



Volume XXIV.

Number 7



# O.A.C REVIEW



APRIL, 1912



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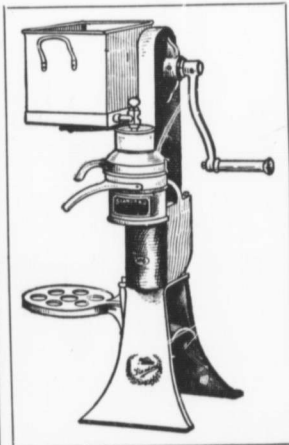
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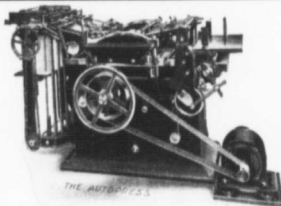
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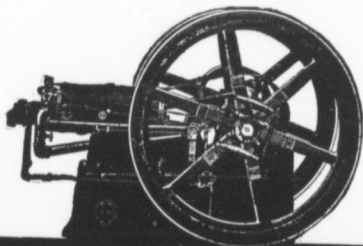
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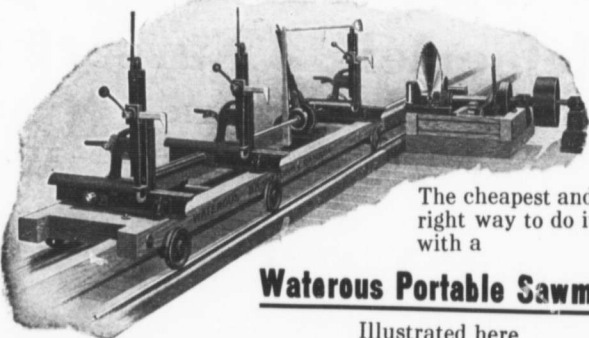
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Series A.

GUELPH, APRIL, 1912.

No. 4.

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## Louden Machinery Co., Guelph Ont.

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



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# THE O. A. C. REVIEW

THE DIGNITY OF A CALLING IS ITS UTILITY.

VOL. XXIV.

APRIL, 1912.

No. 7.

## PHEASANTS

GEORGE L. WOLTZ.

**I**T has always been a mystery to me why the most beautiful, interesting and profitable bird of all the feathered tribe should be so little known and bred in this country. It is true that pheasants, as a rule, are not raised on a commercial basis at all in Canada, but in the United States and Europe there are large pheasantries which produce a large stock of birds annually, and yield a remunerative income to the proprietors. Pheasant-raising in this country is only practiced as a sort of recreation or hobby, and in speaking of it as such, I know of no reason why any person who possesses a small plot of ground and a few dollars to spend in the building of a suitable house and run, could not have very fair success in the breeding of this beautiful bird.

There are about twenty-six distinct varieties of pheasants, all as rich in color as the rainbow; yet, the different varieties differ from each other in their style of grace and beauty. They were originally a native of Europe and Asia, but were introduced into America at an early date. In their native land before any attempt was made to domesticate them, they rarely possessed the gaudy colored plumage that they possess to-day. They were very wary, modest appear-

ing birds, and valued only as a game bird, but naturalists soon discovered that by a careful, judicious mating of the breeding birds, different colors could be developed, and the different color types were bred true to their standard, thus we have the origin of the different varieties.

In the following paragraphs I will endeavor to explain as clearly and thoroughly as possible, the housing and general care of pheasants, and though space will not permit me to go into every detail as I would like to, I will strive to make clear the essentials at least.

### Houses and Runs.

Many people say that they cannot keep pheasants because it costs too much to build houses and yards for them. This is a mistaken idea, because any house that will do for fowls will hold pheasants. Some breeders claim that the houses should be movable so they could be moved every few weeks, this giving the birds a fresh run, but this isn't necessary. The writer can cite cases where pheasants have been bred and raised on the same ground year after year, and with the greatest success, and in one case the house was only five feet long, three feet wide, and four feet high, furnished with a run ten feet long, and six feet wide. However, if

you have the land at your disposal, it may be advisable to give the birds commodious quarters, and a change of run from time to time.

In building a suitable house for a pheasantry, select a southern slope if possible. I have in mind the plan of a building that was erected a few years ago, and which has fulfilled every requisite of a model pheasantry. It is one hundred and twenty-five feet long, ten feet wide, four feet to the eaves in front and six feet in the rear. There is a three foot alley running the whole length in the rear, and the rest of the space was divided off into pens five feet wide, and seven feet long, making a total of twenty-five pens. These pens are partitioned with an eighteen inch board at the bottom, above which is a two-inch mesh wire netting. The outside yards which are fifty feet long and five feet wide, are fenced with boards two feet six inches high at the bottom, above which is wire netting to a height of four feet. The object of the boards at the bottom is to keep dogs and other animals from frightening the birds. A house of this description would accommodate about two hundred and fifty birds, which is somewhat larger than the majority of fanciers wish, but the length may be reduced as much as one desires without interfering with any other part of the plan.

#### **Feeding and Care of Breeding Birds.**

One should always try to have the breeding stock mated up by March 1st at least, as the birds usually start laying the latter part of the month. During the laying season it is very essential that no strangers visit the pheasantry at all, and always have the same person care for the breeding stock if possible. The birds are

very nervous and excitable, and if unduly disturbed, the egg yield will be materially diminished.

There is much difference of opinion as to how many females one male bird will take care of, because it is generally known that the pheasant in his natural state is monogamous, but when domesticated, most of them degenerate into bigamists, and one male will mate with several females. There is considerable difference in the different breeds in this respect, but in nearly all varieties, the exceptions being the Silver and Swinhoe varieties, one male can be mated to three or four females, and they will produce eggs of high fertility.

In the preparation of nests for the laying stock, make them as natural as possible. Some breeders put a stack of pine boughs in one corner of the pen, fixing nests in this, and placing in each a nest egg. However the birds are liable to lay anywhere, and one must always keep a sharp look-out for eggs in different places.

It is also very essential to keep the house and yards strictly clean. Supply a good dust bath in each pen, mixing with every bushel of dust about six ounces of some good lice powder, such as the I. X. L.

The food for a mature pheasant should consist of cracked corn, whole wheat, buckwheat, hemp or millet. They like a variety of food as a rule, and often relish a mash consisting of equal parts of bran, cornmeal and middlings. They must also have a supply of green food kept before them, and a constant supply of pure fresh water if one wants to insure healthy stock and good fertile eggs.

#### **Hatching and Care of the Young.**

Hatching may be done either by use of an incubator, or a hen, but it



has always been my experience to find the latter by far the best method. Be sure and keep the hen free from lice, and in twenty-four days, she will bring out a litter of young birds that will keep you thinking to get them all, for they seem to be able to run as soon as they are hatched. Any small hen may be used for hatching, but the Cochin Bantam makes a very satisfactory mother, being a splendid brooder, and of a quiet disposition.

The feeding of the young birds is by far the most important part of pheasant culture, and in order to be successful, it demands careful study. In nature they are fed on maggots, worms, ants eggs and other similar foods, so in our care of the young we must follow nature as closely as possible. Men who make a specialty of pheasant breeding, actually breed maggots and flies for use in feeding the young birds, but this is far from an agreeable task, and not absolutely necessary. In addition to this kind

of food, a little cracked wheat may be given them once a day until they are four weeks old, after which the grain ration may be increased, and a greater variety of food given. Keep a supply of mica crystal grit before them at all times. After they are six weeks old turn them out in grass runs where they can get plenty of fresh green food, and if other food is judiciously fed, they will grow like young weeds. Always have them roost in the shelter. Be careful in handling the young birds, using a dip net to catch them.

In conclusion, I wish to state that the information given above has been gathered from my own experience as well as the experiences of other breeders, and is quite authoritative. The pheasant has come to stay, and it behooves each of us who are interested in this line of work to keep abreast with the times, and educate ourselves in this, one of the most profitable of all feathered industries.

---

### THE FAR-OFF CALL

If out beyond the city's farthest edge

There were no roads that led through sleepy towns,  
No winds to blow through any thorny hedge,

No pathways over hazel-tufted downs,  
I might not, when the day begins, be sad,  
Because I toil among the money-mad.

If out beyond the distant hill there lay

No valley graced by any winding stream,  
And if no slim, white steeples far away  
Might mark the spots where drowsy hamlets dream,  
I could, perhaps, at midday be content  
Where striving millions at their tasks are bent.

If far away from noise and strife and care

There were no buds to swell on waiting trees,  
No mating birds to spill upon the air  
The liquid sweetness of their melodies,  
I might, at sunset be serene and proud  
Because a few had seen me in the crowd.

—The Chicago Record-Herald.

# The Profitable Feeding of Cattle

L. STEVENSON.

**A**MONG the many successful feeders of cattle in this Province there are very few who feed precisely the same way, consequently very few feeders have the same opinion as to the best method of feeding for either beef or milk. Some believe in mixing every bit of feed their cattle eat, cutting every pound of straw or hay. On the other hand others declare there is no better method of feeding than dealing out the hay, straw, stalks, fodder or roots in the long condition.

All feeders may be roughly divided into the two classes described above. Again these two classes have several ways of feeding. Some contend that cattle should be fed only twice a day, others three times, others four, others are advocates of water, others not, and so on. But whichever method is adopted the goal in each case should be the same—namely to produce the greatest quantity of beef or milk at the least possible cost.

The cow or steer in its natural state fills its stomach and then lies down. If we are to succeed as feeders we must obey this law of nature by thoroughly filling the animal's stomach and allowing it to have perfect rest. This is best done by feeding twice a day only.

Which is the better method, the mixing system or feeding long unprepared feeds? The feeding of long hay, fodder and whole roots has a distinct advantage in that less labor is required on part of the feeder, feeds remain sweet and palatable, saliva secretions are more copious and digestion consequently better. Cut feeds lose their flavor and

aroma, their mechanical condition may cause impaction.

Every successful feeder sees that his animals are kept comfortable and clean, and that they receive no more feed than they will readily devour, and on the other hand that they have had enough.

## Milking.

Milking the cow is such a simple operation, and the one that occupies a larger per cent. of the dairyman's time that it is easy to become careless about it and to look upon it as not requiring skill. It is impossible to estimate the loss in Ontario due to careless and indifferent milking, but if figures were available they would run up beyond the million dollar mark. In Denmark the great financial loss was noted and the Hegelund system of udder manipulation introduced in order to secure all the milk secreted and stop the loss. If such a system were practiced in this Province our cheese and butter export would be materially increased and those who milk the cows enriched accordingly.

The Hegelund method is as follows: First the right quarters of the udder are pressed against each other with the left hand on the hind quarter and the right hand in front on the forequarter, the thumbs being placed on the outside of the udder and the four fingers in the division between the two halves of the udder. The hands are now pressed towards each other and at the same time lifted towards the body of the cow. This pressing and lifting is repeated three times. The milk collected in the milk cistern is then milked out and

the manipulation repeated until no more milk is obtained in this way, when the left quarters are treated in the same way. Second, the glands are pressed together from the side. The forequarters are each milked by itself by placing one with fingers spread on the outside of the quarter and the other hand in the division between the right and left forequarters, the hands are pressed against each other and the teat then milked. When no more milk is obtained by this manipulation the hind-quarters are milked by placing a hand on the outside of each quarter likewise with the fingers spread and turned upward, but with thumb just in front of the hindquarter. The hands are lifted and grasp into the gland from behind and from the side, after which they are lowered to draw the milk. The manipulation is repeated until no more milk is obtained. Third, the fore teats are grasped with partly closed hands and lifted with a push towards the body of the cow both at the same time by which method the glands are pressed between the hands and body. The milk is drawn after each three pushes. When the fore teats are emptied the hind teats are milked in the same manner.

The milking except in unusual cases, should be done with the whole hand and not with the thumb and forefinger alone. The thumb should be turned out and never inclosed within the palm as is often done. The hand should be opened wide enough to allow the teat to fill to its full capacity aided by a slight uplift upon the udder. The thumb and forefinger should then be closed together followed by the second, third and fourth fingers in the order named.

As soon as the full flow of milk has ceased apply the Hegelund method.

#### Spring Litters.

April is the birthday month for many little pigs in Ontario. Their future development depends much on how well they are started.

The brood sows or mother pigs may or may not be in condition to raise a family of youngsters. Their condition whatever it is, will be an indication of the degree of humanity possessed by the feeder.

The little pigs should be well started while yet unborn by being fed through their mother, so that they might come into the light of day with vigor and size.

The first three weeks feed after birth should come through the sow by feeding her liberally so that the litter will develop into strong vigorous pigs. By the time the youngsters are four week old they will be eating with their mother. At this time a pig creep and separate trough should be arranged and the little fellows given a portion of the same feed that they have been used to, where they can feed unmolested.

The litter should have access to fresh green grass and a good run in a sunny location at all times. Their sleeping quarters should be kept clean and dry, if not they may lose their tails or become stiff. If the weather is at all cold and they do not go out in the sun and exercise, they are very apt to get the little pig ailment, thumps. Many a little pig has succumbed to this trouble. Lots of exercise seems to be the only remedy. The pigs should be weaned at eight weeks old, given a clover pasture for a run and sufficient grain and skim milk to keep them gaining at a good rate.

# Planting Nursery Stock

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

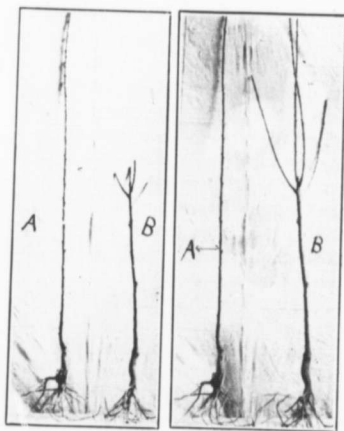
THE following is written with the intention of giving some useful hints to the intending planter. It is not possible to lay down definite rules, which if worked out will give entirely satisfactory results under all conditions. Soil and situation must always be taken into consideration. Principles that are best in one section may not be best in another, and yet the first principles should hold good everywhere. Ideals are constantly changing. This is very noticeable in the height at which trees are now headed compared to fifteen years ago. Even ten years ago it was common practice in the best fruit sections of Ontario to head apple, pear, plum, cherry and peach trees as high as three or four feet and in some cases even higher. Also we now consider the size of the tree as very important when buying nursery stock; not that size was not always considered very important, but that now the extremely large individuals are not looked upon with such great favor. Smaller, straight trees of good quality are in the greatest demand, and the age of the stock is considered more now than formerly; the two and three year old apple, plum and cherry are giving way to the one year old. Ten years ago we never thought of planting one year old apple whips, while this year nurserymen tell me that their one year stock is badly cut into because of the fast increasing demand.

The planting of the apple tree presents a problem all its own and is worthy of an extended discussion, but because suitable illustrations are not available I have used two other

fruits that to some degree at least illustrate the thoughts I wish to leave with you.

## CHERRIES.

The accompanying cuts show what were delivered to me as first class nursery stock for illustration and demonstration purposes, and I am glad to say that every specimen was very good. (A) is a two year old Black Tararian and (b) a one year old



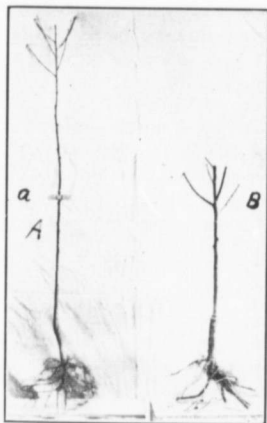
One and two-year-old cherries. Why not cut back the one-year at A?

One and two-year-old cherry trees direct from the nursery.

of the same variety. These trees were picked at random from the trees delivered and are fairly typical of the whole order. (B) at one year old was headed just where the branches start and the branches of what must eventually make the frame work of the tree grew the second year. There are no well developed buds on the trunk below the branches. Trees thus planted must forever remain

with the trunk the length that it is now. Compared to this the one year old tree has healthy buds from two to four inches apart, all along the trunk. This can be headed at almost any height from a few inches to a few feet or it may be left the total length of the tree and be expected to branch well latterly. At any rate the heading is left in the hands of the grower and it leaves him plenty of opportunity to exercise his individuality.

Let us compare the two root systems also. It seems that close planting of the nursery row or some other condition unknown to the writer does not permit of a proper development of the root system after the first year. The roots of the two year old stock are not as large and numerous, compared to the top they are expected to support, as are the roots of the one year tree. This is an important consideration. A well developed, well-balanced root system is invaluable. The same principals apply to the

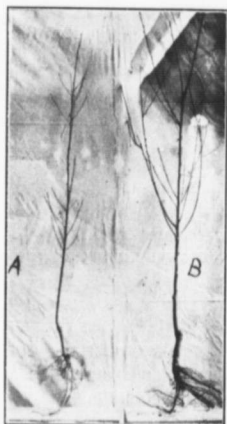


Large and medium first-class Peach Trees pruned.  
Why not cut back A at a?

sour as to the sweet cherry, only in a less marked degree.

### PEACHES.

The illustration represents two first class one year old peach trees. When ordering, a request was made for a certain number of the largest sized and a certain number of the medium size. Undoubtedly if it is size and quantity of wood only that we are after we get it in the larger tree, but what a price we pay. There is scarcely a bud below the branches, and consequently if the tree is headed below the lowest branches it is just possible there will be no branching out at all or at least it will be scattered and not sufficient in number to form a well-balanced head. In a tree of this nature it is just as well, or perhaps better, to leave the laterals that grew in the nursery row and cut them back to two or three buds. This obviates the risk of losing the tree from lack of buds on the trunk. Of course, if the tree is to be headed fifteen to twenty inches high it will

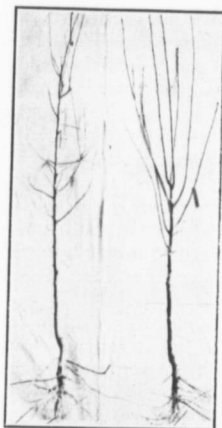


Large and medium first-class Peach Trees direct from the nursery.

be necessary to cut below the branches and take the risk. The tree would have given the grower a better opportunity to develop it properly if the lower laterals had not been removed when in the nursery row.

The smaller tree presents a different problem, but is perhaps exceptional in its length, straightness and bud formation on the trunk. From top to bottom healthy buds are distributed from two to three inches apart. Why leave this pruned and headed the same as the larger tree? The first branches are at least three and a half feet from the ground. Headed in well below this, to suit the taste of the individual, the tree should branch out well. The heading is in the hands of the grower. The root systems are equally important in all classes of nursery stock, but the difference is not generally so marked in the peach as it is in the cherry.

