain combined yield and quality with cheapness of production, no factor exerts a greater influence than good seed "bred from the best."

When we comprehend the vast influence of seed selection in raising the productive value of agricultural plants, and the possibilities in plant-breeding intelligently directed on the average farm, it is inconceivable that more farmers, with their sons and daughters, do not engage in such a profitable and educative line of work.

At the present period of national stress with its obligation of "increased production" of agricultural products, are there not some so situated that they might advantageously turn aside

from the strenuous struggle of producing staple crops, by methods which permit of but staple profits, and take thought to the application of some newer methods of increasing production, of late introduced into agricultural practice.

An agricultural college president has recently said: "If we could keep our young people on the farm, and bring back all who would come, we should soon solve the problem of increased production." Get the boy interested in improving the field crops, and the girl interested in improving the garden vegetables, orchard fruits and the flowers and much of the dullness of which young people complain will have ceased. The prospect of successes at home, an understanding of nature, and an appreciation of life as existing about the farm will make less effective the magnetism of the city.

Successes, such as have accrued from the breeding of Marquis wheat or Dawson's Golden Chaff, O.A.C. No. 21 Barley—experimental evidence of the

superiority of home-grown seeds—may be cited to demonstrate the occurrence of individuality and variability in plants, and the probable reward of keen observation on the part of would-be plant-breeders.

Surely the present is propitious for the application of intellectual as well as physical skill among our farming population. The stores of readily accessible technical knowledge of methods for plant-improvement, together with such aid as a farmer might obtain from the agricultural demonstrator, will enable him to breed an improved stock which shall be more prolific and of better quality.

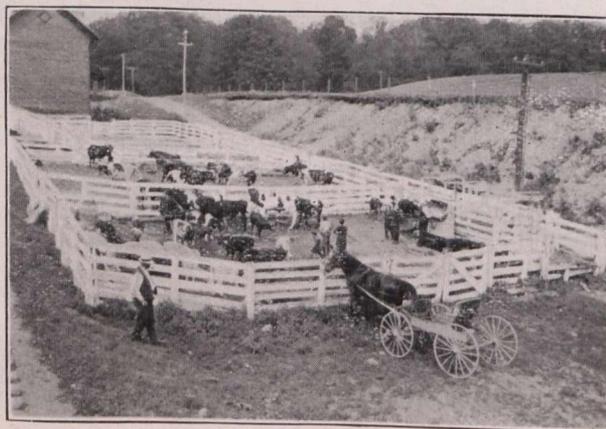
To many producers of corn it may be of interest to note a method of increasing the production of corn (grain) by the use of first-generation-hybrid seed. (U.S. Dept. of Agriculture, B.P.I. Bulletin No. 191.) This bulletin states: "The fact that increased yields can be obtained by crossing two varieties is pretty certainly established. This is quite easily done by planting in one row one variety and in the next another variety, and removing the tassels of the one as soon as they appear. The ears forming on the rows having the tassels removed will be fertilized with pollen

from the other rows, thus producing a direct cross between the two varieties. The seed should be selected from the rows having the tassels removed, and experiments indicate that it will give a larger yield than either of the parent varieties when planted under like conditions. In addition to increased yield the vigor of first-generation hybrids may also allow of an extension of corn-growing beyond the present area of production. Associated with the general increase of vigor in first-generation hybrids a certain measure of disease resistance may be expected."

To the plant-breeder, as well as to the animal-breeder, there is the same necessity of a clearly defined ideal, and adherence to a standard. Selection is the principal factor. Having secured the desired characters he, the plant-breeder, is on the high-road to success.

If we fully realized the opportunities of the farm, and among these the number to which the activities of the young might be directed, we would conclude that the work of increasing production by methods of selective breeding would offer to the enthusiast a new field for successes.

O. C. H., '16.



Stockyards at Shawville

Market-Gardening on the Island of Montreal.



ONTREAL, with its consuming population of 600,000, must of necessity consume large amounts of vegetables annually. This fact leads us immediately to a discussion of the sources of this supply, and a study of the future development of these sources.

Our first thought will naturally turn to the island of Montreal itself, which is already famous for its melons and the Fameuse apple. We would naturally suppose that market-gardeners would flock close to this great market, and this was true in the past. Thus, a few years ago we would have found quite large tracts devoted to market-gardening in Cote des Neiges and also in the district now occupied by Outremont and from there north.

In the last ten years, however, Montreal and its suburbs have grown so rapidly that land in the above mentioned districts has become very valuable and market-gardeners find it pays them better to sell out and move elsewhere.

At present, it is impossible to obtain accurate figures of the area of the island now devoted to market-gardening, since this area varies considerably from year to year. The market-gardening business in the island is in a transition stage at present, but I should judge that there are probably about 17,000 acres now devoted to market-gardening within the bounds of the island.

The soil on the largest part of the island is of a very clayey nature, and is therefore ill-suited to market-gardening. For really successful market-gardening a good sandy loam soil is essential, and the lack of this is probably the reason that so many gardeners are

moving away from the island; however, there is one district which we might rightfully call the exception to the above general rule, namely, the district lying between St. Rose and St. Martin Junction. The soil here is of a rather sandy nature, and we find altogether some 1,000 acres of land devoted to market-gardening. This will probably remain the largest market-gardening district on the island of Montreal.

Practically all the vegetables produced on the island are now being sold on the Bonsecours Market, which is situated between Place Viger Station and the wharf. This market covers some two or three complete blocks, and on Friday, which is the chief market day in Montreal, the whole market is lined with wagons on one side and stalls on the other side of the walk. For a large part the produce is sold here direct to the consumer, only a small portion going to grocers and pedlars. However, as the city grows westward the consumers visit the market less and less; and when growers find that they are forced to sell through middlemen they will probably move to districts where the vegetables can be produced more economically. Thus we see that at present we can judge pretty well the extent of market-gardening on the island of Montreal by the business done on the Bonsecours Market, although now many growers are selling direct to grocers and hotel-keepers.

However, most of the vegetables we see displayed in shop-windows come from other parts of Canada and also from the United States. Lately a district has opened up in the vicinity of Montreal, namely at St. Hubert. Of course, this district is off the island itself, but

it is comparatively close to the city and will therefore develop rapidly. Other districts will be opened up in a similar manner wherever the soil is found suitable, and in time we shall probably see no market-gardeners on the island of Montreal except in the St. Rose district.

One phase of vegetable gardening, namely gardening under glass, has not been touched upon. This business has never been very extensive on the

island, but it is probable that it will be for greenhouse men, like out-door gardeners, to move to cheaper land where the soil is more desirable than most of the soil on the island.

Nevertheless, a large part of the vegetables consumed in Montreal will always be supplied by other parts of Canada, chiefly Ontario, and by the United States. This latter source would probably be more important were it not for the high transportation rates and the duty.



The Montreal Musk-Melon has made the Island of Montreal famous.

island but may develop better in the future. Of course, the same difficulty is found regarding soil conditions; but with the larger profits it may still be found a paying proposition to buy sand to incorporate with the soil. It may be possible that certain portions of the island will not be taken up for building purposes and these parts may possibly become valuable for greenhouse gardening. But the general trend will

be for prospective farmers of Quebec to develop those districts of this province suitable for market-gardening, and keep down the amounts of vegetables brought in from other parts. Wherever the soil is at all suitable it should be easy, with the lower transportation rates, for us to compete with market-gardeners from Ontario and the United States.

R. S., '16.

Assistance Rendered in the Purchase of Stock for Breeding Purposes.



AVING to the heavy drain upon the live stock of the various warring countries of Europe, they have been forced to go abroad for supplies. The longer the war lasts the greater will be this demand. Moreover, when peace is restored, these countries will require large numbers of the various classes of animals to replenish their studs, herds and flocks. It should be borne in mind, however, that the buyers who come to this country after the war will require better animals than have been bought during war time, as they will be used largely for breeding purposes.

With this end in view, the best of the females and particularly the young stock should be kept for breeding purposes. Breeders should not fail to raise all the live stock possible at this time, in order that the country may be able to supply a large number of the animals that are certain to be needed by the warring countries. At present, however, there is an unequal distribution of live stock in the country. In certain sections there is a heavy surplus, with a corresponding scarcity in other parts. During the past year hundreds of young cattle from our Prairie Provinces have gone to the United States as stockers and feeders. These should have been kept at home,

particularly the females. Sections of the West are reported as being in need of good draft horses, particularly draft mares; while, in sections of Ontario, there is an over supply of this particular class.

In order to remedy these conditions, the Minister of Agriculture, through the Live Stock Branch, has decided to grant liberal aid to breeders who wish to secure good breeding stock. The conditions under which aid will be given are as follows:

In the event of a number of farmers in any district of Canada wishing to co-operate for the purchase of breeding stock in carload lots from some distant section of the country, the Department will pay the travelling expenses of their duly appointed representative during the time required to effect the purchase and transport the shipment to its destination.

Should it be desired, the Live Stock Commissioner will nominate a suitable person who will be directed to accompany this representative and assist him as far as possible in buying and shipping the animals.

Persons wishing to take advantage of this offer should make full arrangements with the Live Stock Commissioner as to place and time of purchase before sending out their representative.



MACDONALD COLLEGE EXTENSION WORK FOR RURAL SCHOOLS

Professional Conduct and Etiquette.



HERE is usually no difficulty with regard to any course of action a teacher may take if she considers the circumstances with the proper professional spirit and moral standards, but all trades and professions have gradually accumulated a recognized standard of conduct which is often vaguely termed "professional etiquette." This standard contains both written and unwritten laws which must always be recognized and never transgressed without bringing punishment to the individual and contempt on the profession.

Probably the best known code of ethics is that which is universal in the medical profession, and all doctors rigidly adhere to what they regard as their ethical code. Probably teachers have less of this trade spirit, but there are certain rules which should guide the conduct of all teachers, and the following conventions have been mentioned officially to Ontario students for their observation:—

Never apply for a position until assured that it is vacant.

Do not compete for a position by offering to teach at a lower salary than

that paid the previous teacher, or by underbidding other applicants.

Defend a fellow teacher against unfounded accusations, and consider him innocent until he is proved guilty.

When assured that a fellow teacher is incompetent and unworthy of the profession, cease to defend him.

Be perfectly frank with superiors and with subordinates.

Do not gauge the amount of the work to be done by the amount of your salary. A teacher is always under contract to do his best, no matter what his salary may be. Only when he has done this can he claim to have earned his salary. The richest reward of labour is the power to do more and better work.

Put the child first, just as a lawyer puts his client first. The ultimate good of the child must be the controlling factor in the teacher's action.

Never be satisfied with your attainments; be a stern critic of yourself.

Strive in every legitimate way to maintain the dignity of your profession, and always be ready to co-operate with your fellow-teachers in this regard, even when you are not personally benefited.

Keep your contract, whether verbal or written. If a better position is offered

you before your contract expires, place the matter frankly before your board of trustees, and, if you wish to accept the position, ask to be freed from your contract. If this request is refused, you should cheerfully finish the term of your contract and do faithful work to the end.

No teacher or layman will be able to quarrel with any of these conventions, but in writing this article I wish to draw attention more particularly to the last of these rules, which concerns the keeping of contracts. A written contract is, of course, a legal document binding the parties equally. The breaking of such a contract entails legal consequences, and such a written contract as is mentioned in the Quebec School Law is not merely a moral obligation but a legally binding engagement.

Whenever a teacher writes to the secretary of a school board accepting a position, that letter is also a written contract. Even a verbal promise to accept an appointment is morally binding on any teacher who is honest and high minded. No teacher should ever accept a position verbally or by letter and then coolly accept another position, even at a better salary, without regard for the first engagement. This seems eminently reasonable, and yet several instances have occurred of a breach of this elementary principle of doing business. I have been informed that teachers have accepted a position by letter and have proceeded to the school on the day before the session began, but when they drove to the boarding place and saw how far the school was distant from the village and the railway station, these teachers promptly returned to the station and went to their homes, neglecting their contracts and leaving the school board and the children without

a teacher. This conduct is absolutely contemptible, and it would be well if a competent body were made cognizant of these circumstances and were empowered to cancel the diploma of any teacher guilty of such unprofessional conduct.

Even school boards are sometimes guilty of offering a position to a teacher some time before the school opens and then of cancelling this engagement, because a few days before the first of September they have secured a local teacher (often unqualified) at a much lower salary.

Another instance has come to my notice officially. In this case a teacher left on the last day before Christmas with the understanding that she was to take certain work in another grade in addition to her other work, and on the 28th of December intimation was given that the resignation of this teacher was to be taken on December 31st. The school, therefore, has been without her services since January 3rd. No excuse was given, although probably in this case marriage is contemplated; but the fact remains that without consideration for the children or the interests of the school, a teacher leaves on three days' notice instead of three months.

In all such cases the diplomas should be cancelled.

It is surely not too much to expect all teachers to make proper inquiries before making solemn engagements and then to adhere to that engagement until the conditions of it have been fulfilled, putting duty first and personal convenience last.

The teaching profession will never have the proper respect of the public until a proper ethical standard is the universally recognized teacher's code of ethics.

SINCLAIR LAIRD.

The War and Geography.

By A. D'Arcy Chapman, M.A., F.R.G.S.



THE present war has awakened much interest in the subject of geography and the teacher of geography may often have been asked, "How does geography affect the war?" This question has been put to me and I am tempted to point out a way in which such a question should be answered.

In a history book one reads that a range of mountains, a river, or what not, has such and such a "strategic" value, but owing to modern travel, under mountains, across rivers, etc., the modern child has no opportunity for perceiving or testing these obstacles. He has no experience to guide him in the meaning of that phrase "strategical value." The modern civilized man to-day has great difficulty in appreciating why geographical conditions still dominate war, and by geographical conditions are meant those accidents in the varied surface of the earth which are not due to the action and intelligence of man.

At the outbreak of the war the ordinary maps, however detailed, gave no clear notion of the reasons which determined the Lines of Advance followed by the armies on the continent. Since then orographical maps have been published, and the connection between the relief of the land and the lines of invasion is now generally understood. Until men and munitions can be conveyed in large quantities through the air by ship or aeroplane, the orographical map will show that the Line of Advance will be over plain country, so long as

it is not marshy, rather than over hills, and will follow a river valley. In other words, heavy traffic must skirt round the margins of highlands and find its way from lowland to lowland through defiles. Now, defile is the English for "*defilé*," which is the French for something "spun out," and all our military terms are borrowed from France or Rome. Thus, when a body of men advancing on a certain front is forced to contract that front and "spin out" its advance, it is said to defile. Hence a single bridge over a river, a pass over a mountain, a road cleared through a forest, are all defiles. Of course, the natural defile is the river valley, and from earliest times the easiest way of conveying large bodies of men was the broad stream which moved by itself, required no mending and which gave the first necessity of life, viz., water. Where tributaries entered there were natural meeting-places, "nodal" points, places of supply and exchange—these are towns. When the usual complexity so far developed, roads began to be made to link up these towns. Therefore, the road will follow the river valley, and if this be marshy it will be parallel to it on higher ground. It is the river, then, that determines the great roads by determining the sites of the great towns, and the railway was constrained to the river to link up these towns.

A beautiful example of this elementary piece of historical strategics was used in the present campaign. A series of river valleys has formed not only the

main but the only Line of Advance for the German invasion of France.

The road, canal and railway following down the middle Meuse, the Sambre, the Upper Somme and the Oise made possible the rapid advance and retreat of the main German army upon Paris. It was, in fact, the presence of the valley of the Ourcq which saved the whole of Von Kluck's army. The Ourcq is a tributary of the Marne, a little to the east of Paris, and by a risky experiment he suddenly changed direction when cornered and escaped up that ravine.

