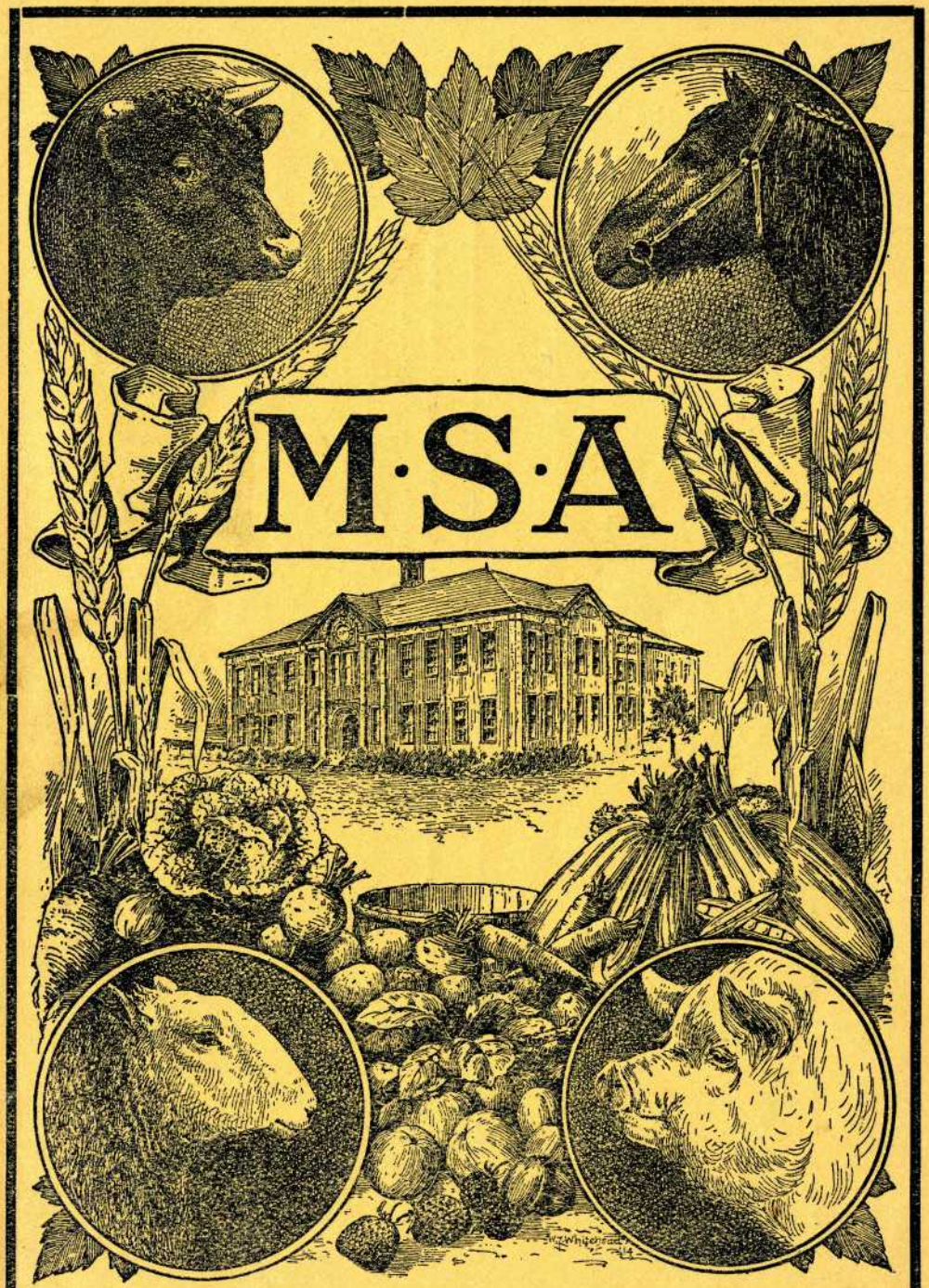


FEBRUARY, 1914

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Don't fear for a **Windsor Disc Harrow.** Don't worry for a second that it will play false on any kind of ground—whether clayey, stony, rough, gullied or stumpy.

**The Windsor** is so substantial, so well-braced at every angle, that no matter what it strikes it withstands the shock. **A Windsor Disc Harrow** will do the work of a plow and a spike-tooth harrow at the same time, and save twice the work of man and horses, besides opening up the ground and pulverizing the soil better. The

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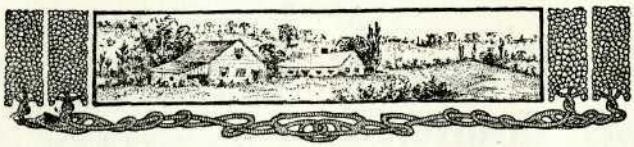
Both of these Harrows have ball-bearings and square steel axles running through the discs. Thus they cannot easily work loose. Ask our agent in your vicinity about these economical machines. He will gladly answer every question. Write us for catalog, " ." It's free to every one.

**THE FROST & WOOD COMPANY, Limited.**
Smith's Falls, Canada.



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The
# MARITIME STUDENTS' AGRICULTURIST

Vol. VI. Truro, N. S., February, 1914 No. 4



## EDITORIAL.

Perhaps there is nothing more striking about this little magazine this year, 1914, than its appearance under a new cover. For a year or more the M. S. A. had got along very well with its old cover design, drawn by one of our own students. But that cover had its defects as well as its merits. While it was undoubtedly typical of agriculture and rurality, yet it lacked the mark of progress, of the attempts being made within its pages to elevate and improve agriculture as a science as well as an occupation. The old cover was unsatisfactory and everyone wanted some change. And we got it. We have long desired to get a cover design which we could consider practically a permanency—now we believe that we have found what we sought. We flatter ourselves that it will be many a day before our successors will find a design they will consider worthy to replace the one we shall hand down from the year 1913-14.

We cannot too highly express our gratitude for this work of art, to its designer, Mr. W. T. Whitehead, and to his son, W. E. Whitehead, '14, our fellow student, thru whose agency

the design was obtained. Altho Mr. Whitehead, Sr., lives on the other side of the pond, still he takes an interest in the institutions in this country (among which we number the M. S. A.), sufficiently keen to put himself to the trouble and pains of originating and promulgating improvements in this, our modest organ. We thank Mr. Whitehead on behalf of all who shall ever see on the M. S. A. the improvement which he has so kindly given us.

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A college magazine, such as this, can never expect to exert very much influence on the methods employed by its agricultural readers. Regular periodicals, having a permanent staff and adopting definite lines of enterprise, may in time and certainly do sway the minds of their readers,and thus, directly or indirectly, control to a large extent the trend of public opinion. But with us, it is different. The most we can hope to achieve is that some thoughtful reader will find, in our elementary treatises of the subjects we discuss, some hint, some single original idea, which he can modify and utilize to advantage. And if our readers can find such an idea in these pages and can and will improve the opportunity to utilize it, we shall have attained the end toward which we strive, so far as information is concerned. But this magazine has another and a higher object even, than the education of the reader. It is the education of the writer and contributor.