I do not mean to advocate the planting of smaller trees or to condemn the planting of exceptionally large trees, but I claim the younger trees in the cherry and the smaller tree in the peach give the grower an opportunity to start right, and are



One and two-year-old Plum Trees direct from the nursery.

the kind of trees to be encouraged. We do not of course always get what we want, but we can at least try. The greatest objection to smaller trees, especially in the apple, from the growers' point of view, is that in exceptionally dry seasons it does not contain sufficient sap or substance to tide it over the time between planting and when the roots are sufficiently established to make up for the evaporation from the trunk. The first supply of food must come from that which is stored in the plant, and if the plant is small and weak it can not stand the drain. More of the larger trees are likely to start, but still from observation we are forced to admit that after the first few years in the orchard one year olds are equal in size to the two year olds, and the smaller when planted equal to the larger and very likely to come into bearing soon.



One and two-year-old Plum Trees ready for planting  
—the former pruned.

## Early Potatoes

A. C. MOORE,

**O**F all the farm produce marketed this year in Ontario, possibly no other crop has brought such comparatively high prices as the potato. For those who had a good crop the returns have been handsome, and with this year's early crop at least there is a small fortune in store for the enterprising agriculturist. The early potato then is our hope, and we must soon make preparation for its production.

### Seed.

It at once appears that we must have an early maturing variety, such as the Early Ohio, Extra Early Eureka, Early Prima, Early Buckeye and Irish Cobbler. Seed of this class should be obtainable in almost any part of this Province. Here, as in animals, the strain is of as much import as the variety. The seed should be of high vitality in order to reproduce the best qualities of the variety. Therefore best results are obtained from seed from a thrifty highly-productive crop, which has been harvested before the tops died. This also insures a quicker maturing crop. For this reason potatoes from a cooler soil or climate are most desirable for early production, hence the old idea of changing seed.

A seed potato does not tend to produce tubers of its own size, but rather of the size of the majority of its foster crop. The market demands a medium-sized potato, about twelve ounce weight, so we must select from a strain containing principally such, allowing for a variety of opinion as to the proper size of set for planting, the 2-oz. set has given the best general results, not so much 2-ounce

tubers but 2-ounce cuts from 4 to 12-ounce tubers. In cases of very expensive seed it may be economical to use smaller sets.

### Sprouting.

It is important to plant as soon as the land is workable, but it is of much greater advantage to start the sprouts beforehand. This is practiced by the market gardener, who harvests his crop about three weeks earlier and secures a price 100 per cent. better than ordinarily. The period of sprouting is generally about four weeks and the tubers should be set in the suitable position by the first of April.

The tubers are placed in single layer in shallow boxes. A convenient size is three feet by eighteen inches and three inches deep, which will on the average hold about half a bushel. These boxes can be ranged in tiers upon a cheap scantling framework in a well-lighted outhouse or cellar. The tiers should be about eighteen inches vertically distant from each other to allow the free entrance of light, which develops the desirable stout, hardy sprouts. Up to this time the seed has been stored in a cool, dark place.

The tubers stand with the eye or seed end uppermost. It will be noticed that one extra strong sprout arises at each seed end. Sometimes for special results in small enterprises, this and the other sprouts, necessary one for a set, are nurtured by keeping other excessive sprouts pruned off. The sprouts are not generally desired more than one inch long though 1½ inches have been used with success.

### Planting.

As soon as conditions are suitable for planting, the sprouted tubers are taken out to the field in these flats. Here they are cut with one strong sprout or two weaker sprouts to a set and placed sprout upward in the drills. These drills are opened with the furrows thrown together. First a gentle covering is applied with a hand-rake or hoe, and then a scuffler or double-mould-board plow is used to split the furrows back on their drills. The rows are usually thirty inches apart, and the sets eight to twelve inches apart in the row. In large areas where there is no sprouting and the planting is done rapidly by hand or machine, the sets are from twelve to eighteen inches apart. It might be noted here that these planting machines are giving good satisfaction. It is unwise to plant in cool, damp weather, especially sprouted sets. When frost threatens a covering by the scuffler usually saves the crop.

### Soil.

The best type of soil for early potatoes is a rich, sandy loam. This is earliest, most easily tilled and produces smoothest tubers. Of whatever variety, it should be in good physical and chemical condition. A sod or stubble field plowed immediately after harvest makes choice soil. Never plant after a root crop. The vegetation on the fallow should be kept worked down during the fall, to kill the perennial roots. Then last thing before winter the land is cross-plowed and left in an open condition for frost action. Then in spring the soil should work up finely with little cultivation.

During the fall or early part of winter, if possible before the second

plowing, apply about thirty tons of barnyard manure per acre. Fresh manure in the spring rots too late to feed that crop. Commercial fertilizers are often used to advantage in the absence of barnyard manure. A dressing of potash manure such as land plaster is beneficial at any time while nitrates are seldom of any use. Not wood ashes, but a phosphate with a little nitrogen and phosphoric acid will likely be beneficial.

### Cultivation.

If any one thing is necessary with early potatoes it is thorough cultivation. Soon after planting the drills should be ridged up high. Then when the weeds have started or the potato shoots appear, the drag harrow is applied. This may be practiced forcibly without any serious injury to the small plants. The ground is thus levelled and the first crop of weeds rapidly destroyed. Cultivation between the rows is done most economically by the two-horse cultivator which does two rows at a time, while the driver rides. Care must be taken here not to work so deep as to injure the spreading roots. The cultivator should be applied about twice a week and after every heavy rain to retain moisture, especially in the early part of the season when the tops are small. It should become gradually shallower, narrower and less frequent as the roots spread and the tops cover the ground.

It is necessary once or twice in a season to go through the patch with a hoe for stray weeds.

### Pests and Diseases.

The Colorado or common beetle, flea beetle and the blights, are all best controlled by four or five applications a season of poisoned bordeaux, 4 pounds lime, 4 pounds blue



stone and 2 pounds paris green in 40 gallons of water. Arsenate of lead and arsenate of lime are sometimes used to replace paris green. The first spraying should be applied when the beetles' eggs are first noticed on the small tops. Endeavor to apply each spraying so that it will have its effect before the next rain.

Scab on the tubers may be treated successfully with the formalin solution or fumes, but it is best to avoid the scabby potatoes altogether. This disease is contagious through seed and the soil, and it is sometimes increased by infection from manure and made worse by lime and wood ashes.

#### Harvesting.

It generally pays to harvest the crop before full maturity while the tops are still somewhat green. Just at this time the tubers are not increasing much in bulk while the prices are going down too fast for delay. Digging is generally done with the ordinary potato plow. The modern machine diggers are not a success with the green tops and the tender skins of the new potatoes which turn black whenever bruised. In marketing, grade carefully to suit your customers. In large cities because of high prices there is considerable demand for the marbles. Finally put up a fair sample and ask a good price.

## Agricultural Notes

### Summer Forage For Pigs

Clover or alfalfa when in good condition will make the best forage for pigs during summer months. They furnish the essential protein in the cheapest form. Rape may be used to good advantage when clovers have failed to start, especially if fed with any concentrate containing high per cent. of nitrogen. If rape is sown early in the spring it will furnish an abundance of very desirable feed during summer months. It may be cut and fed in yard or pastured off. Broadcast seeding will give good results if land is rich and clean. Sow three or four pounds of plump, uniform colored seed (black or deep brown). Under favorable conditions the crop will be ready to feed in eight weeks' time.

#### Value of Roots.

From the standpoint of results roots may be looked upon as watered

concentrates. One of the objections to mangels and turnips as a food product, lies in the fact of their high water content. This limits the quantity which may be fed making it impossible for an animal to eat sufficient to take the place of cereal grains in the ration.

Extensive Danish experiments indicate that a pound of dry matter in roots is about equal to one pound of cereal grains or to three fourths of a pound of cotton seed meal when fed to milch cows.

The present high price of cereals is a factor in favor of the production of mangels, turnips and beets. The serious handicap to the raising of root crops is the fact that with present cultural methods a large amount of hand labor is required. While it may not be economical to raise them

as a substitute for silage or other coarse fodder, it is economical to raise them as a partial substitute for concentrates particularly the cereal grains.

#### Quality in Mangels.

Sometimes it is assumed that mangels with yellowish zones of parenchyma, such as is present in the yellow intermediate variety, are richer than those with quite white flesh. This, however, is an error, as very frequently white-fleshed varieties are much richer than those with yellow or crimson flesh. There appears to be no direct connection between the color of the "flesh" and sugar-content.

The sugar is not evenly distributed in the tissues of the mangel, the upper end contains much less than the body. The greatest amount of sugar is present in the cell-sap of the parenchyma lying close to the vascular ring, the cells in the middle of the zone of parenchyma between two successive rings of vascular tissue being comparatively poor in sugar. The richest mangels are therefore those in which the vascular rings are most closely packed together and in which the parenchyma, poor in sugar, is reduced to a minimum. For mangels of the same diameter the best to feed are those which have the greatest number of vascular rings.

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#### ASK WHAT YOU WILL.

Ask what you will, the wise world says;  
 Ask freely what you will of me:  
 The grace of knowledge, length of days,  
 A lease of power and mastery,  
 The praises of an honored name,  
 The seats of splendour and of fame.

Ask what you will, but you must share  
 The struggle of my men of toil,  
 And on my broad arenas dare  
 The contest and the ceaseless moil,  
 As thousands manfully have done  
 Ere battles have been fairly won.

Ask what you will; but you must climb  
 My hills by many a devious way.  
 To gain those fastnesses of time  
 That have not yielded in a day;  
 And long the siege ere you shall win  
 At length your right of way therein.

Ask what you will brave knight-at-arms;  
 Lo, I have untold wealth to give;  
 But every gift that lures and charms  
 Seeks only of the life you live,  
 Wherever led, however spent,  
 A just and fair equivalent.

—Frank Walcott Hutt.

## What Happened Then

"TRENT."

"I AM sorry to have kept you waiting," he said, taking off his hat as he came up to where she stood in the theatre lobby. "I couldn't get off a minute sooner. In fact for a while I thought I wouldn't be able to make it at all."

"Of course I understand," she said brightly. "I think it's too delightful that we are actually going to see this play together after all our planning."

He smiled at her with a keen sense of pleasure in her companionship.

"That's what it is to be a business man," he said, as they took their place in the matinee line that was being slowly absorbed through the open doorway.

"It's unfortunate that Aunt Agnes dislikes being left alone in the evenings, otherwise we would solve the problem," she said thoughtfully. "If only she would come with us, but wild horses couldn't drag her inside a theatre. But apart from that, do you know that you are incorrigible. Business, always business. It's been getting worse lately."

"Oh! I say, that's not fair," he protested, feeling in his vest pocket for the tickets as they neared the doorway. "This happened to be specially important. Big deal involved. It meant a tremendous lot. You don't understand."

"Perhaps I do," she said quietly.

She said no more, and presently they found themselves in their seats. He leaned towards her.

"Hope you will enjoy it," he whispered.

"I know I will," she whispered back, "I have heard so much about

it." She turned her attention to the stage.

He settled back in his seat and fell to studying her face and the play of expression that passed across it which constituted its chief charm for him. He barely noticed its other attractive qualities.

He was a man who knew singularly little of women. With the exception of the little time he devoted to an inherited literary taste, his daily life was spent in the interests of his business; not so much from inclination as from long habit. His father's example and wish had drawn him early into a business career. In all his forty years of existence he had never spent a moment's interest or thought on a woman before; till he met this one.

His ideas of women had been chiefly gained through the books he had read, augmented by the passing jest in the newspapers on their fads and foibles. He had thought of them, when he thought of them at all, as dissolved in tears one half the time, and complaining about their dress-makers the other half. The few women he had come in contact with in his busy life unfortunately had not served to lessen these impressions. Lately he had often wondered to think of the fatuous mistake he had made.

He recalled the night he had met her. It was a year ago at a dinner party that a friend had insisted on his attending.

"Got to come, old chap," his friend had said. "Wife's bound to have you, She's got an old school chum

coming. Charming widow effect. Says she's just your style. No hope for you old man, if the wife gets those notions in her head," with a patronizing laugh.

He had gone disgruntled enough, and prepared to be bored out of existence. He had been captivated from the first moment he was introduced to her.

She attracted his interest and attention from the start. What a vital arresting personality she had! He remembered their conversation in which she charmed and delighted him with her breadth and scope of thought and subject. She had travelled a good deal and her vivid, clever sketches of places, people she had met enchanted him. They talked of art, in which he took an amateur's interest, and he learned that she had come to live in New York with an aunt while she studied technique. Finally they discussed a subject in which they were both particularly interested and he asked to take her to a lecture on it the following week.

That had been the beginning of a delightful friendship which grew more familiar and easy as the year wore on. It was her fearless independence of mind that attracted and held him, with its original freshness of thought, its insight of men and things. He often talked to her as he might to a man, forgetting her sex, to realize it suddenly with a rush of astonishment. Yet he was vaguely aware that there hovered in the background one or two men who took more than an intellectual interest in her, and who would gladly have given their heads for the privileges she accorded him.

For some time now he had admitted to himself how much the friendship of

this woman was to him. He meant to take steps to make it his permanently, if such a thing were possible. What a delightful companion through life she would make with her gay infectious spirit of camaraderie. He thought of the other men and felt confident.

"Why not try my luck this afternoon?" he asked himself with sudden resolution.

The woman beside him felt his gaze upon her and some power outside her will made her turn her head to meet it. Her look was unfathomable. His perceptions in some respect were indeed very dull.

He smiled frankly at her, and after a minute she smiled back, but as she turned away she sighed.

"I enjoyed it immensely," she said, as they were coming out.

She bowed and smiled at some one in the crowd that filled the entrance and he felt a conscious thrill of pride in being with her.

"I don't by any manner of means agree with all the author's assertions, though," she said gaily with a humorous glance at him. "How thoroughly he raked the modern woman over the coals. I'll have you know I'm by way of being a suffragette," laughingly.

"Better not let your Aunt Agnes hear you say that," he suggested, hailing a taxi.

They grew hilarious over the idea.

Presently they were seated luxuriously at tea. They had a quiet corner to themselves, screened with palms, where the murmur of voices and the clink of china came pleasantly subdued.

Again the woman's grace and feminine charm as she moved her hands amongst the tea things were lost

upon the man, who was only concerned that the tea should be hot and the eatables to her liking. He dimly felt that they existed, but from long habit was incapable of appreciating them.

He sat silent, wondering how he could best approach the subject that now possessed his mind.

His companion was very much aware of his preoccupation and frequent glances at her. The fingers that held her teacup trembled a little. She filled up the awkward pauses courageously with small talk.

"This toast is delicious," she said, taking a bite with great interest and deliberation.

"Yes," he assented absently. He determined to take the plunge.

"We have known one another for a year, have we not?" he asked abruptly.

"I believe so," she said. Her figure grew rigid.

"During this time I have come to value your companionship very highly," he continued, gravely fixing his eyes upon her. "You are the only woman who has ever attracted or interested me in the slightest. You have not seemed averse to me. We have many congenial tastes. Forgive me if I seem blunt. I am not practiced in these things. Will you do me the honor of becoming my wife?"

He waited, looking at her expectantly.

"Do you love me?" she asked as abruptly as he.

He started and grew confused. This aspect of the case had not occurred to him before. His long years of bachelorhood, passed for most part amongst business friends and interests had dulled him hopelessly. He was completely taken aback.

"Why-er," he stammered, "I esteem you very much-er-that is, I admire you immensely. Your personality attracts me. Why, I don't know. No, I don't suppose it's what goes for love," he finished lamely.

There was silence for a few minutes. He ventured to look at her. She was toying absently with the lump sugar, her brows bent in deep thought.

"May I know your answer?" he asked finally.

There was a pause.

"I am afraid," she said then gently still playing with the sugar, "that I cannot marry you." With feminine delicacy she did not look at him.

It was a blow, the more so as it was almost unexpected. Only his business training repressed the exclamation of surprise that rose to his lips. He stirred uncomfortably and drummed with his fingers on the arm of his chair.

"Will you think it unfair of me to ask why?" he nerved himself to say, after a while. "You have always seemed to find pleasure in my company. Please do not think me conceited, if I say that you have seemed to prefer my society to that of other men. You have allowed me to monopolize your time to their exclusion."

She had anticipated this question. She abandoned the sugar and leaning forward, put her elbow on the arm of her chair, she rested her chin in the palm of her hand and regarded him steadily with her brilliant dark eyes.

"I will tell you," she said slowly. "With me love is everything. The reason I won't marry you is because I love you."

He started and flushed, so extraordinary did this sound to his ears.

She was quite calm.

"That sounds paradoxical, doesn't

it? Listen. As you know, I am a widow. I was married when I was very young to a man years older than myself, a professor of archaeology, a well known authority on the subject. He married me partly for family reasons and partly because I interested him as you say I interest you. My vigorous ideas amused him. He was as fossilized as regards human feelings as the ruins and relics he adored. Or no, I shouldn't say that, I believe he had a mild sort of affection for me. But I loved him. Passionately. You have never loved so you cannot imagine the unhappy situation I was forced to endure. I longed for love and sympathy. He was quite indifferent to me. His greatest kindness was to take me with him on his vacations when he travelled and explored. I would beg not to be separated. He was unable to understand why, but he used to take me. I imagine it was because I looked after his clothes and comfort so excellently. In my eight years of married life, I don't think I had eight hours of happiness; and even that was not the happiness I wanted so. I was almost glad when he died. It relieved me of an intolerable pain. I suppose that was selfish of me as it deprived the world of a wonderful mind. Perhaps you have gathered some idea why I cannot marry you. It would be practically the same thing over again." She ended wearily.

"That was four years ago," she said after a few minutes. "I am thirty now, with years of life ahead of me. Other men have given me love, but in every case either their mental or moral standard was beneath my respect, so they were cut out of the question. I had hoped to find in you the happiness I have been

waiting for all these years. But lately I began to fear. Your business is first as his relics were. Nothing could make you lose or break a business engagement, they are of paramount importance to you. Your business enslaves and narrows you. It has made you a mathematical machine; it has fossilized you as he was. How much warm, living, eager human feeling do you really think you are capable of? If you dissected your life, you would find how absurd it is. You already own what most people would call a fortune, yet you are deliberately wasting the best years of your life in accumulating more money than you can ever hope to spend. And then I hear you constantly deploring the fact that you have not more time to spend on outside interests and pleasures. You have literary tastes and you long to have leisure time to gratify them. It is yours for the making." She spoke these last words sadly.

Her manner changed abruptly.

