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# The O. A. C. Review

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of the Ontario Agricultural College, Guelph.

*THE DIGNITY OF A CALLING IS ITS UTILITY.*

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## THE FARMERS' TRANSPORTATION PROBLEM.

By W. L. SMITH, EDITOR WEEKLY SUN AND SECRETARY  
FARMERS' ASSOCIATION.

**A**LLEXANDER MACKENZIE  
once declared the national  
policy was a national folly  
and a national crime.

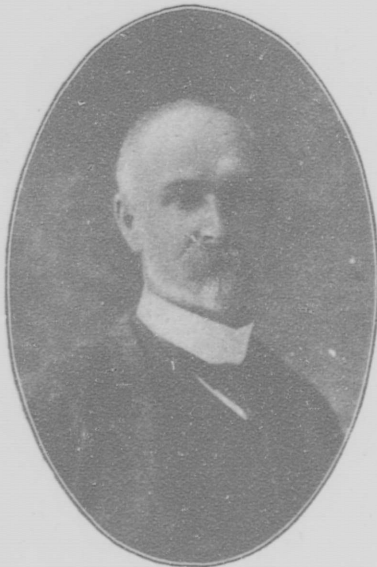
There will doubtless be differences  
of opinion as to the correctness of this  
characterization of the fiscal policy of  
a great political party. But that we  
have been guilty of a national folly in  
permitting our national highways to  
be used to the national injury is some-  
thing on which there can surely be no  
division.

That we have permitted these high-  
ways (railways) to be used to our  
detriment has been proven over and  
over again; still a few facts may be  
repeated here.

A railway, operating under a char-  
ter granted by our people, has this  
year carried cattle from Chicago,  
through Canadian territory, to the  
seaboard at a lower rate than was  
charged by the same road on cattle  
carried from the county of Wellington  
to the seaboard. This and other  
Canadian railways have given rates  
on American grain from Chicago, by  
way of Goderich, Owen Sound and  
Georgian Bay ports generally, to  
Montreal, at less than half the rate  
imposed for carrying to the same  
destination grain grown in Huron,  
Bruce, Grey and Simcoe counties.  
The effect of permitting corporations,  
created by ourselves, to do this sort

of thing must be to make farming in the Western States, so far as transportation facilities and charges control in these matters, more profitable than here; and if that is not a piece of national folly I do not know what would be so characterized.

Not only is there discrimination but there is overcharging as well. While prices of sugars, clothing and merchandise generally have been cut in



W. L. SMITH,

Editor Weekly Sun and Secretary  
Farmers' Association.

half of late years passenger rates by rail remain at the same figure as they were 50 years ago and freight rates are very much the same. Sugars and clothing have been reduced in price because the cost of production has been lessened and competition has prevented manufacturers from keeping all the benefits of the reduction to themselves. Reductions have taken place in the cost of freight service also but the people have not obtained the

advantages therefrom they should have received. A freight train of today can haul three times the freight that was hauled by a freight train of twenty-five years ago and steel rails can be bought at the present time at about one-seventh the price ruling thirty odd years since; but absence of competition, and failure by Government to exercise control, have prevented the producers of traffic from getting the full benefit of the reduction in cost of transportation, and to-day charges for the service are out of proportion alike to cost of the service and the returns received by producers for the goods carried by rail. The Grand Trunk last season charged Niagara fruit-growers over \$600 for hauling twelve cars of fruit to Montreal, although this amount of freight was furnished by the growers every day and the goods formed part of a general freight train, and were carried to their destination in 36 hours. These same growers found that out of every \$3 worth of fruit sold in Montreal at least \$1 was taken in freight or express charges for carrying it there.

Our rates, again, bear no comparison whatever to rates charged on American roads, where public control has forced a reduction. The rate on wheat from Collingwood, Tara, Elmvale, Port Elgin and Paisley to Montreal is about the same as the rate charged on American lines from Chicago to Liverpool. The rates on American lines are so much lower than here that certain manufacturers at Pittsburg, in competing with Toronto manufacturers for the trade of Vancouver, find the freight rate in their favor practically offsets the protective duty of 25 per cent. in

favor of the Toronto manufacturers. Messrs. McLaren and Kemp, members of the Dominion Parliament, acting independently of each other, have, as a result of careful examination, estimated that the freight rates on Canadian lines are, on the average, about twenty-five per cent. higher than on American lines. Since the railways of Canada receive for carrying freight over \$50,000,000 a year, this means that the overcharge amounts to upwards of \$10,000,000 per annum.

And yet the right of the people to control in these matters, on moral and legal grounds, and on the grounds of public policy, is beyond question. Even if the railways of Canada had been built wholly at the expense of the owners, our right to prevent injurious discrimination and overcharging would be indisputable.

These great carrying companies are not ordinary private enterprises. By the conditions governing their existence they enjoy what is essentially a monopoly. You cannot have competition between railways as you can between merchants. It is both impossible and undesirable to have competing lines of railways paralleling each other all over the country, and even at junction points, where two lines come together, there is no longer competition in rates, because it has been found that such would, on account of the vastness and peculiar nature of the interests involved, prove so destructive as to put it wholly out of the question. The consequence has been, the continent over, pools and agreements for the regulation and apportionment of traffic. These conditions alone, conditions which give railways in the very nature of things

a monopoly of the transportation service of the country, justify, indeed make imperative, public control; an uncontrolled private monopoly of such a necessary of commercial life as transportation is not to be thought of.

Public control, again, is justified on the ground that these corporations are in a special sense the creation of law, and so, in an exceptional measure, subject to legal control. They may indeed, almost be classed as part of the machinery of government. They have been given the power to take private property without the consent of the owners, and possess other powers almost equally wide-reaching. In return there has been very properly reserved by the Government the right to control and regulate the rates which these public corporations may charge for the public service rendered.

But there is, aside from these general considerations, a special reason why public control of these corporations is warranted. While private capitalists own the railways of Canada, the cost of building has been largely borne by the tax payers of the Dominion. Outside of the sums spent on the Intercolonial, which the people own, there has been paid through the Dominion, the Provinces and the municipalities, on account of private railways which the people do not own, subsidies to the amount of \$160,000,000. This was in cash or its equivalent. In addition to this we have given to private railway promoters over 60,000,000 acres of land—nearly three times the area of assessed lands of this Province. Even if this land is valued at only \$2 per

acre, (and some of it has been sold by one company, which received land grants, at \$15 per acre) there will be added to the figures already given \$120,000,000 more, thus making the total cash and land grant \$280,000,000. Since there are a little over 17,000 miles of private railway in Canada, this makes the total donations to these private roads equal to over \$16,000 for each mile of track laid. Apart from the other grounds mentioned we have, because of our partnership in the cost of building, a special right to exercise control in operation.

The justification of control of transportation charges being established the question arises how shall that control be exercised. Parliament at its last session provided the means by passing an Act under which a Commission is to be appointed with power to regulate and control freight and passenger rates. The machinery for regulation is, therefore, being provided. The value of that machinery will, of course, depend on its efficiency. In this connection a good deal has been said regarding the personnel of the Commission. That certainly is a matter of importance; but a matter of much greater importance is the strength and intelligence of the public opinion behind the Commission. If people generally have a clear perception of the grievances to be remedied, and take steps to persistently and determinedly press for a redress of these grievances, no Commission can successfully withstand the demand made. I would sooner have a weak Commission, and a strong and intelligent public opinion, than a strong Commission with the people ignorant

of the facts and negligent in demanding their rights.

The first thing to be done is to see that every citizen has a more or less definite knowledge of the facts as they stand. (The first essential to the removal of a grievance is to see that the victim has clear information as to the nature and extent of the same). This secured, measures must next be taken with a view of bringing to bear on the Commission the organized, combined pressure, of all those who suffer from the present over-charges and discriminations in freight rates.

To state the means to this end is one of the principal objects of this paper. One of the immediate causes of the appointment of a Railway Commission was the organization, in response to an invitation sent out by The Farmers' Association, of a deputation representing the Toronto Board of Trade, Canadian Manufacturers' Association, Dominion Grange, Dominion Cattle Dealers' Association, Ontario Fruit Growers' Association, and Dairymen's Associations to ask the Dominion Government to appoint such a Commission. This is an illustration of what can be accomplished by united action. It might not be feasible to adopt the same means of bringing grievances before the Commission when appointed, because the interests of farmers and manufacturers and traders, while not hostile in these matters, are separate. We have, however, The Fruit-Growers' Association, The Dairymen's Associations and The Live Stock Associations, all representing different branches of farm work, but all with common interests in regard to transportation.

Why cannot these several organizations unite, through delegates appointed to co-operate with The Farmers' Association, in preparing and sustaining before the Commission the case of all farmers for a systematic readjustment and reduction of railway rates? Why, indeed, should not these bodies appoint delegates to meet annually, at one central point, as a National Farmers' Congress for the consideration of all matters of a public nature affecting the interests of agriculture? Such a body could be made the means of giving farmers a control not only in matters of

transportation, but in matters of legislation as well, such as they have never yet had. In the United States no legislation vitally affecting the interests of farmers passes the National Congress until it has been considered by the Executive of the National Grange which represents 500,000 American farmers. Why should the farmers of this country not have a similar means of expressing their views on matters affecting their interests? A Canadian National Farmers' Congress, on the lines proposed, would provide that means.

### NATURE STUDY No. III.

#### The Story of an Apple Twig.

BY W. R. DEWAR.

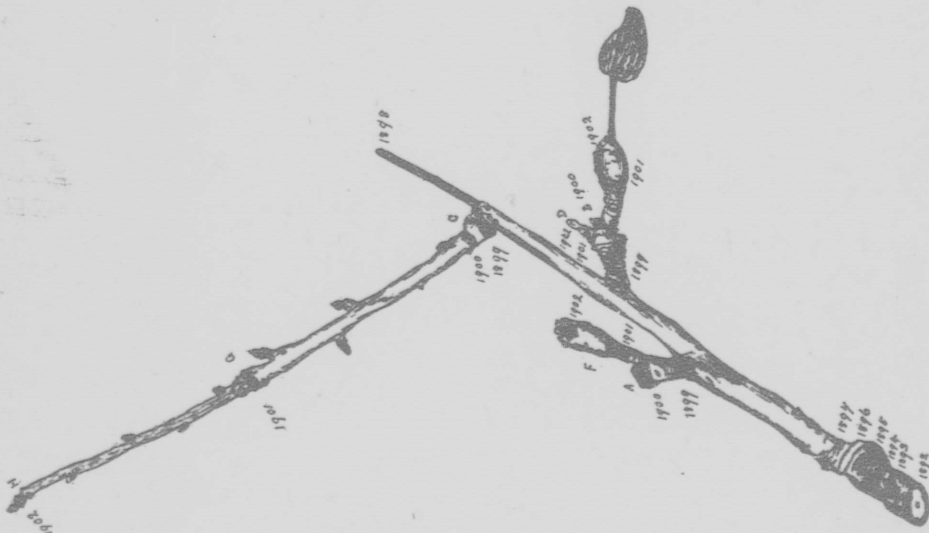
I AM just a small, twisted, stunted, and seemingly insignificant apple twig, but for eleven years I have watched time come and go, and in that period have had a wonderful and varied experience. My home is in a garden, well-known to you all, and my occupation is very sedentary; I have not travelled any,—in fact, I am so attached to my home that I could not travel if I wished to. I have had many brothers, but so bitter has been the struggle for existence amongst us that we have become totally estranged. Many have grown larger and stronger than I, but again many more have perished. My own lot has been hard, and my growth stunted, because I was born on a large limb near the trunk of the tree. My more fortunate comrades strug-

gled on up to the blue sky, whilst my greatest ambition could only be to live and to perform my small part in our great world of vegetation.