We come to college to get educated. We want to know how to be competent and worthy citizens, how to forward the interests of our occupation; and how to better the affairs of ourselves and our fellow-men. If we do not learn something of these things, our college education must be branded as a failure. And a very effective way to acquire knowledge is to try to impart it. That is where the college magazine comes in. We have a series of lectures on one branch or another of agriculture; we have a fairly clear conception of the subject,so let us write it down as tho we were telling it to somebody else. In other words, let us write it up in an article for the magazine. When we have written it out and read it over, we see its strong

points and its weaknesses very distinctly, we consult a text-book on one or two weak points, amend our article accordingly and "hand it to the editor." The editor reads it over, learns a little something—not much—, and it appears in the magazine. Then the subscriber reads it and derives his benefit, little or great, according to circumstances.

Now in all this progress of the article, who derives the greatest benefit? Surely and unquestionably its author. Of the three things we seek to learn, he has advanced in all. He is learning toward efficient citizenship by learning to classify and arrange his ideas, to observe defects and amend them, and to present his ideas to suit his hearers. It is only thus that a man can hope to think and act intelligently on questions of public concern. He is learning to forward the interests of his occupation, in that, in order properly to present his subject to others, he must first obtain a clear idea of it himself; thus he learns to reason out problems which concern the work in which he is active, and incidentally he may impart valuable information to his reader and so advance the cause. And in both these ways is he bringing about the general betterment of himself and his neighbor.

To bring to pass such benefits as those roughly outlined above, *a college paper ought to be essentially the students' magazine.* Ours is the Maritime *Students'* Agriculturist. While articles contributed by the instructors are often highly desirable, and they certainly tend to improve the paper; yet they do not, to an extent equal to students' articles, improve the students themselves. And that is what we are after. So now, for next month, let every student, Junior or Senior, write something for the last issue of the M. S. A. for the year 1913-14. Make the last number the best number. Who cares whether you can write well or not? Is not the editorial staff organized to read and pass upon every article they receive? Let *them* decide the question of merit: *you* supply the goods.

R. M. LEWIS, '14.

## FORESTRY FACTS.

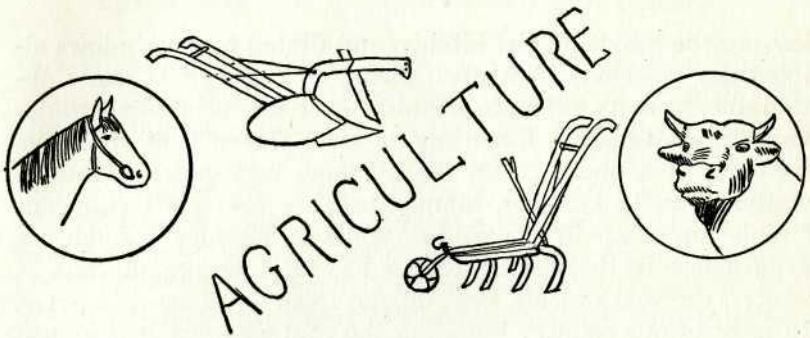
Rabbits have damaged or killed thousands of young forest trees in the West by eating the bark around the base of the stems.

Circular saws of paper are being increasingly used in England for the cutting of thin plates of wood. Veneers made in this way are so smooth that cabinet-makers can use them without further planing.

It is a common superstition among the woodsmen of eastern Canada that many of the dead larch trees have come to life again. The trees noticed were not really dead, however, but had appeared so because they had been entirely stripped of their leaves by the larvae of the larch saw-fly. The tamarack is a valuable tree because of its ability to grow in swamps, and its wood is highly esteemed for fuel, ties, fence-posts and construction work generally. Yet through the continued ravages of the larch saw-fly over one-half the tamarack in eastern Canada has already been destroyed.

Mr. W. N. Millar, District Inspector of Dominion Forest Reserves in Alberta, says: "Along the north fork of the Sheep river is found the largest body of non-licensed merchantable timber which I have yet seen in the Rocky Mountains. It is rather remarkable that this timber consists almost entirely of lodgepole pine—there was in sight at least ten sections (10 sq. miles) of this timber.

Australian gum-trees have attained the enormous height of 480 feet, which is 140 feet higher than the most gigantic sequoias in California, and twice as high as the great firs of British Columbia. How trees supply their foliage with water at such a height is still a matter of scientific controversy.




## THE BOY ON THE FARM.

In the last issue I have endeavored to give a few of the reasons why I think boys leave the farm. Some, on reading the article, say that I would not try to educate children, and to improve them as the days go by, but leave them to do as they like.

Now I mean no such thing, and I fail to see how my article suggested such an idea. What I do mean is, that those conditions which tend to elevate—not picking him up, and throwing him across your knee—the child, to make him see the value, the beauty of farm life, should be created in the country. The question that naturally follows is—what are those conditions?

My ideas, as to what a boy's life should be on a farm shall constitute this article.

First of all, let us turn our attention to the home and see what that should be like. Remember I'm not ridiculing the home. Our parents do the very best they can, and we should not

"Mock their useful toil,
Their homely joys, and destiny obscure."

But that won't prevent us from doing our share to improve them.

First of all the home should be bright and cheery, good big windows and plenty of fresh air—when I say big windows, I don't mean big window blinds also. I would be in favor of

leaving the blinds off the kitchen and dining room windows altogether, especially in winter; plenty of fresh air is easily obtainable, and its entrance should never be prohibited under any circumstances. Experiments have shown that the germ contents of a house is, on the average, very much higher in winter than in summer, simply because there is insufficient circulation of air in the winter, while in summer, though the atmosphere in the warm weather has far more germs than in winter, the windows are kept up,and fresh air allowed to enter. In most of our country homes in the cold weather, it is almost considered a crime to open a door or a window. The fallacy of this practice is again brought out in the fact that "colds" are much more prevalent in winter than in summer, in fact the same may be said about all germ diseases. I need not say anything about the value of cheerfulness, that is too apparent.

Something that adds not only to the beauty of the home, but links the child closer to nature, is a flower garden and a lawn. Now I do not mean a lawn that requires a man steadily clipping away with a lawn mower, nor do I mean that a lawn, to give beauty to a home, needs to be kept clipt; nor do we have to buy expensive and delicate flowers to exhance the flower plots. The old stand-bys, like roses, sweet-peas, nasturtiums, cowslips, etc., cannot be surpassed for their suitability for the country home garden. The wild rose makes a good showing in June, and what is easier grown? A hop vine trained up the side of an old building, looks more natural than an old, bare, forlorn looking wall; morning glories too, are great favorites for this purpose. Best of all plants are our common trees, judiciously planted. What a desolate place is a farm house, with not a tree near it!—why an old stump on a wide plain has more beauty than such a dwelling.

Now welcome to a very important phase of the subject, and that is education. What do we mean by education? We mean all that tends to discipline his temper, develop his tastes, correct his manners, in fact everything that influences a child for good, though the good is not always attained.

Let us look for a little while at the average means of educa-

tion in the country. The school is usually built in a little "hole," cut out of the woods; and consists of a small rectangular building, with three or four windows on each side; a little porch is over the door. The seats are too small or too big, and improperly placed. The blackboards are all cracked. The teacher has a desk in one corner, with a register, and half a dozen school books on it, and in nine cases out of ten, an old strap is to be seen, which has already done its part in life's battle, in constituting part of a set of harness. In fact everything has a desolate look. The teacher has lost patience and the scholars are wishing Saturday didn't take so long to come. They are no more interested in getting an education, than the people of Central Africa. What is the trouble?