"I have some news for you," she said almost gaily. "I meant to tell you earlier in the afternoon. I am going abroad with the Marshalls on Saturday to stay indefinitely. They are all going over, so it will be a splendid opportunity for me to have company."

"I have been planning it for some time," she answered his look of amazement. "Perhaps my intuition told me what was coming."

He said nothing.

She rose to put on her things, and he helped her mechanically. He found himself tongue-tied and cursed himself for a fool.

She stopped to speak to some friends on the way out and he waited for her at the door.

"No," she said, in answer to his

question, "don't write. It would only hurt. I am going to try every means to forget."

He did not dispute the point. His attitude conveyed the impression to her that he was quite indifferent about the whole affair.

"And that is all the feeling a whole year of friendship leaves him with," she thought, a trifle bitterly. But she was above all things philosophical.

As he helped her into a taxi, his wits returned.

"Can you forgive me?" he asked.

"It has been my mistake," she said, putting out her hand and smiling bravely.

Somewhere about a year later she was in the Louvre copying La Cruche Cassee, when something compelled

her to glance up. He was coming towards her eagerly, hat in hand.

She rose to meet him trembling. Her face had grown white.

"Your aunt gave me your address," he explained. He took her hand and looked yearningly into her face.

"I have been winding up my business affairs these last few months. Ever since it came to me just what you mean in my life. My time is now my own," he said simply.

He searched her face anxiously.

"It's the best proof I can offer," tensely.

Her eyes dazzled him. He was thrilled with the promise of her. There was no one around and he took her in his arms.

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### OPPORTUNITY.

They do me wrong who say I come no more,  
 When once I knock and fail to find you in;  
 For every day I stand outside your door,  
 And bid you wake, and rise to fight and win.  
 Wail not for precious chances passed away,  
 Weep not for golden ages on the wane;  
 Each night I burn the records of the day;  
 At sunrise every soul is born again.  
 Laugh like a boy at splendors that have sped,  
 To vanished joys be blind and deaf and dumb;  
 My Judgments seal the dead past with its dead,  
 But never blind a moment yet to come.  
 Though deep in mire, wring not your hands and weep;  
 I lend my arm to all who say, "I can."  
 No shamefaced outcast ever sank so deep  
 But yet might rise and be again a man!  
 Art thou a mourner? Rouse thee from thy spell!  
 Art thou a sinner? Sins may be forgiven!  
 Each morning gives thee wings to flee from Hell,  
 Each night a star to guide thy feet to Heaven!

—Walter Malone.

## Planting Requirements of Grapes and Berries

W. M. AIKENHEAD.

ANY amount of periodic literature concerning the requirements of nursery trees is being printed. Tree planting, first pruning and soil requirements have become the hackneyed and inexhaustible subjects of discussion. Perhaps it is because trees and tree fruits are the most popular, or the more difficult to plant. Grapes have not the importance in America they have in Europe. However, grapes as well as the small fruits have been planted and are being planted extensively and require attention.

Vines at least do not require northern exposure, rather they do better on a southern aspect. Clay or gravelly clay is the soil of hillsides upon which the grape has thrived. Drainage is always laid down as fundamental in the growing of nearly all other fruits. But grapes, even just after planting, may be under water for some time and yet survive. From the foregoing it may be seen that as far as soil, situation, and drainage are concerned, grapes are not so exacting as many other classes of nursery stock.

Grapes may be planted in Ontario as one or two years old from cuttings. If planted as one year old about one-half of the roots are removed and the top cut back to one bud. Two-year-olds have the roots cut back about one-third and the top cut back to two buds.

In setting the plants deep furrows are thrown up in well prepared soil ten or eleven feet apart, better eleven

feet. The plants are then placed. A shovelful of earth is firmly tramped on each root at first and the furrow filled later. This with cultivation to keep down weeds and to hold soil moisture is all that is required for the first season. The width of the rows allows team work.

### Raspberries.

The red raspberries receive two methods of treatment in planting. Small sucker canes which have put up the previous season away from the main plant, are taken up with a portion of root in the one method. The other takes one of the sprouts as it puts up the same spring it is to be planted. The first method is better, for if enough root is taken with the older cane it will produce probably two or more canes the first season. In taking up these young plants they should not be pulled but the root to which the young cane should be lifted, by forcing a spade or some such tool well under them and raising the whole plant upon it. Young plants are better taken from young plantations, owing to vigor and freedom from disease.

Red raspberries are rather peculiar in their soil requirements. Too rich a soil is not desirable as it tends to make for rank growth and nothing else. However, a deep well drained soil with sufficient organic matter in it is desirable. Loamy soils are best, and these should be in good condition for planting. Rows may be six or seven feet apart and the plants four feet in the row or somewhat less if



desired. Or they may be planted on the square five feet apart. The latter plan will make horse hoeing almost entirely possible. In marking a hand or horse marker may be used across the ground and furrows made for the rows. At the intersections the plants should be set deep and firmly.

The ground should be well worked until midsummer, and if the young canes grow rapidly they should be headed back at about two feet.

Black caps are treated differently. The plants are secured by the covering of the tips of the canes with soil in August. These tips are thrust perpendicularly rather than horizontally into the soil. When the plants have started the canes are cut off. After the young sprouts have well started in the spring they are ready to plant.

Rows for them should be six feet apart and the plants three feet apart in the row or they may be grown four feet apart on the square. Trim the roots back and leave about two strong shoots, planting as with the reds firmly and deeply. Blacks can be fed more than can the reds with nitrogen and potash.

#### **Blackberries.**

Blackberries are propagated and planted very much the same as raspberries. Rows are eight feet apart and plants two to four feet apart in the rows, the greatest distance being probably best. These are also grown on the square seven or eight feet apart.

In their soil and cultivation requirements blackberries are most exacting. A cool soil is required and one which may be looked upon to supply a maximum of moisture when the season is driest. For this reason a very deep soil of a clay loam nature,

well filled with humus is the ideal. Cultivation must be given to conserve moisture for fruit but not to induce too rank a growth. Hence barnyard manure with light dressing of wood ashes are about all that blackberries should require. In training subsequent to planting it is better to have only two or three well branched canes in a hill. This may be affected by pinching the central stalk at about four feet. In following years the old canes should be removed as soon as profitable fruiting is over and suckers must be kept down.

In all of these berries it is necessary to be sure in planting that the sets are quite free from disease and in setting that roots are well spread out.

For gooseberries and currants there are two methods; the English, which removes all the eyes but the uppermost three or four and grows the plant like a small tree upon a stalk or leg, and the American which removes no buds and has stalks putting up from the root at all times to be thinned out each year or to become a thicket. The English method is said to be adaptable to the climate where it had its inception, and not to America as a whole. This is due to two reasons at least. The one is that the trunk will scald and the other is that a descending borer is likely to annihilate the whole plant. However, borers exist in Britain and methods are easily acquired which may prevent scalding by the sun. It should be remembered that where canes are innumerable there is so much more opportunities for multiplication of the boring pest.

Currants and gooseberries do well on clay loam and should be planted

in eight foot rows four feet apart. They will stand a good deal of cultivation and the soil should be in fine condition at planting time. Before setting any English gooseberries be satisfied that you are prepared to spray them before every rain and during muggy weather with either Bordeaux or summer strength of lime sulphur.

If you are to follow the English method and planting stock grown for the purpose, no pruning of roots or top is required. If you have plants grown after the American method, you may find it well to thin out the top and cut back the top and roots about one third. This treatment should be less severe if the season is a dry one.

#### Strawberries.

The mistake is often made with strawberries of planting them after all other spring work is done. Strawberry land should be free from white grubs and wire worms and should be prepared in the fall if possible. In the spring following as soon as the ground can be worked down it should be prepared for planting. Every one who has had anything to do with it knows that the strawberry comes to its most critical stage at bearing time. If irrigation cannot be given it and something more effectual than a straw mulch is not available as a water supply, there is a great drying out. Hence, what-

ever your soil—and strawberries vary in their soil requirements—let the soil be deep, and be sure if the growing season is favorable you must cut off many runners.

The rows may be three and a half feet apart or more, and the plant one and one half to two feet or more in the rows. They are also grown on the square eighteen inches apart and kept to single plants. In getting plants ready trim the roots to three inches in length with shears and the top to the two youngest leaves. Some growers, though they know that better results are obtained from plants so trimmed, neglect the practice on the plea of "no time." However, if they would do their planting first in spring the evenings otherwise idle could be spent in preparing the plants for the daytime setting.

After the ground is in perfect condition it should be smoothed with a leveler or plank drag, marked and set. The setting is best done with spade or trowel. The crowns should be just at the surface and the roots spread out fan shape.

In the subsequent culture which should be shallow and oft-repeated, keep the moisture down. Also remember that too thick a set in the matted row is fatal in dry seasons and bad in any season. This is better avoided by runner cutting than by fall thinning whether done by hand, by hoe, or even heroically with a rake.

#### ON SMILING.

If you think you've missed the mark,  
Use a smile;  
If your life seems in the dark,  
Why, just smile;  
Don't give up in any fight;  
There's a coming day that's bright;  
There's a dawn beyond the night  
If you smile.

## Field Crop Competition

CHARLES S. SHIBLEY.

**I**N 1907 the Department of Agriculture widened the work of the agricultural societies by adding a plan for competition in field crops. It was thought that much good could be done by offering prizes for the best standing crops as well as for the best seed grain which was already being done at all fall fairs, because all the competitors would have to pay special attention to the cultivation of their soil, the sowing of the seed and eradication of weeds in order to win in the competition.

For this an appropriation was made and each agricultural society was given an opportunity to arrange for a competition among its members. In each society \$50 was to be offered for prize money, two-thirds of which was to be given by the Department. The latter also was to appoint and pay the judges to make the awards. Besides these prizes the winners of first, second and third prizes in each society were eligible to compete at the Canadian National Exhibition, Toronto, where \$240 was divided for sheaf competition and \$128 for grain competition. They were also eligible to compete at the Winter Fairs at Guelph, or Ottawa, where another \$100 was put up for prizes. Those east of a line north from Toronto were to compete at Ottawa, and those west of that line at Guelph.

In 1907 there were only ten societies entered in the competition, having 325 competitors, representing 2,000 acres in all. In 1908 46 societies, 650 competitors, 6,000 acres; in 1909, 77 societies, 1,200 competit-

ors, 20,000 acres; in 1910, 110 societies, 1,650 competitors, 26,000 acres.

During 1910 a special effort was put forth to encourage alfalfa growing and special prizes given. This crop could be grown for competition in the society as well as one other.

Pure seed being one of the greatest factors in increased production, it was found that this competition could be made to spread its influence farther than just its own locality and consequently the Department made the provision that the prize-winning grain at Toronto, Ottawa and Guelph should become the property of the Department and should be distributed to the district representatives; the representatives in turn to distribute this grain to the farmers in their district on condition that they receive two bushels back from it after harvest, this to be again distributed the following year.

The farmers are taking great interest in this work wherever it has been tried. The size of plots for competition as stipulated by the Department has to be five acres for grains and two acres for root crops. These plots are not too large for a farmer to properly cultivate, and most of them try to do this.

In order to do the most good to the greatest number, the men who are appointed as judges of the standing crops should be thoroughly competent men who not only know how to judge the crops as they find them and pick out all the noxious weeds, but they should be thoroughly familiar with the best methods of eradication and control of them. It is a very easy matter for the judge as he

is going through the field to collect specimens of the weeds he finds there and bring them out with him, and after he has finished scoring the field take a few minutes to talk to the owner (who is generally at the fence) regarding the eradication of the weeds which have been found in his field, and refer him to publications from the Ontario Agricultural College and elsewhere, on the control of weeds. He will find that a few minutes spent in this way with each competitor will be much appreciated and will show results the following year with many of them.

Each judge has to leave with the secretary of the agricultural society the names of those winning prizes and give him full instructions regarding the building and packing of the sheaf and the shipping of it, and of the two bushels of cleaned grain to one of the fairs previously mentioned. He then sends in his report

and score-cards to Mr. J. Lockie Wilson, Superintendent of Agricultural Societies.

When these results are all in, a report is made out giving full results of all the competitors and this report is distributed all over the province. These reports give all the farmers a chance to find out where they can secure good seed grain nearest home and what varieties do best in their locality.

Up to the present these competitions have done a lot of good, and their possibilities of doing more good in stimulating good cultivation and clean seed production seem almost unlimited.

Note—In the March number of the Review there appeared an article on the "Work of the C. S. G. A." with Mr. L. H. Newman's name attached. This name was put there by mistake as the article was not sent in by Mr. Newman.

E. B.

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### EVENTIDE.

The twilight deepens o'er the land,  
 A mystic hush is on the earth and sea,  
 Save for the ripple on the sand,—  
 And fitful shadows flit across the lea  
 Day breathes a tender, parting sigh,  
 The violets nod a drowsy, sweet farewell,  
 The tall ferns stoop to kiss them where they lie,  
 And feel, in turn, the magic spell.  
 The silver crescent of the moon,  
 Mounts higher, higher, in the dusky sky,  
 Flooding the vale like crystal: soon  
 The whippoorwill announces night is nigh.  
 Steals on the quiet eventide:  
 The margin of the shady pool grows dim;  
 The roses clamb'ring up the casement wide  
 Sway softly to the night-birds' hymn.

## Co-operation--No. 1

H. H. LE DREW.

What is wrong with Ontario? Why is it known as a "co-operative desert"? If the farmers of some lands can co-operate so successfully, why can't we? What should the Government do to aid co-operative movement? These questions are all considered in this article by H. H. LeDrew, the well-known authority upon co-operation in all its phases. This is the first of a series of articles upon agricultural organizations.

**T**HE following is a list of the practical advantages which other countries are deriving through a well organized system of co-operation:

1. Collective buying of manure, seeds, machines, and all raw products used in agriculture.
2. Collective sale of agriculture products.
3. Transformation of products to render sale more advantageous.
4. The facilitating of work by the use of machines purchased and owned collectively.
5. The establishment of co-operative banks to obtain cheap credit.
6. Better organization for insurance against loss.
7. Protection of crops against various causes of destruction, by collective vigilance.
8. Improvement in the stock of cattle, swine, sheep and horses, by collective purchase and ownership of the best animals.
9. Establishment of stores for the supply of household necessities to agriculturists.

This list shows that there is scarcely a phase of the whole agriculture industry which may not be organized to good advantage, yet with the exception of a few fruit handling associations and one or two grain societies the Province of Ontario is entirely void of collective dealing. There is no need to pause here to examine the advantages which large-

scale-dealing bestowes upon its operators. We have evidence of this on every side where trade and commerce have gained a footing. Everyone knows that in an order of a dozen, a gross or a thousand the price per unit is smaller and smaller as the dimensions of the order grows larger and larger. Nearly everyone knows that by collecting products in sufficient quantities to make up carload or trainload lots of uniform quality a better market may be obtained, a more direct disposal made of the commodities and hence a larger price per unit gained to the producers. It needs very little proof that insurance companies, telephone companies, credit societies, etc., live, thrive and in many cases grow wealthy quite beyond the proportion to which they have benefitted the rural population. Hence it would seem that if the rural population were to handle these affairs themselves even so successfully as they are handled by others at the present time, that great gains would accrue to the general farming public. And this is precisely what is being done in many parts of the world today. The farmer is regarding his business as a commercial enterprise, and is becoming his own commercial agent. But it must be remembered that this is the highest stage of agriculture. Taking it for granted that there are three well defined parts in the management of a modern farm—the planning of and for the

crops; the overseeing of the labor; and the marketing of the products; it is evident that in the branch last mentioned the farmer is for the time transferred from his domain as a tiller of the soil and placed right in the swim with a class of people who make this side a special study. The natural result in most cases occurs. Now it has worked out in actual practice that there are in all agricultural sections sufficient commercial talent to operate the agricultural affairs of the community. And there are in Ontario to-day many men who are not more than half successful in actual farm practice who, with very little training, would make experts in buying and selling. It takes a pretty high type of individual to be a success in all the parts and phases of what is known as farm management. To be brief then, we are satisfied that lack of material for the conduct of co-operative work is not our difficulty, though we are still called a "co-operative desert." Our difficulty is in the matter of not knowing how. Our farming people have had no training in working together for mutual benefit, and very little training in the advantages to be derived therefrom. It took Denmark fifty years to work up to its present standard, and all this time every possible agency of tuition at work to convince the young Dane that his home was on the farm or nowhere. Not only agricultural insti-

tutions, but high schools and public schools and all schools were enlisted to carry out this programme. There is no cause for discouragement in the matter of co-operation in this Province. The most difficult thing for an agricultural people to do is to lift themselves up without any outside assistance into a position of mutual trust and unselfishness. The question is continually being asked "Is it not up to the Government to do something"? There is one clear field open and that is in the matter of instruction. Societies are being organized year after year under a set of by-laws and a constitution which contain within them the germs of failure. Surely an instruction bureau, if opened, would be able to prevent this to a large extent. Again there is the greatest lack of uniformity in the rules and regulations of the associations now being formed, so that it is next to impossible to reunite for the larger objects of rural betterment. Uniformity would be easy under the direction of such a bureau. Herein we feel confident is our hope. Government grants to co-operative institutions is an operation as contradictory as the writer can recall. If a co-operative society is anything it is a "help-yourself-society."

We started out to state the possibilities of Co-operation and to show how the Government may assist.

#### DON'T BE DISCOURAGED

When the month seems kinder gloomy,  
 And the chances kinder slim,  
 And the situation puzzling,  
 And the prospects awful grim,  
 And Perplexities keep pressing,  
 'Til all hope's nearly gone;  
 Just bristle up and grit your teeth  
 And keep on keeping on.

—The Gateway.

## The Science of Living

PROFESSOR TENNYSON D. JARVIS.

**E**VERY organism is trying to make a success of life.

With the lower animals this is an unconscious endeavor: With human beings there is a conscious object; we work to attain the greatest happiness, and our success towards that end depends upon our equipment. Naturally the best equipped make the most of life and get the largest share of happiness. If we could conceive of an absolutely perfect individual, we should have a being supremely happy, and just in proportion as each individual approaches this state, so his happiness is gauged. There are two schools teaching how human happiness is attained. First, we have the concrete or physiological. In this school we are taught that the cells of the body should be kept in a pure and healthy state, in perfect harmony with the inner and the outer world, and capable of receiving normal sensations. If the cells are diseased they cannot make use of the material at their disposal for their development and consequently fail to discharge their normal functions.