A most interesting example of a defile, produced partly by geographical and partly by political conditions, is that little neck of land, some 12 miles wide, blocked by the fortress of Liège, with the heights of the Ardennes on one side and the Dutch frontier on the other. This is only a defile because the Germans did not choose to violate an arbitrary political boundary, viz., Holland. Dr. Vaughan Cornish, before the Royal Geographical Society, a year ago, pointed out that the whole of Belgium itself was only a defile between Metropolitan England and the Cologne district of Germany, i.e., between the heart of England (London) and the richest industrial district of Germany.

Now, let us consider the "obstacles" which an army on the march may meet. These arranged in order of their importance are: (1) The river, including the arm of the sea and the canal. But the river is only a temporary tactical obstacle, for man could always swim or float over on a log. In considering the river it is interesting to note that the Romans, 395 A.D., never extended their sway beyond the Rhine-Danube boundary, and that towns on the left bank of the Rhine and right of the Danube are of Roman origin, whereas those on the

opposite bank are comparatively modern. (2) The forest with its undergrowth and the chance of losing one's way is a serious obstacle. The ordinary traveller will certainly not progress more than a mile an hour among the wooded slopes of the Ardennes. It was the Crown Prince who lost himself in the "Foret D'Argonne," and the resultant fighting in the "Bois la Guerre" will be remembered. (3) Hills. The difficulty of surmounting a hill varies with its height. For instance, the Pyrenees have never been crossed except at the edges and the Alps only by certain defiles. Strategically only large hills are an obstacle. Tactically for use in battle, this campaign has shown that a small rise is valuable for those in possession of it. It is the old story of the King of the Castle, an attacker must run up the slope to get him. (4) The desert. Of all ancient obstacles the desert was the most difficult. Whether gasoline traction or a railway can convey large bodies of men over a stretch of waterless sand has not yet been demonstrated by current events. (5) The marsh is the last and is really the most difficult obstacle of all. The marshes of Northern Flanders have played an important part in the present war, probably a more important part than the marshes of Russia did in 1812. Trench fighting is the fashion of to-day, but in marsh you cannot entrench. The marsh was too difficult even for the German, as the fighting in the Yser valley around Dixmude proved. Consequently the march to Calais failed. Why that route with that mass of waterways was attempted cannot be guessed. It is said to have been a political miscalculation.

By giving pupils simple lessons in strategics, as the above suggests, the

subject is made real to them, and they will have gained the soundest foundation for geographical teaching.

Those who are interested in this fascinating study should get a Bradshaw's railway map and from it trace the dominating main lines, the through routes from one country to another. If this be compared with the orographical map, it will be seen that the greater

Roman roads and the lines of invasion followed in ancient times pass through the principal defiles of Europe, that large blank spaces on the railway map correspond to blocks of highland on the orographical map, that the lines traverse river valleys and gather into knots at such defiles between highlands as at Belfort, Metz, Namur, Liège and Paris itself.

Scripture in the Primary Grades.



HE new course of study in Scripture differs so radically from the old course that it would be surprising if, by this time, some questions regarding matter or method had not arisen in the minds of teachers. If, however, teachers would keep clearly before them the fundamental principles that underlie the teaching of the subject, it would, in many cases, settle questions that might otherwise occasion trouble.

While Scripture has a cultural value, and while the stories from early Hebrew literature are as valuable in this respect as those of ancient Greece or Rome, and while Scripture stories might well be, and should be, used to this end, it is, nevertheless, the moral value of Scripture that secures for it a place in the curriculum of the public school. It goes without saying that the most important element in education is that of character development. And of all the literature which the world has produced, none is so well adapted for use in moral training and character development as that contained in the Bible. It is to this end that the teacher should pursue the course in Scripture.

The problem which faces the teacher is, "How can I use the Scripture material prescribed so that moral development will result?" With this object in view the teacher can afford to forget to wonder "what is likely to be asked in the June examination."

To the primary child, of six, seven or eight years of age, right conduct consists largely in doing what pleases father, and mother, and teacher, and God. The teacher's problem is (1) to get the child to know what kind of conduct does please those who love and care for him, and (2) to get the child of his own free will to live out this conduct when he does know it. Now, to attempt to accomplish this by merely telling the child what he ought to do, and why he ought to do it, is to violate one of the fundamental principles of teaching that should be observed in primary work, viz., that the teaching should be done by means of the concrete. The child, therefore, must see the kind of behaviour that you wish him to learn. He must see concrete examples of the truth you wish him to know. Hence the selection of stories, for the lower grades, that present concrete pictures of life and conduct; stories in which the

child sees God, and parents, and others actually caring for flowers, and birds, and children; stories in which they see boys and girls, men and women, actually learning to do right and doing it; stories in which they see certain kinds of conduct resulting in sorrow and suffering both for the doer and those that love him, and certain other kinds of conduct that have the opposite results.

If this imagery is made vivid enough, the child will, because it is his nature, respond to it in his own life and conduct. It is natural to the primary pupil to imitate and impersonate the images in his own mind. The whole question resolves itself into the problem of making the images sufficiently vivid to secure the desired results from the child. In teaching the Scripture of the first three grades, therefore, the purpose is to secure control through right imagery—to present the stories in such a way as will arouse within the child the desire to choose and to do the right. But in order that this may be accomplished the stories must be made very real—the characters must not be far off, and other-worldly—they must be real flesh-

and-blood people. Children are interested in the marvelous and wonderful only when it relates to the here and now. Pictures, models, maps, and every conceivable method of illustration should be used to make the truth real, vital, and immediate.

Success in this respect is within reach of any teacher who will pay the price—preparation. A hurried reading of the passages indicated in the manual will not qualify the teacher to tell the story with the desired result. Behind the simple story which she tells there must lie a reserve fund of knowledge from which, and by means of which, she can select and arrange the material for her pupils. She must, in order to get the right perspective, read carefully much more of the Biblical narrative than that containing the story itself; and she must, in order to give the story its proper setting, acquaint herself with the history, political, social and religious, of the period to which the story belongs. All this takes time and work, but it pays in the results attained, and it pays in terms of life and character.

W. O. ROTHNEY.

Nature-Study Lessons.

By D. W. Hamilton.



THE following lesson plans have been prepared by teachers-in-training in the School for Teachers of Macdonald College. The writer is preparing a series of suggestive lesson plans on the topic of the Nature-Study Course. These plans, with illustrations, will be published by the Renouf Publish-

ing Co., of Montreal, and sold at a low price. With these in her possession the teacher will be able to prepare herself for teaching each lesson. The plan will suggest the *aim* in teaching the lesson, the *material* that should be used for illustration purposes, suggestions as regards *method* of presentation, and the *facts* that should be brought out.

It is possible that lesson plans on all the topics for the eight grades will be ready before next September. Teachers-in-training are given an opportunity to help in the preparation of the plans outlined above. The following are given, with few changes, as prepared by students.

GRADE I.—FEBRUARY.

Lesson 2.—Birds' Nests.

Aim. To interest the children in the appearance, location and protection of birds' nests.

Material. The nest of a robin. Other nests, easily obtained, should be brought for comparison with the robin's nest. These nests should be carefully kept in the school for future lessons. Wholesale destruction of nests during the winter should be discouraged.

Method. Previous to the teaching of the lesson encourage the pupils to observe nests in the trees on their way to and from school. Receive their reports on their observations. Ask them to describe the position, size, colour, shape and material of the nest or nests observed. Study the specimen of robin's nest in detail. What shape is it? What was used in making it? What was used for the outside part of the nest? With what is it lined? Why should the lining differ from the outside part? Name all the materials used by the robin in making the nest. Look for anything about the nest that would show how or when it was fastened. Discuss the location of the nest. Did it hang from a limb? Compare the robin's nest with other nests that the school may have. Compare the robin's nest with the descriptions or reports of nests as brought by the pupils. How many saw a robin's nest? Discuss the use by the robins of the same nest after the first year. Should nests be thoughtlessly destroyed during the win-

ter? What is the conclusion from the study of the robin's nest, as to its size, location, materials, use and protection? Make a drawing of a nest. Read a story or poem about nests.

Facts. A robin's nest is quite large, and sometimes rough in appearance. It is made of roots, grasses, strings, leaves, rags, and other materials stuck together with mud. It is usually lined with very fine grass. It is placed either on a branch or in a crotch of a tree several feet up from the ground. Sometimes robins build nests on verandah posts and in other places about buildings. Quite often the nests are found in the vines or in the shrubs around the house. Robins do not appear to be afraid of people, and will often do their work within a few feet of a person watching them. Because of its large size, the robin's nest is easily seen in winter time. If the pair of robins that built the nest should live to return to the same place, they would likely use the same nest again, and for several years. Robins' nests should, therefore, not be destroyed.

BROTHER ROBIN.

Listen! in the April rain,
 Brother Robin's here again.
 Songs, like showers, come and go,
 He is house-building, I know.
 Though he finds the old pine-tree
 Is not where it used to be,
 And the nest he made last year
 Torn and shattered far and near,
 He has neither grief nor care,
 Building sites are everywhere;
 If one nest is blown away,
 Fields are full of sticks and hay.
 Though old mousing puss last year
 Ate his little ones, I fear,
 And he almost died of fright,
 That is all forgotten quite.

MRS. ANDERSON.

GRADE V.—JANUARY.

Lesson 8.—Fruits Imported and Exported.

Aim. To draw attention to the uses of fruits for food purposes, to the importance of the fruit growing industry, and to show the inter-relation, due to climate, of different countries with regard to food.

Material. Specimens of apples, oranges, bananas or other fruits. Pictures of fruits and of fruit trees and orchards in other countries. A map of the world.

Method. Procure for study samples of fruits, both native and imported. Have a brief review of previous lessons on fruits. Arrange in one group the samples of fruits grown in the home district, and in another group the fruits grown in foreign countries. Make a list of all fruits used in the fall, another of winter fruits, another of spring fruits, and one of summer fruits. In each group mark with a star those grown in the home district. When do we have the greatest number of fruits? Why? What fruits are raised for man's food? Which need to be cooked? Which are eaten raw? What useful fruits grow wild? What fruits do we feed to domestic animals? What wild animals eat fruits?

Make a list of fruits grown in the home district. Why are they grown? Are good crops obtained? When is each fruit ripe? How long are they in season? Which will keep the longest? What is done with the fruit not used at home? Which fruits are exported? To what places or countries are they sent? Trace their journeys on the maps. In what are they packed and how are they shipped? Estimate the value of fruit grown in the district. Make a list of fruits imported from

other countries. Examine one or more as to the skin, firmness and taste. Discuss the picking, ripening and shipping of these foreign fruits. Draw conclusions as to the climate of the countries where the fruits grow. Which fruits have not been allowed to ripen naturally? Why not? Estimate the value of foreign fruits imported and used in the district. Compare home grown fruits with imported fruits as to general value for food purposes, quantity and money value. Where are the following imported fruits grown: oranges, lemons, pineapples, bananas, grapes, dates and figs? Find the countries on the map.

Facts. Apples, plums, cherries, grapes, pears, peaches, strawberries, raspberries, blackberries, gooseberries and currants are the principal fruits grown in Canada. Oranges, lemons, pineapples, bananas, dates and figs must be imported. Our native fruits are most abundant in autumn. All our native-grown fruits are preserved for winter use except grapes. Wine is made from grapes. Nearly all our home-grown fruits are eaten, during autumn, without cooking, and are liked best in the ripe, uncooked condition. Raw gooseberries and currants are not often eaten. Strawberries, raspberries, blackberries, gooseberries, blueberries, cherries, plums, apples and many other edible fruits grow wild, and are quite generally picked and eaten, raw or preserved. Horses, cows and pigs like apples, pears and other fruits. In autumn nearly all wild animals like wild fruits. Bears, in particular, are very fond of berries. Deer, moose, caribou, rabbits, squirrels, and nearly all our wild animals eat wild fruits.

Foreign fruits are usually more tender than our fruits, because they grow in hot countries. They are picked when quite green and shipped in that condi-

tion, or after a short artificial ripening, as with oranges. Oranges and lemons are imported from California and Florida; pineapples from Southern United States, Hawaii, Bahamas and other warm countries; bananas from Central America, the Bahamas and the West Indies; dates from Northern Africa; currants from the Ionian Islands and Greece; raisins from Spain; figs from Smyrna. Tons of grapes, packed in

sawdust, come from Spain. Raisins and currants are merely dried grapes and come chiefly from countries in the south of Europe. Valencias and Sultanas are varieties of raisins; the latter contain no seeds and are chiefly for making cake. They are grown in Turkey—hence the name. Prunes are dried plums. The fig is another dried fruit. The date is the fruit of the date-palm, and has been called the "bread of the desert."

The Glacial Period.

(Continued.)

By Prof. A. W. Kneeland.



CLOSED my last paper by a reference to the three prevailing theories regarding an "Ice Age:" (1) The "Flood Hypothesis, (2) the "Drift Hypothesis," and (3) the "Ice-cap Hypothesis."

As I have already said, the advocates of the third hypothesis rely for evidence mainly upon the known erosion of rocks and the glacial deposits by the movements of glaciers in modern times in Europe and America.

The results of ice movements over the surface of the earth are broadly as follows:—

1. The rounded and comparatively smooth outline given to projecting rocks, as compared with the more pointed forms due to what is commonly called "Weathering."

2. The grooving or striation of these rounded rocks by the passage of ice-embedded rocks over them, the grooves

or striae indicating the direction of the ice-movement.

3. The formation of circular-headed valleys and possibly of rock-basins in mountainous regions.

(My own early life was spent in one of these circular-headed valleys, closed on all sides but one, the north-east, by high hills, almost mountains, while towards the north-east, the land sloped off gently for many miles, covered with smooth, rounded boulders on which we often leaped and played; but asking the reader to remember the direction of this wide-open lane as north-east, I shall come back to this valley at a later stage of the discussion.)

4. Earth and rock deposits in transitu or at terminals; and as the under side of these glaciers or moving fields of ice would naturally be warmed to a certain degree by the heat of the earth, which must have been greater then than now, so the deposit of clay,

sand and gravel along with released boulders would be a pretty continuous one from the northern to the southern limit of the moving ice-field.

At the terminals, which would be legion, as the ice-field retreated northward, the deposits would have a peculiar formation. First and farthest from the actual bend of the ice-field, the finer and lighter soil would be spread gently over great areas or small in still water; second, great mounds of coarser material or sand would be thrown up by the torrential rush of the under-glacial waters; third, flanking this sand-hill and somewhat mingling with it on the north, would come a deposit of still coarser material or gravel; and, fourth, a deposit of greater or smaller rounded boulders, dropped from the retreating ice and probably rolled over and over many times by the might of the flood.

It is not at all difficult to find almost anywhere in our own province examples that nearly perfectly illustrate these necessary results of glacial retreat; but unfortunately, in most cases, there is the missing link.

Perhaps one of the best illustrations of this action in this province may be found on the south side of the Ottawa, at a point some ten or twelve miles above Ste. Anne de Bellevue.

Here, at Hudson Heights, we have "Mount Victoria," a hill of almost pure sand, clearly thrown up by some torrential stream carrying a large amount of sediment.

Two or three miles farther up we have the deposit of rounded boulder, stretching beyond Rigaud, where on the side of Rigaud Mountain, in what is called "The Devil's Garden," we have

one of the most remarkable collections of rounded boulders found on this continent.

South-west of Mount Victoria, which runs off in that direction with a very moderate slope, we have sand, then clay, then deep black humus with a clay sub-soil, reaching far down the river; but north of Mount Victoria, instead of the expected gravel before the boulders, we find a deposit of almost pure clay adjoining the sand and reaching north into the boulder belt for miles.

This region I have examined with much care and find so many points in which it differs from the ideal clay, sand, gravel and boulder deposit of a retiring glacier that I am compelled to look for some other cause of the phenomena.