But to come to my life-history. As nearly as I can make out I was born in the spring of 1892, from a small and weak parent bud. I had a hard task to keep alive, and only grew about  $\frac{1}{4}$  of an inch. The summer was droughty, my stronger brothers shut out the sun from me, and I just escaped being altogether eaten by a small brownish worm. It was with a glad feeling that I welcomed my long winter's sleep. I awoke early in the following spring with a pleasant thrill running through me. The warm rains and glorious sunshine had set us all into life again, my first year was forgotten, and I soon sent

out large green leaves to take advantage of the present growing period. But again I was doomed to disappointment. My brothers got ahead of me, and I was relegated to another year of struggle. However, I had such a sturdy start that I was determined to do my share and produce seeds, so that if I should not be able to stand the struggle I might be remembered by the young apple trees that might spring from these seeds. So in the summer and fall I spent all

blossoms dropped, and no signs of an apple was left. I felt like giving up, but a good season of growth aroused me, and from beside the scar of the old apple bud I sent out another growing bud. The following spring, 1895, I grew very little more, but sent my energy into another fruit-bud. The next spring this bud blossomed, the busy insects came and went, partaking of the nectar, and in return pollinating the pistils. This time I was more fortunate. Two



"THE STORY OF AN APPLE TWIG."

my energy in producing a large and strong bud which in the following year would bear apples.

Another winter passed and one bright afternoon in the spring of 1894, the bud I had spent so much energy in making, burst into a bright white blossom, which was followed in a day or two by three more. Surely this was life! Just let me show the world one large ripe apple and I would die contented. But my joy was soon spoiled. One by one the

apples set out of the four blossoms, one of these was small and the stem shrivelled, but the other was strong and healthy. The small apple hung on for a day or two and then fell off, but the large apple grew and grew, and soon was quite large and juicy. It soon became quite a severe strain on me, and I had to increase in thickness at the point of attachment to support the growing weight. This accounts for my swollen joints. All this time I was also making provision

for next season's growth. The best place to send out the bud for next season's growth was just beside the old fruit-bud and as near the end as possible. This alternating of fruit and branch caused my growth to be zig-zag. As autumn approached the apple was growing too heavy for me to carry, and I felt that the first wind would part us. One day the apple fell and I began preparing for my winter's rest.

In the spring of 1897 I grew a little more, but the season was so poor for growth that I was unable to form a fruit-bud, and had to be satisfied with another growing bud. So at the end of that year I was six years old and had accomplished very little. I had only grown one and one-half inches, and had attempted to produce apples twice, being successful in growing one apple out of nine blossoms. You can see how hard our struggle for life is. We have about one chance in ten to live. This was nearly enough to cause me to give up hope. But the spring of 1898 gave me new ambitions. The season was warm and wet; many of my brothers had been cut out, giving me more sunshine, and a thrill of new life went through me. This year I grew very fast, at least six inches, and at last I thought that I might be able to attain some prominence. In all these years I had only produced one bud at a time, but now my growth was so rapid and strong that I felt that I should produce several buds, so that if one or more were damaged, I would still have others to depend upon to continue my growth. With this in mind I set out at regular intervals growing buds, placing them in such positions that each would have

as much room and life as possible. Now it was a good thing that I had taken this precaution, for when I had nearly completed my growth a careless fellow came along and unwittingly broke off a piece of my youngest growth. This so paralyzed my tissues that I shrivelled back two inches and could not grow any more that season. I healed up my wound as well as I could and went into my winter's sleep.

The next spring, 1899, I decided that I would make attempts at growth in several directions, and so started three of my young buds to grow. I started the three nearest the end, as they were the strongest, and had the most chance to get up into the light. Profiting by previous experience I kept some in reserve for any accident that might occur to those already growing, and for that reason kept three or four of my lowest and weakest buds asleep. These I called dormant or sleeping buds. At the end of each of these three growing branches I produced three fruit-buds. My aim was not now to produce a few seeds and then die, but to produce as many seeds as possible and still keep alive. So the next spring I was the proud possessor of three bunches of blossoms with six flowers in each. In each case five of the blossoms dropped off, and only one growing apple was left. Early in the life of the apple at B (see diagram) some person came along and pulled it off, leaving me with only two. These grew thriftily until the apple at C (diagram) met a similar misfortune. (It must have been a city boy that did the mischief, for to them a small,



sour apple is as acceptable as a large, sweet one). I was now left with only one apple, which I was able to retain until large and ripe. Whilst I was nurturing these apples I had also been busy forming growing-buds on the same branches, like I had done before. At B, on account of the early loss of the apple, I was able to produce two buds, one on each side of the fruit scar. In the spring of 1900 two of these, E and F, grew a short distance and produced fruit buds. The bud at D was very weak and could only produce a growing bud, but the bud at C was very strong and in an advantageous position, and made quite a long growth, forming growing buds at regular intervals, and a large, strong growing bud on the end.


In the spring of 1902 one apple set at E and two at F, the bud at D grew but little and the one

at G grew quite a distance. The apples at F fell off early in their life, and the one at E, when about half grown, became affected with a dry rot and shrivelled up. This apple still clings to me and has caused the death of the small spur on which it is situated. This year I was not able to form one fruit-bud, and could only produce growing buds at D, F and H.

This spring, 1903, I am in a healthy condition and flourishing. I have grown from a branchlet to an important branch with branchlets of my own. You see me now in all my glory of green leaves and lengthening shoots, and the thought of death never bothers me. My days of struggle are over and I have learned valuable but costly lessons in the hard school of experience.

## EXPLORING IN THE ABITIBI REGION.

BY TENNYSON D. JAMES, B. S. A.

N June 12th the writer received instructions from Mr. Gibson, Director of the Bureau of Mines, to join Mr. G. F. Kay at Sudbury in a geological and biological survey of the Abitibi Region, Mr. Kay geologist, and the writer biologist for the party. Accordingly, on June 16, the party, consisting of Mr. Kay, Mr. Harold Davis and myself and two canoemen, took a freight train to Metagama, about 80 miles west of Sudbury, on the main line of the C. P. R. After a night spent on the floor of the C. P. R. station at Metagama, our party embarked in two canoes, one large one carrying

three men and the bulk of the provisions, and the other carrying two men and some baggage. A two day paddle up the Spanish river and some small lakes brought us to the Height of Land and a portage of about a mile. On reaching the land the bundles were thrown ashore and portaging commenced. Each man ties the end of his tump-line about a pack, swings it upon his back, and bending forward, rests its broad loop over his forehead. Upon the first his companion places two or more packs; then, stooping beneath the weight of 200 or 250 pounds, the packers at a jog-trot set off up hill and down; over

rigged rocks and fallen timber; through marsh and muskeg; coming to an opening in the woods, on the bank of another lake, they quickly toss their burdens aside, and back again they run. The Height of Land portage brought us to Dividing Lake, where, after having started a fire with birch bark and dry spruce, in a drenching rain storm, we cut balsam boughs for our beds, pitched our tent, and, wearied with the first two days

ming across the lake. We allowed bruin to proceed unmolested, not having a great store of ammunition.

On the third night we pitched our tent alongside of Philip's cabin, an old log hut on the Metagamii river, in which, indeed, we had intended to find shelter, but the mosquitoes being extremely numerous and bothersome, we found our tent easier smudged than the hut, and thus more comfortable.



FORT METAGAMII.

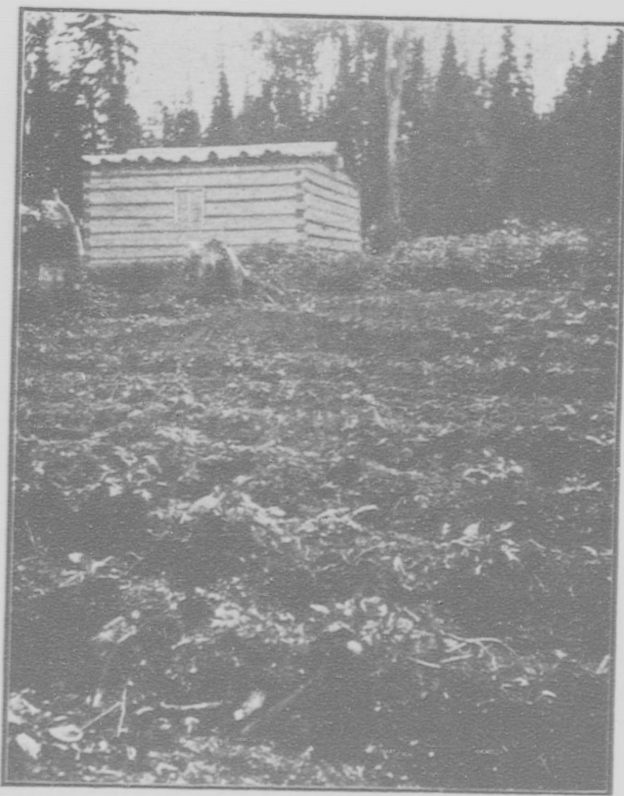
of hard paddling up stream, we lay down to peaceful sleep. Before reaching Dividing Lake we passed two very large Kettle holes, which were of great interest to the geologist.

From Dividing lake a portage was made to Mole lake, an expansion of the Metagamii river. Mole Lake is memorable to us, as it was there we were stranded on a rock and shortly after saw a huge black bear swim-

Next day, Saturday, June 21st, Fort Metagamii raised its flag in honor of our arrival. Mr. Miller, agent of the Hudson Bay Company there, entertained us royally over Sunday, showing us everything of interest at the Fort, including his general store, English church, sawmill, garden, cattle, chickens, etc. I may say, in this connection, that the soil at the fort, though very sandy, has, by the use of

fertilizers, been made to yield excellent potatoes, cabbages, turnips, beets, peas, beans and other vegetables, and some small fruits. However, the 75 miles of country we passed through between Metagama and Fort Metagamii is extremely rocky, and not at all suited for farming, though of great value to the lumbermen, for its heavy

large Balm of Gileads. Inland trips from our water course, lasting from one to three days, occupied our time for the next six weeks, one of which trips I shall briefly describe. We would start out at sunrise, after a hearty breakfast of "homemade bread" and pork and beans, Mr. Davis, with the compass, leading the



AN INDIAN GARDEN NEAR NIGHTHAWK LAKE,

growth of black and white spruce, poplar and white pine.

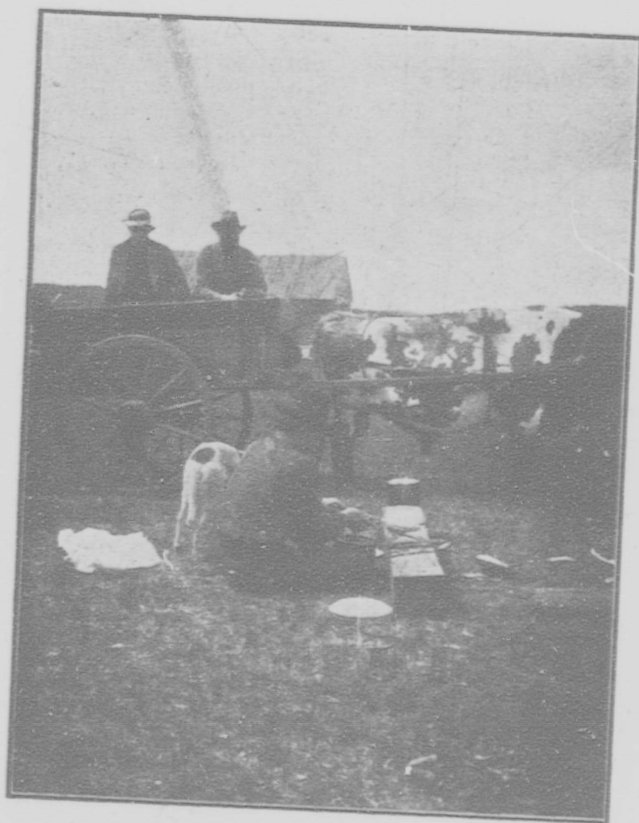
Tisdale township, the scene of our first operations, was reached two days later, after a beautiful paddle down the Metagamii and Kenogamissee rivers, the banks of which in this region are heavily wooded with

party. Then followed Mr. Kay, noting anything of geological interest, then myself recording as many notes as possible on the soil, making physical analyses where practicable, and collecting samples; also observing the flora and fauna of the district. Bringing up the rear, came the two pack-

ers, one marking the way by blazing trees with an axe, the other carrying the tent and enough provisions for the trip.

Throughout the whole trip we were constantly pestered by flies of various species, the mosquitoes, black flies,

our return, there was no respite. It would be practically impossible to convey an adequate idea of the suffering which we were obliged to undergo from their attacks, and no application of oil or salve to our hands and faces seemed to have any effect in keeping them off.