On the other hand, we have the abstract or moral school. Here we are shown by example that a thing is right or wrong by such instruments as Art, Music, Poetry or Literature. The consequence of wrongdoing is more or less indefinite, whereas in the physiological method the results are presented with mathematical accuracy. In the moral school we are led to good or evil by persuasion, in the physiological school we are positively shown that the way of the transgressor is hard. These two

great systems of teaching should go hand in hand, as one is incomplete without the other. Indeed the concrete or physiological should come first. Just as for the proper development of the plant, it is necessary to prepare the soil, so for the best results in human character a thorough preparation must be made by instructing the pupil upon the nature of the component parts of the body.

Select, for example, educative systems anywhere you choose and take the study, which is of all others, the basis or groundwork, of ethical, aesthetical, economical, logical and psychological instruction—the study of physiology. We find that there is next to nothing being done, and that which is attempted is begun where it should end. Physiology is sometimes taught, but the text books used in our schools are altogether too complex for the untrained mind and, in most cases, the teacher himself does not understand the true idea of the subject. To be of use and value all instruction should be correlated with everyday life. How absurd it would be to start a child in arithmetic at some complex problem without having first made him thoroughly acquainted with the processes of addition and subtraction; or to commence a study of English with the poetry of Shakespeare instead of the symbols of the language. Yet this is exactly what is done in the majority of cases with the study of biology. Indeed, the subject receives very little attention at all. Few people know that it is absolutely incumbent on us to obey the laws of nature. As a result of this ignorance, backed up by

an ever accelerated speed of invention and specialization, we have neglected the very laws which govern our everyday life; we have lost sight of the substance in pursuing the shadow; we have disturbed the balance of nature to such an extent that it is the exception to find normal, healthy people living the life that nature intended. Weeks, months or even years of suffering are common even amongst what we consider healthy beings. A further burden upon us is the maintenance of numerous and costly institutions for the protection of dependents and defectives.

Returning to the abstract school again, our great moral teaching has come to us from the foremost poets, artists, prose writers, philosophers and religious instructors. The nature studies of Wordsworth are excellent; the pictures portrayed by Ruskin are beautiful; the philosophy of Lowell and Browning are good; the high ideals of Shakespeare and Tennyson are most useful, and the religious and moral teachings of our Saviour are sublime—but these studies, pictures and teachings find us badly prepared to receive them. We have begun

understand Browning's philosophy one must have a groundwork in nature studies of a concrete nature; even to appreciate a masterpiece



#### MOTHER NATURE TO THE MINISTER OF EDUCATION.

On behalf of those who have not heeded my laws and have become the victims of disease and crime, let me entreat you to listen to my counsels

with the complex and worked towards the simple, when the obvious method is from the simple to the complex, or from the concrete to the abstract. To

painting one must have the elements of a natural training; to understand nature in such a way as Wordsworth presented it to us we must have gone



step by step from simple observation to admiration, respect and love for nature.

#### CHAPTER I.

##### Balance of Nature.

Previous to the advent of man with his powers of planning and subduing other orders of life to his will, the balance of nature was perfect; that is, there were no artificial changes among the forms of life in general, but each species held its place as the opportunity for procuring food, shelter and space afforded. Let us examine any part of undisturbed nature—a woodland scene, for example. Here we find plants and animals of endless variety living together in perfect co-operation and harmony. Suppose, now, we remove from this society any one species, whether it be plant or animal. Let us take, for example, from the birds, the woodpeckers. The insect borers, being rid of their arch enemy, would increase very rapidly and perhaps destroy the trees on which they feed. On the other hand, the hawks and owls, depending upon the woodpeckers for a portion of their food, would perhaps suffer from starvation. Again other birds which shared the borers with the woodpeckers would have an oversupply and might suffer from disorders due to excessive food. Similarly we might remove any member and find the same result in famine, disease, overwork, or even death. This applies precisely to the inner world—our own bodies—as well as the world outside. If we injure or destroy any single cell or tissue of our body it means overwork, famine, disease, or even death to other parts or to the whole body according to the degree of injury.

In both cases life is so interwoven

that if any part of nature, be it ever so small, be disturbed or injured in any way there will be a reaction. It is true that nature tends to assert herself or correct conditions in time, but not without expense to the individual.

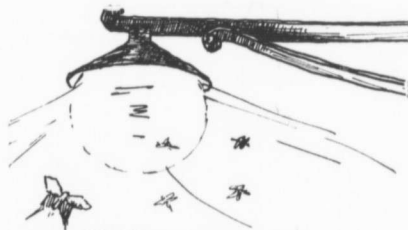
##### THE ABNORMAL LIFE.

###### Effect of Stimuli on the Organism.

Every animal is subject to agreeable and disagreeable stimuli. By a stimulus we mean that state of an organism which makes it respond to outside attractions. A fish meeting a moving object in the water is either attracted or repelled by the stimulus presented. If it is a pleasing stimulus, the fish will attack and probably devour it. On the other hand, if it is a dangerous stimulus, the fish will try to escape. Sometimes, if it is true, the fish makes a mistake and suffers accordingly, but this again is one of nature's methods to eliminate the unfit; if they blunder, they must pay. A very striking example of the effect of a stimulus is seen in the case of the toad during the summer season under the arc light. Before the invention of this luminous body the toad lived in peace and happiness upon an average of 30 or 40 insects in the twenty-four hours, but the great attraction of this light for nocturnal insects has furnished the toad with a special opportunity to obtain a super-abundance of food. As the insects fall to the ground beneath the glaring light, the toad, responding to this unusual stimulus, gorges himself to the utmost, filling up first his stomach, then his throat, then his mouth, and then stretches out his tongue for more. He is utterly incapable of using any judgment or option in the matter. The stimulus is there and he must

respond. The appetizing effect of the fallen insects acting upon his vision overcomes anything in his power to reject it. The only thing he can do is to eat; of course, he suffers in the end; his stomach is distended, indigestion sets in, he must have pain and finally he is entirely demoralized, even as a toad. Nature is opposed to these sudden changes introduced by man. In balanced nature we have evolution, but this is a very slow and gradual change.

Similar cases are observed in the human race. The baby with the bottle will respond to the stimulus of the nipple by filling its stomach, throat and mouth till they overflow. It is powerless to resist and, like the toad, must be punished; it gets pains and gives trouble. At this stage the common practice is to administer medicine in some form or other to force the machinery to act or else intoxicate by alcoholic mixtures, which cause the child to forget its troubles. Later in life the child is attracted by the display of sweetmeats in the confectionery window. He will get some of these, if possible, and, if he cannot, he will resent it with tears. This is the result of an exaggerated display in the modern



THE LURE OF THE ARC LIGHT.

system of advertising. In the country, where the stimuli are more natural, the child is not acted upon by this abnormal display and, as a result, in that particular instance the child is better off. A young lady goes into a millinery shop and, meeting a pleasing stimulus in the form of furs, hats, feathers, etc., often buys that which she really does not need because she is helpless to resist the stimuli which are acting upon her. A man addicted to the drink habit enters a bar-room and meets there most powerful and agreeable stimuli in the form of the company, the click of the glasses, the appearance of the bottles, the odors of liquor and cigars, and the whole combination produces a stimulus which is too strong for him to resist, so he drinks until he is intoxicated. An understanding of the laws of nature would have been sufficient to prevent him from indulging at all, or at any rate from going to the extreme of intoxication; or he might have developed some of the numerous habits which are normal and just as attractive, or more so. A boy will not cut off his arm to suffer pain, neither will he develop a habit which he *knows* will be his ruin.

Civilized man has gone all over the world and introduced his habits among the previously healthy tribes, and, in every case, they have adopted



THE DEMORALIZED TOAD.

You can see I am full, but the stimulus haunts me still.



those habits and become diseased and degenerated, even more so than we ourselves. The Red Indians, once a strong, sturdy race, are now a sickly, delicate people, unable to cope with their environment. The Maori of New Zealand only a few years ago were a robust and healthy people; now they are diseased and rapidly becoming extinct. The Pigmy of Africa follows the hunter and gorges himself with the food that he leaves behind and, like his friend, the toad, fills himself and suffers. The African negro in his native home, undisturbed by the white man, is a successful race, but having suddenly introduced the white man's habits, he is one of the most uncontrollable beings in civilization, lacking even that little control exercised by the white races. Even among the white race we have a similar example; the uneducated man, conforming to the habits of the cultured man, often comes to ruin. Ellen Richards expressed a very vital truth when she said: "By thrusting the implements of the highest culture into the hands of those not strong enough to hold them safely, we have given sharp-edged tools to children."

#### Over-Eating.

At the present time at least nine-tenths of the adult population of America are suffering from over-nutrition. Our case is not unlike that of the toad. Where there is a superabundance of food stimulating our senses, we disregard any laws of eating and swallow food merely for the taste of it. It is too concentrated; it is improperly masticated, and taken in until our stomachs are filled. The tempting and attractive preparations of modern cookery again assist in accentuating this evil. Feasts, banquet, suppers, dinners, luncheons,

afternoon teas, and midnight coffee and wines, all these are simply forcing the poor, tired-out machinery to obey our sensual desires, even without consulting it. Social functions, conformity to custom, a desire to be agreeable, lack of models to direct us away from these things, make it very difficult for the average person to do anything but follow the crowd, though they may know they are going wrong.

Notice again how we have wandered into complexity of foods. Our ancestors, who approach most clearly to the natural state of living, fed upon coarse meal, berries and game. Compare this with the menu of today. From coarse meal we have gone to preparations made of refined flour, to plain breads, plain cakes, concentrated confections, consisting of a little flour and large quantities of grease and spice, to puddings, tarts, pies and all sorts of impossible mixtures. From the raw and natural berries we have fruits of all kinds, preserves, catsups, pickles, sauces, chow-chow, and condiments and seasonings in endless variety. From the simple, raw or boiled game we have drifted into rich and extensive dressings, prepared with grease and spices. Worse than this, modern industry has devised schemes of preserving nearly all the common foods and holding them over from season to season. We have, again, the cold storage system of keeping all kinds of luxuries within reach the whole year round.

#### The Candy and Ice-Cream Habit.

The simplest form of candy was found in the old-time taffy. In this form there was only the single color and taste to stimulate the sensory organs. Compare this with the colors, shapes sizes, flavors, tinctures,

mixtures, alluring names, methods of serving, attractiveness of the confectionary parlors—often music—the elaborate development of the treating system, schemes of advertising continually being dangled before the eyes of the people in papers, magazines, sign boards, street cars and everywhere where the public gaze may be attracted; again the window displays, the artistic arrangement, the exposure of the most luscious grades of the goods, the striking arrangement of color, all meant to compel the passing victim to buy and eat. If the masses of the people could be led to see the enormous quantities of this unnatural concentrated food product which are being manufactured from year to year and in ever-increasing quantities, they would surely take alarm. Every fair, every exhibition, every excursion, every picnic, every lunch counter, every summer resort, every train, every drug store, every grocery store, every flower store includes varieties of candy as a part of the outfit; departmental stores and street vendors also deal more or less in sweets and candy. Instances are not wanting where the popular girl consumes a box of bonbons per day. Candy is generally the reward offered to the child for good behavior. Spending money, given to boys and girls, is nearly always used for candy. Christmas, Easter, New Year and birthday presents consist largely of sweets. At card parties, at homes and opera parties, candy is invariably present, which we accept, no matter whether we feel like it or not.

A few years ago ice cream was not known. Indeed, it is not yet known in most countries, but here in

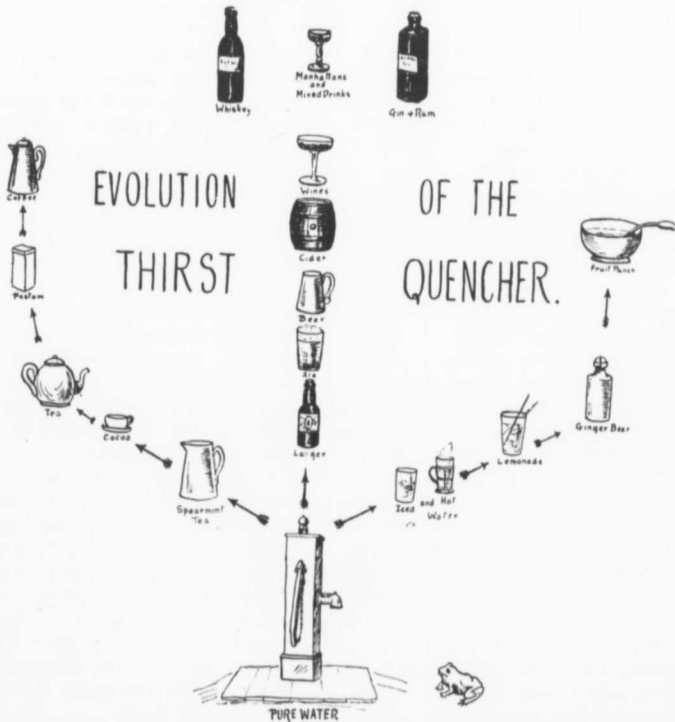
America we find a tremendous development in this article. From plain frozen cream, we have gone to the most complex mixtures and concentrated forms of food, such as cream, nuts, preserves and cornstarch mixed up with high flavors, colors and chemicals. We have introduced the process of manufacture in the home; a modern home is scarcely complete without its ice-cream freezer. The convenience of the ice-cream brick is another means of getting this material into the home. And notice again the varieties of ice creams: Sunny Jims, David Harums, Sundaes, ice-cream sodas, water ices, etc.

#### Beverages.

The evolution in beverages is no less striking than in that of confectionery. First we used spring water, which is pure, clean and capable of doing all that nature requires for the system. All living organisms, except man, receive only this one drink. No matter what climate, no matter what work they perform, no matter what their conditions of life, they need no other drink than water. When all these millions of species and forms of life, from the lowest to the most complex, thrive and are healthy with this one great elixir, surely this should be an object lesson to mankind. Let us see where we are drifting: here is a partial list of what we are now taking instead of spring water—iced water, hot water, lemonade, tea, coffee, postum, chocolate, cocoa, unfermented wines, cider, ginger ale, cocoa-cola, raspberry vinegar, grape juice—these at least are to be found even in what is called temperance homes. When we turn to those less scrupulous, we may add to this list ale, beer, all malted liquors, fermented wines and strong alcoholic

drinks, such as whiskey, gin, rum, brandy and champagne. At the bar-rooms we find mixtures and combina-tions of these. In the modern bar-room, indeed, we find the most stimu-lating centre of all. Here are no end o' fancy bottles, glasses, etc., enticing

sandwiches and biscuits which are offered as a part of the bargain, the foam of the beer, the pop of the sud-denly-removed cork, the liveliness of the place, all tend to make the head swim with intense sensations which are only satisfied by imbibing. The



ALL LIVING ORGANISMS EXCEPT MAN TAKE NO OTHER DRINK BUT WATER.

aromas from open taps and uncorked bottles, rows of people with their drinks and glasses of various shades and colors, conversations of idlers, smoking, chatting, the free and easy life of the saloons—the bartender often with his wit and repartee;

reader must not suppose that by removing the bar there will be any very radical change in the situation. This is only one of the many evil habits which are practiced today. If you eliminate the drink habit, unless you supply some beneficial habit,

something as bad may be taken up.

Therefore, we see the necessity of an improvement in the system of education of the child at a stage when he is impressionable. The alcoholic temperance man who is conscientiously doing his best has a most difficult task before him when he is up against the problem of breaking a matured habit in a matured individual. He is really beginning at the top and working down when he should be working with the child and helping him to become a man. It is true that our educational institutions wish to train a child to good habits, but here again they have missed the point, that it is necessary to instruct the child concerning nature and its laws right from the start. As a rule the child has most of its habits formed before he receives any knowledge of true nature. This is altogether too late. Nature first, after that such subjects as we have time for. Therefore, it is obvious that the best temperance work could be done when the child is forming his habits. How to keep a child from going wrong is a far more vital question than how to turn him back after he has started in the wrong path.

#### **Tobacco.**

This is a habit which arises from neither food nor drink. There is nothing good about this at all. In confectionery there may be a certain amount of food, and certain abnormal beverages may quench the thirst—but what does tobacco do? We find again that the use of tobacco has passed through an evolutionary process. At first the simple mullein leaf was the sole agent of the habit. Later on plain tobacco leaves were used. Now these have been seasoned, concentrated with juices and flavorings

and mixtures of dope. The various methods of use also indicate an enormous development of the tobacco habit. From the old corn-cob, we have the clay pipe, meerschaum, cigarettes, cigars of all strengths and flavors, chewing tobacco, in all its forms. The fact that the first smoke proves disastrous is sufficient to indicate the danger of using this weed. The true nature of its poison is clearly seen in its introduction to the system. It is no argument in favor of tobacco to prove that men live to very old ages who have used it all their lives. A tree that has been repeatedly injured may live just as long as a tree that has received nothing but good treatment, but in the case of the injured tree or the habitual user of tobacco, the enjoyment of life or the response of life to the natural and beautiful stimuli of the world will be limited to the same extent as the healthy cells of the body have been injured. The diseased area, the inactive cells, injured by the constant use of tobacco are not sensible to the stimuli received from the outer world, so that a chronic smoker may be living and still receive not more than a small part of the pleasures that the Great Creator intended for him. Again, think of the imposition of the habitual smoker to force his poisonous gases upon the organisms of this world who are trying to live pure and natural lives.

This habit is growing more rapidly than any of those we have previously mentioned. The process of learning how to smoke is made much easier now than before the mild forms of tobacco were placed upon the market, and this habit is growing in spite of the diligence that the reform workers are putting into their work of sup-

pressing the evil. It is a similar case to that of the temperance worker. One cannot make a man good by telling him a thing is bad; he must have reasons, and have it early in life.

#### **Chewing Gum.**

This habit seems to be strictly American. It is a habit of both members of the sexes, but principally the women. Here, again, we have a marked development from the hardened sap of the spruce tree to the various flavored gums, of mint, violet, etc., sweetened paraffin wax, tutti-frutti, chicklets, dental buds. It is a most uncultured and injurious habit, twisting the mouth and exacting enormous work upon the salivary glands, taking away the supply of lubricants from the vocal organs and thus interfering with speech and voice. It is an unsightly practice that should be discouraged and eliminated if possible. A further development of the traffic is seen in the invention of the chewing-gum slot machine device to attract the unwary.

#### **Patent Medicines.**

Notice the headings in our daily papers and magazines. According to them nearly every imaginable as well as real disease may be cured by the use of sufficient quantities. "A marvel of healing," "cures like magic," "kills the germ," "the only remedy that cures," "the weak are made strong," "thin people fat," and "fat people thin," "restores vigor," "gives you back your manhood"—indeed they are altogether now too common to mention all these alluring headlines. The stimulant of the newspaper and magazine advertisement is too much for the ailing thousands—they buy the stuff and are led on to buy still more. Instead of restoring the balance in a natural way, we try to force the machinery of the consti-

tution to correct incorrect living by tonics, sedatives, etc. The use of these always results in harm by weakening the machinery and overworking the cells and organs. How absurd it seems to imagine that people can cure a wrong of many years' standing by a few doses of mixture that has been prepared for sale! If we break down the machinery and wish to restore it, we must remove the cause. This is the only successful way of restoring the balance of nature in the inner world.