First of all the attendance is too small; the school is improperly built and improperly situated, with improper surroundings. The children are not taught right at home, and too often not taught right in school. A good teacher always has her pupils interested in their work. I do not want to say anything against the teachers, but I honestly believe that seventy-five per cent. of them if not more, should never be allowed to teach school. Well, what can we do? We're short of teachers as it is. I have an idea that country schools should be consolidated. This would mean less teachers, and then only the best need be employed. Better schools would be built, with more modern means of instruction. A school garden could be more easily maintained to teach the scholars elementary agriculture, along improved lines.

You will often hear that these consolidated schools are a failure, but does that say that the principle in itself is no good? Undoubtedly the reason why they fail is because the people fail to stand behind them. However, they don't all fail. Those that do continue to exist are proving a great success, and that is one reason why I believe they should be given more consideration. This is too broad a question to discuss anyways fully in an article such as this, so we will now return to the farm and see what can be done there to increase the boy's interest in agriculture.

Now most boys are very much interested in stock so here is one means of pursuit. Why not let him have a colt to raise? Not one that he can call his in the usual sense, but one that he can actually own, not only when it is growing up but when it is mature and as long as the animal remains on the farm, and when it is sold let the boy have the money and by all means let him do the selling. This will increase his interest in horses, make him give them better care, and increase his knowledge along that line. Did you ever notice what pride a small boy who is just able to talk, has, when upon your asking him if he owns that little colt or calf, or whatever it might be, he answers "yes, that is mine," and on your saying that you guess you'll take it away with you, how quick is his pride changed to indignation and anger?

Another way to interest him in farm ways, is to give him a corner of the garden to look after, and to sell the product in the fall, and let him keep the money. Don't do as is sometimes done by some fond father; give the boy a piece of land because it happens to be famous for weeds, or rocks, or any disadvantages as those, but give him the very best piece of land in the field. I remember one time a boy was given a piece of land to grow some vegetables in for himself, but he got it because it was underneath two large birch trees, rather rocky and inconvenient to get at. Needless to say the boy's profit, though he really worked at it in earnest, was nothing.

A boy likes a little bit of responsibility,and he should be brought up with a little responsibility now and then,to teach him what will be expected of him when he is a man.

J. B. '14.

(Next month this disquisition will be concluded.—*Ed.*)

## SELECTION, BREEDING AND CARE OF SHEEP.

From the early history of man sheep-raising as a source of profit has marked its annals down to the present time, and it appears that each year makes advanced progress in the improvement of our flocks. This has required and still calls for scientific study combined with experience in order to keep up that standard of excellence which has been obtained in the various breeds of our sheep.

We certainly should become more and more convinced of the fact that more attention must be paid to our flocks and herds, as we can no longer depend on grain-growing alone. The raising and feeding of live-stock must therefore take a foremost place in our agricultural pursuits as our soils have become partially worn out and nothing can restore it to its former fertility so quickly as the keeping of sheep.

It is advisable to breed along some distinct line as we can not afford to breed in a haphazard way. I would advise purchasing a few choice ewes from some reputed breeders. These ewes should possess all or as many as possible of the typical characteristics of the family they represent.

A shearling lamb is very desirable for breeding purposes. Select the choicest of the ewe lambs but do not breed them until two years old, otherwise their lambs may have a deteriorating effect upon the flock. To make sheep-husbandry a success we should watch not only the breeding, but also the feeding, supplying plenty of fresh water the year round. Juicy and succulent food is required to keep them in a healthy condition. This may be had in the fall of the year when the pasture is dry, by allowing them to feed on rape, turning them on when the leaves are dry.

A few turnips in winter will also be a stimulus to them They should be fed a liberal supply of fine clover hay. And after lambing a little bran should be fed with the turnips, so as to supply plenty of milk for their offspring. Sheep should have access to salt, as it is essential to good health. They do not require an expensive building to house them. It should be

partitioned to meet the requirements of dividing the flock as may be desired from time to time. Keep the ram in a pen by himself until his services are required. The apartments should have enough windows to admit an abundance of light. They should also be well ventilated but free from draughts, and with wide doorways to prevent crowding when going out or coming in.

In conclusion, I might say the majority of farms are incomplete without sheep, as they will thrive where the horse or cow could not live, and will also partake of a greater diversity of food than any other animal, thereby eradicating many noxious weeds and turning same into wool and mutton. Since this branch of mixed farming is so profitable and requires so little labor it is evident that greater attention should be paid to this important factor of stock raising.

A. ILLINGWORTH, '14.

## THE FEEDING AND MANAGEMENT OF THE HOG.

Although occupying a less prominent place in the estimation of the farmer than the steer and sheep, the hog is, nevertheless, an animal of great value. He is easily reared, comes rapidly to maturity, is not particular as to feed, consuming offal of all kinds, and yields a larger amount of flesh in proportion to his live weight and to the food which he has consumed, than any other of our domesticated animals whose flesh is used for food. To the farmer of limited means he is invaluable, enabling him to turn the scraps from his kitchen and from his garden to the best account. On such fare, aided by a little barley,he can fatten a good pig and supply his family with wholesome animal food at the cheapest possible rate. The writer has received excellent results from the feeding of stale bread soaked in skim milk, mixed with smashed oats and corn meal. The stale bread being purchased from a bakery in busy

Amherst, N. S. The writer has proven that pork of excellent quality can be produced by the feeding of the above ration.

It too frequently happens that less care is bestowed on the breeding of pigs than on the other domesticated animals. From the early age at which they begin to breed there is need for constant change of the male, to prevent the intermingling of blood too near akin. These animals, too, are exceedingly sensitive to cold, and often suffer much from the want of comfortable quarters. Whether for fattening hogs, or sows with young pigs, there is no better plan than to lodge them in a roomy house with a somewhat lofty roof, the floor being carefully paved with cement or stone, and the area partitioned off into separate pens, each furnished with a galvanized iron and cement feeding trough, at the side next the dividing alley, and with adequate drainage so that the litter in them may be always dry. The period of gestation with the sow is sixteen weeks, and as her pigs may be weaned with safety at six weeks old, she usually farrows twice in a year. In Nova Scotia it is desirable that her accouchment should never occur in the winter months. It is a common arrangement to have a pig-shed so placed that the store pigs lodged in it can have access to the cattleyards, where they grub amongst the litter, and pick up scattered grains that have escaped the thresher, and fragments of turnips and other food dropped by the cattle. On such pickings, and the offal from the farm kitchen, aided by a few raw potatoes, turnips or mangolds and in summer by green oats and vetches, a moderate number of store pigs can be got into forward condition, and afterwards fattened very quickly, by putting them into pens and improving their fare. There is no cheaper way of fattening hogs than by feeding them on boiled or steamed potatoes, mashed and mixed with a portion of barley or pea-meal. When barley-meal alone is used, it should be mixed with cold water, and allowed to soak for twelve hours before being given to the hogs. A small amount of coal, or charcoal should be frequently thrown into the troughs. These are eaten with evident relish and conduce to the health of the animals.

R. M. FILLMORE.

## INSECTS AFFECTING DOMESTIC ANIMALS.

Every person that keeps animals, whether for pleasure or profit, knows that there are a considerable number of insect pests which attack them both externally and internally. There is no animal that does not have some insect that is parisitic upon it. Some of these insects are only parisitic in their larval form, such as the bot-fly and warble fly, while others such as the sheep tick spend their entire life upon their host. In this article we will only deal with a few of the more common ones, and their life histories.