FARMING AT FORT METAGAMIL.

sand flies, deer flies, and the bull-dog tabanus, being the most common. The level wooded country of the Abitibi region abounds in marshes and swamps and muskegs, which form ideal breeding places for mosquitoes and flies. They began to be very annoying soon after we took to our canoes at Metagama, and from that time until we reached Mattawa on

I was surprised that we did not occasionally meet with Indians in the woods. On enquiry I learned that they never hunt during the summer months when flies and mosquitoes are out, but congregate at the forts, where they can protect themselves to some extent from the insects by building smudges, and thus keeping the atmosphere constantly laden with

smoke. Even the dogs have learned to creep close to the smudges for protection. If the Indians, who have inhabited these regions for ages, find it impossible to go abroad during fly season, imagine what we poor unacclimatized pale faces must have suffered.

At the end of six weeks we had examined the country in the neighborhood of Porcupine Lake, Porcupine River, Night Hawk Lake, Frederick House Lake, Moose Lake, Driftwood River, Abitibi Lake and Abitibi River, and Black River, which brought us back to the height of land.

The Western portion of the area traversed is extremely level, but here and there are small glacial mounds of sand and gravel, which will be of great value in railway building and road making. Rolling land is characteristic of the Eastern part. The whole region is intersected by numerous small rivers and lakes. The rivers are short, broad, and sluggish, and have low, marshy banks. The lakes are for the most part very shallow, Lake Abitibi itself being about 90 miles long and not more than 15 feet deep at the most. It is probable that the problem of drainage will solve itself when the country is cleared.

Judging from what I have seen of the "Clay Belt" I should say that it is well named, for about three quarters of all the loose material or soil overlying the rock consists of clay. The clay is of various kinds, differing in color, composition, and origin. Around Night Hawk Lake there are at least four distinct kinds of soil: first, glacial deposits of sand and

gravel on the shores; second, on some of the islands heavy clay, very pure and suitable for brick-making; third, terrace deposits on the shores; fourth, clay loam inland from the lake, both the latter soils being unexcelled for agriculture.

In the Indian gardens around this lake there were on the fourth of July potatoes about 7 inches high. These must have been planted fully a month previously and had not been injured by frost. Onions, turnips, carrots, and cabbages all thrive even with the little care that was bestowed upon them. Among the weeds noticed in the gardens were Shepherd's Purse, Curled Dock, Lamb's Quarters, Broad-leaved Plantain, Lady's Thumb, Strawberry Blite, and Horseweed. These grew in great abundance, thus indicating a rich soil.

The trees in this region are as follows: White and Black Spruce, Balsam, White Cedar, Aspen, Balm of Gilead, Paper Birch, Jack Pine, Tamarack, Black Ash, White and Red Pine, White Elm, Mountain Ash, Pin Cherry, Mountain Maple, several species of Willow, Shad bush and Alder. Of these the most important from the lumberman's standpoint are White and Black Spruce, from 14 to 24 inches in diameter, Balm of Gilead about 18 inches, White Cedar 2 feet, Aspen 14 to 20 inches. Unfortunately, the White Pine is not common, and nearly all the Tamarack in the country has been killed by the Larch Saw Fly. Jack Pine is found almost exclusively on the sandy areas. Large Birches are extremely common.

The following is a list of furs traded by the Indians at Fort Metagamii

for the year ending May, 1903: Ermine, 200; Bear, 50; Fisher, 15; Lynx, 15; Martin, 250; Mink, 200; Muskrat, 2,000; Otter, 2,000; Wolf 1. Thanks to the wise legislation in the protection of the Beaver, this animal is becoming much more numerous, and the danger of extermination is warded off for some time.

Moose, Deer, Caribou, Grouse and Ducks are perhaps of most interest to the sportsman, the Moose being very numerous. On our home trip we saw eight moose on one afternoon. The angler is well rewarded for his toil by large catches of Pike, Pickerel, Black Bass, Perch, White Fish, Speckled Trout and others.

Many of our common birds are found in the north country some of which are Kingfisher, Wood Pewee, Filcher, Woodpeckers, Yellow Sandpiper, Night Hawk, Wilson's Thrush, Hawks and Owls, Canada Jay, Loon, Northern Shrike, many warblers nesting, and many species of Duck.

Some of the fungus diseases found in the district are: Black knot and Shothole fungus on the Cherry, Witche's Brooms on the Balsam. Rust on the Wild Raspberry, Mildew on the Wild Gooseberry, and the pore fungus on the Birches and Spruces.

When about eight miles up the Black river from the Abitibi river, one of our packers, tired of hard work and mosquitoes, begged to be taken home. It was a question of whether Kay or I should go back with him and I went. So Macgregor and I set out on very short notice. We took with us eight of the loaves of bread which we had been using, about eight inches in circumference, two inches thick

and exceedingly doughy, and also a little piece of meat and some tea; this was for a journey the duration of which we did not know. We had a rough map of our route up to the Height of Land, but none of that on the other side for many miles.

When once started on the home trip, these Indian packers will not turn back for anything. We started off without the pan for cooking our meat, but Macgregor would not turn back for it, and a couple of others had to paddle and overtake us to give it to us. We had not gone very far before we met a blockade where our axe was laid down, and we had gone a few yards before I missed the axe, but the axe had to stay where it was. So we were in the canoe without axe, gun or other necessities. Shortly after the second day began, our canoe was punctured in two or three places, and we made the rest of the journey with a leaking canoe. We met an Indian on the Abitibi lake who told us there were sixteen portages on the Blanche river, two of which were sometimes shot with a good man at the stern and another at the bow. Out of these sixteen we ran all but five, and had all kinds of experiences. Sometimes we ran over waterfalls from five to fifteen feet high. The roughest kinds of rapids we ran. In one place there was a narrow gorge hollowed out by the water, not more than wide enough for the canoe to go through; at the end there was a rock directly in front. We ran down the gorge and the current carried us against the rock and nearly smashed the canoe to pieces. At the end of the fifth day we reached Tomstown, a small village about thirty miles up

the Blanche river from Lake Temiscamingue. We had not been out of the canoe since a short distance after reaching Round Lake, and I had had nothing to eat for a day and a half. I was so weak I could hardly walk,

and my companion was even worse. We took a steamboat from Tomstown to New Liskeard and thence to Lumsden's Mills, where we took the train to Mattawa and then home.

### A TALE OF THE OLD YEAR.

**I**T is nearing the end of November and Xmas turkeys are growing big and fat. Steve Johnston's farm, situated near an up-country city, has a goodly quota of these feathered friends fast getting ready for the festive season. Two of these are especially large and plump, and seem to live apart from their brethren of the flock. These two are the especial property of Steve's little boy 'Willie,' whose greatest delight is in feeding his "own tookies," and playing "gobble, gobble, gobble," as he runs around with his collie. Steve is a kind and good-natured father, and looks with pride on his young poultry-fancier, silently deciding that these two kings of the flock shall buy a good Xmas present for his son—a mental reparation for the crying hours that their loss will cause to Willie. Willie himself feels that some day, soon his "tookies" must die, but, boyish-like, keeps off the sorrowful thought by asking mamma "if he can ride on their backs next summer, and fly up over the orchard as the old woman does in the picture." Mamma of course says "perhaps," and "she will see," and Willie runs off quite satisfied, and his heart overflowing with "gobble, gobble, gobble."

The scene changes from this country home to a 'room' in a well known

residence college on the outskirts of the same city. Four students are discussing what they will do to 'liven things up a little.' "Gee whiz! you know boys we haven't done a bloom-in' thing this week," exclaims 'Dokie'. "We've got to waken up and let them know that we are alive. Why, the President even went so far to-day as to say that our conduct was improving. Pretty soon he will tell us that we are the best year that ever went through college; A libel on this quartette, I think, and we are looked upon as the 'guardian angels' of our year."

"Well, what shall we do? I'm ready for a change," says 'Mac,' the silent one, who never concocts schemes but is always the boldest and foremost one in carrying them out, when once started.

"Let's hook a turkey and have a midnight feed," proposes 'Whiff,' another silent one.

"By jove! that's just the thing! I wonder if there are any around. A turkey and a goose, cider, bread and cake! Whoopitee whoop! And we won't go home till morning," and 'Dokie' dances a jig with his No. 11's, regardless of the unfortunates who room below and who are noted for studying late. "When'll we have it?"

"Whiff and I thought of this scheme last Sunday, and went out to look

around," says Frank. "We've found two places where there are turkeys. At one place, not far from here, we saw a whopper roosting in a tree. She was a dandy, and, I'll bet, ready to kill now."

"Hurrah! We'll get that beggar," chimes in 'Dokie.'

"Well, just hold on. We went a little further and found another place where there is a swell flock of turkeys and geese. Now, I for one, like a goose, so I say we go there."

"That's right; I want a goose, too," adds 'Mac.'

"So do I," says 'Whiff'; "but I think we should get the turkey at the first place and then take the goose from the other fellow; divide it up a little you know."

"O. K.! when'll we go?" asks the irrepulsive one. "To-night?"

"No. I think we had better go to-morrow night, that's Thursday, and then we can have the feast for Saturday night," answers Frank.

"Who's going to cook them?" enquires 'Mac.'

"Oh, that's all arranged," continues Frank, "We've seen to that. Let's get the turkeys, its easy enough to get them cooked."

"All right, to-morrow night, then," says 'Dokie,' who, in the meantime, has become very quiet; "but, I say fellows, I wonder if they keep dogs. Gee whiz! fellows, you know, I hate dogs, and I can't pluck a turkey. I want to go with you, but I know I won't be any good."

"Oh, come off now! You don't need to do any plucking, we'll attend to that, eh Whiff!" exclaims Frank.

"Ha! Ha! yes, we'll do the plucking. 'Dokie' can come along to play

with the dogs," answers 'Whiff'. "There's two wolves over at that second place, isn't there?" winking at the others.

"All right, fellows, I'm with you; but if a dog comes along see if it can catch me."

So the next night, at a little after 12 o'clock, when all is quiet, four figures slip from the College and off, over the fields. Nothing much is said, and 'Dokie' brings up the rear. 'Dokie's' courage has somewhat flagged in the last twenty-four hours and his talk has mostly been about dogs, the time when he was *just about* bitten by one, and when his kid brother's Bedlington treed him for a tramp. The silent march goes silently on, 'Dokie' seemingly hard beset to keep up. However, by means of an occasional jog, he manages to reach the outskirts of the first farmyard—their first point of attack. A whisper comes from the rear: "I say, fellows, I wonder if these turkeys will be outside,"—no answer. "Dokie" cautiously tip-toes towards the fence and watches the house; "Gee whiz! How bright it is! Look at the moon shining on the house." No notice is paid to this by the other three, for they are already through the gate and stealing along in the shadow of the barn. "Dokie," seeing this, musters up all his remaining courage and hurries after them, making more noise than all the others together. They silently explore all the trees and out-buildings without any signs of 'turkey'—at least three of them do, while 'Dokie' stands guard, shivering in the darkness of a row of evergreens and listening for every little sound, expecting every moment to hear a medley of



noise from somewhere in the silence around him. But at last the three return to him empty-handed. His question is an utterance of pent-up relief—"Where is the turkey?"

Frank pushes his way through the evergreens, grumbling that they must have taken them to bed with them. "Let's go on to the other place; its better anyway."

"Dokie" is in the lead now, his relief is great, and the spirit of adventure has touched him, too. He talks a lot, and tells the others how that when they left him on the lone vigil, he had taken a white sign-board for something else, but had walked boldly up to it and found out that it was only a sign-board after all. The joke was on him, he said, but it was too funny to keep to himself. "Say, fellows," he continues, "isn't it light to-night? How in the dickens will you keep clear of the dog?"

"The dog doesn't matter, we'll fix that, and before the old man gets on his inexpressibles we'll be over the hills and far away," answers Whiff. "We can pluck the beggars right here in this woods."

Just the other side of this woods is a small farm-house, and a little farther, on the opposite side of the road, is the destination of our friends. They go on until they pass the first house and reach the orchard in front of the second one. Suddenly all stop together and look towards the orchard. Nothing is said, but each chuckles to himself to let the other fellows know that he sees the fun. Right there on the fence sits a big turkey, all alone, and not another in sight.

"Where in the dickens are the others," whispers 'Dokie.'

"I don't know; over in the orchard perhaps," answers Frank. "Gee whiz! fellows, isn't that a cinch?"