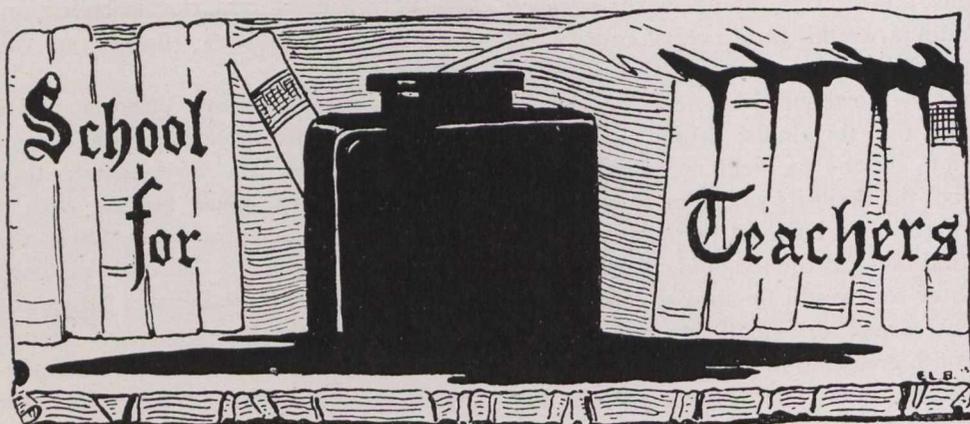
Let us now return to the round-headed valley in which some twelve years of my life were spent.

This valley, as I have said, is almost surrounded by a crescent of high hills, through which, toward the south, a large creek has worn its way to the lake beyond.

The larger part of the valley is flat, covered to a moderate depth with a fine alluvial soil, under which are gravel and boulders.

North-eastward we find sand and gravel mixed, sometimes thrown up in low hills, much like the sand dunes of the coast of California or western Europe; and still farther north-east is the long field of rounded and striated boulders, packed closely together and reaching to an unknown depth.

(To be continued.)



The Pupil.

IN a training school for teachers one quickly learns that many things are necessary to future success in this profession, although their importance varies according to the views of the instructor. One learns that a teacher must have infinite patience, no temper, or, if fate has been unkind, must have it under perfect control; a musical, one might almost say a "silvery," voice, the audible sign of a charming personality. Of course, these are things which we can all very easily acquire, if we are not fortunate enough to possess them at the beginning of our professional career. There is also something else about the supply of which we do not need to concern ourselves. This is generally not mentioned among the requisites, which seems strange, since it is really a necessity. I refer now to the pupil. The omission to mention the pupil may possibly be traced to the fact that the majority of people, not looking at these matters from the teacher's viewpoint, erroneously consider that it is the presence of the pupil which makes

the teacher a requisite, rather than the presence of the teacher which makes the pupil a necessity.

When one mentions the pupil one is immediately confronted with difficulty, for there are so many varieties belonging to the species. Since we cannot here consider them all, we shall, for the sake of brevity, choose our examples from the small boys, because here we are able to find representatives of practically every type in its most advanced form. Assuming that most pupils are of average intelligence—an assumption which can easily be proved wrong—we shall classify them according to their ability to behave, or, we might more correctly say, to misbehave. Among small boys we find the pupil who is a model of good behaviour—I might remark here that this species is fast becoming extinct—the pupil who has neither the imagination nor the courage to misbehave; the very unusual pupil who has both, but has them under an almost unnatural control; and the pupil who has an abundance of both, with marvellous ability in recognizing and welcoming the necessary opportunities. He

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is not of those who wait for Opportunity to knock at the door; he can hear the least flutter of her garments, and rushes to greet her, or draw her in if she had intended passing him by.

As a helper this small boy is invaluable. He helps make the noise; helps his less courageous neighbour to talk; helps waste the time of those fortunate enough to be within throwing distance; helps form and carry out the plan which is to test the detective ability of the new teacher; in fact, may be counted upon as a willing worker in any mischief, to the success of which his efforts are, of course, indispensable.

I have often thought that the small boy is merely a little premature in his freshman spirit, for the saying concerning the knowledge of a freshman has, I think, become a college classic, and

is therefore known by all. This, then, is the reason that a small boy is first, last and always the teacher's self-appointed source of general and miscellaneous information. There is no subject in which he is not only willing but eager to supply new and sometimes startling facts. With the unparalleled cruelty of fourteen years he will not even try to hide his feeling of superiority, which is his because of his greater knowledge in subjects to him vastly more important than mere book learning.

The Pupil—the teacher's professional material, which too often becomes the means of her downfall; the teacher's hope and the teacher's despair; the cause of her Austerlitz, or her Waterloo.

T., '16.

Prodigal.

Wandering at will can hold no charm for
me,
Though pipes of Pan are calling far
and wide,
Since o'er the ocean's narrow strip of sea
My countrymen are fighting side by
side.

I must away to where the cannon roar,
And in the conflict bear my humble
part,
Assured that when the tide of battle's
o'er,
Nature will bind me closer to her
heart.

E. D.

Winter.

“ The snow had begun in the gloaming,
 And busily all the night
 Had been heaping field and highway
 With a silence deep and white.
 Every pine and fir and hemlock
 Wore ermine too deep for an earl,
 And the poorest twig on the elm-tree
 Was ridged inch-deep with pearl.
 From sheds new-roofed with Carrara
 Came Chanticleer’s muffled crow;
 The stiff rails were softened to swan’s-
 down,
 And still fluttered down the snow.”



OW beautiful Lowell’s words
 are and how they bring back
 the remembrance of the first
 snowfall of the year!

Winter and snow! The terms are synonymous to us in Canada. Oh, the joy of waking in the morning and finding the earth covered over with a fleecy, white blanket, which tempts all outdoors! Along come the joyous children with their sleds, and up they toil and down they skim over and over again with happy shouts. In the evening the older brothers and sisters have their turn. Out come the big “bobs” and toboggans, brakes are looked over, bells put on and then they’re off!

Lakes and ponds soon become firm, and the clang, clang of sharp metal and the merry voices of skaters are heard. What care they of icy winds? On they go, the cold blast crimsoning their happy faces, to return in a little while borne by the wind.

With long, loose strides the ski enthusiast slides over the ground and up the sides of the hills. In a few moments he returns swiftly, high up in the air he soars; then, returning to earth, he glides on as before.

But everything comes to an end. Then there are the long walks home over snow-covered fields on which the moon shows a silvery sheen? The trees seem to huddle together for warmth, while a few bold ones stand out as sentinels to guard the snows. Home, a grate-fire and “something hot” beckon us. Perhaps marsh-mallows, as well as fingers, will be toasted over the coals, or perhaps we’ll roast chestnuts or popcorn. Surely someone can play! An impromptu dance? What better way to finish the evening? At length farewells are called back and quietness reigns.

Quietness! How still and beautiful the night is and how white the snow! What season can compare with Winter?



Discipline.



ANY seem to think that discipline is merely the power of keeping order. It is that to a certain extent, but, more important still, it is the art of maintaining diligence and attention to work. Should a class become disorderly, it would only be an outward sign that their attention had already vanished. To keep a class attentive the teacher must have his lesson so thoroughly well prepared that he is able to give some thought to his class at the same time that the lesson is progressing. If a pupil becomes restless and his mind begins to wander from the subject, the teacher should be sufficiently wide awake to observe it. Ordinarily a look, a momentary pause, or a question addressed to that pupil would suffice to recall his thoughts without disturbing the other members of the class.

But should the teacher have to speak a word of reproof the thread of thought would be broken, and this interruption would increase the possibility of the other pupils' thoughts wandering on resuming the lesson.

The teacher should be sympathetic. He should study carefully his pupils so that he might be able to deal with

each one in an understanding way. This individual treatment is conditioned by a number of things. The temperaments of children differ very greatly, and this will necessitate particular consideration and guidance. Also the home training of children differs very greatly, and these differences should be taken into consideration.

Discipline becomes a farce when the teacher is very cold and formal to the children and is thought of only as a punishing machine. School becomes a drudgery to them, and they work only through fear of punishment.

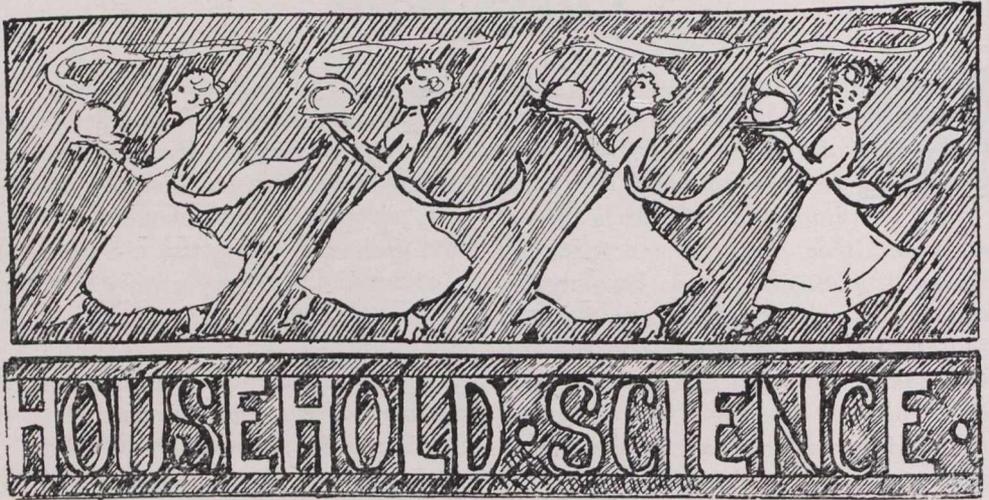
Sarcasm, insinuation and personal remarks should be avoided above all things. Great harm has often been wrought through some bitter sarcasm, or personal remark, made to some extremely sensitive pupil.

The surest test for discovering whether a teacher's method of controlling his pupils is beneficent, is the attitude of the children towards him outside the classroom. If the children shrink from him we may rest assured that his method is not of the best.

In short, discipline is the process by which the individual acquires and develops social self-control.

VIOLET WATT, T., '16.





A Shipwreck in Winter.



WONDER if any of you, who live far away from the sea-coast, can realize what a tragic disaster a shipwreck is in winter.

Several years ago, a passenger steamer was on her way from Bermuda to St. John. When off the extreme south coast of Nova Scotia the steamer ran into a terrific storm which had been raging for several days. Early the next morning word came that she was stranded on one of the treacherous reefs which lie off the coast. Everyone expected that the ship with all on board would be lost. It seemed impossible in the blinding storm to send aid, but in spite of the wind and snow several tugs were sent out to try to approach the ship if chance offered. It seemed as if at any minute she would be dashed to pieces.

When the tugs located the steamer she was partially submerged and encased

in ice until the ropes appeared to be the size of the funnels.

The tugs lay off all day, and towards evening the storm and sea abated, and they were able to get near enough to send boats to rescue the people on the wreck. Can you imagine the plight of the passengers and crew? The former were huddled together in the pilot house, some of them very thinly clad, as most of their clothing was soaked. The crew, mostly negroes from Bermuda, were even more badly situated. For twelve long hours they had to sit drenched with water, in some cases partly covered with it. During that time they could only make small amounts of coffee over a pan containing a few coals.

Each and every one was taken from the steamer safely by the crews of the tugs, who were later rewarded for their brave and untiring efforts. Some of the negroes had their limbs badly frozen, and on landing had to be taken

to the hospital. The rest, with the passengers, were taken to the various hotels where their wants were attended to, and clothing supplied for those needing it.

One of the things which attracted much interest was the ship's kitten, which was rescued from the water and brought ashore in one of the officer's pockets.

I happened to be at the station the

next morning when a special car was added to the train to carry the colored crew to Halifax, from there to be shipped home to the south. As the train pulled out they sang "Praise God from Whom all Blessings Flow" with more pathos and feeling than I have ever heard put into song. I think I can safely say that there was not a dry eye among the crowd on the platform as the last notes were lost in the distance.

College Spirit.



IT seems to me that in our college there is perhaps too much of the class or section spirit and not enough of the college spirit. College spirit elevates a college; class or section spirit pulls it down.

The different section organizations are worthy of the highest praise, but they should be made more general, so that the student body as a whole might take an interest in all the different activities of the college. When one section has a number of men in the football team

or MAGAZINE board, or one section of the girls has a number of girls on the basketball team, each person on these teams represents the college, and not his or her section. These feelings make a college divided against itself.

It would be much better for the students as a whole if they would learn to vote with due consideration, not because a boy or girl happens to be a friend of theirs, but because he or she would be the right person in the right place.

B. E., Sc., '16.



The Winter Short Course, 1916.

JANUARY 4, 1916, witnessed the gathering together of a new family of the Macdonald Clan. Who are the members of this family? WE are. Who are "we"? The Winter Short Course Students in Domestic Science and Dressmaking. We are more than pleased to feel that already we are of "The Macs," and hope to be thought of as such, not just as "The Short Course."

We were fortunate in being here for the afternoon tea given by the Macdonald girls to pay for *Magazines* which are sent to our soldiers overseas. The room was prettily decorated in Macdonald colours. The young ladies assisting were also clad in green and gold, adding much to the pretty surroundings. This tea was a brilliant success, and was well patronized.

And speaking of teas—there have been



During the short time that we have been at Macdonald we have not only become much more proficient with the rolling-pin and flat-iron, but have found time to enjoy numerous games of Hockey, Baseball and Basketball. We are proud of our Basketball teams. Their victories are becoming quite frequent, thus keeping up the reputations which we had anticipated in the teams of such a college.

numerous little tea parties lately, the reports of which, through negligence, did not reach the Ste. Anne Gazette. Nevertheless, they are quickly brought to one's knowledge without any publication being necessary. They are often the cause for invitations to a "social" meeting, at the end of which a collection is taken up, and thereby the Short Course is impoverished.

TINY.

Faculty Items.



THE December meeting of the Macdonald College Club took the form of a club supper, held in the college dining room. About fifty members were present. The toast to the King was followed by a toast to the Allies, responded to by Dr. Harrison, and one to the Empire, responded to by the Rev. Norman McLeod, after which Prof. McNaughton, of McGill University, addressed the club on "War and the Bible." This brilliant and inspiring address was much enjoyed by all present.

Our sympathy is extended to Miss McGill, whose father, Lieutenant-Colonel Sydenham C. McGill, died in Kingston a few minutes after the breaking of the New Year. Col. McGill, who was born in Montreal in 1842, joined the Royal Canadian Rifles in 1860, became adjutant of that regiment and was commander of the depot at Prince Arthur's landing during the Red River Rebellion. Later he served with the 22nd Foot at Fermoy, Ireland, with the Fourth Regiment of Cavalry in Canada, and for seventeen years as staff adjutant in the Royal Military College. Since his retirement in 1900 he had been manager of the Frontenac Saving and Loan Society.

During the Christmas vacation the majority of the men of the staff took advantage of the special military instruction given by Dr. Harrison with the assistance of Professor Laird, Dr. Shaw and Mr. Boving. All taking part felt greatly benefited by this course and it is hoped that the benefits will be apparent in the movements of "Platoon No. 1."

Two shooting competitions were held December 17th and 18th—a handicap match for those who had taken part in last year's competitions and an open match for newcomers. The first prizes for the two matches, Christmas turkeys, were won by Mr. A. C. Gorham and Prof. S. C. Laird. In the open match Mr. E. H. Jones came second and Mr. Van Zoeren third. In the handicap match, Messrs. Starrak and Ness were tied for second place, and Messrs. McLaurin and MacMillan for third, while Prof. Bunting won fourth place. With their handicaps, Messrs. Gorham and Ness exceeded the total score possible for a scratch competition, Mr. Gorham making 115 and Mr. Ness 106 out of a possible total of 105. Without their handicaps they would have stood third and fifth, respectively, Mr. Hammond ranking first, Mr. Summerby second, and Profs. Barton and Bunting fourth. Another handicap competition is announced for January 22nd.