*The horse bot-fly.*

This is a familiar form of parisite to all horse-men, and has caused a good deal of dispute as to the amount of damage it does to the horse. It may cause damage in four different ways. First by clinging to the stomach walls and causing irritation and inflammation,secondly by loss of nutrition, thirdly by causing a stoppage of food passing from the stomach to the intestines,fourthly by sometimes getting loose in the intestines and attaching themselves to the walls of the rectum where they often cause serious inflammation.

*Life History.*

The adult of this species is a large two winged fly that is seen during the summer. The female only, hovers near the horse and appears to be in a vertical position, since the body is bent downward and the abdomen extended to its fullest extent. The fly then darts forward and glues its egg to the hair in an instant, then retreats a short distance and hovers till another egg is ready to be deposited. The operation is repeated at short intervals, so that hundreds of eggs may be laid in a very short time. The eggs are light yellow in color, and will be found upon almost all parts of the body, but more abundantly upon the shoulders and forelegs of the animal. These eggs hatch in from twenty to thirty days, and are greatly aided by moisture and friction, such as given by the tongue of the animal when licking itself. The larvae are carried by the

tongue to the stomach. As soon as it reaches the stomach it attaches itself to the walls by means of two small hooks near its mouth. There it lives and grows through the fall and winter till late spring, when it loosens its hold and is passes through the intestines escaping with the excrements. It then burrows into the ground to pass the pupal stage, which lasts for several weeks. It then emerges as a fly ready to carry out its business of providing for another generation.

*Control.*

In dealing with bots the most important point is to prevent the introduction of the larvae into the stomach. We have no way of doing this only by destroying the eggs, this being the most vulnerable point of attack. With horses that are kept in the stable or worked daily there is little trouble, as the flies have less opportunity of depositing their eggs upon them, and careful grooming each day will prevent a large proportion of those that are laid. With colts or horses in pasture, the case is different, as these get but little attention and perhaps are not seen for weeks at a time, so that the eggs may be deposited upon them by the thousand. They should be examined once every week or two weeks and the eggs removed or destroyed. This can be done in several different ways. By useing washes of diluted carbolic acid, about one part acid to thirty parts water, or rubbing affected parts with kerosene, by clipping the hair or by shaving the eggs off with a sharp knife or razor. By doing this very few of the larvae will reach the stomach of the horse. Any prescription of drugs to remove the bots from the stomach belongs to the work of the veterinarian, and any one intending to dose for them should employ his services.

*Biting Lice of Horses.*

These insects are not very common on horses that are well cared for in the stable, but are mostly found on colts and horses that are out in the pasture for some time. They occur mostly around the head, mane and tail, and are generally thickest in the spring. The best method for destroying lice on

horses or any other domesticated animals, is to apply a prepared emulsion of kerosene and soap, prepared as follows: Dissolve half a pound of good hard soap in one gallon of boiling water, then add two gallons of kerosene and stir thoroughly till an emulsion is formed. This emulsion should be diluted, one part solution to from nine to fifteen parts water. This mixture will kill the lice by contact, and can be applied as a spray. The lice can also be destroyed by a wash of carbolic soap.

The sucking lice of horses are not found so abundantly as the biting, and can be controlled by careful grooming. In case they become too numerous, a little kerosene applied to the currycomb or card will be found of value. If more vigorous treatment is required the same measures as applied for the biting lice will be found effective.

*Warble Flies.*

This is a very common parisite upon bovine animals. It only lives in the animal during the larval stage and causes considerable losses through the country. First, by weakening the vitality of the animal, causing a loss in the production of beef or milk, also by the maggots perforating the hides, causing some of them to be discounted or rejected from the markets. The adult is a large two winged fly, which appears during the summer and deposits its eggs upon the hairs of the cattle. These eggs hatch in a short time, and the animal by licking itself carries the larvae down to the gullet by means of its tongue. Here they remain for some time, finally making their way through the subcutaneous tissue up to the skin along the back, where they bore through, remaining in the hole about two months. When the larvae or maggots become mature they force themselves out through the skin and fall to the ground and burrow below the surface,when they enter the pupal stage. This lasts about four or five weeks or even longer, when the adult fly emerges.

*Control.*

This insect can be prevented from laying its eggs, by ap-

plying some sticky substance or this may be used in combination with some substance of obnoxious smell. Coating the back with a mixture of sulphure 4 ounces,spirits of tar on egill, whale oil 1 quart, is found effective. Apply this once a week. About January the warbles become large enough to detect by running the hand along the back of the animal, and at this time a little kerosene rubbed into each one, or the application of mercurial ointment will destroy the grub. The animals should be examined during March and April, and if any grubs escaped the first treatment, they will then be about mature, and can be easily pressed out and crushed.

*Cattle Lice.*

There are three kinds of cattle lice, two are sucking insects and one is a biting insect. These lice are found in great numbers, especially the sucking species. They are found most abundantly in the spring. They infest particularly the neck and shoulders, and these parts are often worn bare by the animal, in trying to rid itself of the irritation caused by these visitors. The eggs are glued to the hairs, as is the case with all lice, and hatch in a short time, the young resembling the adult. They cling to the skin by means of two small hooks, and, inserting their beaks, commence sucking the blood. The control measures are the same as those given for the horse louse, either kerosene emulsion, carbolic acid soap, or mercurial ointment can be applied.

*Horn Fly.*

This insect causes a considerable amount of loss to stock breeders, the loss showing in reduced vitality, lack of growth or in loss of milk. The loss is the direct result of the irritation to the cattle which keep them in perpetual worry, and interferes with their feeding, also from loss of blood, where the flies are in great numbers.

The adult is a small fly, about half the size of the common house-fly. They appear sometimes as early as May, but are thickest through July and August. The eggs are laid on fresh dung. The flies dart for an instant from the cattle to de-

posit the egg immediately the dung is passed. The eggs are laid singly, never in clusters. The eggs hatch in a short time and the larvae pass down into the dung, when full size they enter the ground to pass the pupal stage, which lasts for five to ten days, when the adult emerges. When the flies are seen clustered around the horns of the animal, they are doing no damage, as this is where they gather to rest. The flies usually prefer the concave side of the horns near the base. When at rest the wings are held nearly flat down the back, and the head is held in a nearly horizontal position, and the legs not widely spread. In the active sucking position, the wings are slightly elevated and held out from the body, the legs spread out widely, and the beak inserted beneath the skin of the animal is held in nearly a perpendicular position.

*Control.*

For the direct protection of the animal the parts most affected can be daubed over with some sticky, offensive substances to repel the flies. Fish oil and tar in equal parts is found to be effective. Spraying with kerosene emulsion is very good. The larvae can also be destroyed by spreading the droppings, so as to allow them to dry out quickly. This kills the maggots as they cannot live in dried dung.

*Sheep Tick.*

This insect is well known to all sheep breeders. They are generally found wherever sheep are kept. These insects belong to the same family as the true flies. The eggs are laid on the wool of the sheep, these hatch in a short time to small maggots, in this state they do little harm to the sheep. When mature they enter the pupal stage. The pupae are small, brown oval objects and can be found attached to the wool where the ticks are abundant. In a short time the adult emerges and commences sucking the blood from the host.

*Control.*

The tick can be greatly lessened in numbers by the vigorous application of pyrethrum, a most available remedy, during the winter, but the more practical method is the use of a good dip. If this is done thoroughly, there will be no need for

any other remedy. There are several good dips on the market. Dipping should be done just after shearing, and the flock should be kept in a new enclosure for a few days, to prevent any straggling ticks that may have been caught in pieces of wool upon brush or posts, from getting back to the sheep. These ticks will soon die if they cannot get back on to the host. The flock should be examined a week or ten days after dipping, and if any of the pests are found to have survived the first operation, it should be repeated, but if it is done thoroughly at first, a second application will be found unnecessary. All fresh additions to the flock should be examined thoroughly and dipped to prevent a reinfestation of the flock.