"And a peach of a one, too," continues 'Mac,' "but let's leave him there until we get a goose, and then we can get this fellow when we come back."

Then, they all steal silently on, past the midnight dozer, toward the barn. They explore around the barn on the side away from the house, but find nothing; then, very carefully they work around toward the out-buildings near the house, but still nothing.

"Likely they are in the shed," whispers Frank, and off he goes, followed by 'Mac' and 'Whiff' straight across the yard between the house and the barn. This piece of boldness is too much for Dokie. He deems it is too much for Dokie. He deems it wiser to go back around the barn towards the road, and being anxious to reach there before anything happens, he manages to disturb two pigs in a small pen and to remove a rail in clambering over the fence. Every little noise sounds very loud to him, but at last he reaches the far side of the barn without any misfortune. As he works his way around the strawstack towards the shed, he of course stirs up a bunch of pigs, that run off with a noisy "oof, oof." Then, on the other side of the stack, there arises a sound of rustling, intermingled with the "squaks" of geese; the dog strikes into the chorus and soon there is a medley of sound. 'Dokie' is over the fence, into the road, and off in an opposite direction whence they came, thinking only of the dog, farmer and buck-shot. He stops up about one hundred yards on, and listens. The dog still barks fur-

iously, and all its neighbors have joined in; he even hears a distant chorus from the city. But everything else seems still, what is he to do? He mildly swears at his nerve, and thinks that if he hadn't been in such a hurry he might now be with the other fellows, for undoubtedly they would have "gall" enough to go right past the house and take the turkey on their way. Now, if he went back, he would probably be the one to be caught by the irate farmer. But here the dog decides for him. Its barking breaks upon his thoughts with seeming increased fury, and "Dokie" resumes his journey. There is nothing to do now but make a wide detour and "bring up" at the woods where they had decided to pluck the fowls. Between walking and running, always urged on by the innumerable strange sounds, he soon reaches the outskirts of the woods farthest from the scene of the late exploit, and listens for any sound that may lead him to his friends. He makes an attempt to whistle, but the sound frightens him, and, with a sudden resolve, he starts towards the college. He feels that bed is the place for him; anyway the others will do as well without him. He reaches his room and patiently awaits the return of his friends, revolving in his mind how, if the other three were captured, he would work to get them out of difficulty. But these thoughts are rendered useless by the arrival of the three laughing marauders with a turkey and a goose, both plucked as well as the

scanty light of the moon would allow.

"Well, by jingoes, how in the dickens did you get them?" is his greeting. "Well, by jingoes, where in dickens did you go to?" asks "Mac.," and "Dokie" has to submit to a lot of chaffing before he is permitted to explain:

"Oh, Gee! fellows, you know, as that old dog started up, I struck for Puslinch Lake, made a detour of nine and three-quarter miles and came in half an hour ahead of you. How's that for a G. T. R. time-table?—Now, tell me how you got the chickens."

"Why, took them," said Mac.

"Stuck them and plucked them," added Whiff.

"And now we'll cook them and eat them," continued Frank.

And after a little more chaffing and planning they separate to their respective rooms and to bed to dream of turkey and goose, with a little dog thrown in for one of them.

"Mamma, mamma, there is only one of my 'tookie's' here this morning. Where is the other one?"

"I don't know, dear, it will come pretty soon; you run off and see if you can find it."

But, needless to say, Willie never found it and had many a crying spell over his "poor lost 'tookie'". Steve never says anything to his son, but often remarks to his wife that he knows why Collie "kicked up such a fuss that night."

W. R. DEWAR.

## Agricultural Department.

EDITED BY J. C. READEY.

### Some Educational Features of Fat Stock Shows.

**S**CARCELY have the inspirations of such exhibitions as the Central, Industrial, and Western, had time to settle to a normal activity, when the announcements of the Winter Fairs remind us of the never-ceasing energy being put forth by American breeders for the improvement of that industry, which now holds the most important place among agricultural pursuits, viz., the raising of live stock. By the end of November the International has opened its doors to the American continent. Within Dexter Park have been placed the very best specimens of live stock which science and art can produce. Within a week afterwards the Ontario Winter Fair, less in extent than the International, but with several additional features, is contributing to the progress of the Ontario breeder, while another Fair held at Amherst, N. S., a week later, still is doing as much for the farmers of the Maritime Provinces. After a struggle for several years, the people of Eastern Ontario are to be rewarded with a Fat Stock Show, to be held at Ottawa the second week in March, so that throughout the greater part of the year a continuous opportunity for the study of breeding and feeding is afforded.

To the young student no greater education is afforded, perhaps, at these shows, than the fixing of the proper types upon the mind. Experienced men tell us that without a

definite type or ideal in mind no person can hope to make a success of breeding live stock. There is no better means by which to fix a type upon the mind than by examining the living example. At our own Canadian shows, and to a greater extent at Chicago, the almost perfect specimen is on exhibition. Here, too, the different breeds are abundantly represented, and the beginner has an opportunity to decide which shall be his favorite, unless he become lost in the profusion of form and finish.

As the form of the animals indicates to us the possibilities of skillful breeding, so the finish will show what science and art can do in feeding. As we pass from animal to animal, examining their forms, we notice a most striking difference in the "feel" of the different bodies. Occasionally we come to one around which we linger. We press our hands against the shoulder, over the back, down the ribs, and over the loin, and nothing suggests hardness or harshness, and we almost regret, that such a breadth and depth in a living creature should be destined to the slaughter house. But close by stands one almost equally good in appearance. We place our hands upon it as before, but there is something which suggests grease, or else we have vivid pictures of Sunday morning sausages. Whence comes the difference? Breeding, health of the animal, but most of all, perhaps, the feeding have contributed to the conditions of the two animals. What a study therein exists, can only be

realized through a practical participation in the work of feeding, and yet to know the extent of the possibilities is a long step towards the realization of them.

Right here students at agricultural colleges may stop to congratulate themselves. Was it not the case, that at the Chicago Exposition of last year the great prize-winners of the show were fed under the direction of professional men. So frequently has this been the case that there is, we are told, an agitation on foot among the farmers to have a separate class for College fed stock, so that they may not come in competition with the farmers themselves. Moreover, students from our own College would have been pleased to have seen an animal or two sent from our own institution to compete with the Colleges across the line. We have every confidence in the ability of Professor Day to conduct such work. He may have good reasons for not doing so, but we hope those reasons may soon be removed, believing that such competition would help to give us an even better standing than we already possess.

A feature of our Canadian Fairs that is doing much for the dissemination of information is the illustrated lecture. Here we hear from the foremost men of the Province on many subjects of interest to farmers. The block test is a valuable feature, and when used in conjunction with the living animal in illustrated lectures is one of the most important and impressive means of conveying information. Then there are the discussions and interchange of opinions, with

their consequent mutual helpfulness. In fact, no person is able to avail himself of all the privileges attendant upon a visit to a good Winter Fair.

It may be fair to ask, do we improve the opportunities as we ought? Many people seem to attend a Show simply for the pleasure of sight-seeing. In order to get most from such shows we must have a definite purpose in going. It is not enough simply to glance over the stock. They must be studied, their good and bad qualities noted and compared, and a mental decision as to relative merit formed. If the decision can be confirmed or corrected afterward by a competent judge, so much the better. The methods and placings of the judges may be noted, and comparisons made after the awards have been given. Then there are the lectures to be attended. All this means work, and the earnest intelligent visitor will find himself quite tired after a well-directed day at a Winter Fair, or Fat Stock Show.

In conclusion, we might point out a few improvements which might be made. Since the object of the shows is to convey the greatest benefit possible to the greatest number, everything practicable should be done to that end. First, there should be a plainer and more accurate numbering of the animals. At the late Guelph Show some of the previous year's numbers were still attached to the stalls, so that the catalogue was often useless. If the different classes of animals might stand together in their stalls, as they appear before the judges a great improvement would be introduced. It would mean much more work for the attendants, but

would be of great advantage to the visitors. The practice of giving reasons for the placing of the animals, at the close of the awards, is one that might profitably be universally adopted. Other improvements might

be suggested, but these, if carried out, would certainly add to the already great efficiency of a growing institution.

J. C. R.

## Experimental Department.

With this issue our College paper goes before its friends in its new role of official organ of the Experimental Union. The names of G. E. Day, C. A. Zavitz, W. J. Brown, G. C. Creelman, N. Monteith, E. C. Drury, and T. H. Mason have been placed upon our advisory board, with the object of assisting us in making the paper of more interest to the members of the Union and experimenters throughout the Province.

With the co-operation of these new members of our staff, it is our intention to add a department to our paper, devoted to the interests and work of the Union. This department will be gradually strengthened until it occupies one of the strongest positions in our college paper. In our next issue we purpose giving a forecast of the Experimental work for the coming year, together with the announcement of our programme of good things in store for the readers of this important section of our paper. Assisted by such an advisory board, supported by the hearty co-operation of the members of the Union, let us hope that the O. A. C. REVIEW is just in the dawn of its growing time, and that in its new sphere of influence it may prove a source of strength and assistance to the Union and experimenters generally.

### Notes from the Experimental Feed Department.

It is the desire of the editors of THE REVIEW that their paper should serve as a medium through which the graduates and others interested may know what is being done at the college. In compliance with this very laudable idea I make this short contribution, which tells something of our latest experimental work with swine.

During the past year several articles have appeared in the agricultural press deploring the fact that almost all the blood meal and tankage from Canadian packing houses, is sold to firms in the United States to be used as commercial fertilizers. It has been pointed out that, in this way, our farms are being drained of a large amount of fertility which ought to be conserved. And so the writers of these articles recommend that these by-products should be bought by Canadian farmers and applied by them to the land. During the past summer, however, we have conducted experiments with these by-products, which have clearly demonstrated that when properly prepared they can be fed on the farm, and thus a profit be made, not only from the feed, but also from the manure of the animals fed.

A few words of explanation will be necessary, before stating the actual facts of the experiment.

Blood meal, as the term indicates, is dried blood reduced to meal. That supplied to the College by Swift & Co., of Chicago, analyzes: 87 per cent. protein, 3 per cent. ash, 10 per cent. moisture.

Tankage is a prepared product from refuse meat, entrails, and other offal that accumulates in the slaughter house. That supplied by Swift & Co., analyzes: 60 per cent. protein, 6 per cent. phosphates, 10 per cent. moisture.

Both of these products require to be specially prepared, in order to be palatable to stock. We made an attempt to feed to hogs some of the ordinary commercial product, as used for fertilizing, and found that the hogs to which it was given, refused it. On the other hand they ate the refined product with avidity. Hence, although the refining process adds more than half to the cost, it is an absolutely necessary process. Thus far, however, no attempt has been made by any of our Canadian firms to refine the blood meal and tankage from their factories, but should the demand arise, and we think that, if others find these products as satisfactory as the one experiment described below would indicate, it certainly will, we have no doubt these firms will proceed to manufacture blood meal and tankage for animal food purposes.

In the experiment referred to, a bunch of hogs, carefully selected so as to be as even as possible, were divided into groups of five each. One of these groups was fed upon

meal (barley and middlings), and blood meal; another upon meal and tankage; another upon meal and skim milk. Still other lots were fed upon mixtures of meal, skim milk and either tankage or blood meal. Some of these groups were also duplicated. A few figures selected from the report of this experiment will serve to indicate the value of these by-products as a feed for hogs. In estimating this, meal is valued at \$20 a ton, blood meal at \$55 a ton, and tankage at \$33 a ton.

GROUP.	FOOD CONSUMED FOR 100 lbs. Gain.	Cost of 100 lbs. Gain.
Fed Meal and Blood Meal.	350 lbs. meal. 27.78 lbs blood meal.	\$4.29
Fed Meal and Tankage.	382 lbs. meal. 28.73 lbs. tankage.	\$4.29
Lighter Pigs fed Meal and Tankage.	374 lbs. meal. 20.53 lbs. tankage.	\$4.08
Fed Meal and Skim-milk.	458 lbs. meal. 815 lbs. milk.	\$5.40
Lighter Pigs fed Meal and Skim-milk.	405 lbs. meal. 735 lbs. milk.	\$4.78

#### NOTES ON THE ABOVE TABLE.

1. This is but a single experiment, and must be duplicated before decisive results can be announced.
2. At the first of the experiment, the pigs were fed blood meal or tankage in the proportion of 1 to 6 of meal, each pig receiving about three-tenths of a pound per day. This amount was not increased, so that throughout the whole experiment the rate of tankage or blood meal to meal was about 1 to 13.
3. The pigs fed blood meal or tankage produced gains more cheaply than those fed skim milk.