Volley ball is now the popular sport among the men of the staff. This gymnasium game is a sort of tennis without rackets and with a ball as large as a football. One of its convenient features is that the number of players who can take part in a game is not limited. Mr. Starrak and Mr. McLennan have the honour of having introduced the game in the college.

The ladder competition of the Golf Club, which was continued until snow came, was won by Prof. Laird with Dr. Harrison second.

Short course duties necessitated the absence of many members of the staff in the early part of the month of January.

Messrs. Macmillan, Summerby, Boving and Taylor devoted two full weeks to this work. Prof. Barton, Mr. Jull, Mr. Ness and Mr. Bergey each spent one week in short course work and Prof. Bunting and Mr. Emberley have attended some of the meetings. In the Farm Home courses lectures were given by Miss Hill, Mrs. Rutter, Miss Zollman, Miss Campbell and Mr. Emberley. At the college a special course in dressmaking and some evening classes in dressmaking and millinery are in progress in addition to the regular three months' short course in Household Science.

The Short Course in Horticulture is announced for February 7th to 11th and that in Poultry for February 14th to March 4th.

Dr. Harrison visited Shawville on January 4th, the day of the short course lectures in that town.

Miss Fisher, who has been in Columbia University during the fall, has been making it a rule to visit at least one institution a week to study their methods. These institutions have embraced schools, college residences, lunch rooms, cafeterias, hospitals and laundries. She is now visiting institutions in other cities, but is still making New York her headquarters.

Miss England has given up her position in the Day School, and we hear that her marriage to Lieut. F. L. Drayton, B.S.A., of the 86th Battalion, is set for January 26th.

Miss Hopkins, a graduate of the Mechanics' Institute, Rochester, N.Y., has been engaged as instructor for the special dressmaking short courses and

the evening classes in dressmaking and millinery.

Prof. Murray and Mr. Bergey attended the Winter Fair at Guelph, Ont.

Mr. Sadler attended the meeting of the Eastern Ontario Dairymen's Association at Renfrew and delivered an address entitled "New Possibilities in Dairying."

Dr. Savage is now a lieutenant in the Canadian Veterinary Corps and has charge of a mobile veterinary unit. The duty of a mobile unit is the care for wounded horses between the front and the veterinary hospitals.

Mr. J. V. Dupré who left the Physics Department last spring to become an inspector of explosives has already been promoted to a chief inspectorship.

Mr. L. C. McOuat, B.S.A., is temporarily assisting in the Animal Husbandry Department.

Mr. J. E. McOuat is arranging for courses of two or three days in a number of rural schools to give the teacher a start in Nature Study and Elementary Agriculture work.

Miss Pearl Harwood, a 1915 graduate of the School for Teachers (Model Diploma), has been appointed to fill the position on the Day School staff left vacant by Miss England.

Mr. Wm. J. Edwards, B.A., formerly of Cookshire, has been appointed to the staff of the Day School for the remainder of the session. Mr. Edwards holds a first class academy diploma.

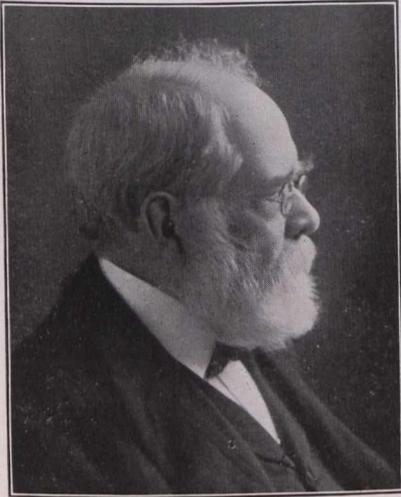
Mr. J. McWilliam has been appointed to the staff of the Bursar's office.

The Robins Family and the Training of Teachers.



HE resignation of Miss Robins at Christmas from her lectureship in mathematics in the School for Teachers has brought to a close the long connection of the Robins family with the Normal School since its foundation in 1857.

Perhaps it will be of interest to students to know that when the Province of Quebec established a provincial normal school in connection with McGill



DR. ROBINS.

University, a young man was brought from Ontario to assist in its organization. This young man was first Professor Robins, Professor in Mathematics in McGill Normal School; and afterwards Dr. Robins, Principal of McGill Normal School until it ceased to exist in 1907 and was reorganized as the School for Teachers at Macdonald College.

Previous to the institution of the McGill Normal School there had been no proper training for Protestant teach-

ers, although the Colonial Church and School Society had done some work for pupil teachers according to the old system of Bell and Lancaster.

Dr. Robins had been recommended by Dr. Egerton Ryerson, the real founder of public education in Ontario, as one of his ablest and most promising instructors, and those who know the career of Dr. Robins will be aware that Dr. Ryerson was perfectly justified in his estimate and prophecy. Sir William Dawson, Principal of McGill University, also acted as the first principal of McGill Normal School, from 1857 to 1871. Mr. W. H. Hicks, who was the old school master of the Colonial Church and School Society of Montreal and its headmaster when it was taken over by the McGill Normal School, succeeded Sir William Dawson as Principal in 1871 and remained until 1883. During the time of his principalship Dr. Robins was appointed Superintendent of Protestant Schools in Montreal, but was recalled to the McGill Normal School as its Principal in 1883, where he remained until he retired in 1907. While superintendent, however, he continued to give some lectures to student teachers and thus he has a record, which is probably unique, of fifty continuous years of service in a college for training teachers.

Dr. Robins was the first to introduce lady teachers as professors and lecturers and to introduce specialists to lecture on their own subjects. The reputation of the old Normal School is largely due to his faithful work, wise guidance, and forceful personality. Dr. Robins became the leading figure in Quebec

educational affairs, and during the fifty years of his activity almost three thousand teachers passed through his hands. Fortunately, we still have Dr. Robins with us. He is hale and hearty and full of vigour, and his former students all hope that he may long continue in the enjoyment of health and strength.

His daughter, Miss Lilian B. Robins, B.A., was first of all a tutor in McGill Normal School in 1884, but she took her B.A. degree in 1891 and taught English and Mathematics in the Normal School until 1907, being transferred with the institution to Macdonald College.

It may not be known to the present generation of students that Miss Robins edited the *Educational Record*, which is the official journal of education of the province, for five years, from 1899 to 1903, winning praise for her competent management and the excellence of its contents during that period.

Miss Robins was also largely instrumental in introducing the present school geometry and arithmetic text-books in the Province of Quebec and has always been actively interested in education in general, and mathematical instruction in particular. As Miss Robins carries the record of her family until the beginning of 1916, it will be noticed that she and her father have given sixty years of service to the province. They are entitled to the respect in which they are held for their hard work and influence,

being single minded, loyal, conscientious and extremely hard-working.

With no disrespect to any present member of the staff, it may be said that there is no lecturer left who is more reliable, punctual and faithful. Miss Robins' influence will be missed in the institution, and the students will be without a friend and a teacher whom they respected and with whom a former



MISS LILIAN B. ROBINS.

generation enjoyed many a tobogganing party.

It is not often that a province is blessed with officers who are forceful in their personalities and whose standards are as high as those of the father and daughter who have just terminated their active official interest in Quebec education.

SINCLAIR LAIRD.



Obituary.

TO those who were associated with Macdonald College in the early days of its history, the news of the death of R. W. D. Elwell, of the class of 1911, will be received with regret.

Elwell died in Calgary, Alberta, on 31st October, 1915. Although several of his classmates corresponded with him pretty regularly, none of them knew of his death until some time after it occurred. Earlier in the autumn he joined the army and was in training at



R. W. D. ELWELL

Sorel Camp. While there he contracted a cold which necessitated his discharge from the force and later consummated in his fatal illness.

In the early days of college history, if there was one outstanding figure amongst the students it was that of Bob Elwell. An M.A. of Oxford, and a skilful teacher of mathematics and languages, his work at Macdonald, in both the field of study and social life, was brilliant. Although he joined the

class of 1912 when first entering college, he took the first three years' work in two years and entered the class of 1911 in its graduating year. After graduation Elwell went west, where he had, as he himself says in his last letter to one of his friends, "varied experiences and not plenteous riches." He taught school, worked on farms, at newspaper work, and was for a time on the staff of the Alberta Department of Education. He also bought for himself a small farm. In the summer of 1914 he revisited England for the second time since coming to Canada. He returned to teaching for a time after leaving Sorel Camp, and succumbed to the effect of his illness while attempting to "get well again and make a fresh start in life."

In his letters he frequently refers to the "lonesome prairie" and to the "lack of society" of the west. "I never see a girl with any education," he writes. "I wish I could come and see you and...and have a long talk with you. I guess it *would* be long."

Very few of those who really knew him at college will ever forget him. His disinterested generosity and kindness to any who needed to call on his help, in matters where his abilities and past training could be of service to them, made him a source of secret strength to more than one fellow student who needed a little kindly coaching. His literary attainments made him a leader in much of the literary and social life of the college. He was chosen editor of the "Trifolium" and also of the first college magazine.

He was very definitely impressed with the different attitude of mind and

outlook on life which he met with in Canada. His response to it, as noted by his friends, was generous and typical of the breadth of his Old World training. He came to the college a real Oxford M.A., polished, reserved to frigidity, unappreciative of the practical things of every-day life, and almost unapproachable. He left it with the shell of many Old World conventions broken, and all who knew the real man beneath admired and esteemed him for both his personality and as much of the shell as he chose to retain. Neither small mindedness nor selfishness ever found congenial soil in his nature. He had many friends also in that residence which shelters many of those whom he looked upon as

typically Canadian, in their bright, attractive, and ingenuous charm—Canadian women. If secrets could be told, Elwell would be thought even more of now than in the past, by those of his college friends who lived in that residence.

All his classmates of both the class of 1911 and 1912 will admit that their experience at Macdonald was made not less but more worth while; was not narrowed but broadened and deepened because of Bob Elwell. To say that is but a small tribute, perhaps, to his real self, as those who knew him more intimately will feel it his due to admit.

A CLASSMATE.

The Golden Harvest.

| | |
|---|--|
| O brave and young, who perished in your spring-time, | In that far land, on either side the river |
| The time of singing birds and sunny hours, | Of endless life, in the bright heavenly groves, |
| Sweet mystery and dreamings vague and tender | Trees of God's planting, do you grow, I wonder, |
| Of fruit to come from out the heart of flowers! | To nobler ends and to serener loves? |
| Your eager pulses leaped when called your country, | Your leaves may be for healing of the nations, |
| You counted not the cost, but gladly gave | Now sick with strife and worn with fierce desire, |
| The sunshine and the hope of Life's fulfilment | Showing, though darkly in a glass, the vision |
| For darkness and the silence of the grave; | Of a new Earth made clean by love's pure fire. |
| In love you broke the box of ointment rare: | O seed that dies! For tears we cannot see |
| What purpose is this waste of lives so fair? | The golden harvest of Eternity. |

J. M. KRAUSE.

Macdonald College Agricultural Alumni Association.

Lieut. A. Savage, '11, is officer in command of a mobile Veterinary Corps that is to be attached to a unit now in France. He is at present recruiting in Montreal and expects to leave shortly for the front.

□ □

Major R. Innes, '11, is at present training the 106th Battalion at Truro, N.S.

□ □

Lieut. C. M. Williams is also in training with the 106th Battalion at Truro preparatory to going overseas.

□ □

Mr. Wm. Newton, '14, who until recently has occupied the position of Soil and Crop Instructor with the British Columbia Government, has enlisted for active service with the Canadian Forces.

□ □

Mr. V. B. Durling, '15, is with the 73rd Battalion in Montreal and has been filling the position of Musketry Instructor and Instructor in Physical Drill in that unit.

Mr. B. T. Reid, '14, who has been engaged in New Brunswick as Assistant

Field Husbandman, has enlisted and is at present taking a course of instruction at Kingston.

□ □

Mr. J. M. Robinson, '12, who was with the 2nd Canadian Divisional Cyclists, has been transferred to the Canadian Ordnance Corps and is stationed at Ashford, England.

□ □

Mr. F. H. Grindley, '11, who has been at the Arkansas Hot Springs for his health, has so far recovered that he expects to be back in Ottawa by the end of January.

□ □

Mr. A. A. Campbell, '12, has been transferred from the C.P.R. farm at Fredericton to Caledonia Springs, where he is taking up the management of the company's farm at that place.

□ □

Mr. J. M. Leclair, '14, is spending the winter at Quebec, where he is engaged by the Quebec Government in connection with the Seed Fair and educational work in that province.



Class Presidents.

School for Teachers.



MISS EVANGELINE PLANCHE.

MISS EVANGELINE PLANCHE (VANJO).

A noble type of good heroic womanhood.

Miss Evangeline Planche, president of the Model Class in the School for Teachers, honours Cookshire as her birthplace, where she received her early education.

Two years at McGill University, then a short experience in teaching has fitted her to ably fill the position as none other could.

Motto: Liberty, Equality, Fraternity.

□ □ □

MISS DOROTHY LONGWORTH.

Excellence is never granted to man but as a reward of labour.



MISS DOROTHY LONGWORTH.

Miss Dorothy Longworth, president of the Elementary Class, hailed from Charlottetown originally, though her home is at present in Montreal. Her early education she received on "the Island," whence she went to England, spending three years there in the High School forms. Miss Longworth intends taking up Kindergarten work. She is exceedingly popular with her classmates, and with the many girls whom she meets in the exercise of her many duties.

Class Presidents.

School of Household Science.

MISS BEATRICE ROACH.

It's good to lengthen to the last a sunny mood.

Miss Beatrice Roach came to us from St. John, where the buoyant spirit of the grand old ocean seems to have become part of her personality.

Graduated from St. John High School.

Having spent some time at home making cakes, she decided to come to Mac to become acquainted with the scientific methods of doing same.

Motto: It is so good to be Irish.

□ □ □

MISS ERNESTA LAW.

Oh, blest with a temper whose unclouded ray can make to-morrow as cheerful as to-day.

Miss Ernesta Law was elected president of the Homemaker Class of '16. Miss Law is one of the famous "Blue Noses," being a native of Yarmouth, and is a graduate of "Edgehill," Windsor, Nova Scotia. She is a great favourite with all the members of her class and has always a word and smile for everybody.



MISS B. ROACH



MISS E. LAW

Class Presidents.

School of Agriculture.

Geo. C. Hay, '16, for the second time is guiding the destinies of class '16. George has won the esteem of everybody, and as president of the Students' Council discharges his duties in a very able manner.



GEO. C. HAY

S. R. N. Hodgins, '17, has been elected to be the chief executive of his class, and we think he is the right man in the right place. Though short in stature he is long of head, and has shown his ability, both in class and along executive lines.



S. R. N. HODGINS.

R. A. Derrick, president of '18, is a quiet man but a thinker. Derrick has shown rare ability in leading his classmates through some troublesome times in their career. We have no hesitation in saying that Derrick will make good in this position.



R. A. DERRICK.

J. D. Sutherland, president '19. Good sense and deliberation on his part won for him the honour of leading his class on the initial lap of their four-year course. The Freshmen used good sense when they chose Sutherland for their president, and we congratulate them on their choice.



J. D. SUTHERLAND.

Macdonald.

A College Song.

By A. W. Kneeland.

I.

Macdonald! Macdonald! Macdonald!
 Within thy bounds where mingled waters meet,
 Within thy halls where echo many feet,
 Where twine the green and gold of youth and age,
 And youth casts lightly down the battle gage,
 Where shackles fall and leaps the bounding heart
 To play on wider field her signal part,
 Here minds enkindled, answer, mind to mind,
 And hearts uplifted, answering pulses find.

REFRAIN.

Strike green to gold! Strike green to gold!
 The colours mingling, fold on fold;
 Then join in ringing song of praise,
 Which we in highest accents raise
 To Macdonald, Macdonald, Macdonald.

II.