#### **Drug Habit.**

Under this we should mention morphine, opium, and cocaine. These are gaining ground. Not long ago, only used by a few and quite moderately, it is now used by thousands, many of whom make use of it in large quantities. These are concealed practices, being under the ban of the law, yet investigation shows that they are largely in use even in this country, and especially in the larger cities. Many individuals carry with them a large injecting apparatus and gradually increase the dose from day to day. Is it not time we were looking for a change and enquiring into how this may be prevented before they have become a part of the individual's daily life?

#### **Indoor Life.**

Let us go back to the example set us by our ancestors and see the natural play grounds, the beautiful forests, the fields and meadows, the great plains, the high mountains, the fertile valleys, the running streams, lakes and waters, bright sunshine, pure air and everything that is conducive to a wholesome and happy life. In those days there were no hospitals—and none were needed; no asylums—there was no necessity; no prisons—there were no criminals; all out of

doors was a huge sanitarium of the best kind. Men did not congregate for hours in unwholesome and stuffy rooms. They had their games and sports, pleasures and past-times, but they were all outside. The musical comedies were furnished by the birds and their own voices. They were musical, but their theatre was in the open air. They danced, but not in a stuffy ball-room. Now we have our well-built homes, from which we exclude every possible bit of fresh air. We have the club house, stuffy schools, crowded churches, crowded theatres and concert halls; even skating is practised for the most part indoors, and we have even roller skating rinks—the acme of dust producers. Almost all business meetings and social functions are performed indoors so that with the exception of brief intervals our lives are closed in. Our shopping, our travelling, etc., are carried on in an atmosphere of impurities. Very few people even admit air to their rooms at night; they sleep with barred windows—of single glass in summer and double in winter. We even treat many of our domestic animals in this way and cause them to become sickly and unhealthy. Our heating systems again contribute to the evils of impure air.

#### Exercise.

Before the days of specialization every family was obliged to perform for itself all the work of producing and preparing the food and clothing necessary for nutrition and protection. Here long hours were spent in the open air tilling the soil with the crudest forms of agricultural implements, such as called for the most exacting use of limb and muscle—the adze, the hoe and the spade. In harvest there was the sickle and the cutlass. The grain was ground with the hand mill. The clothing was made by

hand. The wool was taken from the sheep, spun, woven and sown all by hand. What an enormous amount of physical exercise as compared with what we now have! The varied exercises too developed all the muscles of the body, producing a strong and sturdy individual. The division of labor and specialization of to-day has changed all these, with the result that the masses of the people have congregated in the cities. Now, a large part of the farming is done in the city factories where hitherto all the routine of farm life, including the making of the simple machinery, was done right there, usually in the open air and subject to all the advantages of natural conditions. Now grain for thousands is prepared for food in a single factory; clothing for thousands is prepared away from the farms, and its natural conditions. The modern machinery, which has been so elaborate as to dispense with hundreds and thousands of men and women who previously worked in the field, is made in the city factory, where those who represent the previous farm family workers are now shut up in factories in front of ingenious and powerful machines, where in many cases only one set of muscles is ever drawn into play. Even the machinery for cooking and preparing the meals has so been specialized that there is no longer anything like the exercise required that was necessary in days gone by. In transportation again we find the free use of the limbs has been greatly interfered with as the locomotive, the electric car and the automobile have successively been called into use, till now walking, as in the sense of former days, is almost unknown. People never think of walking where they can be conveyed more easily, and this is almost anywhere in these days, especially in the older countries. (To be continued in May issue.)





## LITTLE THINGS

A traveller through a dusty road  
 Strewed acorns on the lea;  
 And one took root and sprouted up,  
 And grew into a tree.  
 Love sought its shade at evening time,  
 To breathe its early vows,  
 And age was pleased, in heat of noon,  
 To bask beneath its boughs;  
 The dormouse loved its dangling twigs,  
 The birds sweet music bore;  
 It stood, a glory in its place,  
 A blessing evermore!

A little spring had lost its way  
 Amid the grass and fern,  
 A passing stranger scooped a well,  
 Where weary men might turn;  
 He walled it in and hung with care  
 A ladle at the brink;  
 He thought not of the deed he did,  
 But judged that toil might drink.  
 He passed again—and lo, the well,  
 By summers never dried,  
 Had cooled ten thousand parching tongues,  
 And saved a life beside!

A dreamer dropped a random thought,  
 'Twas old, and yet was new—  
 A simple fancy of the brain,  
 But strong in being true;  
 It shone upon a genial mind,  
 And lo, its light became  
 A lamp of light, a beacon ray,  
 A monitory flame;  
 The thought was small, its issue great,  
 A watch-fire on the hill;  
 It shed its radiance far adown,  
 And cheers the valley still!

A nameless man amid a crowd  
 That thronged the daily mart  
 Let fall a word of hope and love,  
 Unstudied from the heart;  
 A whisper on the tumult thrown—  
 A transitory breath;  
 It raised a brother from the dust,  
 It saved a soul from death.  
 O germ! O font! O word of love!  
 O thought at random cast!  
 Ye were but little at the first,  
 But mighty at the last!

—Charles Mackay.

# THE O. A. C. REVIEW

## REVIEW STAFF.

J. MILLER, Editor-in-Chief.

L. STEVENSON, Agriculture.

H. M. McELROY, Athletics.

E. BRADT, Experimental.

L. B. HENRY, Alumni.

W. M. AIKENHEAD, Horticulture.

MISS ISABEL SHAW, Macdonald.

J. H. FAY, Poultry.

J. H. WINSLOW, Locals.

C. W. STANLEY, College Life.

F. WATERHOUSE, Artist.

E. A. WEIR, Business Manager.

G. J. JENKINS, Assistant Business Manager.

## Editorials

### THOUGHTS

"Before man made us citizens  
great Nature made us men."—Lowell.

"In the rainbow brilliantly span-  
ning the two mysterious silences,  
what is there for any of us worth the  
having more than work and friends  
and love?"—From the Myrtle Reed  
Year Book.

### Don't Be Selfish.

Look on other lives besides your  
own; see what their troubles are and  
how they are borne: try to think of  
something in this busy world besides  
the gratification of small, selfish de-  
sires; try to think of what is best in  
thought and action, something apart  
from the accidents of your own lot.—  
George Eliot.

The greatest coward is he who  
treats with cruelty a helpless living  
thing.—The Dumb Animals.

Aspiration sees only one side of  
every question; possession many.—  
Lowell.

If you love a bad man he will soon  
hate some of his badness.

Sympathy must have a moral  
quality in it if it is to be any good.—  
The Gateway.

Lots of people who go through life  
for little or nothing will find, if they  
get to the pearly gates, that they  
can't work the free pass racket on  
Saint Peter.—Winnipeg Telegram.

If you don't know, say so. It's a  
sign of strength to acknowledge your  
weakness.

If you're ashamed of what you are,  
either your occupation is disgraceful  
or you're a disgrace to your occupa-  
tion.—The Presbyterian Record.

No matter how much a man hears  
the word, small is the credit attached  
to him if he fails to be a doer also.  
In serving the Lord he must remem-  
ber that he needs to avoid sloth in  
his business, as well as to cultivate  
fervency of spirit.—Theodore Roose-  
velt.

Men converse; women talk. The result, so far as improvement of the mind goes, is about the same.—Lux Columbiana.

Reading is to the mind what exercise is to the body. As by the one health is preserved, strengthened and invigorated: by the other, virtue (which is the health of the mind), is kept alive, cherished and confirmed.—Addison.

In the editorial "Have We Time" we asked if we were not "tending to promote artificiality

**Social Life** rather than congeniality of society." We

stated that "as farmers we were not by education and inclination suited to these things." It has been said that we only vaguely understand our subject. It has been argued that we imply an insult by stating that the ordinary farmer should not have a desire for the forms of social life mentioned.

Well, let us see! Wherein does the social life of the farmer fundamentally differ from that of his city cousin? Are there any sharp lines of division, and if so, why? We believe that there are. We think economic conditions place the social life of each upon an entirely different basis.

First, let us consider what humanity is working for. In all the varied pleasures and work, virtues and vices—all the component parts making up life—what is humanity really seeking and securing? And as a further development of this idea what is the object of society—what do individuals give to it and receive from it? Around humanity and human relations more philosophy is centered,

perhaps, than around all other natural phenomena. But the philosophy of Carver seems to be based upon a solid foundation of truth. He writes: "This philosophy would test the soundness of all conduct, of all social institutions, and even of all moral codes: Do they help in the great task (that of getting a living) which the human race has before it, or do they hinder? If they help they are good and sound. If they hinder they are bad and unsound. For getting a living means extracting from the material world which surrounds us, the means of subsistence, of comfort and of happiness."

On the farm there is a great community of interest in each home in the work of making a living. Each member of the family understands this work and assists in some way. The business of the father is the business of them all. Each child aids in the work as its strength permits. In these days we hear much of child labour and its evil effects: but more children are ruined through idleness than by over work. On the farm each child has an excellent chance to reach a normal development because of the many kinds of light labor that require little strength, but teach the importance of work. Money is not made rapidly and its value soon becomes impressed upon the young mind. A farmer is not directly dependent upon anyone for his living. He must sell his produce, to be sure, but he has little control over the selling end. He directs his energies to the growing of crops and no man can well influence this. As a result a strong feeling of independence has developed in rural districts which has stood this country in good stead in more than one crisis.

There is another feature of home life that must not be over-looked. Since, in Canada, the unit of rural business is the family, it follows that to attain very great success a farmer must be married. It is a part of the business of making a living (in the broad sense) and both the young men and young women realize the "means of subsistence, of comfort and of happiness" can be secured to best advantage only in the married state. They start with a definite aim, one which constantly requires mutual help and advice and which will bind the entire family with a common interest. And it must not be thought that this business-like view of marriage and family relations is low or demoralizing. The only nations that have ever developed high civilization and culture and refinement have been those in which a family interest was centered in a productive work. Carver writes: "The ideal of production for a common family purpose—of building a family and perpetuating a prosperous family estate—instead of subtracting from the dignity of family life is really one of the greatest factors in adding dignity to it." That it is both normal and successful is shown by the fact that while marriages occur at an earlier age and families are larger, there is a smaller percentage of divorces, murders and suicides than in the city. Members of the family are together a large portion of each day. They form a social unit and must depend upon their own society most of the time. A polish which their business does not demand is usually not in evidence, but deep and sincere feelings exist none-the-less. They say directly and openly what they mean and act accordingly. Relations, feel-

ings and actions are perfectly natural and sincere. And because this social life is founded upon such true economic principles and because it is so solid and enduring it must command the respect of all but those of insufficient brain power to appreciate natural and honest work.

However, the ideal rural social life is not the life of the individual family. It possesses most commendable features, but only when the different families in a district mingle is the highest state reached. Then with the interchange of ideas and the association of people of different temperaments and different degrees of education a development of social character occurs, different in many respects, but quite equal in intelligence and true culture to anything of the kind evolved in city society.

Let us now consider the social conditions of the city. At once we perceive a difference. The family is not working for a common business end. Usually the wife cannot directly help her husband in his work and often the circumstances are such that she can take little interest in it at all. The children—unless they follow the work of the father—take no interest in it. They often have no work to do and drift into idle ways. In the case of the wealthy they do not always appreciate the value of money. In short, owing to the very nature of things, the home relations are different. Neither a business man nor a business woman is enabled to make a living more easily by marriage. They may even find it harder to do so. Another difference is at once apparent, and that due also to the different nature of business. In the city men were in close contact with men. Business operations were influenced by

many different people. A smooth and gracious air was developed by this constant contact which naturally would not be gained on the farm. "Minds sharpen minds," and thought became more rapid. Men became less conservative and rapid progress was made, until the city has reached its present state.

In the home, associations became quite as close as in business and the same forces were at work. Manners improved, social education progressed until the present social conditions have been evolved. But in this there is a danger. Members of the family are not always dependent upon each other for assistance and pleasure. The old family feeling sometimes becomes broken. Outsiders enter into social pleasure, until in extreme cases the family is not united in anything but name. And as these forces develop the shallow and the insincere become more in evidence as the natural and the true are obliterated.

So it would seem there is a difference in the principles of rural and city society that is centered in the home. The life and surroundings widen this difference, and more than education will be required to remove it. But need it be removed? Is not a better understanding between city and country all that is desired? Social intercourse, culture and refinement will develop more and more under the present commercial system of agriculture, and as education spreads. But we still argue that those forms alluded to (being only natural to the city), should have no place on the farm. Nor do we advocate this as an "extensive moral reform movement." We argue along economic and physiological lines. The principles of physiology involved are too

complex to further consider here. But very entertaining and complete information upon this subject is given in an article by Professor Jarvis, entitled "The Science of Living," published in this number.

On the other hand the best minds in the cities are advocating a more simple social life. The best magazines are decrying "artificiality" that makes up so large a part of some lives. But each must decide for himself when the time to pause is reached. What could we do without the artificial in life—the light and heat we use, the houses we live in, the clothes we wear, the books we read. Each must use his own good sense to point out for him the proper course. After all if we allow ourselves to be governed by the philosophy already quoted we will not go far astray whether our living is to be made in the country or in the city.

As is well known our prize competition of last Christmas was very successful. A large

#### **A Prize Competition**

number of entries were received and the standard of the work was beyond our expectations. But the time was too short to allow the competitors to do their best work. It has been decided to hold a similar competition this year, and the announcement is made this early so that each one may have ample time for preparation. A first prize of \$10, and a second prize of \$5 will be given in each of the following four classes:

1. Short stories, not exceeding 3,000 words.
2. Poems of any length.
3. Sets of cartoons of three.
4. Sets of photos of three.

It is to be hoped this competition

will receive the support of our readers. Whether it will become a permanent feature of our policy, or not, remains with the student body. If a large number of entries are received we will know the plan meets with general approval. We trust everyone will compete in at least one class. Don't say you can't, for you know you never can tell what you are capable of until you try. Better make a start right now.

#### Rules of Competition.

1. All competitors must be subscribers to the O. A. C. Review.
2. Subscriptions may be made any time previous to closing of contest.
3. Impartial judges, unknown to competitors will be selected by a special committee chosen from the Association Executive.
4. All material submitted will be judged under a "nom de plume."
5. All stories, poems, cartoons and photos must be original.
6. All material submitted whether it is awarded a prize or not, becomes the property of The Review.
7. Number of entries not limited.

8. No competitor may win more than one prize in each section.

9. All photos and cartoons must be submitted at The Review office not later than Oct. 15th.

10. All stories and poems must be submitted at The Review office not later than Oct. 15th.

#### Special Rules.

##### Stories—

1. Choice of subject left to competitor.

2. Stories must not exceed 3,000 words in length and may be illustrated.

##### Photos (set of three) —

1. All pictures must be representative of Canadian Country life.

2. The Review reserves the right to demand the use of the negatives of any photos submitted.

3. Negatives used will be returned to owner.

##### Cartoons (set of three)—

1. All cartoons must be centered on College life.

2. All productions which are awarded \$10 prizes will appear in the special Xmas number of The Review.

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#### Spring Song.

"Spring speaks not of budding trees  
 Unto me;  
 Nor of buds and flowers and bees  
 Oh, so free!  
 Nor of meadows that I see  
 Filled with lambs;  
 Spring brings back no thought to me  
 But 'exams.'"

# ALUMNI

M. C. Brownlee, of class '07, grew on a farm near McDonald's Corners, Ont. After absorbing knowledge for the two college years of '04 and '05, he obtained his associate diploma and set sail for the West, landing at Calgary. He worked for a time with the Farmers' Advocate, assisting Mr. R. J. Deachman, and later obtained a position with the Great West Saddlery Co. of that city. By diligence, application and industry he succeeded in making a rapid advance from order clerk, pricing clerk, travelling salesman, buyer, to assistant manager, which position he is holding at the present time.

When it is taken into account that the Great West Saddlery Co. is the largest wholesale harness and saddlery concern under the British flag, one can better realize the envious position which Brownlee now holds. It can be imagined that M. C., with his shrewd business ability, did not allow the opportunity to increase his bank account, which the western cities afford, to go by without getting his share. He is still boarding out however and when approached on the subject says he hasn't time to make a change for the dual system of living. We would recommend that some of the Macdonald girls write to him. He is loud in his praise of the O. A. C. and credits his success largely to the training he received at this institution.

A man of whom we may fittingly write is A. G. Turney, Provincial Horticulturist of New Brunswick. Before Mr. Turney went down to that Province the farmers had a great many apple trees with no apples, but in two years he has demonstrated that it is an apple country, and more than that, has done so beyond a challenge and alone. Not being sure of his chance in going at the farmer directly, he hit upon a scheme of having the business men of each district, through their board of trade, advance the money for an orchard in their vicinity, which he undertakes to look after and they pocket the profits. He rather humorously puts it "that his lantern lectures are costing the audiences one thousand dollars per night," but the fact remains that he never fails to get his cash subscribed, and will in another two years have his commercial demonstrations well established. The above idea is unique and so far as we know is his own. If some other part of the country does not steal him away he will have the people of New Brunswick growing No. 1 apples in spite of themselves. Turney has made good, we might say with both feet.

Among the many men of other nations who have taken a course at this College is Gonzalo Diaz, who was graduated in '09. He was then affected by the call of his native land



PELAYO DIAZ, '07.

and went home to Spain for a few months before going to Argentine, South America. There he obtained a position in the Polytechnic School at Buenos Aires, where he is dispensing a scientific knowledge of agriculture to the ranchers of that great cattle country.

M. W. Doherty, '95, in addition to the management of the A. R. Williams Company of St. John is the head of the Maritime Dredging Co., with a capital of \$750,000. He is there under the main spring of the harbor development of Canada's winter port and in a fair way of making a million of the long green variety. The plant is a very large and modern one, and is being driven to capacity to get things ready for the G. T. P. and C. N. R., in addition to providing further berths for the C. P. R. traffic. While busy as two men should be, he

always has time to go out and say a good word for the Conservative party and is easily the most popular stump-er in his party in a country where orators are found by the dozen, born, not made.