4. The pigs took to both of these by-products with avidity, and kept in good condition throughout the whole experiment.

5. The pigs were fed twice a day, with a very little green feed extra at noon.

The quality of bacon produced by this method of feeding was most satisfactory, as is evident from the report of the Wm. Davies Co., Toronto, to whom the hogs were delivered. The following sentence is quoted from their letter:—"Out of the whole ship-

ment there was not a single hog which did not yield firm bacon, which was graded by our inspector 'best'".

We purpose continuing our experiments with tankage and blood meal, and hope shortly to be in a position to speak more authoritatively upon their value. In the meantime, I would refer the reader to the college report shortly to be issued, for a fuller account of this experiment.

M. C.—g.

## Horticultural Department.

EDITED BY T. C. BARBER.

*Keeping account with the pickers and the system of payment.*—Before leaving for the orchard in the morning, each picker is given a sack containing a number of tickets, each ticket bearing the number of the picker to whom it belongs. In the orchard, the picker places a ticket in each basket of peaches that he picks.

When the fruit reaches the grader in the shed, he takes care of the tickets he finds in the bottom of the baskets and gives them to the time-keeper.

The time-keeper credits the grader with the quantity of tickets that he (the grader) has gathered from the baskets, and credits the pickers with the quantity of tickets received bearing that individual picker's number; hence, one lot of tickets suffices for both pickers and graders.

The pickers (packers and graders also) are paid so much per day with advantage of increase over average

number of baskets picked or crates packed during the day.

For example, at the Hale orchards, the packers are paid \$1.00 for the average number of crates that day. If the average for the day happens to be 50 crates, each packer receives two cents per crate for the work he has done. The packer who has packed over 50 (the average) is paid at the rate of 2 cents per crate, and the one who has packed less than the average receives a corresponding decrease. The following day the variety and grade of peaches being packed, may be larger or smaller, as the case may be; if the former, the average will be higher and the packers will receive a lower rate per crate, or if the latter, a relatively low average will be the result and a correspondingly high rate per crate.

This system of paying the fruit workers,—known as the "average system,"—is satisfactory both to em-

ployer and employee. The former gets more work done for less money than he could by any other system of payment, and the employee, who is a little better than the other fellow, feels that his efforts are being substantially recognized. Personally, I may say that at first I thought the system unfair to the employee, and it certainly would be if all the packers were experts, as then the average always would be high; but, after talking with the packers, I found that all appeared to be pleased and satisfied with the method on account of the fact that every day new and inexperienced hands are employed who tend to keep down the average and enable thereby the best workers to make a good showing above the average for the day.

To fully estimate the advantage of the system to the employer, I noted, on a particular day, the difference between the results of this system and those of a system practiced on a neighboring orchard:

Hale's—180 crates for \$1.00 (average system).

Neighbor—40 crates for \$1.00 (day system).

I have referred to the packers and packing for convenience in explaining the system, not because they alone are paid in this way. Such is not the case, as the same method is used in paying the pickers and the graders, and with the same degree of satisfaction and success.

*Handling the pickers in the orchard.*  
—Over every twenty-five pickers is one foreman, with assistant if neces-

sary. To prevent delay, each picker carries a couple of baskets to the orchard, where they are started picking, one picker to a row. When picking, a ticket is first placed in the basket, then the peaches, and when the basket is full it is left under the tree. The baskets are then carried by boys to convenient places for loading on single horse orchard waggons, (known in Georgia as "Dunkirks"), which go about among the trees gathering up the baskets and carrying them to the avenues where they are transferred to larger waggons, ("floats"), that ply between the orchard and the packing shed.

These floats leave the barns loaded with empty baskets in the morning. In the orchard, the empties are distributed by basket boys who should keep ahead of the pickers to prevent loss of time. Four or five basket boys are required for twenty-five pickers. Two boys are also employed to keep pickers supplied with drinking water. This is merely an outline of the orchard practice, and may not be suited to all conditions, as at all times and in all orchards it is necessary to adjust labor to suit existing circumstances.

The trees are gone over two or three times to get the fruit at the proper stage of maturity. Practice soon teaches the pickers the proper stage for picking. In general, the fruit is in the right condition when it is full grown, but yet firm, and when the ground color takes on a faint yellowish tinge.

A. B. C.



### The Growing of Tomatoes for Early Market.

The first point in the growing of early tomatoes is the selection of the variety; no single variety "fills the bill" for all localities. The climate, season, and character of the soil, as well as the demand of the market, differ widely in different sections, and these are the conditions that must determine for the individual grower the variety he will grow. After choosing one that conforms well to these conditions, his object should be to improve it all he can, bearing in mind the size, color, form and texture most desired in his particular market, and aiming to produce it as early as possible. He should select his seed from the first ripening and best fruits on strong and vigorous plants. It is believed that this method produces a gain in earliness, in yield and in quality. The fact is well known that one or two days' gain in earliness, of the finer quality of tomatoes, often makes a great difference in the market price.

#### GROWING THE PLANTS.

The aim is here to anticipate nature,—to get ahead of her in all points, in order to reach success. All conditions should be made favorable for the rapid germination of the seed, and the quick, healthful growth of the plant until the crop is harvested.

The tomato is a plant that requires a high temperature, and it is not only retarded in growth, but is injured, by a low temperature during its early stages of development. From 60°—80° are the most favorable limits of temperature; hence, in this country, it is necessary that plants for early fruiting shall be grown either in a

hot-house or hotbed, where the temperature can be controlled. Farmers who only grow a few in the garden, for their own consumption, may use a box to start the plants, placing it near the kitchen stove at night and in a window by day, following as far as possible the plan I will outline below.

The seed should be planted about May 1st, the time varying with the locality. It is placed in rows six inches apart, and about four seeds to the inch; one-half inch of earth makes sufficient covering. If they are more thickly planted, the young plants should be thinned out to the proper distance, in order to produce good, strong, healthy and stubby plants. Germination should take place in about ten days; when the young seedlings are well up they should be treated, to prevent long, spindling growth; hence, over-watering and too high a temperature should be avoided. It is better for the plants to have too little than too much water. If the seedlings have been well and properly cared for they should be ready for transplanting in about six weeks. Most market gardeners use cold frames, and into these the young plants are set out, in rows, from four to five inches each way; the soil having been previously warmed, by the sun shining through the glass, and stirred to kill germinated weed seeds. In a general way the treatment of the young plants in the frames is not to keep the plants too warm and to give them air and water when necessary. When the weather becomes warmer the sashes should be gradually removed, in order to harden the plants for setting out later. When ready to set in the

field, the plants should be 12 to 15 inches high, with strong, vigorous stalks and foliage; even blossoms may have formed at the crown.

#### SETTING IN THE FIELD.

The plants are cut out in blocks of four or five plants, lifted out into a wagon box and drawn to the field; here each plant is cut out singly and placed in its position in the hill, with all the soil adhering to the roots. If manure is used in the hill, it is packed around the plant and the soil drawn over all with a hoe; then the earth is packed tightly about the plant by the workman's feet.

Plants thus set rarely wilt or feel the effects of transplanting, and start at once into vigorous growth. Occasionally it is necessary to water the newly set plants, but a time is generally chosen when there is sufficient moisture in the soil.

#### CULTIVATION.

Cultivation of the soil should begin the next day after setting, in order to counteract the effects of tramping and packing, and also to aid in the warming up of the soil and to prevent a too rapid evaporation of water. Cultivation should follow every rain, and if none falls a weekly cultivation should be practiced. The

chief object of this cultivation is to kill weeds, conserve moisture, and to keep the surface soil warm. After the plants fall, no further cultivation is necessary, as they are able to take care of themselves afterward.

#### GENERAL REMARKS.

Plants handled as described above should produce ripe fruit in from five to six weeks, much depending upon the weather conditions, warm and dry being preferable. A good average yield is 250 bushels per acre. In handling and marketing the crop, much depends upon the care used in picking, packing, and carting. It does not pay to send poor stock to market; fruits partially green, or those which are intermixed with rough specimens and those containing a considerable proportion of smaller or over-ripe fruit, do not bring the highest price in the market; and the tendency of such stock is to reduce the consumption, and hence the price of the good product.

R. G. B.

NOTE.—The article on the "Surplus and By-Products of the Peach Industry," by Mr. A. B. Cutting, which has been running in our last few issues, will be continued next month.—ED.

# The O. A. C. Review.

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## Editorial.

### New Year Greeting.

**C**HRISTMAS holidays are past and gone, and we stand at the dawn of the new year with a bundle of good resolutions and a firm determination to keep them all. Why, at this particular time, do we give vent to such a plethora of good intentions? The question is a difficult one to answer. We go on day after day, week after week till near the gladdest, merriest season of the year, then suddenly we resolve to do better in every way and turn over a new leaf.

To-day, in the opening month of a new year, let us decide upon a better plan. Stop turning over new leaves, and at once get a new book. Set before your mind an ideal of perfection, and, day by day, mould your every thought and action to the attainment of that ideal, and success will crown your efforts as never before. Make good resolutions if you will, but above all keep them, and never wait for any chosen time

of the year. There is no "close season" in the carrying out of a good intention, but only one time, "now."

Why do we wait and linger?  
 Dreaming the hours away,  
 Wishing for something better  
 Than what we may have to-day.

Bewailing the moments wasted,  
 Mourning the chances flown,  
 Viewing the faults of others,  
 Envying those who've won.

Nursing our fancied troubles,  
 Till life is a burden great;  
 Hoping, but never doing,  
 Cursing our luckless fate?

Why should we wait and linger  
 When there's so much to do?  
 Why idly stand at the gate and gaze  
 While others are pushing through?

KERRY O'BYRNE.

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We are indebted to Mr. W. L. Smith of the *Weekly Sun*, and Mr. T. D. Jarvis, Fellow in the Biological Department, for two excellent general articles in this issue. Mr. Smith, who is a stalwart champion of farmers' rights,

deals with that great question of national politics, "The Transportation Problem," while the article by Mr. Jarvis tells something of the great northern section of Ontario, a region of rich undeveloped resources, of which even our best informed men know far too little.

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#### Mahomet's Miracle and Modern Education.

Lord Bacon, in his essay on Boldness, described Mahomet's miracle in the following words: "Mahomet made the people believe that he could call a hill to him, and from the top of it offer up prayers for the observers of his law. The people assembled; Mahomet called the hill to come to him again and again; and when the hill stood still he was not a whit abashed, but said, "If the hill will not come to Mahomet, Mahomet will go to the hill."

This is the attitude of modern educators. If the people will not come to the college, the college will go to the people. As only a small percentage of the young men and women of this country can leave their homes and spare the time and money necessary to attend college, the college must provide means of reaching the people. One of the most important of present day educational movements results from this effort, and is what is known as the correspondence system of teaching. This does not remove the necessity for study, but places a first-class education within comparatively easy reach of everyone who is willing to embrace the opportunity. To secure an education should be the first ambition of every

young man and woman who hopes to succeed in life. As Prof. Robertson says, "The man who is not educated is lost." He is lost because he does not discover his own mental powers; lost to his opportunities because he cannot embrace them; lost in the race of life, for his hands are tied and his feet manacled with the fetters of ignorance. He lives in the midst of nature, without appreciation, without understanding and without hope. Like an image of stone, he has eyes, but he sees not, ears but he hears not. What does he know of the inspiration received from the study of biography? The struggles and achievements of the world's great men are lost to him because he does not know how or what to read. The history of the world is the world's judgment, and every page is packed with wisdom, yet to the uneducated it is foolishness. What does a man who is not educated know of the culture and refinement acquired through the study of languages and literature; of the accuracy and thoroughness, in other words, the mental discipline, resulting from work in mathematics and science? Study is the fulcrum and time the lever that lifts a man out of the mire of idleness, ignorance and superstition, and places him on the highway leading to success and power.