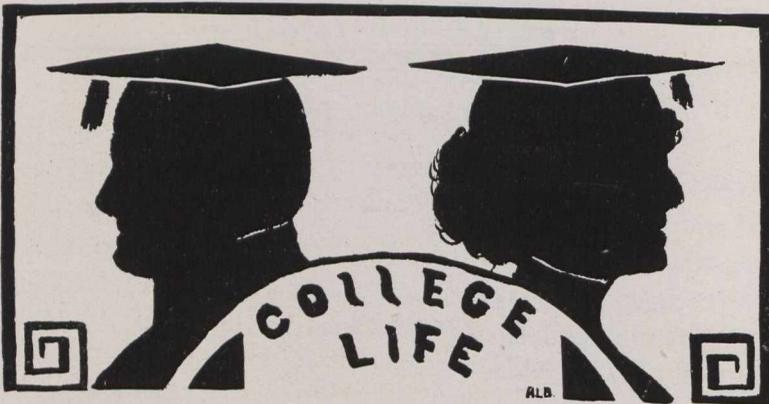
Macdonald! Macdonald! Macdonald!
 The green of leaf, the flower of dazzling gold
 But to our eyes the beauty of a life unfold.
 Springtime of life and summer's rip'ning ray
 But usher in life's fruitful autumn day,
 When answering to our motto's lordly call,
 We write high on life's upreared flinty wall
 Some summer record of a noble life,
 The fruit of golden thought and springtime strife.

REFRAIN.

III.

Macdonald! Macdonald! Macdonald!
 To list'ning hills and flowing waters round,
 We raise our song with ever-growing sound;
 We twine the green in Autumn's golden hair,
 And leave it like an em'rald, sparkling there;
 We planted broad in springtime blythe and sweet;
 We cultured deep in summer's glowing heat;
 And now our fruitage, green and gold, we raise
 In glad acclaim, an autumn song of praise.

REFRAIN.



Y.M.C.A.

The Sunday morning meetings of the Y.M.C.A. in the Gym. still continue as part of our weekly bill-of-fare. Since you last heard from the association through the columns of this MAGAZINE, several months ago, we have had the pleasure of listening to a number of speakers on a variety of subjects. Mr. J. S. Woodworth, of the Canadian Welfare League, addressed a union meeting of men and women students on the immigration problem. The following Sunday, the men heard Mr. A. E. Roberts, of Toronto, on the boy problem. Mr. W. H. Henderson, of Central Y.M.C.A., Montreal, discussed the rural problem with us. Another union meeting was held on November 28th, when Mr. Warwick Chipman, of the Law Faculty, McGill, gave a most interesting address on "The duty of those not at the Front."

We might add that these union meetings are only held when we obtain a speaker with a subject of interest to both sexes; we do not like to retain the good things for ourselves only. Our friends across the campus might show their appreciation of this fact, and turn out in larger numbers the next time we transfer our meeting to the Assembly Hall.

Early in the new year the executive met together to draw up the programme for the coming three months. The new list includes, among others, several men who were on our fall list, but who were prevented from falling in with our programme then. If all goes well, the M.A.C. students will be given an opportunity of meeting with such men as Taylor-Statten, Raymond Robins, of New York; Wm. Birks, the business man; Mr. Bradford, of Montreal, the man with more jokes up his sleeve than we would have time to listen to in a week; Winfield S. Hall, Dean Adams, of McGill, etc., etc.

W. N. J., '18.

LITERARY MEETING.

The first meeting of the Elementary Class Literary Society was held Monday evening, January 17th, at 6.45 o'clock.

The President, Miss Kirby, opened the meeting with a short address, in which she brought out very clearly the aims and objects of a literary society. Miss Kirby emphasized the importance of practice in public speaking, especially for teachers, who will be called upon and expected to help in this work.

Miss Wood favoured the audience with a solo which was appreciated by all. Then followed an interesting read-

ing by Miss H. McKay. A very pleasing piano solo was given by Miss E. Caldwell. Perhaps, the most enjoyable part of the programme was a recitation by Mrs. Dormer.

The meeting was well attended, showing the interest taken by the girls. After singing the National Anthem the meeting was brought to a close.

We owe an apology to Professor Kneeland for the inconvenience caused him through so much delay.

At this, the first and, as yet, the only meeting, the main feature was a debate upon the subject: "Resolved that the girls should be allowed to have visitors on Sunday." The affirmative was upheld by Miss Olmstead and Miss



COLLEGE LITERARY EXECUTIVE .

Standing: Wright, L. R. Jones, Arnold, Crothers (Pres.), System, Tilden.
Sitting: Misses Lees, Kirby, Curry, Planche, Davidson, Woodhouse, Mentle.

The Society regrets very much that the Honorary President, Mr. Thompson, was unable to be present.

A. C., T., '16.

SECTION B LITERARY MEETING.

Owing to the fact that other events occupy so many evenings, great difficulty was experienced in obtaining one for Section B's first literary meeting.

McOuat, while Miss Hecht and Miss Merrill ably supported the negative. Dr. Hamilton and Professor Kneeland kindly consented to act as judges and decided in favour of the negative. While they were making their decision, the Misses Lavers and Johannsson entertained us with a piano duet, which was so much enjoyed that it received an encore, enjoyed likewise.

The judges returned in time to hear Miss Murray recite "The Cremation of Sam McGee," with her usual ability. This was followed by a piano solo by Miss Olmstead which, needless to say, was much appreciated. The meeting closed, as all meetings do, with "God Save the King."

G. H. M., T. '16.

SECTION C LITERARY SOCIETY.

It was not until Thursday, December the sixteenth, that Section C held the first meeting of their Literary Society. This meeting took the form of a reception in honour of their Hon. President, Miss Robins, who was about to retire from the College Staff.

A very enjoyable evening was spent. A few games were played in order to break away the stiffness and reserve sometimes felt on such occasions. The game of "guessing eyes" seemed to be greatly enjoyed both by the girls and those members of the staff who were present. After every one had become thoroughly acquainted with the colour of everyone else's eyes, the refreshments were served. After this the prizes were awarded, Miss Wren and Miss Wright being "the lucky ones."

Then came the climax of the whole evening—the representatives of the different sections appeared and presented Miss Robins with tokens of remembrance from their respective sections. Miss Planche, on behalf of Section C, expressed the regret of that section on losing such a kindly instructor and president of their Literary Society and presented her with a bouquet of red roses. Miss Planche was followed by Miss Lees, representing Sections A and B. After expressing the regret felt by the girls on her departure, Miss Davison presented Miss Robins with a desk-lamp. Miss Davison was in turn

followed by Miss Longworth, of Section D, who gave Miss Robins a desk-set on behalf of the Elementary Class. Miss Robins was much pleased, and replied by a speech that will long be remembered by all those girls fortunate enough to be present. "And the greatest of these are the Belgians" was the topic of her address. After giving us the reasons for the greatness of the Belgians, namely, their continual struggles and endeavours, she asked us to remember these people and to try to emulate their greatness.

The evening was brought to a close with the singing of college songs and many old favourites, such as "Old Black Joe," "Annie Laurie" and the Christmas Carols.

As Miss Robins disappeared down the hall amid the enthusiastic cheers of all the girls, many were the wishes expressed for her happiness and success in the work she is about to take up.

G. M. W., T., '16.

MISS ROUSE'S LECTURE.

On the afternoon of January 16th, the members of the Y.M.C.A. and Y.W.C.A. had the pleasure of listening to a lecture by Miss Rouse on the "Work of the Students' Confederation as affected by the War."

As a secretary of the Women Students' National Confederation, Miss Rouse has recently returned from Russia, and she was able to give us an interesting account of the work done by the various Christian Associations in some of the belligerent countries.

As might be expected, many of the student bodies have been broken up, but it was interesting to note that in Russia most of the colleges were going on with their work.

The meeting closed with a vote of thanks to Miss Rouse on behalf of the

students and the singing of the National Anthem. It is to be hoped that in the future the Students' Confederation may be again brought together with yet stronger and closer ties.

L. KINGAN, T., '16.

C. O. T. C.

The reorganization of the Officers' Training Corps, for the session 1915-16 has thus far proved a great success.

The following officers are in charge:—
Commanding

- | | |
|--------------------------|--------------------------|
| Officer..... | Major Harrison |
| Platoon Commanders. | { Prov. Lt. N. Shaw |
| | { Prov. Lt. S. Laird |
| | { Prov. Lt. P. A. Boving |
| Platoon Sergeants.... | { R. Summerby |
| | { H. S. Hammond |
| | { H. Barton |
| | { H. S. Cunningham |



JONES AND SPENDLOVE. Somewhere in Belgium.

The obtaining of the long promised uniforms seems to have stirred up a new interest among the fellows, and each man has taken a more serious view of the present situation, realizing the country's need of trained men.

- | | |
|------------------------|--------------------|
| Section Commanders. | { S. R. N. Hodgins |
| | { R. H. D. Todd |
| | { R. A. Derick |
| | { G. D. Matthews |
| | { J. Carl Fraser |
| | { J. D. Sutherland |

During the first term we spent two hours a week in training, consisting chiefly of platoon and section drill. Apart from this we spent two Saturday afternoons doing outpost duty. These drills were very instructive, giving us some idea of how field operations were being carried on at the front.

The Training Corps has been handicapped, to some extent, by the lack of a sufficient number of trained instructors. This difficulty has been overcome by extra drills being conducted during the Christmas holidays, for the purpose of giving special instruction to those who are to act as temporary officers.

During the second term, it is the intention of the instructors to give the men the opportunity of obtaining some practical knowledge of the duties of an officer.

In order to maintain the keen interest of the men it has also been planned to hold some shooting competitions, where each man will be able to show his ability with the rifle.

It is to be hoped that the Training Corps will continue its good work, and that every man will make a special effort to pass the examination in the spring and qualify as a commissioned officer.

R. A. D., '18.

RED CROSS ACTIVITIES.

The Red Cross Branch of the Young Women's Christian Association held its first meeting for the year 1916 in the college reception rooms, on Tuesday evening, January 11th. Only a small number were present, but considerable work was given out. Bandages and surgical materials were prepared, and many girls who were absent asked, later, for knitting, etc., so the good work which has been started will be continued during the winter.

A large bale containing towels, sheets, socks, wristlets, scarfs and surgical supplies was shipped before Christmas to Red Cross hospitals at the front, and from time to time more will be shipped.

Only one short meeting is held each week, but the work accomplished shows what can be done even though the time is limited.

M. G., F., '16.

Red Cross as usual! In spite of the beautiful night for skating, quite a few ardent workers met in the Reception Room, and soon the hum of voices and clicking of needles filled the air. Only for a while, however, for when the president announced that Mrs. Dormer would give a reading, all were silent. "Uncle Sam" met with a hearty hand-clapping and was much enjoyed. For the remainder of the meeting Miss Olmstead played with her usual talent. At the end there was a dandy big pile of work to testify to the energy of the workers.

D. D., T., '16.

HOW THE SCIENCE "FRESHIES" WERE INITIATED.

The "Freshies" were the new Short Course girls. For several days we had seen them around the buildings and in the dining room, but there had been no chance to get acquainted, no opportunity to welcome the newcomers. Everyone realized that this state of affairs ought not to exist, so our friends were invited to meet us in the large reception room about five o'clock, one afternoon. This kind invitation was accepted, and the new girls turned out in full numbers, all dressed up for the occasion.

First, the president of the Junior Administrators conveyed our greeting, closing her very fitting address by introducing the "Seniors." Then came the fun. Armed with combs and many-

coloured ribbons, we, old girls, attacked the neatly arranged hair of the unsuspecting visitors.

Both doors were guarded, cutting off all escape. In vain our friends struggled. Every pin and comb was removed, and down came fair hair and dark hair, curly and straight. Then each girl tried her skill in dressing her opponent's hair. It was, indeed, a strange scene for that stately reception room.

At last each Freshman was satisfactorily decorated. Some, it is true, managed to undo our work (for the new girls were quite as numerous as we were), but these rebellious ones were punished by means of extra braids and ribbons. Then, one by one, the now submissive Short Course signed the list of rules drawn up for their instruction and guidance. This business over, they marched in single file through the halls, displaying their finery to great advantage. Then, being ready for tea ourselves, we sent them home to the Main Building, where they were greeted by confusion and disorder. It was no small task to put those rooms to rights again.

Such was the welcome given to the Winter Short Course. It has served to show that they are good sports, and since that night the Freshmen and Seniors have been the best of friends.

J. S., Sc., '16.

LEAP YEAR NIGHT ON THE RINK.

The righteous indignation of all the members of the fair sex was roused into action after listening in silence to the remarks of the sterner sex, which dealt with the slowness we displayed regarding the customs always associated with Leap Year. Some boys said the girls wouldn't be brave enough to ask them for a skate, others said that nobody would even know that this year could

be divided by four, and so forth. So we put our heads together and decided to have a Leap Year Night at the rink, and a notice to that effect was posted one Friday noon.

About six-thirty that night the dining hall was deserted, everybody was hustling and bustling into their outdoor garments, and group after group were seen wandering in the direction of the rink. "Why, where are the lights? What's up? Have the boys turned them off?" was shrieked from group to group. For the first hour the skaters had to depend on the moon for light, and it was hardly light enough for us to see with whom we wanted to skate. However, the boys helped us out by introducing themselves, and when gently reminded that for this one night the privilege of asking was ours, they would remind us that the habits of a lifetime could not be broken in one night.

When the lights did come on, which occurred as soon as the trouble at the Power House could be remedied, the fun began, and everyone had a good time. Why, the girls weren't a bit bashful, and when it came time to go home, each lassie knew just how to bring her laddie over the many rough bits of walk found between the rink and the tunnel. Brown, as usual, was standing at the entrance, so everyone soon said "good-night," all voting that before the skating season was over another such night should be arranged for.

THE RINK.

While the students, taking no thought for the morrow, were busily engaged in satisfying the abnormal wants of the inner man, our energetic rink manager, Mr. R. J. M. Reid, had our welfare at heart, and as a consequence on our return, January 4th, we found that the rink had been constructed on the girls'

campus and a perfect sheet of ice awaited the careless cut of innumerable skates.

The lighting system has been somewhat improved by the use of large reflectors and high power lights, which, although fewer in number, give a better and more even distribution of light than in former years.

Mr. Reid believes in efficiency, and with that idea in view he has built a snow plow which, he claims, is a great labor-saving device, especially after severe storms. By making use of this plow one man can remove the snow in record time even after the severest storms.

As in former years, the rink continues to furnish us a medium in which we can combine pleasure and healthful exercise, which is much appreciated by all after a hard day in the lecture-room or in the fume-laden, vile atmosphere of the chemistry lab.

C. L., '16.

THE SCIENCE DEBATE.

On Friday evening, Dec. 10, 1915, the meeting of the Home Economics Club took the form of a debate. The subject under discussion was: "Resolved: That Faculty Government is better than Student Government." The Home Makers had the affirmative and the Short Course the negative side.

The leader of the affirmative was Miss L. Kirby, the seconder Miss J. Sommerville; while the Short Course was represented by Miss W. C. Comstock, as leader, and Miss T. Blaiklock seconder.

The debaters spoke well, the leader of the affirmative knew the subject and showed that she had given it considerable thought; the seconder gave her ~~material~~ material in a clear and concise manner and made many points. The leader of

the negative very quickly lost herself in her subject and showed her ability in clinching her arguments. The seconder of the negative aided her leader in using England as an excellent illustration of the success of student government.

Miss Hill, Miss Phelps and Miss Price very kindly consented to be the judges of the evening and gave their decision in favour of the negative, though Miss Hill, in giving the decision of the judges, stated that the points were so close it was very difficult to reach a decision at all.

At the close of the debate the company adjourned to the reception room, where the remainder of the evening was spent in playing games and dancing. After the refreshments, an enjoyable item of which was a donation of apples from Mr. Gorham, Miss W. Comstock sang in her usual pleasing style. College songs and "Auld Lang Syne" ended a very pleasant evening.