Pelayo Diaz is a brother of Gonzalo, and might be said to be a forerunner of the latter, as he was graduated from this College in the year '07. He then travelled in Spain, Italy, France and Portugal for a few months, after which he remained under the parental roof for a short time before setting sail for South America. At the present time he holds a very good position as Superintendent of Agriculture for one of the provinces of Argentine. He spends his time travelling around the country buying and selling land for the government and handing out scientific agricultural "dope" to the farmers. The College may well be proud of the Diaz brothers.



GONZALO DIAZ, '09.



Mr. John A. Mooney, of '95-'96, went to Manitoba about ten years ago and located at Valley River, near Dauphin, where until 1908, he farmed very successfully. One of the first things to which he devoted his energy was the improvement of the wheat grown in that district. In co-operation with the experimental farms he made careful records of precipitation and made selections of grain which were tested with a view to determining the effect upon the quality of various quantities of moisture in the soil. After a number of years' work Mr. Mooney has found a strain of Red Fife which he believes will, when grown on the scrubs lands of Northern Manitoba, Saskatchewan and Alberta, produce hard red glutenous kernels. These districts usually produce wheat which is said to be "piebald," that is rather starchy instead of being hard, red and glutenous.

Mr. Mooney left the Dauphin district three years ago and bought a farm in the Regina district. Two years ago he bought a farm at Tessier, forty miles west of Saskatoon, and a few months ago, organized the Mooney Seed Co., Ltd., which purposes to carry on business as growers of and dealers in high quality farm seeds. He is a public spirited citizen, being a director of the Regina Exhibition Association and Vice-President of the Canadian Seed Growers' Association for Saskatchewan.

After leaving Guelph, Mr. Mooney, in accordance with well-established custom, returned and led away Miss Annie Henry to cheer him up and now is blessed by four young "Moons" "guaranteed free from piebald."

#### **Our New Assistant Deputy Minister.**

When Mr. C. C. James resigned

his position as Deputy Minister of Agriculture for Ontario, the Hon. James Duff paid him a great compliment by appointing two men to fill his position. Our newly-appointed assistant deputy minister is Mr. C. F. Bailey, a graduate of this College. Mr. Bailey was born on a farm near Kempville, N. S., in 1880, and obtained his degree in 1909. In the same year he joined the Ontario Department of Agriculture as live stock specialist and was attached to the institutes branch. He has had charge of the Short Courses and other outside work of the Department, and besides can say what he wants to on a public platform. In his new position he still has charge of outside affairs, such as the district representative work and it is up to him to use every effort, which he can muster, towards the advancement of Ontario agriculture.

#### **"The Wed and the Near Wed."**

Big Toole has fallen, but what more could one expect. Those of us who remember Wade will no doubt recollect the "leary" look which would come over his strong face when in some of his day dreams. At that time we could not understand the cause, but now, low and behold, the cause was as plain as the effect is happy.

To use football language, with which Wade is familiar, the story can be told very briefly. After a few scrimmages in the opponent's end of the field Wade made a try and on March 6th converted it in the presence of about sixty guests. The bride was Miss Mabel Leary, of Whitevale. The happy couple will take up their future residence in London, Ont., where Wade holds a position on the staff of the Farmers' Advocate.

George B. Rothwell, of '05, was badly wounded by cupid's dart, and on August 5, 1911, had the wound stitched up. The bride was Miss Myrtle L. de Long, of Ottawa. After recovering, the happy couple began housekeeping in the capital.

The class of '07 will be interested to hear of the engagement of A. D. Broderick to Miss Bertha Read, of Port Dalhousie. The wedding will be recorded in these columns in the fall if everything turns out as expected.

Whe. W. H. Evans, commonly known as "Chirpy," left the O. A. College in the spring of 1911, at the conclusion of his Sophomore year, the College lost a born humorist. The day that "Chirpy" arrived in the

Malay Federated States was a new date in their history, for being a son of the governor, he was royally received by two regiments of soldiers. After this welcome, he obtained a position as assistant on the "Ged-dong Estate," a large rubber plantation, consisting of four thousand acres, situated at Bagan Serai. There he has charge of 300 to 400 Indian women, who do the weeding and cultivating of the rubber plants. "Chirpy" is provided with a fine house and servant and says the only drawback to the place is its lack of white people.

Although many thousand miles away from here, he has not lost his regard for his Alma Mater and intends to return in the year 1913 to renew acquaintances with his old college chums.

### BEYOND THE HILLS.

Beyond the hills, where I have never strayed,  
I know a green and beauteous valley lies,  
Dotted with sunny nook and forest glade,  
Where clear, calm lakes reflect the sapphire skies;  
And through the vale's deep heart a river grand  
Draws toward its home, fed by ten thousand rills  
From fresh pure springs; it blesses all the land—  
Beyond the hills.

Beyond the hills, while here I faint from strife,  
Are quiet homes that soothe men's minds to rest;  
And peace and justice and the simple life,  
With love pervading all, with knowledge blessed.  
Life's purest joys and dearest hopes are there  
Unknown are sleepless cares and needless ills;  
And men are loyal and women true and fair—  
Beyond the hills.

Beyond the hills I yet shall surely go—  
Some day I'll cross the farthest barren height,  
And rest in dreamy forest glades, and know  
Those placid lakes, and see the morning light  
Silver the mighty river; and, to me,  
The sweetest hope that now my senses thrills  
Is of that land a denizen to be—  
Beyond the hills.

—John E. Dolsen.

# Athletics

## Indoor Meet

**T**HE annual indoor meet, held in the college gym, on the afternoon of March 13, was the most successful held at the O. A. C. for many years, eleven records going by the boards. J. Pope was again grand champion, with 36 points. Jim

Fence Vault—1st, J. Pope, '14, 6 ft. 8 $\frac{7}{8}$  in. (record); 2nd, R. Robertson, '14; 3rd, Mollison, '14.

Standing Broad Jump—1st, J. Pope, '14, 10 ft. 2 in. (record); 2nd, Mollison, '14; 3rd, Culham, '13.

15-Yard Dash—1st, A. Toole, '12,



OUR ATHLETES WHO REPRESENTED O. A. COLLEGE AT MACDONALD COLLEGE.

has won the Pringle shield three times in succession. E. Davies came second, with 15 points, winning them all in the swimming meet. A. Toole came third with 14 points. At the close of the afternoon, Miss Shaw, president of Macdonald Athletic Association, presented the badges to the successful competitors. Following is a list of the events.

2 1-5 sec. (record); 2nd, J. Crawford, '14; 3rd, Stirrett, '15.

Three Standing Jumps—1st, J. Pope, '14, 30 ft. 8 $\frac{3}{4}$  in. (record); 2nd, Robertson, '14; 3rd, Culham, '13.

60-Yard Potato Race—1st, S. Crawford, '14, 15 $\frac{1}{4}$  sec. (record); 2nd, E. W. White, '12; 3rd, Hextall, '13.

Standing Hop, Step and Jump—1st, J. Pope, '14, 29 ft. 8 in. (record);

2nd, Mollison, '14; 3rd, Toole, '12.

Standing High Jump—1st, Pope, '14, 4 ft. 7¼ in. (record); 2nd, Culham, '13; 3rd, Mollison, '14.

Hitch and Kick—1st, Robertson, '14, 8 ft. 9 in. (record); 2nd, Chambers, '15; 3rd, Thorpe, '14.

Rope Vault—1st, Palmer, '13, 11 ft. 9¾ in.; 2nd, Toole, '12; 3rd, Culham, '13.

Pole Vault—1st, Toole, '12, 8 ft. 10 in.; 2nd, Palmer, '13; 3rd, Pope, '14.

Running High Jump—1st, Pope, '14, 5 ft. 1 in.; 2nd, Mollison, '14; 3rd, Palmer, '13.

Chinning Bar—1st, E. Neff, '13, 26 times (record); 2nd, W. R. White, '15; 3rd, Nourse, '14.

Putting Shot—1st, Pope, '13, 38 ft. 4¼ in.; 2nd, Herder, '15; 3rd, Evans, '15.

Rope Climb—1st, Kirk, '14, 14 2-5 sec; 2nd, Webster, '13; 3rd, Harding, '13.

440-Yard Potato Race—1st, E. W. White, '12, 2 min. 47 secs.; 2nd, Wilson, '15; 3rd, Stirrett, '15.

Running High Dive—1st, Toole, '12, 5 ft. 2½ in.; 2nd, Harding, '13; 3rd, J. Crawford, '14.

Inter-Year Relay Race—1st, Fourth Year; 2nd, Second Year; 3rd, First Year.

#### Officials.

Referee and Starter—H. S. Ringland, jr.

Judges—Prof. S. F. Edwards, E. W. Kendall, S. H. Gaudier, B.S.A., A. W. Baker, B.S.A.

Timers—Prof. W. H. Day, S. Springer, H. L. Fulmer, B.S.A.

Clerks—W. A. McCubbin, M.A., C. F. Neelands.

Announcer—E. Davies.

### BOXING AND WRESTLING TOURNAMENT.

The annual boxing and wrestling tournament, held in the college gym., on Saturday, March 9, furnished a good afternoon's sport. All the bouts were of a high order and keenly contested. The following is a list of the events:

#### Boxing.

Featherweight—1st, Kirk, '14; 2nd, Walsh, '15.

Lightweight—1st, N. I. Wilson, '15; 2nd, Kirk, '14.

Welterweight—1st, Ryan, '14; 2nd, McCall, '14.

Middleweight—1st, Ryan, '14; 2nd, Neil, '14; 3rd, Thatcher, '15.

Heavyweight—1st, Wiltshire, '14; 2nd, Curtis, '15; 3rd, Davison, '13.

#### Wrestling.

Featherweight—1st, Sorley, '12; 2nd, Kirk, '14; 3rd, Lindsay, '14.

Lightweight—1st, Sorley, '12; 2nd, McElroy, '13; 3rd, Whaley, '15.

Welterweight—1st, Nourse, '14; 2nd, Bergey, '14; 3rd, Dunlop.

Middleweight—1st, Duff, '14; 2nd, Herder, '15; 3rd, E. W. White, '12.

Heavyweight—1st, Carroll, '13; 2nd, Steckle, '15.

## Aquatics

### SWIMMING MEET.

The annual inter-year swimming meet, held in the college tank, on Saturday afternoon, March 2, proved a brilliant success, three records be-

ing broken. E. Davies broke his old records for the back swim and 100 yards, while VanderByl broke the college record in the novice's 52 yards. The following were the events:

Novices 52 Yards—1, VanderByl, '15, 32 2-3 secs (record); 2, Braithwaite, '15, 37 secs.; 3, Harding, '13, 37 1-5 secs.

Long Plunge—1, Townsley, '15, 44 ft. 9 ins.; 2, Bosman, '12, 42 ft. 6 ins.; 3, Mendoza, '14, 42 ft. 4 ins.

52 Yards, open—1, E. Davies, '13, 36 3-5 secs; 2, Hextall, '13, 33 secs.; 3, VanderByl, '15, 34 4-5 secs.

104 Yards, open—1, E. Davies, '13, 1.06 3-5 (record); 2, VanderByl, '15, 1.18 2-5; 3, Harding, '13, 1.23 4-5.

Senior Relay—1, Third Year, 1.30; 2, First Year, 1.34 3-5; 3, Fourth

Year, 1.36.

208 Yards, open—1, E. Davies, '13, 2.20 2-5; 2, VanderByl, '15, 2.57 1-5; 3, Spalterholtz, '14, 3.05 3-5.

Beginners' Race, 35 yards—1, Wilson, '15, 29 secs.; 2, Hales, '14, 31 3-5 secs.; 3, Stirrett, '15, 32 3-5 secs.

Diving for Form—1, Wills, '14; 2, Jarvis, '13; 3, Hextall, '13.

Back Swim—1, E. Davies, '13, 38 3-5 secs (record); 2, Spalterholtz, '14, 46 3-5 secs.; 3, Cleverley, '15, 52 4-5 secs.

Novices' Relay—1, First Year; 2, Second Year.

## Hockey

### Freshmen, 4; Juniors, 2.

The First Year trimmed the Third Year in the second inter-year fixture, at the Royal City Rink, by the score of 4 to 2. The Freshmen were faster skaters and outplayed the Juniors in every department of the game. The half-time score was 2-1 in favor of the Freshmen. Oswald, Kilgour and Herder featured for the Freshmen, while Henry in goal, Jenkins and Tisdale, on the defence, played a splendid game for the Juniors. The teams:

Freshmen—Goal, Mallock; point, Kinlock; cover point, Fraser; rover, Herder; centre, Kilgour; right wing, Burrows; left wing, Oswald.

Juniors—Goal, Henry; point, Jenkins; cover point, Tisdale; rover, McElroy; centre, Bramhill; right wing, Culham; left wing, Hunter.

### Sophomores, 10; Seniors, 9.

The Sophomores beat the Seniors, in the fastest and closest contested inter-year game of the season, by a margin of one goal.

In the first half the game was all the Sophomores, and they looked like

easy winners. But in the last half things were different. Dawson in the nets for the Seniors got his nerve back and began to stop them, while Clark, and Petch on the Senior forward line, pulled off some pretty combination rushes, that generally landed the disc in the Sophomore nets. MacDonald, Madden and Kedekey starred for the Sophomores, while for the Seniors Clark was the outstanding man, although Clemens and Petch played a hard game. The teams:

Seniors—Goal, Dawson; point, McCrostie; cover point, Bradt; rover, Clark; centre, Petch; right wing, Clemens; left wing, Taggart.

Sophomores — Goal, Creelman; point, English; cover point, Kedekey; rover, MacDonald; centre, Madden; right wing, Weld; left wing, Duncan.

### Sophomores, 15; Juniors, 1.

The Sophomores won their third consecutive game, and cinched the college championship by defeating the Juniors in a one-sided game by 15-1. The champions had everything their own way, and played the Juniors

off their feet. MacDonald played his star game of the season, finding the nets for the majority of the Sophomore tallies. Madden, Kedey and Weld also played an effective game. For the Juniors every man seemed to be off color. "Cap" Gandier refereed and gave entire satisfaction. The teams lined up same as in previous games.

ston; 1st base, Clarke; 2nd base, E. White; 3rd base, Weir; left short, Sorley; right short, Shibley; left field, McCrae; right field, Smith.

Sophomores—Battery, Jackson and Hales; 1st base, Creelman; 2nd base, Culverhouse; 3rd base, Duff; left short, S. Crawford; right short, McCall; left field, J. Crawford; right field, Wills.



O. A. C. AT MACDONALD COLLEGE

### BASEBALL

**Seniors, 7; Sophomores, 4.**

The Seniors defeated the Sophomores in one of the best games of baseball, seen on the gym. diamond this season, by the close score of 7-4.

The low score is an indication of the class of play; the fielding was brilliant and errors were out of the question. Johnston, the Senior pitcher, had speed to burn, and fanned man after man. Toole behind the bat for the Seniors demonstrated that he could backstop as well as short stop. The teams:

Seniors—Battery, Toole and John-

**Juniors, 11; Sophomores, 9.**

The Juniors captured the inter-year baseball championship, when they defeated the Sophomores in the final game, by the score of 9-11.

The game was very close and excitement ran high. The Sophomores went to bat in the second part of the ninth with the score 8-11 against them, two men got out on first, and one man scored, leaving the runs 9-11. Then with two men on bases, Neff pulled down a drive over second and saved the game for the Juniors. The game was characterized by few errors, and fast fielding, the Juniors

having the edge in the field, while the Sophomores wielded the willow, with greater effect. The runs were scored in bunches, the Juniors getting 5 in the third, 3 in the eighth, and 3 in the ninth. The Sophomores scored 2 in the third, 5 in the seventh and 1 in the ninth. Line up:

Juniors—Battery, King and Jarvis; 1st base, Palmer; 2nd base, Neff; 3rd base, Bramhill; right short, Nixon; left short, McElroy; right field, Stanley; left field, Henry.

Sophomores—Battery, Jackson and Hales; 1st base, Creelman; 2nd base, Culverhouse; 3rd base, Duff; right short, McCall; left short, S. Crawford; right field, Wills; left field, J. Crawford.

#### BASKETBALL.

Juniors, 98; Sophs., 11.

The Third Year defeated the Second Year in easy fashion by the overwhelming score of 98-11. The timers whistle just saving the score from going into three figures.

Tisdale and Millar, the Junior guards, demoralized the Second Year forwards, while Culham, Bramhill and Neff made the Second Year basket suffer from over nutrition. The teams:

Juniors—Guards, Millar, Tisdale; forwards, Bramhill, Neff; centre, Culham.

Sophomores—Guards, J. Crawford, Angle; forwards, S. Crawford, Culverhouse; centre, Gardiner.

Freshmen, 15; Juniors, 12.

If the Juniors over-fed the basket when they played the Second Year, they certainly let it go on a starvation diet when they played the First, and the First Year won the inter-year basketball championship, after one of the most gruelling contests ever witnessed on the gym. floor.

The striking feature of the game was the close checking, every man climbed on and all over his check the second he got the ball. Prior Horobin checked Culham so close that it completely demoralized the Third Year combination. Fouls featured in the winning of the game; the First Year made sure of their's, and the Third Year missed several. Although the game was not a demonstration of how basketball should be played, yet the First Year deserved their victory, and are to be congratulated on winning. The teams:

Freshmen—Guards, Laird, Bertam or Wilson; forwards, Wilson or Raynor; W. Horobin; centre, H. P. Horobin.

Juniors—Guards, Miller, Tisdale; forwards, Neff, Bramhill; centre, Culham.

## The Rink Fund

A covered rink at the college has been a long-talked-of and long-dreamt-of project, and surely there is nothing more necessary for the furtherance of our College athletics than this very structure.

A few years ago a rink fund was started for this purpose, the gradu-

ates of '07 giving their promissory notes for \$25.00. These were to be payable upon the condition that the fund had reached certain proportions by a certain date. Similarly a great number of the graduates since then have been giving their notes under somewhat the same conditions or

payable upon demand. The amount subscribed in this manner has now reached the sum of \$2,500, and letters have been sent to nearly all who gave their notes, requesting the payment of the same.

The Athletic Association, thinking it wise that something definite should be done in connection with this matter, have, quite recently, elected a Rink Committee, composed of two members of the faculty, namely: Messrs. H. H. LeDrew and W. J. Squirrel, and a student from each of the three years, second, third and fourth. It is their purpose to rush this thing along by every possible means and it is their aim to see the completion of a new and up-to-date rink in two years' time at least.

Any donations from our Old Boys who feel strongly towards their Alma Mater will be most acceptable to the association, and we trust that a number may see fit to aid us in our project.

The following is a subscription list up to date.