One frequently hears men in middle life express the sincerest regret that they did not get a better education. The most successful of them utilize every opportunity within their reach to increase their learning, to broaden the horizon of their knowledge and intensify their vision. The man of force must develop the penetrating powers of his understanding until he

can see things as they are. True success is a question of brains and education. Our young men, however, are largely pre-occupied with physical and social pleasures. Some of the greatest problems of life must be solved between the ages of 16 and 25. It is during this pivotal period in their lives that young men form their habits, tastes and character, and, in most cases, select their occupation or life's work. Comparatively few of them realize how important it is to spend their spare time; i. e., hours between work and rest, in improving their education, and in providing for their future in such a way that the asset will be available, no matter what circumstances arise. The proper use of their spare time in study along some definite line, or systematic work in almost any given direction, will yield them a measure of power which can be utilized in after years. They will be able to increase their earning powers, to enjoy a higher standard of living, and to equip themselves for their most important duties in life.

Our young men and women should make the best use of every opportunity to qualify themselves by education, fitted to our conditions, to provide for their future, and assist in building up this magnificent country, by developing her agricultural, commercial and industrial resources. The institutions especially designed to make this possible for the young people of this country is the Canadian Correspondence College of Toronto. The teachers of this College are experts, and the work is handled in the most modern and up-to-date manner. This College has now removed the last vestige of an excuse which people

have for not improving their education and qualifying themselves for better positions and better pay. The old story of Mahomet's miracle is repeated. Nine hundred and ninety-nine out of every thousand cannot go to a residence college; but this college, by reason of the King's Mail, is able to give the people, no matter where they live and what their circumstances may be, many of the advantages of a college education, and at the same time allow them to continue their daily work, thus saving their time and money.

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The staff of the O. A. C. showed their usual keen perception of the needs of the farmer when they instituted the short course in grain and stock judging. If any one thing is more necessary than another for the further agricultural development of Canada, it is a great knowledge of the subject; and how can this be better gained than at the agricultural centre of the Dominion, from the lips of practical men who have made a life-long study of their specialty, whether it be grain, sheep, swine, cattle or horses? If a man intends to successfully raise or breed any type of grain or stock it is necessary that he should have an ideal.

At the short course here typical animals are shown, their good and bad points discussed, and new ideas as to their feed and management put forth. A farmer goes away with his conception of the possibilities of agriculture broadened, his knowledge of his profession increased, and new ideals which he may strive to attain.

We regret that our Editor-in-Chief, Mr. W. R. Dewar, has resigned from the staff of the REVIEW, in order that he may devote more time to his studies in the closing months of his graduating year. Dewar is a good man, and a royal hustler. Energetic and resourceful, an able writer and a born leader, he has been a source of strength to the paper ever since his connection with it. To him the REVIEW owes much of its present worth, and therefore we hope our friends will not think us too effusive if, in parting, we give three ringing cheers and a tiger for "Billy" Dewar.

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**Our Library as Used and Abused.** That our college library is not receiving, from our students that measure of attention which is essential for the proper educational development of a college graduate is unfortunately only too apparent. Time and time again has our attention been called to this important feature of our college course, but the days slip by, and the weeks wear in and we remain as before, unheeding the injunction so frequently spoken, "Spend more time in the library." What are the causes for this negligence? Are our students careless on so important a matter, or is it possible that with the library itself rests some measure of the blame? The student of the Ontario Agricultural College is fitting himself for the carrying on of his chosen profession, and also for the duties of responsible Canadian citizenship. Yet, in our library, how few books are to be found dealing with the social and economic questions of the day. Our

library should have added to its shelves books by modern authors dealing with the great questions which are bound to be forced upon us in our future lives. Not only in social and political science, but even in those sciences, more intimately associated with agriculture, and even in agriculture itself, do we find books that were old and out-dated at the time Sir Isaac Brock gave up his life for his country on the blood-stained field of Queenston Heights. Agriculture is a science that is moving with gigantic strides. The theories of today are discarded a few days hence. Then why should not the library of a modern college keep pace with the advance of the times?

Another point very objectionable to the student body is the fact that many, very many books, which are printed in a tongue strangely different from our mother English have found their way to our library. Works in German, French, and Latin, beautifully bound, and handsome in appearance, fail to attract the student of the Agricultural College, and rarely, if ever, does he take them from the shelves. Twenty-two books in German, arrayed on one shelf, may paralyze the student with the knowledge of how little he knows, but otherwise are of little value.

What our library really needs is a thorough reorganization. Let the fossilized legacies of the past be consigned to the tender mercies of the curator of the museum. Have modern books, by live authors, printed in a living language, and no more shall we pass unheedingly that kindly word of warning, "Spend more time in the library."

We publish in this issue our first prize story. Competition was keen, but the award was finally given to Mr. W. R. Dewar, who is to be congratulated on the production of a really first-class original story.

## Our Old Boys Page.



H. A. Morgan, B. S. A., (1886-89).

\*Graduates we seldom see.

Mr. H. A. Morgan, B. S. A., graduated in 1889, and was one of the second class which wrote for the degree of B. S. A. from the University of Toronto. In the fall of 1889 he went to Louisiana as entomologist at the State University and Experiment Station. Mr. Morgan must have proven himself particularly valuable in the discharge of his work in this department, for in 1894 he was made Professor of Entomology and Zoology in the University there, which office he has ably filled, at the same time retaining his old position as entomologist of the station. Under his able management, however, the sta-

tion work has grown to such an extent, in range of investigation and in importance, that he has been compelled to give up the professorship, and devote his whole time and energy to experiment station work, as Entomologist. This includes membership, as Entomologist, of the State Crop Pest Commission recently created by a special session of the State Legislature, to combat several insect pests, particularly the Mexican Cotton Boll Weevil. Mr. Morgan has been President of the Louisiana Society of Naturalists, and is at present an active member of its Executive. He is Director of the Gulf Biologic Station, member of the American Association for advancement of science, the Washington Entomological Society, and the Society for the promotion of Agricultural Science.

In 1895, Mr. Morgan married Miss Sara Fay, of Louisiana, and has now three children.

Among the ex-students at the short course in stock judging, are "Sport" Clark, S. M. Pearce, P. Reed, and W. V. Harcourt, also W. W. Hubbard, ('82-84), and G. Fred. Marsh ('85-87).

Ed. L. Ferraby ('91-93), is manager of the Hull Chemical Works, Limited, Hull, Ont.

\*This is the first of a series we intend to publish in the remaining issues of THE REVIEW.



G. Fred. Marsh, ('85-87), Secretary of the Georgian Bay Fruit-Growers Association, has been managing the old homestead for the last few years until last summer, when he entered the employ of an American fertilizer firm, for the summer season. He is very much interested in the idea brought forward at the Union, of forming county or district associations of ex-students, for the purpose of interchanging news and knowledge, and establishing a still greater bond of union with the O. A. C.; and hopes it will materialize. The idea is a good one. Let us hear from a few more ex-students.

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 DRYDEN-MILLER.

On Wednesday, Dec. 30, 1903, at Sittyton Grove, Township of Pickering, by the Rev. H. Crozier, of Ashburn, assisted by the Rev. J. C. Sycamore, of Hamilton, William A. Dryden, son of Hon. John Dryden, Minister of Agriculture, to Margaret, daughter of Mrs. William Miller, and grand-daughter of the late James I. Davidson, ex-M.P.—*Toronto Globe*.

"Bill" Dryden ('99-01), was one of our most popular men here at college. He was a fast sprinter, and also one of the strongest men in his class, which is saying a good deal, while he was invaluable as a Rugby player, and a star at hockey. He was made president of the Athletic Association in his second year. THE REVIEW wishes joy to the happy couple.

In our Christmas issue, we unintentionally left the name of D. T. Elderkin, '03, out of the list of ex-students present at the Union. Mr. Elderkin, our ex-Editor-in-Chief, was here for both the Union and the Fat Stock Show, accompanied by Mrs. Elderkin.

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 J. R. Taylor, who took a special honor course in Chemistry last year, at the O. A. C., is now wielding the birch in a public school near Campbellville.

—  
 Ferdinand Pohnl, of Austria, is now in Hamilton, doing "office work" in a branch office of a manufacturing firm of Toronto. He has not, however, forgotten the term he spent at the O. A. C.

—  
 A. M. High ('92-94), when heard of in December, was to be married on the 29th of that month. He is now out in the Northwest, and THE REVIEW extends to him best wishes for the future.

—  
 Percy E. Reed ('03), was a member of this year's class for the "Short Course in Stock Judging." While here, he also wrote a supplementary in agricultural chemistry, and has been awarded his Associate Diploma.

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 A. T. Sutherland ('99-01), went out to British Columbia in 1902, with the intention of farming in the Chilliwhack Valley, but at the end of eight months found that, owing to the heavy annual rainfall in that part, farming there was both uncomfortable and unprofitable, and gave it up. He is at present in the employ of the Ashcroft Water, Electric, and Improvement Co., at Kamloops, B.C.



J. O. Storey, who was farm foreman at the college for a number of years, is now the proprietor of Forest Lodge Stock and Dairy Farm at Stanley, Wisconsin. He is extensively engaged in the breeding of pure-bred stock, including Guernsey cattle, Shropshire sheep, Berkshire swine, Bronze turkeys, and Barred Plymouth Rocks. He likes the country well, but says that many of his neighbors are moving to New Ontario and the N. W. Territories.

John M. Livingstone ('94-'96), the former manager of the City Dairy in Ottawa, is now at Vancouver, B.C.

John C. Cook ('92-94), is farming at Milberta, Lake Temiscamingue, New Ontario.

E. Allen Scholfield ('85-87), who, after leaving Guelph, went into the paper business at Holyoke, Mass., has since gone to New Brunswick, where he is running a large paper manufacturing establishment in partnership with his brothers.

A. T. Wiancko, B. S. A., ('95), is now Professor of Agriculture at Purdue University, Lafayette, Indiana.

S. P. Brown ('86-88), proprietor of Maple Grove Cheese and Butter Factory, at Birnam, Ont., was employed during the past summer by the Western Dairymen's Association as one of five travelling instructors among the cheese factories of Western Ontario.

E. C. Drury, B. S. A. ('00), President of the Union, is now addressing Farmer's Institutes in Eastern Ontario.

H. B. Sharman, B. S. A., is attending Chicago University. In writing of our Experimental Department, he says, "I follow with growing pride and admiration your work over there, which is growing in scope and thoroughness."

W. J. Kennedy, B. S. A. ('96-98), Professor of animal husbandry at Ames, Iowa, and J. J. Ferguson, B. S. A. ('94), of Swift's, Chicago, spent their Christmas holidays at their homes in Eastern Ontario.

Douglas Weatherstone ('82-84), writes us from Misantla, E. de Veracruz, Mexico. He says, "I have a coffee and vanilla plantation here, and will say that the experiences gained at the O. A. C. have been of the greatest benefit to me."

P. O. Vannatter ('91-93), who was formerly in the Experimental Department here, has charge of the experimental work at the Agricultural College, Knoxville, Tenn.

Dr. A. G. Hopkins, B.S.A., ('97-'99), D. V. M., has returned to take a prominent place on the editorial staff of the *Farmers' Advocate*, at Winnipeg. With three such men as W. J. Black, B.S.A., ('02), Editor-in-Chief, M. W. Geddes ('98-'99), head of Calgary branch office, and "Doc." Hopkins, on the staff of the *Advocate*, we may be sure that the paper will advance faster than ever. Mr. Hopkins has been for some time in the Dominion Government Veterinary Service.

## Book Review and Exchange Column.

The funeral of the late Mrs. James McIntosh took place from her late residence, corner Queen and Palmer streets, on January 5th, in the afternoon. Rev. R. J. M. Glassford conducted the services. The pall-bearers were Dr. Mills, Prof. Harcourt, James Watt, G. B. Hood, Wm. Burgess and Peter Anderson.

Mrs. McIntosh had been in somewhat precarious health for a couple of years back, though able to be about. During a visit to her daughter at Orangeville she caught cold, and the subsequent developments were too much for her strength. Her husband and family were with her when she passed away on Sunday, January 3rd. She was the wife of Jas. McIntosh, formerly mechanical superintendent of the O. A. College, and the eldest sister of the late James Innes, M. P. Mrs. McIntosh was a woman of sterling character and deep religious principle, and her quiet, kindly disposition had endeared her very much to her more intimate circle of friends. The family are J. Innes McIntosh, of the Mercury, Mrs. Ferrer, Mrs. Wm. Macdonald and Mrs. C. R. McKeown, Orangeville.—Guelph Mercury.