S. D., S., '16.

THE HOME ECONOMICS CLUB.

The Home Economics Club held its second open meeting on Friday evening, January the fourteenth. It was very fortunate in securing Professor John Macnaughton, of McGill University, to give his lecture on the "War and the Bible."

The lecturer was introduced, in a very happy manner, by Professor Lochhead, who remarked that it was rather remarkable for a professor of Greek to show the interest in, and knowledge of, agriculture that was exhibited by Professor Macnaughton.

In his opening remarks Professor Macnaughton spoke of the wonderful discoveries the Germans had made in science. It was they who discovered the fact that clover and alfalfa absorbed

the nitrogen from the air and, when turned into the ground, nitrogenized it. After experimenting with the ordinary beet, they produced a beet containing much more sugar and almost equal in proportion to that in our cane sugar.

Their philosophers and scientific men had done more in researching the Bible than any other nation, but, perhaps, their religion had become one more of knowledge than righteousness, and it was a case of "knowledge puffeth up," which fact may have been partly the cause of their blundering into the present war.

Britain, on her part, might have stood aside, and even at the eleventh hour she did her best to maintain peace honorably, which being found impossible, the sacrifice was made and her army placed in the field to aid the weaker

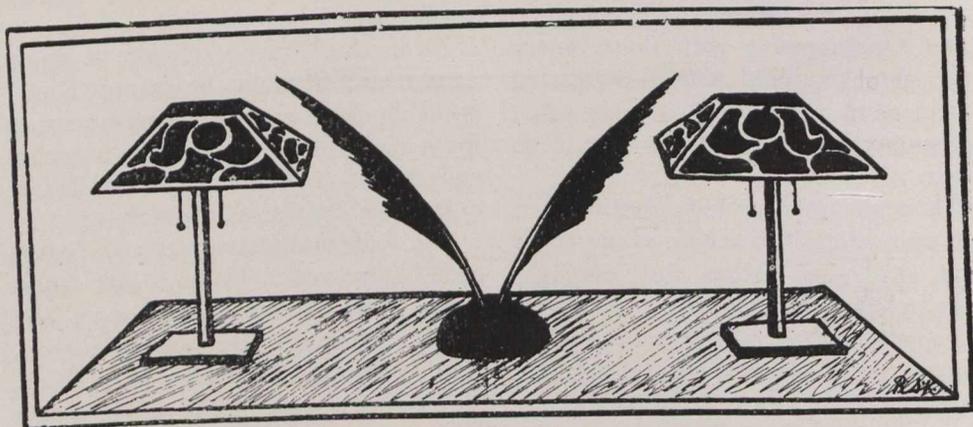
nations in their righteous war against the strong.

As to the German religion, it seems as if their "Prophet, Priest and King" was Billy the Kaiser. It seems disastrous for a nation when one man, its ruler, endeavours to place himself before everything else in his country.

The fact that more real and lasting good, more real religion in its truest sense, more willingness to serve and sacrifice, than has been shown hitherto, may come out of this war, is, perhaps, the brightest spot in the whole aspect of the future.

A hearty vote of thanks was tendered to Professor Macnaughton for his kindness in coming out to Macdonald to address the students. The meeting closed with the singing of the college songs, "O Canada" and "God Save the King."
D. C., Sc.





Under the Desk Lamp.

SHORT COURSE IN HORTICULTURE.

As this Magazine goes to press there is commencing at Macdonald College a course intended to give practical information on fruit growing and vegetable gardening to fruit growers and market gardeners, and to others who intend to engage in the industry. The necessity for increased production of all farm crops in Canada should make this short course a very valuable one. The following is the programme to be followed in these meetings:

Monday, Feb. 7th.—Prospects for Fruit Growing and Vegetable Gardening in Quebec; the Planting and Sowing of Seeds; Floriculture; the Vegetable Garden.

Tuesday, Feb. 8th.—Strawberry Culture; Hot-beds and Cold Frames and their uses; Bush Fruits; Floriculture; Up-to-date Methods of Gardening; Culture of Peas and Beans; the Principal Garden and Orchard Insects and Fungus Diseases, Illustrated.

Wednesday, Feb. 9th.—Onion Culture; Plum Culture; Tomato Culture;

Potato Culture; Insecticides and Fungicides and their uses; Fungus Diseases of Fruits and Vegetables; Gardening, Illustrated.

Thursday, Feb. 10th.—Varieties of Fruit for Quebec; Top Grafting and Selection of Nursery Stock; the Care and Management of a Young Orchard; Intercropping the Young Orchard; Pruning Demonstration; Box and Barrel Packing of Apples, Demonstrated; Improving the Home Surroundings, Illustrated.

Friday, Feb. 11th.—Sod Mulch versus Clean Cultivation in the Apple Orchard; Renovation of an Old Apple Orchard; Spraying the Apple Orchard, When to Spray and what to Spray with; Making and Testing the Lime-Sulphur Solution; Spraying Pumps, Spraying Material, Demonstrated.

The 1915 "Patriotism and Production" campaign resulted in an enormous increase in Canada's crops. Macdonald College, through its short courses in Agricultural subjects, is endeavouring to do her bit toward keeping up the production of farm crops in 1916.

JIM HAMILTON JOINS THE COLORS,

The 148th Battalion has already enrolled one Macdonald College student in the person of James Y. Hamilton, Agriculture, '19. Jim is deeply interested in the welfare of his country. He was a great reader—kept himself well informed in all matters pertaining to the war, and goes now with a full realization of all that lies before him. "Jim" had made many friends at the College, and his loss will be deeply felt.

AFTERNOON TEA BY THE GIRLS,

The afternoon tea given by the Macdonald College Girls, Saturday, Jan. 22, was a most decided success, both from the standpoint of the customers and of the managers. The tea was held to raise money to reimburse the MAGAZINE Board for magazines which are being sent to the soldiers at the front. It was suggested by some of the science girls, and at once taken up heartily by all the girls—cakes were cooked, tickets were sold, the room was decorated, and everything made ready with the least possible fuss, for everyone was working. And the result of this work? Oh, gratifying indeed—many pleased customers, a lot of happy but tired girls proud because they had made this tea a success, and a hundred dollars for the MAGAZINE Management. This success should encourage us to still further BOOST THE MAGAZINE.

In the Dec.-Jan. issue a prize of one year's subscription to the MAGAZINE was offered for the person guessing the correct name for a sketch which appeared in the Joke Column. Some answers were received, and while none exactly hit the mark, the prize has been awarded to Miss Brenda Heney, Westmount. Her contribution was, "Cheer up, the worst is yet to come." We wish there was more competition in these guessing contests.

EXCHANGES.

The Christmas number of the *Manitoba Agricultural College Gazette* is bright and interesting. Like other colleges in Canada it must needs devote a large share of its magazine space to its representatives at the front. The magazine, however, seems to exhale the fresh breezes of the prairie.

Acta Victoriana is publishing a series of very instructive and, under present conditions, extremely interesting articles. "The Everlasting Balkans," in December issue, and "The Government of Russia," in January, will give the readers a much better grasp of the war situation than they would otherwise have.

We are glad to number in our exchanges *The Mitre*, which is gotten out by the University of Bishop's College. The material is distinctly diocesan, and the entire magazine seems to smack of a conservatism delightful in these days of hurry. Bishop's has sent many men to the front, but is gratified by the large Freshman class this year.

The Western University Gazette is typically a college magazine. The articles for December are mostly short, but they appear to cover pretty well every phase of college activity.

Our days at "Prep." school come back to us as we look over the *Stanstead College Magazine*. But in this magazine, as in all others, we find the thoughts of the writers centred upon the war.

We are indebted to the Department of Publications at Ottawa for numerous instructive bulletins and *The Agricultural Gazette*. The Commission of Conservation has also kindly furnished us with copies of *Conservation* and a bulletin on "The Discovery of Phosphate of Lime in the Rocky Mountains." For these and other papers and bulletins we express our thanks.

News from the Front.

The following is an extract from a letter received by one of the students from Private Pat. H. Ashby:—

We are back again in our old billets and are not at all sorry, for there is less mud around here and we have better places to sleep. We were absent from here for twelve days, and during that time I think the realities of this war were brought nearer to me than ever before.

We left here one Sunday morning and, when about half way to our destination, I began to notice the amount of traffic on the road. It was getting greater every minute. In the distance I could hear the roaring of artillery above the noise of the traffic, and I found myself almost in trouble several times, for I was following the movements of three aeroplanes overhead. The first indication I had of them was when I saw some shells burst a little way off to the right, and others bursting nearer until they reached immediately overhead. I then looked ahead of the puffs of smoke and sure enough I saw an "Allemand," and wasn't he going some! He was making a final dash for the German lines, and was leaving a long trail of smoke behind him, fifty to a hundred yards in length. Then I saw one of our battle aeroplanes making for him. No wonder the German put on speed! But it was of no use, ours was gaining steadily on him and finally made a dash straight at him. Of course, I've scraped the bark off more than one tree by this time, and have been yelled at to pull off to the right, but I'm seeing things and look up again. The shelling has stopped for fear of hitting our own machine. Ours is circling around the German, and as I pull up for a moment

I hear their machine guns rattling away, a sound never heard in any other war. But some one calls me, "Pat!" I thought I heard someone call my name. Then someone grabbed my leg as I was looking the other way. It's "Dooley" Richardson, of the 24th Victoria Rifles. We grab each other by the hand and "How are you?" we both yell together. Drivers yell to "get out of the way." Motor lorries toot, toot, toot, but they can't push us off the earth. So, "What's doing out here?" I ask. "A battle's on at——, and we've been standing to all night." "Try and see you again." "Be good." I wave my hand, my horse thinks I'm going to hit him, and we part again in a hurry.

The roads are becoming very much worn in places and it is hard to turn out for the big motor lorries. I pass horses and men plastered with mud. It is hard to tell the colour of some horses. We halt in a little village for a few minutes, and see some French-Canadian troops. We start again, and after a few miles we come to the top of a hill overlooking quite a bit of country, and the atmosphere in the distance looks smoky. I can see big blotches of black smoke suddenly appearing low down on the skyline. I know that to be shrapnel. A few miles farther on and I come to the barns where No. 2 Company will billet. I pack the "kitchen" into an old shed, and start back to look for the place chosen for the horses. I hauled rations to the companies that night and saw a fine display of bursting shells along the firing line. This bombardment kept up for two or three days, but finally died out and left things fairly quiet. Of course, there is always some battery firing.

Coming back from—— with ordnance the other day, I saw 22 aeroplanes flying towards the German lines. Some scouted around but 18 of them kept going. "Wait until the Germans open fire on them," we all said. What a sight that was! No sooner were those aeroplanes within range of the German guns than the air was filled with puffs of smoke. Thousands of shells were fired at them, but they kept going, and when I saw them last they were still being shelled. But I heard none of them were lost.

Now, between No. 2 Company's billet and the Q. M. Stores, a distance of about one and a half miles, is a little village. I had just received the order to take No. 2 Company's rations when the enemy thought they would give us a little rouser. They started to shell the road this side of No. 2 Company, and at the same time commenced to knock down a few trees, destroy a few gardens and open up a few cellars. This village was full of civilians. Every house was inhabited. The people stayed for a while, but when a little child had been wounded, and a man blown almost to pieces, they began to come out. Women carrying babies, old men, old women, boys and girls, all carrying what they could first lay their hands on. Children running about crying, wild-eyed mothers looking for some child that

wasn't at home, and everyone scared blue. Over to the left you could see them running across the fields in all directions, and still those shells came, and the dirt and jagged shrapnel would fly in all directions. My load is ready, and two fellows ask me if I'm ready. They climb on and we make a start. Civilians block the way and I stop. Here come some of the fellows, sweating terribly. Reggie Jones is with them. He smiles when he sees me, and shakes his head. Some of them have had narrow escapes. No. 2 Company want their eats and I have to make a start. I got through all right and delivered the rations. Turned around and started back. An interpreter rode just ahead of me and on getting into the danger zone he turned up his coat collar, leaned well forward on his horse, and giving his steed a few lashes with a whip, galloped off in great shape. Several shells fell between this man and myself and four dropped behind me. That's all that happened to me. The hospital was pretty busy that night but otherwise the Germans wasted their shells. The holes in the roads were filled up next day and the holes in the field were made larger. I worked for about an hour in one hole, hoping to find the nose or the cap of the shell, but was forced to give it up for lack of time.



Christmas with the Macdonald Boys at the Front.

The following are extracts from letters from the front throwing some light on the manner in which our fellows spent Christmas Day:—

PRIVATE A. R. MILNE:—

I wish to thank Class '17, one and all, very much indeed for the parcel which they sent me. It was good of all of you to remember us, and I hope that the next Christmastide will see us reunited at good old Macdonald.

We have seen quite a few fellows lately that we knew in other Canadian regiments. Among them were Charlie Wilson, "Spike" Roy, and "Dooley" Richardson. Spike was over to see us in billets, and so saw us all. Dooley was over the day before yesterday, but his regiment went into the trenches last night (Dec. 24). Dooley and Spike both got their parcels O.K., also their MAGAZINES.

We are up here doing fatigues, such as digging out fallen-in reserve trenches, draining them, etc. Mud—mud—mud wherever one goes. We will be some authorities on drainage when we return. We are billeted in wooden huts now, but up until yesterday we were in tents. We are having as enjoyable a Christmas as could be expected under the circumstances. The friends at home have been very kind, and we have been having some Christmas fare for about three weeks steady. We are hoping to have a Macdonald feed in the village to-night, and have all the fellows there.

□ □ □

PRIVATE H. C. BAILEY:—

Just a line to express my thanks to Class '17 for the box of cigarettes which

I received a few days ago. Please thank the fellows all, and say how much I appreciate them. We are never more pleased than when we can get some news from any of you fellows, for old Macdonald is still to us everything that is dear and pleasant to think of.

□ □ □

PRIVATE "DOOLEY" RICHARDSON:—

This is Christmas week, and we are doing our best to have as good a time as possible before we go back into the trenches. So far we have had a concert every night given by one of the companies of the Y.M.C.A. Our company feed comes off to-morrow, and you can guess how eagerly it is looked forward to.

The Macdonald bunch passed through the town where we were billeted on the way to a place two miles further on. They all look fit and I was certainly glad to see them. We are again in the trenches. Christmas day passed very quietly. There seemed to be a kind of truce on both sides which enabled you to stick your head above the parapet and get a good look around in front of you. It was soon brought to a close by the artillery, however, and although it remained quiet the rest of the day things livened up toward evening.

□ □ □

PRIVATE PAT. ASHBY:—

We spent Christmas day here in this place. I was on duty most of the day, went over to see the rest of the Macdonald boys. Kelsall hunted all day for a place where we could cook something and all meet together and eat, but was

unsuccessful. Christmas mails were delayed so we got none to speak of.

□ □ □

PRIVATE A. R. JONES:—

Eight days ago (the letter was dated Dec. 27) we left our nice comfortable billets in barns and moved to this place. We are living in tents surrounded by mud on every side. From here working parties go out each day to work up at the trenches—putting in drains, putting up barbed wire, laying tracks for a small railway, and numerous other things. The days are usually cloudy and misty so that we are able to work fairly close to the German lines without being seen. To-day it was clearer than usual, and one of our parties went a little too close, so the Germans got the range on them and put a few shells over. Our fellows at once took shelter in a disused trench close by, and luckily came out all right.

Around three weeks ago I transferred from No. 4 Company to the snipers. The work is going to be far more interesting here, I think, as besides being snipers we are the battalion scouts and guides.

Christmas day was very quiet here, and everybody enjoyed a good rest.

PERSONAL.

G. Brock Walsh has just recovered from an attack of diphtheria, and is now in England on a furlough for the winter months.