A D. McIntosh, B. S. A., '09. . . . .	\$25
D. H. Jones, B. S. A., '08. . . . .	25
G H. Hibberd, B. S. A., '08. . . . .	25
C. M. Frier, B. S. A., '08. . . . .	25
J. F. Harries, B. S. A., '10. . . . .	25
W. E. J. Edwards, B. S. A., '10. . . . .	25
S. Kennedy, B. S. A., '10. . . . .	25
A. M. Shaw, B. S. A., '10. . . . .	25
J. G. Lloyd Jones, B. S. A., '10. . . . .	25

**Everyone Boost and Watch this Grow**

Address all communications to the O. A. C. Rink Fund Committee.



#### FATE.

Two shall be born the whole wide world apart,  
 And speak in different tongues, and have no thought  
 Each of the other's being, and no heed;  
 Yet these o'er unknown seas to unknown lands  
 Shall cross, escaping wreck, defying death,  
 And all unconsciously shape every act  
 And bend each wandering step unto this end,  
 That one day out of darkness they shall meet  
 And read life's meaning in each other's eyes.

—Susan Marr Spalding.



# College Life

## The O. A. C. and Ontario Farming

PROFESSOR J. B. REYNOLDS, B.A.

**T**HE other day on the train I was talking with a farmer, a prosperous stockman from one of the best counties of Ontario, who remarked to me, referring to a particular college graduate: "We have an impression that a course at the Ontario Agricultural College unfits a young man for the actual work and conditions of farming as it is among us."

We all know it is easy to find instances that seem to justify such an impression. We know, also, that the impression often arises from prejudice, from a ready willingness to believe in the alleged effect of a college course. Nevertheless, it is not wise entirely to ignore such a statement. There may be some good grounds for the impression, and if there are, those who have the interests of the college and of Ontario farming at heart, should face the facts candidly. At this time, with overflowing numbers in attendance at the college, a frank discussion of the matter would seem to be opportune. It is a question which every student and teacher at the college should be interested in.

So far as the criticism quoted is a just one, the unfitting for actual farm work which is a result of the college course probably proceeds

from one or all of certain well-defined causes. The college course opens the eyes of many farmers' sons to a wider knowledge of other modes of life, and other opportunities of livelihood. They see: (1) That the established methods and present equipment of the ordinary farm are inadequate. Many students, in a four-year course acquire (2) a distaste for the exacting labor involved for everyone on an Ontario farm. The social life which a college course gives a student the chance to enjoy reveals to him (3) the comparative social isolation of farm life. The opportunities for a livelihood in some other direction, for which a full course at the college fits a graduate, convince him (4) that actual farming offers too little reward.

If these alleged causes are according to the facts, this plain statement of them may be unpalatable to a good many. But it is always in the interest of truth and progress to face the facts candidly. There has been a good deal of nauseous insincerity uttered lately in the form of advice to farmers, by all sorts of people—editors, politicians, speculators, and manufacturers—the gist of which is that farming is a first-class occupation—for somebody else. Ruskin ironically defines the English pastoral

poetry of the seventeenth and eighteenth centuries as "that strange delightsomeness in the grass that is expressed by men who seldom put their foot on it." The attractiveness which farming has for some minds is of that sort. Graduates of this College who have the opportunity to farm, but who accept appointments as "leaders" in agriculture, are occasionally placed in the somewhat delicate position of recommending to others, and advising others upon an occupation which they have declined for themselves.

I am not disposed to find fault with young men who, having gained a thorough training in the science of agriculture, decide temporarily or permanently, to abandon the art of agriculture; or others who become farmers, and at first make a mess of things. Many take the course for the specific purpose of securing technical training so that they may gain a livelihood as leaders and teachers and demonstrators. Many enter the college with the intention to return to the farm, but the vision they get of improved methods and larger possibilities make them dissatisfied with the opportunities which the home farm offers. Some return to the farm with their new ideas, and are naturally impatient to introduce them all at once, with the frequent result that they get into difficulties and are criticized by their neighbors for their radical and so-called impracticable methods. A few fail because of that impatience, and from lack of means or sufficient business ability to cope with the new situations created by their new methods. The good intention, and the honest effort may be there nevertheless. Faith in the business, and patience to engraft, sometimes slowly and lab-

oriously, the new methods on the old plan, are qualities necessary to success.

Nor am I disposed to admit that the educational policy of the Ontario Agricultural College is much amiss. A recent issue of a prominent farm journal in Ontario criticized the College course as too technical; by which I suppose was meant, that advanced scientific theories were taught, and highly specialized scientific training given, and too little practical acquaintance with actual farm operations. Undoubtedly, the dividing and subdividing of the teaching work at the College, which is a natural development in accord with the spirit of the times, and which has kept pace with increasing attendance, has led to specializing. There is a temptation, too, for every enthusiast to emphasize the more advanced subject in the circle of his studies or investigations. Plant-breeding, for example, is a highly specialized branch of the work in agronomy and the scientific interest in plant breeding may easily outweigh the practical interest in crops. Besides, the large demand in recent years for men trained in special branches of agricultural science has forced upon the College considerable attention to the graduate course. On the other hand, an important feature of College instruction lately has been the short course which is entirely practical.

Unquestionably it is desirable that more highly-trained men should become farmers, and that their training should ensure, so far as training can ensure it, that they become successful farmers. The pioneer conquered Ontario once, felled the trees and cleared the land and raised crops by the exercise of faith, courage, and brute force. A new set of enemies

has invaded our land—weeds and insects and depletion of soil—and the battle has to be fought over again. This time it will require all the faith and courage of former times, with skill instead of brute force as the directing agency. It is not to be supposed that an industrial occupation can call for missionary zeal in its followers, or expect that young men choosing that occupation shall choose it in the spirit of sacrifice. In fact, the missionary spirit is more likely to be found among professional leaders in agriculture than among the actual farmers. The prizes which farming can offer to brains and skill must be sufficiently inviting before any change in the present situation can be expected. Nevertheless, it is to be hoped that the young men who receive training at this College will not be repelled from farming merely because it is an arduous occupation. Love of ease is not an heroic attribute in any man, and we hope that the heroic in our young men will respond more and more to the call for faith, patience and courage, as well as skill—a call which is daily becoming more insistent from the idle lands of Ontario.

#### The Athletic Concert.

The annual Athletic Concert on Friday evening, March 1, although not quite such an elaborate entertainment as that of the previous year, was nevertheless no exception to the rule that it is always worth attending. The attendance was also somewhat smaller than usual, but everything considered, the concert was very successful.

The programme was varied as much as possible, but the nature of the entertainment prevents many variations in the style of the num-

bers. The College orchestra, assisted by some outside talent, discoursed some sweet music during the evening. Besides the usual exhibitions by the Gym. team on the German horse, the parallel bars, the horizontal bar and the mat, all of which were cleverly executed, especially the work by P. S. D. Harding and J. Iwanami on the horizontal bar, there were two amusing contributions to the evening's entertainment, by A. Campbell and C. B. Nourse, entitled, "Watch the Roosters," and "Are you There?" The latter feat consisted of a scrap between them with "swatters," while lying blindfolded on a mat.

Two numbers furnished by the Macdonald girls proved exceptionally interesting and fascinating. Both the lighted club swinging and the Macdonald Dance in the twilight delighted the audience with the graceful and precise manner in which they were given. Two fencing bouts and an exhibition with broad swords were given, and the dexterity and science displayed by the combatants proved a surprise to many of us who never devote any time to this style of self-defence. Several clowns were also on hand and did everything imaginable, in the way of foolish stunts, to enliven the proceedings.

The following letter from an old O. A. C. boy may prove interesting to some readers of the Review, particularly those connected with literary work:

Ottawa, March 21, 1912.

Editor O. A. C. Review,  
Guelph.

Dear Sir: I note with interest the account in the last Review of the debate at the Union Literary Society meeting of February 2nd. The subject of the debate as indicated, was:

"Resolved, that the decrease in rural population is both desirable and inevitable." I do not wish to reflect on the ability of either the debaters or the judges, but when I read it, it reminded me very forcibly of an attempt of another student and myself to prove in a similar meeting some five or six years ago, "That the downfall of England was inevitable." It

fore the students begin to make actual preparation, a committee of censure if you will. I am,

Yours very truly,

W. A. Brown.

The new scheme of having the nominations for the various societies at one general meeting did not attract a very large or enthusiastic bunch of



AFTER LIGHTS GO OUT ON CRAIG STREET.

was shown at that time that it was impracticable and well-nigh impossible to prove that anything is inevitable.

Would it not be well to have a committee of the Faculty for the Union Literary Society and a committee of senior and junior students for the other societies, to whom should be submitted all subjects for debate be-

students to Massey Hall on Saturday, March 16, on the occasion of its first trial. The rumor that all those nominated, besides the nominees, would have to make a speech either in support of themselves or the candidates they nominated, as the case might be, seemed to have spread throughout the student body and the idea of more public speaking did not appeal to

many, so few came. However, candidates were nominated for every office and by vote of those present it was decided to dispense with speech-making. However, the elections on the following Saturday proved much more interesting and exciting, and a very large percentage of the eligible voters used their franchise.

Mr. W. M. Aikenhead, '12, won first place with an oration on "The Blinders We Wear." It was largely a criticism of College affairs and the way they are conducted, but it was undoubtedly the best speech of the evening.

Mr. C. C. Rebsch '12 was awarded second place. His subject was "Soc-



THE FIRE—THE BIOLOGY BUILDING BURNING.

The 14th Oratorical Contest on Friday evening, March 8, could hardly be said to be up to the standard as far as speeches were concerned, but the musical part of the programme was exceptionally good. Master Douglas Stanbury, the boy contralto, delighted the audience with his solos and duet with Mrs. Stanbury. Miss Kathleen Wallis also gave several violin solos in a most charming manner.

ialism." Mr. Rebsch spoke quite fluently and used good English, but his voice was not strong nor his articulation very clear, so that many had difficulty in following the trend of his subject.

"The Great Delusion" was dealt with by Mr. R. Dougal, who received third place. Mr. Dougal has an excellent command of English, and like Mr. Aikenhead, played the part of the critic of our social affairs.

Mr. G. J. Spencer '13 was awarded fourth place with "Liberty" as his subject. Unfortunately Mr. Spencer lacked in preparation, but his voice and language were excellent.

Mr. J. E. Lattimer '14 spoke on "Our Natal Day," but he did not make as good a speech as he is capable of delivering.

Professor G. E. Day presented the Day Judging Trophy for the year making the most points at the Live Stock Judging at the Winter Fair, to Class '14.

Colonel J. J. Craig, Professor R. Harcourt and Rev. Dr. Dix acted as judges.

#### Aid of Students Appreciated.

Mrs. Alice Gibson,

College Hospital, O. A. C.,  
Guelph, Ont.

Dear Mrs. Gibson: Your letter of

the 10th inst. addressed to Mr. Gage has been handed to me for attention.

I have received the money order for \$17.25, being a contribution from your hospital to the funds of the Muskoka Free Hospital for Consumptives. May I ask you to convey to the contributors the sincere thanks of the board of trustees for this practical evidence of their sympathy and co-operation in our hospital work and to assure each of them not only that the money itself is very helpful but the kind thought which prompted them in sending it is also much appreciated. I am,

Yours faithfully,

R. DUNBAR,

Sec.-Treas.

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#### DALUAN.

Daluan, the shepherd,  
When the winter winds blew chill,  
Goes piping o'er the upland,  
Goes piping by the rill;  
And whoso hears his music  
Must follow where he will.

Daluan, the Shepherd  
(So the old story saith),  
He pipes the tunes of laughter,  
The songs of sighing breath;  
He pipes the souls of mortals  
Through the dark gates of death.

Daluan, the Shepherd—  
Who listens to his strain  
Shall look no more on laughter,  
Shall taste no more of pain;  
Shall know no more the longing  
That rends the heart in twain.

Daluan, the Shepherd—  
Beside the sobbing rill,  
And through the dripping woodlands,  
And up the gusty hill,  
I hear the pipes of Daluan  
Crying and calling still.

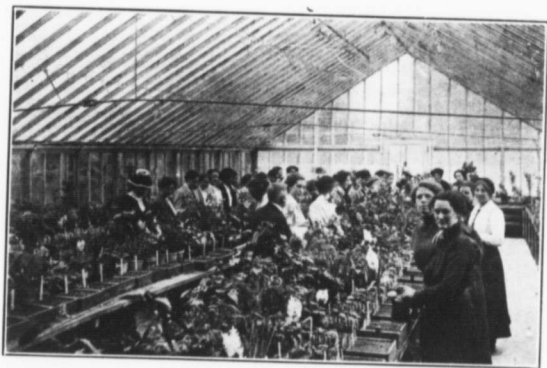
—Weekly Globe.

# MACDONALD

## April Suggestions

**N**OW that the lengthening days tell us that spring is here and summer close at hand, the nature lover begins eagerly to look forward to the time when "all the woods stand in a mist of green and nothing perfect," when, stirring from their long sleep beneath the blanket of dead leaves with which nature has

ing hood-like growth, the skunk cabbage. There, in the shelter of that little dell, pale green tents are peeping—tents that later, when the sun bids them, will unfold and allow the beautiful but fragile white blooms of the blood root to appear. A whiff of delicate perfume on the breeze surely tells that under the brown



HORTICULTURE—A POPULAR STUDY.

covered them, the flowers begin to show in sheltered spots. A few woolly buds here among some battered last year's leaves show where later the hepaticas, those "eyelids of earth," will "uncover their numberless eyes." Yonder in a warm moist corner a sturdy bunch of green shoots stands guard over that strange but interest-

covering somewhere near are to be found the glossy leaves and dainty wax-like blossoms of the trailing arbutus.

These are but the heralds. Do they, I wonder, send messages back to their brethren, still slumbering! Surely it must be so, for behold a few days later and the woodland glades are

carpeted with bloom. Scene after scene of beauty succeeds as the changes rung upon a stage. Nature is most lavish in her profusion and her variety—is? or was? for alas! our delicate forest flowers, shy and beautiful are every year becoming more rare. Is it that the advancing tide of our civilization must sweep them from their native haunts as it has their brothers, the Redmen? Some are already to be found only in the remoter settlements. Must we lose all this beauty from our land? Not if we wish to preserve it. We can admire but not ruthlessly destroy. We can plant instead of uproot. We can provide conditions favorable for their perpetuation, not make it impossible. And this without losing anything of the utility of our fields and woods. Will we do it? If we neglect, the loss is not only ours but theirs who come after us.

B. M. P. '12.

### The Union "Lit."

The Macdonald Hall gymnasium was the scene of an unusually attractive gathering on Saturday evening, February 24, when the Union meeting of the Literary Society was held. It was a Leap Year affair—decidedly informal and jolly throughout. Each maiden invited a youth who awaited his escort in the drawing room. The couples then passed up the stairway to the gymnasium where they were greeted with the usual spelling of names and "Who is he? Who is he?" shouts from the girls at the back of the room.

The programme was as usual, excellent, with piano solos, songs, readings and an interesting debate, "Resolved that women have contributed as much as men to the world's ad-

vancement." The affirmative carried the day. Misses Champan and Beaty proved conclusively that women have done as much as men.

Refreshments were served at the close and the guests left in the customary gloom caused by "lights out," but resolved to take advantage of Leap Year liberties again if all could be as pleasant as the Leap Year "Lit."

### Y. W. C. A.

After a season of successful meetings the Macdonald Y. W. C. A. held its closing service on Sunday evening, March 3rd. The executive were indeed fortunate in securing Mrs. W. P. Gamble to address the meeting. She spoke on the subject of "Woman's Work and Prayer" in such a bright and interesting way.

The missionary collection at this same meeting amounted to twenty-three dollars, showing that the financial side of the society's work is not neglected.

Great credit is due the executive of 1911-12. The work was sometimes trying and is always work where results are seldom seen. Their influence has been for good, however, throughout the College year, and we feel sure that their labor has not been in vain.

### I Saw Life.

I saw Life in his sculptor's studio  
Modelling souls to grace Eternity.  
His studio was Time, and 'round him,  
lo!  
Lay the un moulded clay, Humanity.  
And some of this, the artist left to stand  
In sunshine till it gleamed, but  
grew the while  
So stony hard that when the moulder's hand



Retouched the uncouth lines with  
sharp-edged trials,  
It fell apart in shapeless ruin.  
But where the sculptor took the  
shapeless clay  
From dark recesses of obscurity,  
Softened with tears and melting  
drew away  
Its dross with buring griefs, he found  
that he  
Had formed a masterpiece that  
would endure,  
Whose beauty grew with every chisel-  
beat,  
And shed a hallo 'round which  
beamed so pure  
That others in its glamor grew more  
sweet,  
Just as we see the auburn Autumn  
breathe  
O'er the bronze fields and sunset  
woods aglow  
With softened gold and crimson  
through a wreath  
Of purple haze, and wonder-wrapt  
we know  
That all this charm and glory  
would be lost  
But for the lonely night, and stinging  
frost.

E. M. C. '12.

### Among Our Graduates.

Miss Ethel M. Tennant, house-keeper at Macdonald Hall from the time of its establishment until quite recently, writes very interestingly of her work in the West. Miss Tennant left in December to organize the women's residence in connection with the University of Saskatchewan at Saskatoon, Sask. Since her arrival there she has been making brief tours through the province, giving addresses in Household Science chiefly on the questions of Food Principles and Personal Hygiene. These have proved most interesting, not only to Miss Tennant herself in giving her a practical knowledge of the country and its conditions, but more especially to the women of the province, as is evidenced by the fact that they have come great distances to hear her, on one occasion even 60 miles with the mercury at 50 degrees below. Some of the points visited were Battleford, Prince Albert, Kindersley, all rapidly growing towns. The residence at Saskatoon is being erected and furnished in the generous and progressive style of the West, the buildings and equipment being on an elaborate



FLUFFY RUFFLES VS. MAC. SPECIALS.

scale. Miss Tennant will come east shortly and will spend the summer purchasing supplies and making arrangements for the opening in September.

### The Song of the Mac Girls.

#### Down Town Girls.

Breathless and puffing, and hot,  
Like a trolley car towing a freight,  
A girl burst into the locker room,  
"Get out o' my road, I'm late!

Change, change, change,  
For chemistry, cooking and gym,  
My apron got torn and my tie's left  
at home,

But, somehow, I've got to be trim."

#### Senior Housekeepers.

Stews! Stews! Stews!

Be they simmered, or fireless, or  
brown,

Stews! Stews! Stews!

We study and analyze down  
And its oh! for a millionaire's job,  
Where there's tenderloin steak every  
day,

And the scraps may go hang, and  
the housekeeper's hair  
Need never turn premature grey.