*Hog Lice.*

This is another very common parisite and is well known. The life history is very simple, the eggs being laid on the skin or hairs, generally in the folds of the skin. These hatch into young lice and look like the adults, the only difference being in the size.

Owing to the scarcity of hair these pests are easily controlled by the application of kerosene emulsion, by means of a force pump, or by washes of dilute carbolic acid or with sulphur ointment. This species is not known to attack other domesticated animals.

In conclusion, I would say that if every man who keeps live stock of any description, would give them more care, and try to keep down all parisites that are so common among them, he will be well repaid for all expense or trouble that he may be put to.

C. B. GOODERHAM, '13.

## CEMENT MILLS BEING CLOSED.

It is announced by the Canada Cement Company that, owing to the dullness of business, they have decided to close down four of their plants for the balance of the year 1914, or until further notice. The plants affected are those of Marlbank, Ont., Lakefield, Ont., Shallow Lake, Ont., and Calgary, Alta.

# HORTICULTURE

## A SMALL PATCH OF STRAWBERRIES.

With many people, in New Brunswick at least, the strawberry crop this year was almost a complete failure. At the home of the writer, however, an excellent yield was obtained, and it may be of interest to those growing strawberries to know how the berries were cared for.

The highest yield was from a small plot, 1-9 of an acre in size, which yielded over 1500 quarts. These sold in the St. John market at an average price of fourteen cents per box. This would be a yield of 13,500 boxes per acre, while the average yield seldom exceeds 5000 boxes. While it is true the plot was given more care than could be given a large acreage, conditions were not so favorable as they might have been. First the ground had only been plowed the year before the plants were set out, and the sod, which was mostly heavy moss, had rotted very little. It should be explained that the ground had been covered with stumps and in pasture until this plowing. Second, quite a number of plants were eaten off by white grubs, and third, the yield was lessened to a marked degree by the plants rusting during the picking season.

The year previous to the planting of the strawberries the ground had been planted to squash. After the squash crop has been removed it was given a fairly heavy top-dressing of manure and again plowed. In the spring it was harrowed as soon as it was dry enough to work, was plowed once more and then given a final harrowing before setting the plants.

The planting was done on the 14th of May. The plants were obtained from a grower near by and were taken from matted rows of one year old plants which had not been allowed to fruit. In setting the plants a shallow furrow was made, and the plants, which had been slightly sprinkled with water, were set in, about eighteen inches apart in the rows, the rows

being three feet apart. Only one or two furrows were made at one time so that the earth was filled in around the plants before it had been dried by the sun.

The plants were cultivated with a horse cultivator about every ten days throughout the summer and by frequent hand hoeings to remove the weeds and loosen the soil near the plants. At the same time the runners were trained in to form matted rows and the fruit buds pinched off.

About 150 pounds of fertilizer was applied shortly after the plants were set out and an equal amount the following spring. It was mixed in the following proportion: Bone Black, 50 lbs., Muriate of Potash, 20 lbs., and Nitrate of Soda 12 lbs. It was sown by hand along the rows and brushed off the plants with a broom to prevent burning of the leaves.

The plants were mulched for the winter with a thin covering of straw. On half the plot the mulch was all removed in the spring and the ground cultivated. On the other half part of the straw was left between the rows and no cultivation was given. The result noticed from this experiment was that the fruit from the part which was mulched was larger, had more lustre and was kept cleaner than on the cultivated ground.

The plot with the exception of one row was given two sprayings of bordeaux mixture, one shortly after the mulch was removed and the second about two weeks later. The sprayed rows rusted fully as bad as the unsprayed row and no benefit whatever could be noticed.

Most of the berries were of the Glen Mary variety, the remainder being Michigans. The Glen Marys gave a much higher yield. The fruit was larger and firmer and the berries carried their size well through the picking season.

F. L. W. '15.

## FIVE ACRES ENOUGH.

The appellation of this article may cause its readers to feel rather dubious as to its veracity; but I shall endeavor to make them feel differently ere they read the last line.

When I say "Five Acres Enough" I take into consideration the situation of the five acres, the quality and texture of the land,and most important of all, the man who is to manage it.

One must be near a town or city, which are quite numerous, and many an opportunity awaits the man who is willing to follow out this vocation.

Some people say to make ends meet from five acres it would be necessary to have it completely covered with glass. Such is not the case although a good glass house for this phase of agriculture is indispensable.

When a man confines himself to five acres and a green-house he has begun to learn the higher lesson of vegetable gardening. He begins to see that lettuce, for instance, may be grown very profitably in winter time in a green-house and this is the time when city folks appreciate a crinkling salad.

About the month of September a crop of lettuce may be grown outside and transplanted into a green-house, and by Christmas practically all this crop would be marketed. By this time another crop is ready which has, of course, been grown from seeds planted in flats.

Lettuce heads in winter sell for seventy-five cents per dozen; so you see a couple of hundred dozen means one hundred and fifty dollars ($150.00). This makes a nice return and keeps the green-house employed.

By thinning out and replanting four crops may be gathered during winter. Then again, each recurring Spring makes many city men want their own "wee" garden. These men demand young plants ready for permanent setting out. It would not be out of ordinary in a city like Amherst, Moncton, St. John or Halifax to dispose of say two thousand boxes of to-

matoes, cabbage and celery plants to those city people and adjoining farmers. These boxes would easily average twenty-five cents each; five hundred dollars ($500.00) is not so bad considering that he has enough left for his own summer gardening.

Seed for out-door plants is sown in flats about March first, for a climate like St. John County. Then by the latter part of April, or as soon as the weather is fit, the young plants are set out having spent a week or two in cold frames. Manure has been applied during the winter preceding, to say the three acre area actually cultivated.

Forty or fifty tons of manure would be enough for the whole garden. We can secure manure for twenty-five cents a load in St. John. So the manure one would have to buy would not exceed in cost over twenty dollars ($20.00) beside the cost of hauling.

*Commercial Fertilizers* are unquestionably an important factor in vegetable gardening, but to my mind nothing takes the place of well rotted manure.

*Asparagus* may be grown very profitably on a piece of sandy loam, if there be any. It never pays well on clay soil. Asparagus is a well known vegetable and a good seller. From a very small plot a large sum of money may be realized.

*Onions.* If there is a piece of muck, the best onions imaginable may be raised. I know a man who cleared one hundred dollars ($100.00) from not more than a twelfth of an acre. That wasn't bad when the man was still learning.

*Celery.* One hundred and fifty thousand (150,000) may be grown on an acre; it sells well and for a good price.

*Strawberries, raspberries* and *gooseberries* may also be included as money makers.

*Good seeds hard to obtain.* To the reader this may seem all sunshine; it is not the case. Every weed causes more or less worry, and besides the important labor question and the greatest of all the seed problems. Canadian seed houses are not what they are "cracked up to be," to use a slang expression.

It is impossible to get over ten per cent of some purchases from Canadian seedsmen, to germinate. Sometimes we test them ourselves because it would not be safe to risk a crop with so many unreliable seeder's seeds. We should not have to test them though, the men who send them out ought to test them. Why are they allowed to send them out when sometimes ninety per cent are infertile? We would be willing to pay very high prices for real good fresh seeds, but we cannot seem to get them. I much prefer the American seeds to Canadian. It is not impossible, however, to grow many varieties of seed at home.