□ □ □

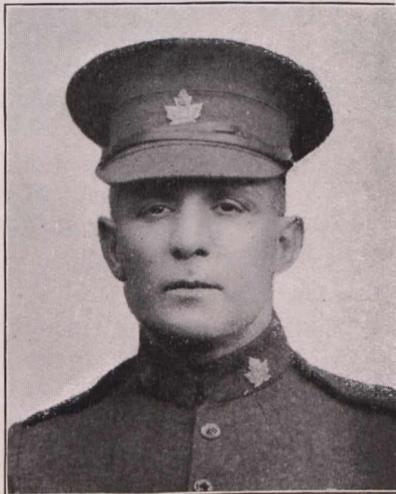
“Scotty” Rankin, when last heard from, was expecting to get a general commission, and after putting in his four months at the Inns of Court Officers’ Training Corps should be turned out a full-fledged officer.

□ □ □

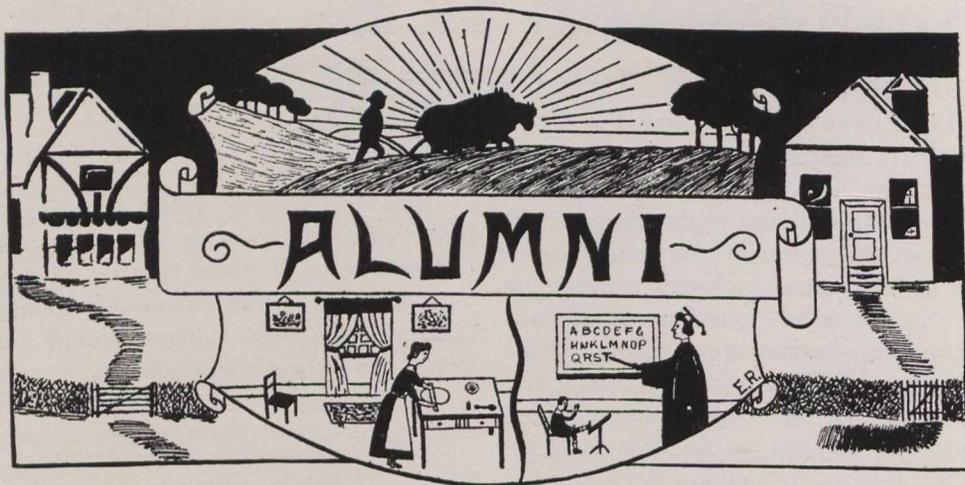
Charlie Wilson even at the Front has heard of Chic Hyndman’s moustache, and states for Chic’s benefit that a girl once told him that kissing a man without a moustache was like eating an egg without salt. He also gives some paternal advice about the proper rearing of Chauvin: “Shun the Clarendon, Chauv.; it has been the cause of more than one good man’s downfall.”

□ □ □

Cecil Bradford says that he believes that they would go crazy if they were let loose on the skating rink, just for once. The ice in France is, unfortunately, in the state of a liquid.



SERGEANT-MAJOR SHARPE



AGRICULTURE.

"Jimmie" Boden, of Class '12, called at the college in December, having come down to his brother's wedding. He is farming in Lancaster County, Ont., and very successfully, too, if we may judge by the number of prizes taken by his stock at the Fall Fairs.

Miss Kitchener, of Class '17, was married in the early summer to Mr. R. Gervers, a graduate in engineering from McGill, but at present in the Royal Flying Corps. When last heard from, Mrs. Gervers was staying at her old home in Hampshire, England.

J. E. Drouin, of Class '18, is working in Montreal at present, but expects to return to M.A.C. at some future time to complete his course.

D. H. Rough, of Class '17, called at the college just before Christmas, on his way west.

C. B. Loomis and R. T. Atto, of Class '18, are both at home on their fathers' farms, putting their agricultural knowledge into practice.

We hear that W. E. Hodgins, of Class '17, is booming the poultry industry in Pontiac County. With headquarters in Shawville, he is working through the egg circles, buying up poultry on commission.

Owing to illness at home, Miss Broad, of Class '17, was unable to go to her farm this summer. She is now keeping house for her father and sister at St. Andrews, N.B.

H. C. Curley, of Class '17, was married on Christmas day at Dunham, Que., and is now farming at Tatehurst, Que. His classmate, W. H. Elliot, is also farming in the same district.

W. V. Corrigan, of Class '18, and "Farmer" Hodgins, of Class '17, are farming at Shawville, and skating in the evenings.

Word has just come of another break in the ranks of the bachelor alumni. "Dave" McCredie, of Class '15, has taken unto himself a wife, having been married to Miss Gladys Graham of Elmside, Que.

SCHOOL FOR TEACHERS.

The Misses Pearle Leet and Dorothy Shrimpton have returned this year to finish their model course.

Miss Jessie Gilbert is teaching at a school in Melbourne, Que.

Miss Muriel Black, T. '15, has a class of little ones in Dunham.

Miss Betty Massy-Bayly is teaching a primary class in Edward VII school.

The Misses Mae Robertson and Ethel Quigley are having their experience in teaching at Dufferin School, Montreal.

Miss Margaret Bryant is still enjoying school life at Peace Centennial, where she is teaching.

SCHOOL OF HOUSEHOLD SCIENCE.

Miss McFarlane severed her connection with the college this month and left to take a position as dietitian of the Protestant General Hospital at Ottawa.

Miss "Polly" Canne, Homemakers', '15, is taking a teacher's course at Truro Normal School.

Prof. D. Harvey, who married Miss Winnifred Ross, of the Class '12-'13, has lately moved from Vancouver to Winnipeg where he has accepted a chair at the University of Manitoba.

Miss Aline Pomeroy is training at the Royal Victoria Hospital at Montreal.

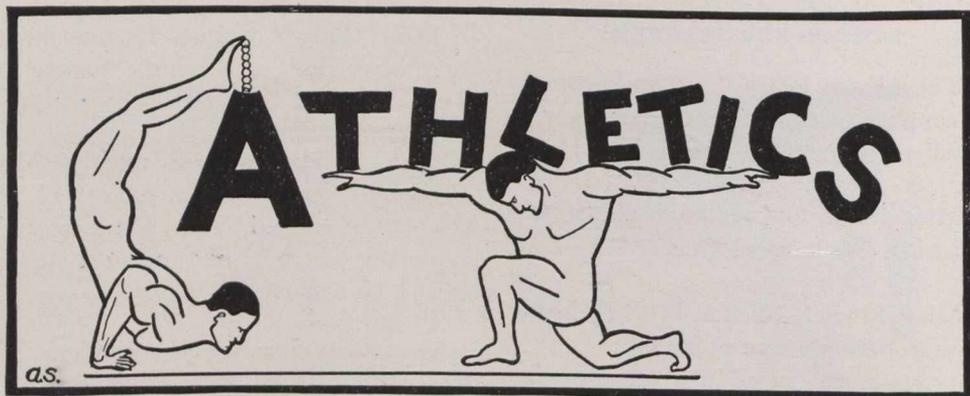
Miss Helen McIntosh, Homemakers', '15, is doing settlement work in Montreal.

Mrs. (Lieut.) S. L. Warner, formerly Miss Allison Pitblado, Homemakers', 12, is doing Red Cross work in England.

Miss Beatrice Brigham's engagement to Lieutenant Forrest Cooke is announced. The marriage is to take place this month.

Miss Lynn Hutchison and Leslie Johnstone, Homemakers', '15, are practising Domestic Science at their homes in Ottawa.





THE Athletic Association is one of the most important institutions in the student life of Macdonald College.

Few of us ever stop to realize what sports and games actually mean to us, and the importance of the task which we entrust with the executive of the Association, namely, that of organizing and conducting all our physical play.

But in looking back over the past year, we cannot but remark on how well this task has been done, and how faithfully they have kept our trust. The executive of 1915 is to be congratulated on the manner in which it carried on all branches of sport, especially during the last session, when they had to contend with the fact that most of our best athletes and players had enlisted for overseas service. They instilled so much enthusiasm and zest into those remaining that they got busy, and most of the teams this year compare favourably with former standards.

The student body met on Jan. 5th for the purpose of electing the new officers of the Athletic Association, and they are as follows:—

President.....Geo. H. Dickson.
 Vice-President...R. J. M. Reid.
 Secretary.....S. F. Tilden.
 Treasurer.....L. R. Jones.

The other members of the executive remain unchanged from last term. After the election of these officers, a hearty vote of thanks was tendered the retiring board for their excellent work and for their untiring efforts on our behalf.

To the new board of directors we wish every success, and assure them that they can count on our certain co-operation with them in all things. Judging by the personal calibre of these different men, we can look for big things from the Athletic Association during the year 1916.

ASSOCIATION FOOTBALL.

Thanks to the weatherman, the football season lasted a little longer than usual this year, and the soccer team was able to get in a final game on Saturday, December 4th. This game was played at Montreal, and was a return match with a team picked from the several theological colleges. The field was in rather poor condition, and it was slightly windy, but in spite of these drawbacks, the game was very exciting for the players. The teams were evenly matched, and the game was closely contested throughout, as can be seen by the final score, which was a draw 1-1.

At a meeting of the soccer players on January 10th for the purpose of electing a new captain to look after the

team next year, G. D. Matthews was returned to office. "Matt" did some excellent work with the soccer team last season, and along with the stimulus added to the game by the presentation of the Boving Trophy for inter-class competition, he awakened new interest in this sport, and put it on a better footing than ever before at Macdonald College. In retaining the services of our worthy captain we can look forward to bright things for soccer next year.

INTER-CLASS GAMES.

These games are not being played off now on the scheduled dates, but are being postponed as they come along until such evenings when the weather does not permit of good skating. Thus these games do not conflict with that very pleasant pastime, which, like most good things, does not last forever. At the same time they form a very pleasant diversion from the routine of skating every evening.

But this postponement does not mean that interest in the inter-class games has fallen off at all. The games are just as keenly contested as ever, and the teams are keeping up their regular practising. Everybody is out for the trophy, and the chances are about equal all around. Our fair friends across the campus still enjoy the inter-class games as much as ever, as is evidenced by the large numbers of them who visit the Men's Residence on such occasions.

On Thursday, December 2nd, the Seniors ran up against the Freshmen in baseball. The game was very one-sided all the way through, the Seniors evincing little trouble in putting it over the Freshmen. This is probably accounted for by the fact that the Seniors have had four years' experience with the game, whereas to most of the Freshmen indoor baseball is practically a

new game. The Seniors chalked up a total of 19 runs against the Freshmen's 4.

However, these same Freshmen were not doomed to suffer defeat always, as was seen in the Junior-Freshmen basketball game on January 8th, which resulted in a victory for the Freshmen of 33 to 14. This was a very exciting game both for the players and spectators, and the final result came as a surprise to many. Something must have gone wrong with the internal workings of the "Juniors' "war-machine," for their ordinarily crack shots could hardly find the basket. But we would not try to discredit the Freshmen; they are to be congratulated on the remarkable game they put up, Patenall especially doing some excellent work.

BASKETBALL.

The basketball season is well under way now, and what with the practices and the regular fixtures of the Y.M.C.A. Provincial League, the players are kept pretty busy. Up to date, five of these league games have been played. Our men are playing a very good game, but are seriously handicapped by the lack of a competent coach. In most cases where the college teams have lost, it will be observed that the margin of difference is only slight; the teams lack those finishing touches supplied by a coach, which would pull them up over this line and put them on the winning side. Yet most of these games have been played away from home, on strange floors and under somewhat adverse conditions, and it is quite likely that we will see the reverse order in many cases when these teams come to Macdonald College.

On December 1st, our first and second teams played the Westmount Intermediate and Junior teams at the Westmount Y.M.C.A. Both teams were

defeated, unfortunately, and by only a small margin, which might be put down to the fact that our men were not accustomed to such a small floor. The play throughout both games was clean and sportsmanlike. We look forward to the next game with the Westmounts at Macdonald College. The scores of the two games were as follows:—

| | Macdonald | Westmount |
|--------------|-----------|-----------|
| 1st team.... | 28 | 32 |
| 2nd team... | 24 | 36 |

The college teams lined up as follows:—

| 1st team | | 2nd team |
|-----------------|------|--------------|
| Skinner (Capt.) | R.F. | Tilden |
| Pesner | L.F. | Miller |
| Dunsmore | Cen. | Hodge, Hatch |
| Roy | R.G. | Biggar |
| Fraser | L.G. | Holmes |

This game was closely followed by a home game against the McGill Intermediate and Junior teams, on Saturday evening, December 4th. The Junior game, played first, was very fast and clean, and was a good exhibition of basketball. In the Intermediate game, however, the McGill boys showed up better, and maintained the lead from the start. Macdonald tightened up in the second half, but was unable to alter the standing. Final result of both games was:—

| | Macdonald | McGill |
|--------------|-----------|--------|
| 1st team.... | 28 | 35 |
| 2nd team... | 42 | 21 |

Line up:—

| 1st team | | 2nd team |
|-----------------|------|----------|
| Hyndman | R.F. | Tilden |
| Skinner (Capt.) | L.F. | Miller |
| Pesner | Cen. | Dunsmore |
| Fraser | R.G. | Biggar |
| Roy | L.G. | Holmes |

The two college teams again took a trip to town on January 8th, and played North Branch, at the North Branch Y.M.C.A. Here again Macdonald lost and won. When the two first teams were playing, the game was somewhat in the hands of the North Branch people. They were out to run up a record score, and our men had about all they could do to hold them down, without thinking of scoring themselves. There was quite a lot of "roughhouse" mixed up with the basketball, and North Branchmen had quite a number of fouls called against them. The second team game was about the exact opposite, clean, fast, with few fouls, and the college men worked well together, bringing in some nice combined plays. Miller was very effective on the forward line, and succeeded in scoring the major part of the goals. The games resulted thus:—

Macdonald North Branch

| | | |
|--------------|----|----|
| 1st team.... | 25 | 56 |
| 2nd team... | 35 | 30 |

Line up:—

| 1st team | | 2nd team |
|-----------------|------|----------|
| Skinner (Capt.) | R.F. | Tilden |
| Pesner | L.F. | Miller |
| Dunsmore | Cen. | Hatch |
| Roy | R.G. | Patenall |
| Fraser | L.G. | Holmes |

Another double-header was played in town, on January 13th, against our old friends, the Railroaders, at the Railroad Y.M.C.A. Both our first and second teams were defeated here. The games this year were not characterized by as much "horse-play" as we noticed when the Railroad Y.M.C.A. came to Macdonald last winter. Hatch, however, received a minor injury to his wrist when he was bodied into the wall, and he was replaced by Hodge.

Sutherland, who was playing on the first team for the first time, starred for the college.

Score was as follows:—

| | | |
|--------------|-----------|----------|
| | Macdonald | Railroad |
| 1st team.... | 18 | 23 |
| 2nd team... | 25 | 40 |

Line up:—

| | | |
|-------------|------|--------------|
| 1st team | | 2nd team |
| Pesner | R.F. | Tilden |
| Skinner | L.F. | Miller |
| Dunsmore | Cen. | Hatch, Hodge |
| Fraser, Roy | R.G. | Biggar |
| Sutherland | L.G. | Holmes |

HOCKEY.

Hockey forms the only outdoor game at this season of the year, so consequently receives the attention of all those who like to play in the open. When we returned from the Christmas vacation we found the rink in good condition, due to the efforts of our hard-working rink manager, Bob Reid, so it did not take the devotees of this game long to get out there and try their hand at it again. The available material for the team is not as good this year as it was last; but before the season has advanced very far the team ought to be in pretty good shape, as the men are in charge of a very competent captain, A. E. Hyndman, who not only can tell them how to do a thing, but can also show them how to do it.