Ex-students of the O. A. C. who knew the late Mrs. McIntosh, will know that the above description of her is no mere flattery. In the days when Mr. McIntosh was connected with the college Mrs. McIntosh was a well known friend of every student, and to these her death will mean a personal loss.

The Christmas issue of *Acta Victoriana* is a winner. To describe it as it deserves would take more time and space than we can afford, therefore we ask the students to see it for themselves. It contains 140 pages of reading matter, and is profusely illustrated. To a Canadian, and especially to a college man, it is better than any 35-cent magazine in America. Out of such a collection of excellent articles it is impossible to say which ones are best, but "Scenes and Songs of Acadia," "Canadian and American Relations" and "Canadian Literature" are well worth reading; "so are they all."

In this number of the REVIEW we have the pleasure of welcoming two new college journals, both of which make a very creditable showing. One of these is edited and managed by the students of the Royal College of Dental Surgeons, the other by the agricultural students of Cornell University, Ithaca, N. Y. The former paper is known as *Hya Yaka*, and is certainly an enterprising paper. In its third issue, it has somehow run foul of the faculty of the institution for criticising too severely the curriculum of the R. C. D. S., and the methods of teaching followed at that institution. If its criticisms were just or otherwise we cannot say, but we know that if its editors can manage this paper as well as some of their number can play Rugby, *Hya Yaka* will have a successful career.

The *Cornell Countryman*, which is the name given to the Cornell Agri-

cultural paper, is also a very good paper, judging from its opening issue. A neat brown cover, encloses about thirty pages of printed matter, well illustrated and well printed on good paper, its editors may well be proud of their initial effort. It contains articles by Prof. Bailey, John Craig and Miss Martha Van Rennselaer, besides articles by the students, and we are very glad to have it on our list of exchanges.

The *Farmer's Advocate* has made its debut as a weekly agricultural journal, and already shows itself worth the subscription fee of \$1.50. The weekly issue is quite equal to the previous fortnightly issue.

"GRASSES AND HOW TO GROW THEM,"

BY PROF. THOS. SHAW, OF UNIVERSITY OF MINNESOTA, EDITOR OF "THE FARMER," ST. PAUL.

Until now no means have been presented to farmers and others interested of gaining a practical knowledge of the comparative values and cultivation of the grasses, yet every farmer and rancher is dependent upon this crop, hence the value of a book, which

concisely and simply written, discusses the useful grasses from the standpoint of the stockman and farmer, giving the characteristics, adaptation, cultivation and care of each variety. The careful detail with which these are written, and the many engravings, showing the peculiarities of the different varieties, insure for the work a useful future. Altogether, in material and make-up, the volume is worthy of an author whose able pen has rendered such priceless services to scientific agriculture. Published by Webb Publishing Co., St. Paul.

Acknowledgements. (*December Exchanges*), Acta Victoriana, The Argosy, Vox Wesleyana, The College Paper, The Illustrated Collegian, The Rocky Mountain Collegian, Trinity University Review, M. A. C. Record, Ottawa Review, Weekly Sun, New Glasgow Times, Cornwall Freeholder, Saskatoon Phoenix, Prairie Witness, Acadia Athenaeum, McMaster Monthly, The Hya Yaka, Cornell Countryman, The Merchistonian, Brandon College Monthly, The Jayhawker.

## College Reporter.

### The Years That Lie Before.

To win success in life, a fixed principle, an unflinching determination is necessary. A lifetime is composed of years, and months, and days, of minute details which make up the whole; therefore, the ideal must be kept ever before the mind. He who rouses to enthusiasm at one moment, and at the next, wavers and desponds, can

never attain success. It is the steady mind which never falters or flinches, from which the vision of the goal is never absent for a day nor for an hour, that wins in life's race. The year and the years that are to come, should present to each mind the consummation of a great central object which requires steady, persistent effort, wisely directed.

Without a definite purpose, life cannot be, in any sense, a success. The purposeless man is like a ship without a rudder, driven hither and thither by the tides of popularity and adversity, struggling in the vain attempt to reach some harbor. He pursues what suits his momentary fancy, and when tired, follows the direction of fancy to another course, equally unstable. He has nothing substantial to recommend him, no ability to do, or to be, in a world which requires the best of work and of life in every one of its citizens.

A great, absorbing principle or object is the stimulative, directive power of every life which is truly worth anything to the world. Cromwell determined to give Englishmen good civil and religious institutions, and he did it. Pitt resolved to banish corruption from the British Government, and he fought alone until victory crowned his efforts. It did not stop Lincoln, determined to raise four millions human beings from abject slavery, that men bullied, and plotted, and threatened; that the very nation would be rent in conflict. The great principle of liberty could not, in his character, be outraged. A definite object concentrates all the powers of body and mind for its attainment. The physical being is developed to suit the demands of the work, the mind is trained to do the certain special labor which the purpose requires. Concentration of effort is thus induced, and concentration of effort means final success.

A distinct purpose is necessary for the accomplishment of a great life work, and the character of the life purpose determines whether the re-

sult will be true success or not. After all, the real object life is happiness. Widely varied are the means taken to satisfy ambition and obtain happiness, but the hermit, striving to satisfy his spiritual nature, seeks happiness just as much as the epicure, who seeks it by indulging his physical nature. This divinely implanted desire for joy is good, without it, life would not be worth living. Happiness is to be sought above all other things, but, in many lives, the means used to obtain happiness result in misery. The pursuit of power, influence, wealth, for selfish ends never has brought and never will bring happiness; pursued for the good of others, they are of untold blessing. Napoleon satisfied his ambition and died unhappy and unwept. William the Silent, of Holland, saw his desire accomplished, and died happy in the love of the valiant Dutch, who, with him, had fought so nobly for liberty. It is the life devoted to duty, to service, to the absorbing purpose to benefit humanity, that brings the true reward.

As men, and as college men especially, we should have some definite aim; we must have, to make our lives count. The opening of a new year induces a momentary glance into the future, a tendency to castle-building, and visions of success and happiness. Too often, we forget how these are to be obtained, and go on with no definite course marked out. If the years that lie before are to bring true success and real happiness, a steadfast, unwavering purpose is essential, a purpose that develops character, that faces duty without flinching, that has for its real, ultimate, object, the good of humanity.



F. H. REED, DEAN OF THE RESIDENCE.

**Our New Resident Master.**

The Third Year lost one of their strongest men, and the college gained a good resident master, when F. H. Reed accepted that position last December. Reed has, from the very first, been a favorite and a leader among students, because of his strong character and well-marked executive ability. He entered with the class of '05, of which he was made president, and he held this position until December. He has also held important offices in the Y. M. C. A., was one of two representatives sent to the Northfield Conference in 1902, and in the Literary Society and Athletic Association he has been prominent and active. He has had a very creditable class standing, and ranks well as a judge of live stock. He was one of the judging team sent, in 1902, to Chicago, where he won a high place and a substantial prize. He is, in fact, an all-round man of the best type. Esteem for, and confidence in him, have, therefore,

increased as the years passed. He has been too broad for mere year spirit. A strong, deep, college spirit and interest in all students was his, and his service was largely given to the student body as well as to his own class. In his new position, the students may depend that he will still strive to serve their very best interests, and that he deserves the respect due from manly men to a manly man.

**Y. M. C. A. Notes.**

The Association begins work this year full of hope and vigor. The new executive is succeeding a very able one of last year, and the earnest co-operation of all the students is required to make this a record year in Association work here. The fact that many of the best men of all departments of college life are in the Y. M. C. A., disposes the student body favorably towards its work. There is, however, a necessity for each individual member to do his best to make the work successful. The meetings will be made as bright, interesting, and helpful as possible—and short. Let everyone come and have a good time.

Prof. Reynolds' Sunday morning Bible class is exceedingly instructive. It is an opportunity, which no one should miss, to become familiar with and to gain an understanding of the Bible.

The Mission Study Class meets, as usual, at 6.30 on Friday evenings. It has been suggested that a discussion of up-to-date missionary magazines form a part of the work. The committee will probably act on the suggestion. Everybody come and enter

into a lively discussion of missionary matters, character, and also enjoy a little singing.

During the holidays the Y. M. C. A. held a meeting at which Ralph Connor's "Man from Glengary" was discussed. The discussion of this magnificent character proved very interesting and inspiring.

**Literary Society Notes.**

The character of the new executive gives promise of a successful term in the work of this very important

organization. Yet, the real success of the work, the amount of good which each member obtains, rests entirely with himself. The Executive may give direction and help in a general way, may offer inducements such as an oratorical contest, but the Society cannot be said to be truly successful unless every member makes a decided improvement in public speaking. Let each member do his best, take advantage of every opportunity, thus giving all the members the greatest good, and the Society will be truly successful.



**Macdonald**



**Notes**



**T**HE Domestic Science Course reopened January 5th. The Macdonald Institute is now nearly complete, and the classes are being held there. The kitchens are complete, and the girls are deeply interested in the why and the wherefore of cooking. The first lesson which was given was a very practical one—on the art and science of dishwashing. It was firmly impressed on our minds that "Cleanliness is next to Godliness," at any rate in the dishwashing line.

In addition to the regular courses, a short course of three months was opened. The pupils of this course take up practical cooking almost entirely. About eighteen girls have entered for this work.

The staff has increased by two new teachers. Miss Holland, who has charge of the short course students, is a graduate of the Domestic Science School which was at Hamilton until this last year; and Miss McEwan, who teaches the Home Nursing and Emergencies. Miss McEwan is a

graduate of Montreal General Hospital.

The results of the Christmas examinations were quite encouraging. Either the girls were more clever than they thought, or the examiners were very lenient. The most successful girls are still smiling like Chesshire cats—as a little Freshman was heard to remark.

The first demonstration took place Thursday, Jan. 14th. Miss Strong, assisted by Miss Miles, gave a very interesting demonstration on the subject, "Luncheon Dishes." Miss Strong demonstrates exceedingly well, and when at the close, each girl came around with a spoon, as large as possible, with which to sample the results, there certainly was no doubt as to her ability as a cook.

## Athletics.

### "Our Laundry."

"The straight I have fallen into my patience cannot bear!  
It frights my reason—warps my sense of virtue,  
My laundry changes into a thing, I look at  
With abhorance! Listen to me."

Taint for the wear and tear,  
Nor the loss of divers dollars;  
But the way they lave my shirts,  
And reconstruct my collars.

No wonder that I kick;  
When a fellow can't be tidy,  
As an O. A. C. man should,  
Or a priest on Holy Friday.

There's a shirt I bought last month,  
For a dollar, at an auction,  
It is plastered up in streaks,  
By some horrible de-coction.

Those sheets I brought from home  
Were white as winter weather,  
Now they've taken on the hue  
Of a side of yellow leather.

My nightshirt is a sight,  
From the caudle to the collar.  
I've a mind to start a show,  
With admission, half a dollar.

They wash the stuff by steam,  
Which saves a lot of bother;  
While they steal a march on time,  
And don't wear out the wather.

"In peace there's nothing so becomes a man  
As mild behaviour and humanity,  
But when the blast of war blows in our ears  
Let us be tigers in our fierce department."

KERRY O'BYRNE.

### A Plea for Athletics.

"The Field of Waterloo was won on the Athletic Field of Eton College." This statement must necessarily remain unchallenged, since it is universally admitted that the "Iron Duke" from whom we quote, was competent to judge of such matters; and on this occasion knew whereof he spoke. In seeking to apply the sentiment implied in the above quotation to our own times and conditions, it is not our intention to assert that proficiency in hockey and football for the college man is a more important goal than intellectual attainment. Such an arbitrary assertion here would be at once unreasonable and out of place. We do claim, however, that in the case of the student athletics should be a veritable handmaid, ever attendant on literary and scientific pursuits; since both these phases of college life, the physical and the intel-

lectual, exert a naturally beneficial influence upon one another. It must appeal to all that an abundance of physical exercise is essential and even imperative to continued effective studying; while, on the other hand, efficiency and success on the athletic field is determined largely by the degree and extent of science employed in methods of training and competing. Development of physique should constitute the firm ground work, affording an enduring foundation for the more delicate structure of intellectual expansion. As examples, illustrating the realization of this fact in modern college life, we point to Oxford and Cambridge, where with the majority of undergraduates a member of the University crew holds a position quite as enviable and infinitely more popular than that of senior wrangler. In the United States, popular sentiment is so greatly in favor of college sport that the status of each of the American Universities is, in large measure, fixed by the results of its battles on the football field. Last, but not least, our own Canadian Universities illustrate a happy blending of sport with study, and ever keep in view the dual significance of the motto: "Mens Sana in corpore Sano."