In summing up I do not want the readers to think that I have made a success of five acres or that I have made money at it, but with the experience I have with vegetable gardening I can see the possibility of deriving a good fat living from five acres.

Yours, etc.,

WM. ARTHURS, '13.

# Dairying and Poultry

## KEEPING RECORDS.

Is your herd profitable; or I should say, is each individual cow in your herd a profitable one?

How many of our dairy men can give a definite answer to the question? yes,or no. I have heard the question asked time and time again and almost invariably the same answer was given ; "I think so, but I don't keep any record of what the cows produce, nor of what they consume." Surely this guess work is, at best, an unsatisfactory method of conducting any business. We do not find such a lack of system in any other business.

Fron the village blacksmith to the huge steel corporation, from the smallest retail merchant to the largest wholesale dealer, all along the line, we find that there is kept a strict account of all receipts and expenditures; and business men will tell you that without some such system it would be impossible for them to carry on a successful business.

This being the case is it not even more necessary, when the chances for losses are so much greater, that the dairy man should keep a record of all milk produced, and of all food consumed by his cows? A great many men keep a record of the milk yield, but disregard altogether the cost of production. Again, a great many herds are profitable as a whole, but there are individuals in the herd which are far from being profitable. If these individuals were weeded out and replaced with others which would be profitable, the production would be materially increased, at least while the cost of production would not be increased, at least, to any great extent. The labor involved would be the same in either case and in these days, when farm help is scarce and wages high, the labor question is an important item.

There is only one way to discover these unprofitable cows, and that is by keeping a record of each cow's product, by weighing and using the Babcock tests, and keeping a record of what she consumes. A small four bottle tester, with the necessary apparatus, costs little. A small pair of spring balances being in a convenient place in the stable,and a sheet of paper with the name of each cow written upon it and a column under each name for the weights, tacked on the wall within reach of the scales, completes the equipment.

Each cow's milk should be weighed separately after each milking and marked on the sheet in its proper column. If it is not convenient to weigh the milk every day, a fair average of the daily yield can be arrived at by weighing the morning and night milking on three different days at intervals of ten days each. The monthly total can be figured from this. At stated intervals during the month a small sample of milk, including both night and morning milkings should be taken from each cow and placed in a jar. If some preservative (such as corrosive sublimate) is placed in the jar it will only be necessary to test once every month.

The monthly milk totals together with the average monthly test should be copied in a book kept for that purpose, and the barn sheets filed away for future reference. A record should be kept of all the feed consumed during each year, and the cow charged with what she consumes. At the end of the year, with the information, it is a simple matter to tell which cow has been kept with profit and which has not.

The matter of keeping records does not apply to the dairy business alone. Farming is a business, and as such should be run on business principles. Every farmer should have some system of book-keeping by which he can keep a record of all transactions carried on during the year. By this means many small leaks can be detected, which are perhaps in themselves trifling, but mean in the end the difference between failure and success. Similarly a record of dates of tillage, seeding, harvesting, weather conditions, etc., are an invaluable guide in the farm operations in after years.

H. CUNNINGHAM.

## POULTRY NOTES OF THE MONTH.

Are you getting eggs this month? You should be and if not there's something wrong. Better investigate. The good poultry man is getting fifty per cent at least egg yield now, but the one who is only getting 25 or 30 per cent is only getting a new dollar for an old one and perhaps not that.

Are you keeping hens for egg production alone? If so, why let your male birds in with the hens. The only place for them is in your breeding pen. It costs a dollar to keep a male. Better keep an extra hen.

Start your incubators this month and get your early broilers, roasters and layers.

Remember, successful artificial incubation has a few essentials which should always be considered. Good hatchable eggs, a good incubator, a good place for the incubator, coupled with good management.

Three eggs a day—When fed wheat exclusively a laying hen could lay three eggs a day as far as the fat requirements of the egg are concerned, but if fed wheat only the hen can only lay one egg in two and a half days or 146 eggs in a year. In other words the wheat furnishes 3 times as much fat as the hen requires to lay an egg an day and less than one-half the protein which is the most abundant element in an egg. Here is where the important knowledge of the balanced ration comes in.

If you are planning to hatch some chicks for roasters remember that the American breeds are more desirable on account of their yellow skins and shanks. Roasters bring good prices from June till December.

One should always bear in mind when he hatches winter chicks to provide ample brooder room. Don't wait until your hatch is out but see that you have the room beforehand.

Keep your layers busy three months. Have a good litter and make them work and by all means have the quarters dry.

Green food helps a lot when the birds are in confinement.

They always relish it and it keeps their system toned up. Sprouted oats or chopped mangle beets are both good.

A scaly legged hen should never be used as a sitter for she will invariably give the trouble to the whole brood as the scaly leg mite will leave the feet of the mother for those of the growing chicks. See that the defect is remedied before you set the hen.

To be successful the poultry man must be attentive to every particular, ever ready to observe the faults and excellencies of his fowls.

The fancier who trusted his twenty dollar eggs to one of his setting hens was heard to remark:

"Of all sad words of tongue or pen,
The saddest are these—I set a hen."

To set or sit, more bother is
Than curing one of fits;
For if you set a broody hen,
The hen most surely sits;
At least she ought to as you know
But it's an even bet
The bloomin' fussy, sitting hen,
To please you, won't stay set.

## CORYSA AVIUM CONTAGIOSA.

This is a disease commonly found in poultry and otherwise known as roup. Much has been written about this disease, for it is one which causes enormous losses in poultry.

Many of us are familiar with the general appearances of this disease. There is, however, much misunderstanding as to the forms in which the disease appears. The disease assumes different forms, depending upon the parts affected. If it affects the soft membranes of the mouth and eyes a thin discharge appears and later forms yellow deposits in mouth. The

upper air passages may be likewise affected and completely closed. This discharge has a bad odor and is unmistakable when once recognized. When the deposits affect the lungs and trachea respiration is seriously interfered with. Oftentimes in this case a bird will die, in a few hours, of suffocation. On the dry skin the wounds appear just as small elevations over which soon forms a dark scab. This is the so-called chicken pox. When the bird swallows much of the mouth discharges laden with infective material the digestive tract becomes more or less affected. According to experiments these various conditions commonly spoken of as canker, chicken pox, diphtheria, swelled head and many others are all but different forms of roup and all due to the same cause.

The disease is caused by a defective organism or germ and not by colds as has been the opinion of many. Cold, damp quarters and exposure will cause colds but not roup. However, birds subject to unsanitary conditions readily contract the disease when the germs are present. On the other hand a healthy bird will contract the disease but not so readily as a poorly kept bird. The resistance of disease varies in individual birds of a flock and possibly in different breeds.

During experiments at Ohio State University with the disease, a new kind of treatment was discovered with excellent results. This treatment is a biological product, a serum which is prepared directly from a sick bird. It is administered with a hypodermic syringe which sounds difficult, but will not be so with a little practice. I might say here for the benefit of those interested that this serum is now made by the Ohio Serum and Vaccine Co., Station A., Columbus, Ohio. In small quantities it costs about ten cents per bird for treatment and full directions for use are given by manufacturers.