The college team played its first game of the season on Saturday afternoon, January 15th, when they met on the college ice a team from Montreal called the "Winonas." The game could not be called fast, but was characterized by good clean sport. Our boys played hard and individually showed pretty good form, but there was a noticeable

lack of combined plays. The only two goals chalked up for M.A.C. were scored by one of the defence men, who twice took the puck down the whole length of the ice, and played it in the net. Our forwards were not very effective, in that they did not work together and keep the play in their hands once they got the puck. During the first period the game was pretty evenly balanced, and at the end the score stood 1-1. In the second period, however, our opponents got busy and changed this score to 3-1. This had a stimulating effect on the college men, for in the last period they came out and played hard, determined to alter the relative standing, but the Winonas were equally determined to retain their advantage, and the final score was 3-2 in favour of the visiting team. Hyndman played the most effective game for the college team, scoring both goals, while Wes. King starred for the Winonas. The game was refereed by Mr. A. R. Ness. The teams lined up as follows:—

| | | |
|--|----------|--------------------------|
| M.A.C. | | Winonas |
| Todd | Goal | A. Earle |
| R. Reid | Point | Munro |
| Hyndman (Capt.) | C. Point | C. Hodges |
| Buckland | C.F. | King (Capt.) |
| Welsh | R.F. | Lefebvre |
| W. Jones, Chau- vin, Holmes } Delany } | L.F. | { L. Hodges, J. Earle |

In order that hockey may be enjoyed by many more than those few who are good enough for the college teams, class teams will be organized this season, and a little friendly rivalry started. The Athletic Association has drawn up a schedule of games which will be run off as soon as possible.

Girls' Athletics.

SCIENCE-TEACHERS BASKET-BALL GAME.



OTS and Pans, Knocks and Slams," etc., etc., were the words uttered in melodious notes from some thirty Science girls, in the gallery of the girls' gym, on the evening of December 2nd, when the long-looked-forward-to Science-Teachers' game was played off. And Teachers! There were loads and loads of them, too; but all we heard was "Household Science in alliance," etc., for was not our team down on the floor there, battling for all they were worth, to be victorious over those studious, blue-garbed creatures, who knew positively that those "shilly shience" girls hadn't a chance to win. Even our own players felt before the match that the odds were against them. However, new courage set in when we heard that Pinkey wasn't going to play. Right well we knew that Pinkey was one of our most dreaded opponents, and right well we knew that her absence would weaken the Teachers' team.

From the outset the battle was hot and heavy. First the Teachers scored, and great shouts and cheers went up from their supporters. The ball was tossed up, and biff! down it went to the Science end; shouts of "shoot, Sweeney, shoot" went up, and into the basket the ball went. The game was tit for tat throughout, and never will the players forget those last two minutes of play. Science had a lead of one point! Would that whistle never blow? Surely time was up. Oh, my heart! Carrie Moore had the ball! Down it went to the Teachers'

centre, down to the forward. Good guarding, Gladys—pause—Time—Come on, kids—Three cheers for the Teachers—(From the gallery) When you're up against the Science you're upside down! Final score: Science 14, Teachers 13.

Line up:—

SCIENCE.

| | |
|--------------|----------------------------------|
| Forward..... | { M. Sweeney S. McGregor |
| Center..... | { M. Guthrie (Capt.) B. Ellis |
| Defence..... | { G. Ross M. Dawson |

TEACHERS.

| | |
|---------------|---|
| Forwards..... | { K. Mountain, D. Harris, E. Levitt. |
| Centers..... | { D. Rashback L. Young |
| Defence..... | { C. Moore (Capt.) G. Veitch |

BASKET-BALL, OLD GIRLS' vs. PRESENT.

On December 4th, 1915, the first match of the season between the old and present Macdonald girls took place.

Our girls practised faithfully and well before the exciting event, and this, added to the encouragement and enthusiasm of our excellent coach, enabled us to accomplish a great victory. The score, which was 14-10 in our favour, shows that a hard struggle was necessary to carry off the honours. But owing to the many vague rumours, previous to the match, of our opponents' skill, our downfall had already been decided upon even before they had made their appearance. It was a great surprise not only to the majority of the girls but especially to our coach, who had com-

pletely given up all hope for our success. However, we all thoroughly forgive her for making such a mistake.

It was owing, no doubt, to the lack of practice on familiar ground (although once so well known) that our opponents were not able to do themselves justice. On the whole, they played an excellent game, and we all look forward with pleasure to a return match in the near future.

Line up:—

OLD GIRLS.

| | | |
|--------------|---|-------------|
| Defence..... | { | Pearle Leet |
| | | M. Brown |
| Centre..... | { | E. Binning |
| | | G. Armour |
| Forward..... | { | S. Dettmers |
| | | Cornell |

PRESENT GIRLS.

| | | |
|--------------|---|--------------|
| Defence..... | { | C. Moore |
| | | D. Davidson |
| Centre..... | { | G. Ohmstead |
| | | M. Guthrie |
| Forward..... | { | S. MacGregor |
| | | G. Donnelly |

MACDONALD vs. R.V.C.

On January 15th did we win? Well, I guess; and did you hear the score? Yes, it was twenty-one to fourteen. A neat little majority, too, wasn't it?

As it was the first game of the season, the team had many misgivings as to their playing, but they need not have had a fear as they were the best players, both in shot and combination.

The Victoria gym., in which the game was played, was somewhat smaller than the one our girls are used to. This, no doubt, was the reason for the number of fouls that were made. For such fast work as the Mac. girls are used to doing, it is impossible to stop so suddenly

and not let even the smallest fraction of your foot go over the line. Such rules may do for R.V.C. basket-ball players, but not for lightning flashes like the Macdonald team.

Many fouls, no doubt, were due to the ultra-strictness of the referee. No matter how much you liked your fellow player, your gym. suits were not even allowed on intimate terms. If they got so reckless and went so far as to merely touch—Toot! Toot! went the whistle—“Body check, free throw, R.V.C.”

It would have been quite a joke had it not been so sad; but, as you know, “every little bit added to what you've got makes a little bit more,” and a free shot generally means one point, and if not, often it means two.

In spite of that never failing blast, which interrupted just when the game was getting exciting, the Macs displayed some very fine team work. The first half was rather slow, both for spectators and players, on account of these interruptions, but in the second half it was a different story.

The Mac. team played up, and played the game. Sweeney rose to the occasion and realized her position as shot, and shoot she did, rarely ever missing a basket; and R.V.C. soon saw they had a difficult opponent in Doris Nolan, whose shooting was par excellence, while in the opposite direction things were kept humming by the rapid and deft work of Carrie Moore and Pearle Leet, our able defences. Our centers, Capt. Margaret Guthrie and Gertrude Ohmstead, are the most worthy of note for their accurate and snappy passing. So three cheers for our victorious “champions-to-be,” and they'll be champions, too, as you know the old saying, “Well begun, half done.”

N. O. G., Sc., '16.

SECOND TEAM.

Great was the excitement on Saturday morning, the fifteenth of January, at the thought of the first of the "League Matches," which was to take place that afternoon against the R.V.C. girls in Montreal. Long before train time eager looking girls with bags, basket-balls, etc., were impatiently waiting the arrival of the train which was to take them to their destination. In due time all safely arrived in town, and parted until the afternoon.

At 2.30 sharp all were ready and anxious to play the game. The whistle having blown, the first teams lined up to play, and at the end of the first half the second team received much encouragement by the fact that the score of the Senior Team was in favour of Macdonald. The second team then took their places, and the game began. The teams were evenly matched, and for some time it was doubtful which side would carry off the honours of the day, but at the end of the first half we have to confess that R.V.C. was in the lead. During half time many changes were made, which we hoped would strengthen the team; and in a few minutes the game was resumed.

In the second half both teams seemed more determined than ever to win, but luck seemed against Mac., for in spite of our utmost efforts the score ended 20-15, but in favour of our opponents, whose passing certainly was excellent.

On the whole the match proved very exciting for the spectators, and we hope for better luck next time.

The line up was as follows:—

MACDONALD.

| | |
|---------------|----------------------|
| Defence | { D. Davison (Capt.) |
| | { L. Young |
| Centre | { G. Ross |
| | { D. Rashback |
| Home | { G. Donnelly |
| | { M. Dawson |

R. V. C.

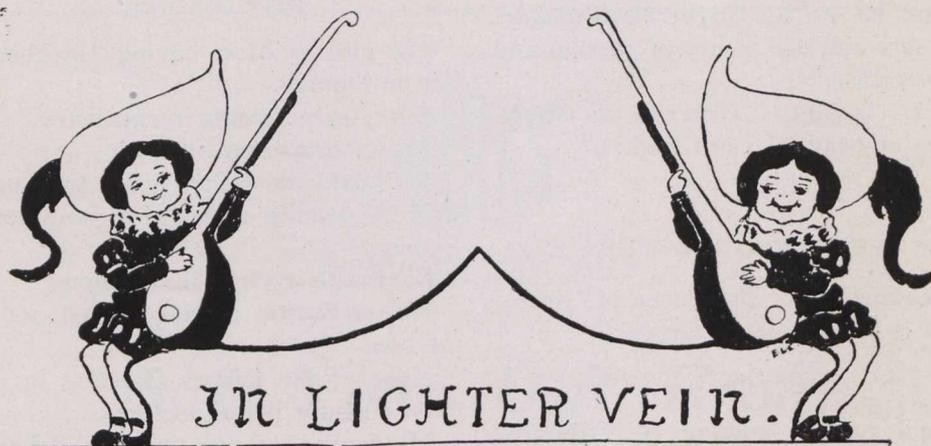
| | |
|---------------|----------------|
| Defence | { T. Kilgour |
| | { T. Grindley |
| Centre | { C. Hay |
| | { Q. Craig |
| Home | { L. Macdonald |
| | { E. Hay |

HOCKEY.

Once more hockey has started. Mr. Vanderlick, who has coached many previous teams, is taking special interest in this year's team, as he has many raw recruits. We also have a very able manager in Gertrude Ohmstead. Some of our most promising "stick handlers" so far are: Dora Nolan, Teddy Gardner, Gertrude Ohmstead, Gladys Donnelly and Laura Kirby. We have already received two challenges, one from R.V.C. and one from Cornwall, the captain of which was our last year's star hockey player, Jean Hodge. We certainly shall accept the former challenge, but as to playing against Jean Hodge and May Boyd—!

P. LEET.





A FEW WORDS FROM MR. GOOD-GROWER ABOUT HIS GARDEN.

EDITOR, *The Farmer's Advocate*:—

Pears to me my garden *beets* all this year. Let me tell you what I have:—

"One Thousand to One".....*Beans*.
 "American Wonder".....*Peas*.
 "White Beauty".....*Potatoes*.
 "Everlasting".....*Cucumbers*.
 "World Beater".....*Cabbage*.
 "Matchless".....*Tomatoes*.
 "Perfection Heartwell".....*Celery*.
 "Early Giant".....*Corn*.

In the flower beds there is almost everything one could *cauliflower*.

You should see the *morning glory* of it before many people are *aster*.

Lettuce hope that nothing will *turnip* to *squash* the success of it.

JOHN GOODGROWER.

○ ○ ○

AN INTELLIGENT QUESTION.

Interested young lady (to a captain returned from cruising in Alaskan waters): "I suppose, Captain, that in those northern countries the sun, at a part of the year, doesn't set until quite a while after dark.

WITH APOLOGIES TO "OMAR KHAYYAM."

Before the phantom of false morning died,

Methought a voice within the grub hall cried:

"When all the breakfast is prepared within,

Why nods the drowsy sophomore outside?"

And, as the bell rang, those who stood before

Its portals shouted: "Open, then, the door!

You know what little while we have to stay,

Nor may return for full three hours or more."

Each morn a thousand eaters brings, you say;

Yes, but where leaves those filled up yesterday?

And this first hour of day goes all too soon,

And leaves us wending hungrily our way.

Ah, my beloved, fill the glass so clear
 With water that is brown and thick as
 beer,

For dinner!—Why, for dinner we will
 have

Fish! and we will taste it for a year.

Mrs. R— (to Bright Homemaker)
“Be sure and use plenty of sapolio and elbow grease.”

B. H. (aside): “Where is the elbow-grease anyway? I can’t find it.”

o o o

WHO’S WHO AND WHY.

Speaking about the Queen of Greece, blood is thicker than “Greece.”

o o o

Pupil teacher coming to “Applica-tion”: “We have learned the uses of ‘and,’ ‘but,’ ‘notwithstanding.’ What boy can give me a sentence using these words?”

Smart pupil: “I can.”

Pupil teacher: “All right.”

Smart pupil: “Johnnie has worn a hole in his trousers, but not with stand-ing.”

o o o

AT THE JUNIOR-FRESHMAN BASEBALL GAME.

Lady:—“Who is that young man playing first base for the Freshies?”

Gentleman:—“That’s Smith.”

Lady:—“Well, why doesn’t he have a surprise party on his shoes and invite his pants down?”

JUST IMAGINE

The girls at Mac. having “brothers” out on Sunday.

Everybody passing in chemistry.

A good dinner on Friday.

A Macdonald fellow going to church with the definite object of coming home—alone.

Big Smith without his diamond.

Walter Sutton getting batted out of the box.

None of the fellows standing in the main corridor before lectures.

Mr. Sadler judging the girls’ debate.

Everybody on time for a meal.

o o o

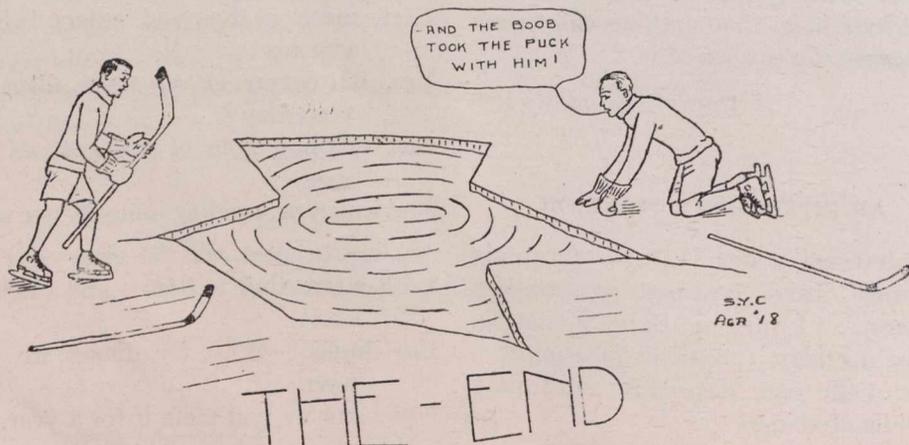
Professor K—: “Did George Elliot continue in her religious activities at Miss Franklin’s School?”

Miss A-n-d-r-o-: “No, she learned to play the piano.”

o o o

NOTES ON PUBLIC SPEAKING.

A suffragette at a meeting in Hyde Park, London, was bearing patiently the snubs of a small, insignificant specimen of the genus Man. He irritated not only the speaker, but the audience who wished to hear, and as a final remark said, “How would you like to be a MAN?” She answered, smiling at him so pleasantly, “I don’t know! How would YOU?”



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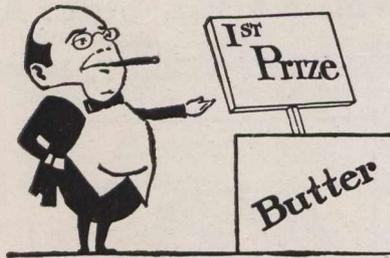
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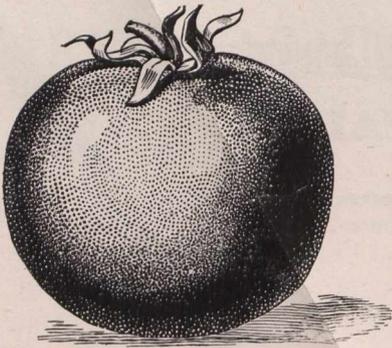
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