We can all readily appreciate of what great achievements studious zeal is capable in the acquirement of knowledge and attainment to academic success; and it is reasonable to infer from this that our honor roll of athletic victories would be and the status of our college correspondingly raised, if universal enthusiasm were the prevailing characteristics of our

college athletics. Enthusiasm is here used in its broadest sense, and includes constant and regular practice on the part of players as well as the hearty co-operation and loyal support of those of us who don't play the game, but who will accomplish much—apart from the pleasure derived—by turning out en masse to all the matches; and in literally cheering our boys on to victory. It has been suggested by several that much might be done to promote competition and enthusiasm in hockey by providing a regulation sweater to be worn by those players only, who have participated in a stipulated number of City League games. The sweater would be an incentive to competition, as well as a reward for merit; and its introduction into the college would seem to be an experiment worth trying. In conclusion, the fact is worthy of emphasis, that, although we are laboring under conditions, in many cases detrimental to enthusiasm in athletics—for it does seem discouraging that our hockey practice must be conducted on an uncovered rink, and that we should be denied the use of our gymnasium at a time when we might be preparing for the Indoor Sports—still it rests with ourselves to so enter into the spirit of athletics as to have the effect of obviating such conditions. Let us each and all do what we are able to sow the seeds of the future supremacy in sport of the college, which has done much for us; and whose success should be our aim.

The O. A. C. Hockey team has again entered the Guelph City League. A splendid cup has been donated by Mr. Hugh Guthrie, M. P., to the



champions of this league; and our boys have excellent prospects of capturing it. The games will be played according to the following schedule:

Jan. 16—Bankers vs. Moulders;  
Page-Hersey vs. O. A. C.

Jan. 20—O. A. C. vs. Moulders.

Jan. 30—Bankers vs. O. A. C.; Moulders vs. Page-Hersey.

Feb. 10—Bankers vs. Page-Hersey;

Feb. 15—Moulders vs. O. A. C.

Feb. 22—O. A. C. vs. Bankers.

Feb. 27—Moulders vs. Bankers;

Page-Hersey vs. O. A. C.

March 2—Page-Hersey vs. Bankers.

The inter-year matches for the Marshall-Harris cup will be played according to a schedule of twelve

games, instead of leaving the contest to the three games at the end of the season, as in former years. The matches will take place on the college ice, and will be refereed by competent students. The following is the schedule:

Jan. 14—3rd year vs. 4th year.

Jan. 18—2nd year vs. 1st year.

Jan. 23—2nd year vs. 4th year.

3rd year vs. 1st year.

Jan. 25—2nd year vs. 3rd year.

Jan. 29—1st year vs. 4th year.

Feb. 1st—1st year vs. 2nd year.

Feb. 4th—3rd year vs. 4th year.

Feb. 6th—3rd year vs. 1st year.

2nd year vs. 4th year.

Feb. 8th—1st year vs. 4th year.

Feb. 12th—2nd year vs. 3rd year.

## Locals.



A Typical attitude of the "Gentleman from Nova Scotia."

First year man at Fat Stock Show, in company with several farmers, was admiring a carcass of pork.

Freshy to farmer—"You bet your neck that's a jolly fine carcass of beef."

Farmer, contemptuously—"It's a fine small carcass of beef."

The "God of Clay" wishes to return thanks to the "Lord" for his bountiful gift.

The Local Editor to the fair one—"Don't you think my mustache becoming?"

The Fair One—"It may be coming, but it is not here yet."

The students have been graciously granted an extra half hour's sleep in the mornings. Breakfast is now from 7.30 to 7.35.

Mr. Barber, as he takes his place at the breakfast table, after the above law had come into effect: "If I were *on time*, and I came down to find myself *five minutes late*, and the doors closed, I should leave the College at *once*."

Gummy wads of gristle,  
Little hunks of cake,  
Make a big commotion,  
And the — ache.

A. B. C., expounding on the lecture on Layerage in Horticulture,—“What does Bailey mean by the ‘pegging down’ of propagation? What would you peg men down for?”



This is an oat, o-a-t, oat.

We are glad to hear that the Staff, in spite of opposition, still claim it their privilege to set their papers to suit themselves, and incidentally, the students, although the “powers that be” claim there are some “who should be prevented from getting through.”

After having spent the week most profitably at the Winter Fair, Andy

Robertson is very much distressed because he was unable to find any Brantford (black leghorns) among the show birds.

We sincerely hope the Staff have provided the necessary where-with-all e. g. chairs, tables, books, etc., in the library for the Second and Third Years, who have a little (?) reading to do this term.

Overheard after examination of surveying—“I wish during the surveying lectures last term I had not taken so many off-shoots from the campus.” Some of these we are informed, terminated in the city.

Mr. Hyphen W Laager-Shanty wishes to express, through the columns of this paper, his sincere regret that he is no longer able to take lectures with the students of the Macdonald Institute. Nevertheless, he rejoices in the fact that he is now able to ride up in the car with them.

TID-BITS FROM 1ST YEAR EXAMS.

Baldwin (in Veterinary Anatomy)  
—“The peritoneum is the outer covering of the teeth.”

Wright (in ditto)—“The perioteum is the external covering of the heart.”

Question in English—Give an example of a concrete noun. McKinley—  
“She is a little beauty.” We hope she is, but who is he referring to.

It is reported that the natives of “Craig Avenue” awoke one morning to find that the usual shower of dust and plaster had not fallen that night. It is also reported that many of the afore-mentioned natives, in astonish-

ment at the fact, forgot to perform their morning ablutions.

Moral (to authorities):—Stop the dust and save the water.

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A LOVE STORY.

(Tolled by a Mercury Bell after a recent walk.)

O happy love! where love like this is found!  
O heartfelt raptures! bliss beyond compare;

I've paced much this weary mortal round,  
And sage experience bids me this declare—  
If Heav'n a draught of heavenly pleasure spare,

One cordial in this melancholy vale,  
'Tis when a youthful, loving, modest pair,  
In other's arms breathe out the tender tale,  
Beneath the milk-white thorn that scents  
the ev'ning gale:

---

SIDE LIGHTS ON COLLEGE LIFE.

There is now a rule for every hour of the day, to say nothing of the night.

To hold meetings, students must sacrifice hours of sleep, or their one and only cherished hour of recreation.

The Gymnasium is closed, could not some "reason" be trumped up to close the Rink also.

Why have the students moved "down town?"

Ask no questions and you will be told no lies.

---

EDITORIAL ADVICE AND OBSERVATION.

Look before you sleep.

Many are called, but few get up.

Economy is the thief of time.

A lie in time saves nine.

If we used the advice which we have given away, we should need none from others.

Fools rush in and win, where angels fear to tread.

Where there's a will, there is a law suit.

The silence which is golden, is that which we never see during study hour

Because a man likes work, it does not follow that he likes to be worked.

He laughs best whose laugh lasts.

The meek may inherit the earth, but that does not prevent those who are not meek, getting possession of it.

A fair division is where we get the lion's share.

---

One day, not very long ago, a student wended his way to the dairy building. He wore a broad, deep smile, fully half-an-inch thick, and carried in his pocket two bottles of that lacteal fluid, known to the plebian born, as milk. Those bottles contained representative samples from college dining halls, separated by the wide gap, which divides the rulers from the ruled. Silently, and quickly, the youthful investigator made his tests, and stood paralyzed at the record of the scientific truth-teller, which stood before him. Sample No. 1 revelled in the creamy richness of 5.01 butter fat, while No. 2 stood cold and blue as a sweet potato patch after an early frost—a measly 2.5 per cent.

Oh, Dr. Babcock, wizard of the dairy and knight of the problems of dairy chemistry, little did you imagine that your scientific researches would reveal the great truth, that even the college dairy cow realizes the fact that all men are not born equal.

Then let us face the problem as

men, and as we gaze at our college libations of the thin, blue fluid, let us, as stockmen and agriculturists, decide to devote a large measure of our future time to the one great cause of developing a race of college cows which will prove to be no respecter of persons.

WORDS OF GREETING.

1st Horticulture Lecture—"You did not do enough outside reading last term; I would like you to read the following: Book No. 1, Book No. 2, and 3 weeklies."

1st Physic Lecture—At Easter you will be held responsible for the contents of Book No. 3. I should also like chapters 1—15 in Book No. 4." (This book has only 17 chapters.)

1st Chemistry Lecture—"I want you to read more this term; you will be examined in the following: Book No. 5, Book No. 6 and half Book No. 7.

1st Economic Lecture—"You will not benefit unless you do a large amount of reading on this subject; I'd advise the following: Book No. 8, Book No. 9."

Two more books in English and one Agriculture make 12 books, with an average of 300 pages. Combined, this comes to 3,600 pages of matter to be read during recreation hours, of which we have one whole one per diem.

Perhaps the Faculty hope to give the Sophomore's fourth year work next year and the Juniors their degree in June of '04.

Don't diversify too much. Rather devote your attention to one or more branches of labor which work together harmoniously, and go into other lines simply enough for the home supply. When such a plan is attempted one takes a deeper interest in everything. Everything pays because it has its proper place and receives its proper proportion of care. Under such conditions one truly "lives."

Why is it that a student is  
Ashamed to say he works?  
And why do Freshmen laud and praise  
The man who duty shirks?

\* \* \* \* \*

You all have heard of William Brown,  
In his Seniority:  
A shining light around the club,  
The Freshman's idol he.  
At lectures—mere formalities—  
Of course he'd never been,  
(Except when passing by the door  
He happened to drop in).

They think he King of Idlers is,  
Ennui caused that yawn;  
And little know his mid-night oil  
Burns till the rosy dawn.  
He is a "square-head," "all-round-  
man,"  
And "darned-fine fellow" hailed;  
The lists come out, he stands well up,  
The Freshmen all have failed.

\* \* \* \* \*

To any whom this cap may fit,  
Pray do not take and wear it,  
But with the needle Diligence  
Seek duly to repair it.

—Sardonius.

## An "Original" Letter.

OSLER, Sask., N. W. T. April  
6th, 1903.

Mr. Miller Morse Co.  
Wpg. Man.

Dear Sir,—

Will you kindly Put Me the Price  
for Bench Drills No 1 Length 30 in. of  
Bed. Sene me a Katalogue from all  
Cains of Drills Bench Vises E. T. C.  
and Net Prices if you Please I feel  
sick about Dooing Buissenes, any  
Moor as ME Stoor is about Empty &  
I Cant geat The goods Brought up  
The Sisson is over now for Blustoon  
& Some other goods That I shuld have  
heer 4 Weeks a goo & The Car is Not  
Between Regina and Osier Yeat I  
Dont Know What To if I Dont geat  
The Goods Sun The have send me Do  
Brandon, or Silkirk. Peoples Mack  
up Putt-enear Craesae I groth Lotse  
time to Writing you Becuse if Peoples  
ask for Something in goods Nails or  
Something else all I have to Do as say  
Now Ex—me mi goods have Not  
arrived Yeat. Hopping to Receive  
Some befor Christmas I am & Obglie,

Yours truly,

J. J. HEINRICHS.

## Stopping the Paper.

I've stopped my paper, yés I have;  
I didn't like to do it,  
But the editor got too mighty smart,  
And I'll allow he'll rue it.

I am a man as pays his debts,  
And I won't be insulted,  
So when the editor gets smart  
I want to be consulted.

I took his paper 'leven years,  
And helped him all I could, sir,  
And when it comes to dunning me—  
I didn't think he would, sir.

But that he did and you kin bet  
It made me hot as thunder;  
Says I, "Ill stop that sheet—I will,  
If the cussed thing goes under.

I hunted up the measly whelp,  
And for his cunning caper,  
I paid him 'leven years and quit!  
Yes, sir, I've stopped his paper!

—Ex.

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