The value of this treatment, other than curing affected birds, is as a preventive or assurance that the disease will not come into the flock. A healthy bird injected with this treatment will not take the disease, even if kept in a pen of sick birds. It is not advisable, however, to treat a large flock which is free from the disease, on account of it being too expensive. All

birds intended for exhibition should be treated as a precaution and all new birds added to the flock treated likewise. When once the disease appears in the flock they should all be treated, otherwise the progress of the disease cannot be stopped. It seems to me that at a cost of ten cents per bird it is worth while to save the laying hen as the curing takes place in a short time of from six to eight days.

Sometimes in mild cases a convenient treatment may be had by spraying mouth and throat of bird with a mixture of one-half camphorated oil and one-half kerosene. This can be done twice with an interval of two or there days. With this treatment the affected birds should be isolated from the others.

The chronic form of the disease is not often considered by some but oftentimes this causes greater loss than the acute form. In this form the birds rarely die, but as they do not lay and are unfit for use or market, they are a continual expense to feed. During one experiment on this line, one flock was treated with the serum while another flock, housed and fed alike, were not treated. The first flock showed improvement in a week's time, with no change in the others. In five weeks several were laying with still no improvement on the latter, which in time were destroyed.

As we poultry men realize, prevention of disease in all cases is more desirable than treatment after the flock is infected, and so care should always be taken to keep the houses and runways disinfected and in good condition.

C. F. PETERSON '13.

## THE OPEN FRONT HOUSE.

There is a problem which confronts poultrymen during the winter months and that is how to avoid having my birds' combs freezing, especially my males? It matters too whether he wants to show that bird or not.

Not very long ago we had our chicken houses air tight on

four sides, and a high glass exposure on the south side. Next we adopted curtain fronts aided by curtained roost chambers, but in the last year or two open fronts are more and more being used 365 days of the year. However, the curtain front has not been entirely given up, as the hinged curtain is useful in very stormy weather, but the drop curtain in front of the roosts is being done away with as it prevents to some extent good ventilation. The advantages of the open front house are: Economy in construction and perfect ventilation, and preventing dampness. By use of the hinged curtain we merely keep out driving rains or snow, and in good weather we should have the south side open from one-quarter to one-third according to local conditions. If one relies on the muslin front being down day and night, it will not be long before the curtain becomes dusty, allowing no circulation of air, and we have the conditions as in the glass fronts of too warm a house during the day and too cold at night. By hindering ventilation we aid the accumulation of dampness, thereby making conditions for a damp freeze. We may have frosted combs with the open front houses but the damage is never as great as in closed houses.

During some experiments lately which I have been following up, I have found conclusively that a dry freeze is never as bad as that in a vaporized atmosphere. Three arrangements were experimented with. Houses with glass front, houses with open front but with drop curtain in front of roosts, houses open front no drop curtain. These experiments were carried on when the temperature was 25 degrees below at night. The birds in the last houses had their combs frozen the least and it was not so detrimental as with the others. With the glass front heavy frost accumulation on the side walls caused by the vapor given off from the fowls made the comb freezing very severe. In the second house, while not near as bad as the first, it was found ventilation was retarded somewhat and frost accumulated on the walls and roof of the roosting chamber.

There is also the opinion that much depends on the individual bird as to how bad its comb will freeze. Lately I noticed

during a cold snap that in one house the birds' combs did not freeze at all, while in another house, 12 feet away, containing the same number of birds, housed, fed and cared for in the very same way the birds' combs were frosted. These are some things we cannot account for but this we do know, that in dry, well ventilated houses, allowing no drafts, we do not get the severe cases of freezing. There is a good deal in the idea of climatising the birds to cold conditions.

C. F. P. '13.

## THE RECORD EGG LAYER.

Not long ago I mentioned the fact that the hen laying the most eggs in a year was one within the borders of Nova Scotia. But since that, another one has come into prominence, a hen at the Oregon Experimental Station, which layed 303 eggs in one year Many individual records are published from time to time but I have since learned that the official records are generally given out by experimental stations.

This high mark of 300 eggs in a year has been aimed at for some time by those who believed it possible. When the 200 egg hen was thought possible many "scoffed" the idea. But the 200 egg hen was realized possible long ago and we are now aiming higher. These high producing birds are termed by the skeptics as freaks but it seems that a good many freaks are being brought into prominence lately.

At one time experiments were carried on at an institution for the purpose of evolving some plan for the reproduction of high producing pullets from high producing hens. It seems that their experiments were not successful. But there was probably a reason for this. Taking these experiments for their standards many poultrymen emphasize the fact that a hen does not transmit her egg laying qualities. They point out that when a hen lays an egg she is exerting her reproductive organs and excess strain on these organs tends to weaken

the offspring. But the male side was disregarded in these experiments. The same rule applies to poultry as with cattle, that the male is one-half the herd. And as later experiments have shown that egg laying qualities are also transmitted through the male, haphazard breeding in mating high producing hens with any old cock bird and expecting to obtain high producing pullets never will produce good results.

The work carried on at Oregon Experimental Station has been in the form of revolution instead of evolution. Their individual records are backed up by flock records. Their work was carried on with regard to selection in pure breds and also in crosses. The second gave the best results.

The 303 hen is seven-eights White Leghorn and one-eighth Barred Rock. The other hen with the 291 egg record was five-eighths White Leghorn and three-eighths Barred Rock. They maintain that the problem of increasing the egg yield is not a matter of breeds, whether they be pure-bred or crosses, but rather a problem of selection.

The two hundred hen came and she was real and it is my opinion that before long many more of the three hundred egg standards will be realized everywhere.

C. F. P. '13.

## CO-OPERATIVE FIRE PROTECTION IN CANADA.

### Present and Prospective Development of Lumbermen's Protective Association.

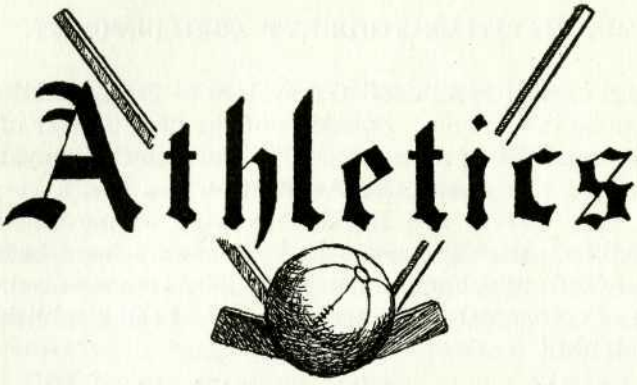
At the request of the lumbermen of British Columbia the Western Forestry and Conservation Association held its annual meeting in Vancouver on December 15th. This association represents a body of over four hundred lumbermen in Idaho, Washington, Montana, Oregon and California. The chief purpose of its organization was to secure adequate protection from forest fires, the money being provided by an assessment based on acreage of holdings. The total area controlled by this association is about 20,000,000 acres, containing fully 500,000,000,000 feet of lumber, one-fifth the total timber wealth of the United States and almost as much merchantable timber as there is in all Canada.

This association, at an average cost of between two and three cents per acre and an aggregate cost of about $200,000, maintains about 600 regular patrolmen, besides a large reserve force for emergencies, has built several hundred miles of trails and telephone lines and has installed numerous tool caches and lookout stations. Large sums have also been spent on educational work. Mr. E. T. Allen, the Forester for this association, speaking of the fire loss on this immense timber track, in 1913, says: "Reports to date on destruction of merchantable timber estimate it at three million feet, worth perhaps $5,000." One thousand five hundred potential forest fires were extinguished.

This is the largest co-operative association of its kind in the world. Probably the second largest is the St. Maurice Fire Protective Association of Quebec, which has also the distinction of being the first and only one of its kind in Canada. The constituent lumbermen, whose holdings total over seven million acres on the St. Maurice watershed, assess themselves one-quarter cent per acre for the maintenance of a fire protective patrol on this area. This association has only been in existence in its present form since the spring of 1912, yet in two

short summers it has installed a system of fire protection second to none in Canada. Speaking of the dry summer of 1913, Mr. Elwood Wilson, a member of this association, says: "The St. Maurice Fire Protective Association has had a very successful year. Over 275 forest fires were extinguished with practically no damage; seven lookout towers have been constructed and telephone lines have been commenced. The success of co-operative fire protection has been established beyond a doubt."

What has been successfully accomplished by lumbermen in the United States and Quebec can be done elsewhere in Canada, and with a view to furthering this solution of the forest fire problem, the Forestry Branch of the Department of the Interior, Ottawa, is publishing a bulletin on co-operative forest fire protection, which can be obtained free of charge from the Director of Forestry.




## HOCKEY.

The College played their first game on January 20th, with the Moose. The game was fast but the College not having any practice could not be expected to do very much. When the game ended the score was 10-1 in favor of Moose.

The second game was played on January 27th; the College showed up better when they faced the Regals. The score was 1-1 at end of first period and no score was made on either side in second period but on playing over time the Regals scored which decided the game. The Regals defeated the Moose, so the College is looking up better, showing that practice is what they want.

The third game was with the Eastern, which was fast and clean but the Eastern had good team work, the score in first period was 4-1 in favor of the Eastern, but at the end the score was only 5-1.

We hope to do better later in the season, but the teams we go up against know how to work their combination which the College team lacks.

# College Life

## DEBATING SOCIETY.

Under the new rules our Debating Society is making rapid strides toward the object of its existence, viz.: The turning out of speakers. Meetings are being held regularly every Monday evening, and the students seem to show great interest in the Society. At our last meeting the following question was debated. "Resolved:—That the Pen is Mightier than the Sword." Messrs. Laird, Langille, and J. McKenzie upheld the affirmative, while Messrs. Atkinson, Sanford and Lewis took the negative. Prof. Smith acted as critic and decided the question on points in favor of the former. Most of those gentlemen made their maiden speech on the evening in question, and needless to say acquitted themselves with high honors.

Judging from what *we* have seen and *heard* at those meetings, we *believe* that a grand improvement is taking place among the students. Some of who at first spoke in faltering broken sentences are now beginning to have more confidence in themselves, and are delivering their discourses in a clearer, more forcible and fluent manner.

## ANNUAL RECEPTION.

On the evening of January 30th, the students of the N. S. A. C., were "At Home" to students of the Normal College and a large number of the citizens of Truro. The occasion proved even more enjoyable than was expected. The entertainment for the evening was opened with a short address from our President, W. R. Shaw, who, with a few well chosen and appro-

priate remarks made the guests welcome. The following programme was then rendered:

Vocal:—College.
Reading:—M. H. Coughlan.
Solo:—J. N. MacLean.
Solo:—R. Schafheitlan.
Piano Solo:—H. Trueman.
Vocal:—College.
Farce:—College.
Refreshments.

After refreshments had been served, every one devoted themselves to the Terpischorean Art for several hours, the music being furnished by Prof. Mills. Needless to say, it was of a quality that left nothing to be desired.

The most casual observer could not but notice the striking costumes that were plentifully in evidence. It would trouble Canada to produce fairer and more tastefully gowned women than many of those who were present at our reception. As for the gentlemen words are idle. Mrs. M. Cumming and Mrs. J. M. Trueman acted as chaperons. Their usual charming manner did much toward making the guests at home, and they are deserving of the highest thanks from the students of this college. The committee in charge of the reception are also deserving of praise for the pains they underwent to make it a success. Their executive ability cannot be questioned, and their most fitting reward is the consciousness of the task well done.

# Alumni and Exchange

## ALUMNI.

H. R. Brown, '08, has been assisting in the seed department during short course time.

A. Kelsall, '10, S. Payne and H. J. Payne, Truro School of Agriculture, and H. Gilliat, '10, are engaged in brown tail moth work.

J. Campbell, '12, on his way home from England took in the annual reception, and there met many old friends.

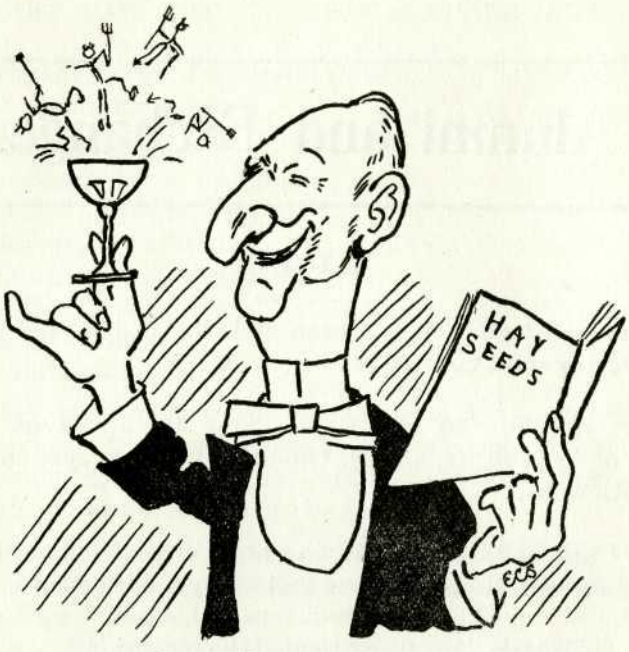
A. C. Tattrie, '13, also attended the reception.

H. P. Munro, '13, is busy running down the brown tail moth in the valley.

We would like to congratulate our students who have done so well at other colleges. They are indeed giving N. S. A. C. the best kind of advertising.

## EXCHANGES.

We acknowledge with thanks the following exchanges: U. N. B. Monthly, Dalhousie Gazette, Macdonald College Magazine.




**HAY-SEEDS.**

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Senior to lady at reception:—"I saw you dancing with that Junior. Can he dance good?"

Lady:—"Wonderful, he never touches the floor."

Senior:—"How do you mean?"

Lady:—"He danced on my feet."

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Senior:—"Yes, I'm trying to raise a mustache and I'm wondering what color it will be when it comes out."

Girl:—"Gray, I should say at the rate its growing."

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Senior to pretty girl:—"What is a kiss?"

Girl:—"Nothing divided in two."

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R. F-l-ore—(Reading "The Princess.")

"When they, like swallows coming out of hell."

Nobody thought it of Bob.

St-nd-sh:—(explaining a critical question)—"If the horse dies under the operation, it is better that he die then, than to go on eating food and die again later on." Surely he must have been thinking of a cat.

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The young farmer had been sitting quietly on the sofa for some time with his best girl when suddenly she asked:—"John, what are you thinking about?"

John:—"Same as you."

Girl:—"Well, if you do I'll slap you."

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Prof. B-t-x:—"When you are speaking over a telephone, the electricity is used intermittently."

A. C. St-r:—"I guess not when the old women get talking!"

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Voice:—"We don't want our pictures too small."

McK-z-e:—"What's the odds; we're used to looking through a micrsocope."

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In a Political Economy Exam:—"The Bank is the place where money is kept and let out."

# :: BUSINESS CARDS ::