#### Normals.

Starch, starch, starch,  
In laundry, cooking and foods,

C<sub>6</sub> H<sub>10</sub> O<sub>8</sub>

Till our study bump really protrudes.

Our bread and our puddings are  
starch,

Our cookies and small cakes as well

Our own back bones need starch

When it comes to exams,

For—nobody never can't tell!

#### Homemaker.

Meals! Meals! Meals!

Apartments for mine, now, you bet,

Meals! Meals! Meals!

I know I'll go wild if I fret.

What does porridge look like when  
it's done?

I've never cooked much, but I'll strive  
And just how do you serve up a  
dinner for two?  
I do hope I come out alive.

### Short Course.

Cook! Cook! Cook!

We've only a few weeks for this.

Cook! Cook! Cook!

A few weeks and then—unalloyed  
bliss!

And it's hey for a flat that holds two,  
When this diamond ring course is  
complete

A cheese souffle or so will sustain us,  
I know,

With ice cream for our Sunday  
night treat.

Chorus:

Every little granule has a frame  
work all its own,

Something like a jelly fish

Without a single bone.

Soak it, you find you can't affect it,

Heat it, and then you may suspect  
it

To be containing starch—expect it  
To thicken—all alone.

G. M. C.

### The Examinations.

"When you're sitting at night

'Neath the corridor light,

Studying for an exam,

Just remember that your studies

Are the first of life's great worries,

And you'll meet the tougher prob-  
lems later on.

If you're plugging every minute,

Keep in mind there is a limit,

Or you'll soon grow thin.

Don't get blue, and feel down-  
hearted,

For your troubles have just started;

Count the days until you'll be at  
home, and grin."

## Schools' and Teachers' Department

Devoted to those interests of the Ontario Agricultural College which pertain particularly to the training of teachers for giving instruction in the schools of the Province along vocational lines—in Home Economics, Industrial Arts, Elementary Agriculture and Horticulture.

The January number of The Review outlined a new policy with especial reference to material bearing upon the home life of the farm. In this connection it is proposed to give articles on the various useful handicrafts, such as may be carried on in the home. These will be given in the form of lessons, describing each process in detail so that even the young boys and girls may follow them. The chief aim of this department will be to be helpful, and readers must feel free to write for information or to suggest further ways in which they can be helped.

### COURSE IN WOODWORK (Continued.)

The last lesson provided us with a rack for some of our tools and probably by this time some of us will have made one or two other racks for the tools not provided for in the first one.

In this lesson we will make another article that will be very useful for our bench—a bench hook or cutting board. This is used for holding pieces while sawing, as in our last lesson, and for chiselling on, thus protecting the bench top.

If one is proud of his work and his tools, he will take as much care of his bench as of his plane. Some boys will say, "Why, give me a board and a piece of stick. I'll just nail them together and never bother about getting them smooth and square. It's only for cutting on anyhow." True enough, but when we show anyone our workshop there is a great satisfaction in showing them a well made tool, when it is one we made ourselves and then too, we can learn a lot while making this simple object, that will be of use to us when we come to make a more complex object.

#### Lesson II.

Material—One piece maple, 7-8 inch by 8 inches by 12 1-2 inches; one piece maple, 7-8 inch by 1¾ inches by 12½ inches; four screws, flat-head bright, 1¼ inch No. 10.

New Tools—Scraper, Handscrews.

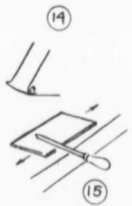
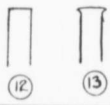
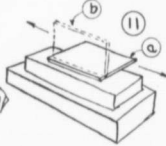
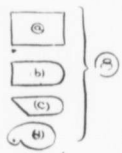
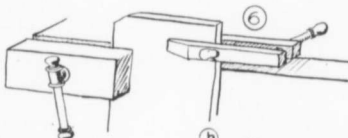
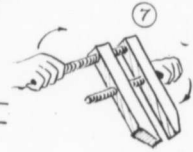
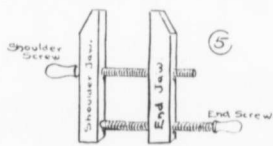
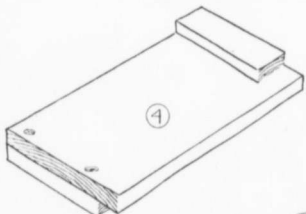
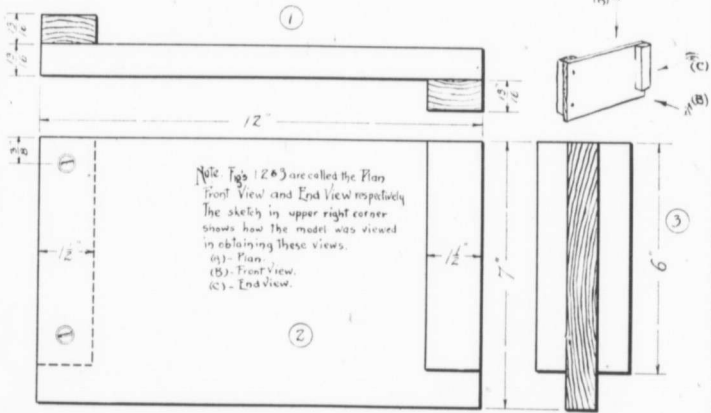
In Figs. 1, 2 and 3 are given the working drawings with all necessary dimensions, while in Fig. 4 is a sketch of the finished object. Examine the drawing carefully and you find that there are three pieces used in making it—a large piece 13-16 inch by 7 inches by 12 inches, and two small ones 13-16 inch by 1½ inches by 6 inches.

Prepare the smaller ones first, from the 7-8 inch by 1¾ inches by 12½ inches piece, by working as follows, setting your jack plane to cut a very fine shaving:

1. Plane, test and mark Face Side.
2. Plane, test and mark Face Edge.
3. Gauge and plane to width.
4. Gauge and plane to thickness.
5. Square up both ends with saw and chisel (read Introductory Lesson carefully.)
6. Measure the lengths 6 inches from both ends and square lines around the piece with point of knife.
7. Saw off one piece, sawing in waste close up to the line.

MODEL II

BENCH HOOK



8. Saw off waste from other piece in a similar manner.
9. Finish up ends with sharp chisel.

Prepare large piece as follows:

1. Plane, test and mark Face Side.
2. Plane, test and mark Face Edge.
3. Gauge and plane to thickness.
4. Gauge width and chisel corner in waste, as in previous lesson.
5. Plane and square with sharp finely set smoothing plane.
6. Mark length, square knife line around piece, saw off waste on end, chisel corner in waste and plane as before.

Note—In both 5 and 6, on account of width of board, it may have to be held in the side vise of bench. To do this, a handscrew (Fig. 5) is of great assistance. Fix chiselled edge of board in the vise and grip the other (Face Edge) with the handscrew, allowing handscrew to rest on bench top as in Fig. 6. (In closing—or opening—handscrew, grasp the handles firmly and revolve them in direction of the arrows—or reverse. The jaws then remain parallel, Fig. 7). In gripping the piece, tighten up the shoulder screw first and then tighten end screw.

The piece can now be planed as directed. In planing up these pieces it will be found that there are spots in the wood where it is left rough on account of cross grain. To get these spots smooth (in hard wood) we use a tool called a scraper. A scraper is a thin flat tool like a piece of saw blade varying in shape for different purposes as in Fig. 8 (a-d).

These tools should remove a very fine shaving. If you find they only remove a dust, it means that the tool is dull or you are holding it too slanting. They cut either towards or away from the operator, that is by pulling or pushing. To hold the scraper for pushing, grasp it with the fingers of both hands on the front, the thumbs close together and low down at the back, the scraper tilted from you, just enough to allow it to cut. If tilted too far it will dull rapidly. At the same time the scraper is bent slightly to prevent corners catching (Fig. 9).

In cutting by pulling, the tool is reversed in position, fingers brought close together on side away from you.

The direction of tool travel must be changed frequently to avoid "chattering" or jumping of the tool.

This tool is so easily dulled that it requires frequent sharpening. To do this we need an 8-inch flat, smooth-cut file, an oilstone and a burnisher (the round back of a gauge is sometimes used in place of the burnisher.)

The scraper is put in the vise, the file held as shown (Fig. 10) and moved along edge in direction of the arrows. This is called "draw filing" and it produces a square, straight, fairly smooth edge with a slight burr on the corners.

The scraper is then placed flat on the oilstone and rubbed on both sides (see "a" Fig. 11). It is then put on edge and rubbed ("b" Fig 11.) This produces smooth, square corners (Fig. 12).

It is placed again in the vise as in Fig. 10 and burnished to the proper shape (Fig. 13.) The burnisher is held in one hand at right angles to length of scraper, but handle slightly lowered. This rubs the metal on the square corner out to a point as in Fig. 13. This curved, sharp edge does the cutting (Fig. 14).

Sometimes, if not very dull, the scraper is sharpened by placing it flat on the bench, holding the burnisher as before, and rubbing the edges to shape (Fig. 16). Then replacing it in vise and burnishing as described above.

Having finished the pieces we next drill countersink holes for screws, sinking heads at least one-sixteenth of an inch below surface of board. This completes the model.

# LOCALS



"I DARE DO ALL THAT MAY BECOME A MAN."

This was handed in to the Editor as poetry:

There stands a College, neither large nor small,

Its air and situation sweet and pretty;

It matters very little, if at all,

Whether its denizens are dull or witty,

Whether the fellows there are short or tall,

Or whether near it stands a city.

Only it may be requisite to minute

That there's a water tower with some water in it.

Upon a dark and dusky night 'tis said  
Aspiring Freshmen with paint and  
brush were seen

Climbing, its dizzy heights did dare  
to tread

And wrote in honor of their year—  
fifteen.

There too, an envious Sophomore  
wrote in red

Their name, though if they'd put  
fourteen,

It would have been more politic than  
bums,

Even though they are a lot of  
muts and scums. —Errxi.

While visiting Guelph recently a certain clergyman was staying with Professor —. On Sunday morning he was passing through the library and found a small boy curled up in a big chair, deeply interested in a book.

"Are you going to church, Don?" he asked.

"No, sir." He replied.

"Why, I am," said the minister.

"Huh!" said the boy, "You've got to go. It's your job."

L—n (to young lady while skating)—I think R. J. Campbell's new theological thought unbalancing, don't you?

Miss D. (rising after a severe fall which occurred at this juncture)—I certainly agree with you!

It was at a lecture in a Guelph church one night on woman's rights. The speaker was waxing eloquent, and after his peroration on woman's rights, he said, "When they take our girls, as they threaten, away from the co-ed colleges, what will follow? What will follow, I repeat?"

And a loud masculine voice, resembling that of Standish, replied from the rear, "I will!"

### The Latest Fiction.

The Jewish Invasion, by Morse.

The Trained Nurse, by Kirkly.

Romance of a Typist, by Gibson.

Puppy Love, by Torrance.

Windsor and It's Environs, by Cleverly.

Confessions of a Prune Eater, by A. R. Dow.

Guelph, the Deserted Village, by C. L. Higman.

Pocket Guide to Barber Shops, by Anglin and Beatty.

The Pace that Kills, by McKenzie.

What Won't Fatten Will Fill, by the Cook.

The Lost Dog, by Nutty Woods.

Fussed and Fussing, by Hutchinson.

The Yellow Peril, by China Duff.

How I Won the Belt, by Wiltshire.

The Strange Adventures of Graham's Trunk, by the owner. (Founded on fact.)

The Model College Student, by Neelands.

The Decisive Hour of Christian Missions, by Stansfield.

A respected member of the Junior Normals, Miss K—, went home at the conclusion of the spring term, full of domestic lore. The second night after her arrival at the parental abode, her father, who had been absent all day, remarked to her that she looked tired and worried.

"I am, papa," was her reply, "You see I heard you say that you liked broiled rabbit. So I meant to surprise you with one for dinner; but I've been hard at work on the horrid thing all day, and I haven't got it more than half picked yet."

### Stop! Look! Be Warned!

For a bet a young seedsman of Leeds, Rashly swallowed six packets of seeds;

In a month—silly ass!—

He was covered with grass,  
And he couldn't sit down for the weeds.

It isn't the thing you do or say,  
It's all in the way you do or say it;  
For what would the egg amount to,  
Pray,  
If the hen got up on the perch to lay  
it?

**Musings of the Gentle Cynic.**

The truth of the saying that time is money seems to be borne out by the way people squander it.

You can place a man on a pedestal, but you can't keep him there.

It is very often the juice of the grape that makes a fellow feel seedy.

Marriage is a lottery in which some people are never satisfied till they take three or four chances.

When a man trades a bank account for experience, would you say that a fair exchange was no robbery?

It's the love of other people's money that is the root of all evil.

The worst thing about an obstacle is that it is always in the way.

At the same time, lots of men are liars who never go fishing.

You can flatter any man by asking his advice.—New York Times.

Doc Reed—What is the action of aconite?

Locke—It acts on the spinal cord.

Doc Reed—In what way?

Locke—It cures it.

"To know the pains of power we must go to those who have it; to know its pleasures, we must go to those who are seeking it; the pains of power are real, its pleasures imaginary."—C. C. Colton.

## Fertilizer Requirements of Corn

Extract from "Fertilizing Fodder Crops," by T. Walter Shipley.

"Corn is a gross feeder and must have an abundant supply of readily available 'plant food' material. Where corn is grown on any but a clover sod or meadow, a dressing of twelve to fifteen tons of barnyard manure should be applied and thoroughly worked into the soil. While this dressing of manure would supply the necessary humus and part of the nitrogen required, it must be supplemented by the addition of phosphoric acid and potash if a maximum crop is to be grown. The addition of, say, 400 lbs. Acid Phosphate and 150 lbs. Muriate of Potash per acre would supply these necessary ingredients and, except where the land is in a very high state of cultivation, 120 to 150 lbs. Nitrate of Soda, applied as a top dressing, would be required to supply the amount of nitrogen to produce a maximum crop.

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"EASTLAKE" Steel Shingles were the first lightning proof shingles in Canada—and are just as far ahead of others to-day—in fact with an "EASTLAKE" Roof you need no lightning rods.

There are many other exclusive advantages I have experienced in using "EASTLAKE" Steel Shingles that I have no room to mention here, but if you are interested in building or roofing write to-day for free booklet and full information.

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If it takes an expert nigger two minutes to pluck a chicken, how long will it take Professor Graham to pluck a Sophomore?

Last night I held her hand in mine,  
A hand so slender and divine,  
Endued with all the graces.  
Tonight another hand I hold,  
A hand well worth its weight in gold,  
Just think of it, four aces!

The question is, if McElroy has been to Macdonald's, where has Horobin?

◇ ◇  
**The Spectre.**

"Three weeks," the Student sadly said,

And breathed herewith a psalm;  
"Three weeks from now that I must face  
My Second Year Exam."

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 ARE SUPPLIED TO YOUR DEALER  
 DIRECT FROM US - AFTER EACH  
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Morrison, Ont., Nov. 14th, 1907.

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Whenever I hear a neighbor having trouble with his stock I hand him one of your pamphlets or advise him to get ABSORBINE, and quite a number are now using it around here.

Respectfully yours,

D. E. MORLOCK.



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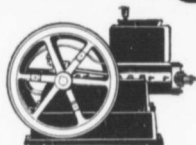
E. A. A. GRANGE, V.S., M.S.,  
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N. B.—Calendar on application.

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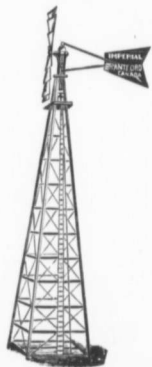


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66D

Thorpe—I say, Puler, how many days are there in the College week?

Puleston—Why seven, of course.

Thorpe—Oh no, nine. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, George-Day and Billy-Day.

Puleston—But what about all the little Days?



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It is composed of the best feeding parts of Corn, Oats and Barley, White Middlings, Cotton-seed Meal and Feed Flour.

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# Corn, Oats and Barley

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**WE POSITIVELY GUARANTEE**

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**INTERNATIONAL STOCK FOOD**  
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Because it promotes digestion and assimilation and enables you to cut down the grain ration 15% to 25% and still get better results. The saving of grain represents a saving of good hard cash to you.

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It will not cost you a cent if you are not satisfied. See our dealer in your town or write us for particulars. Mention this paper and the stock you own and we will send you a litho, size 16x22, of our three champion stallions.

Read what James L. Hill, of Fredericton Junction, P. E. I., wrote us on February 15th:

I think International Stock Food is a great thing for stock. We wouldn't be without it for anything. It keeps our horses in fine condition; in fact, every person admires them, they have such a glossy skin and always look well. We give it to young calves and pigs and find it agrees with them splendidly, and the Poultry Food shows itself in a very short time. Our hens have been laying most of the winter. I cannot say too much for your food for all kinds of animals.

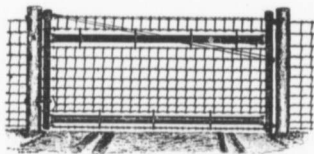
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The hired man, stranger, your own boy, your wife, or perhaps yourself.

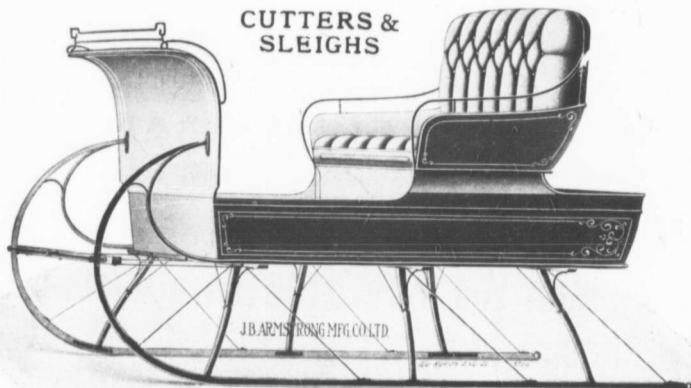
## WHY?

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## *Official Calendar of the Department of Education for the Year 1912*

### MAY:

1. University of Toronto Examinations in Arts, Law, Pharmacy, Music and Agriculture begin.
2. Inspectors' report number of candidates for Senior High School Entrance, Senior Public School Graduation Diploma and the Model School Entrance examinations and the Lower School examination for Entrance into the Normal Schools and Faculties of Education.
3. Arbor Day. (1st Friday in May).
14. Notice by candidates to Inspectors due for the following examinations—The Middle School examination for Entrance into the Normal Schools, The Upper School Examination for Entrance into the Faculties of Education, the Pass and Honor Matriculation examinations (before 15th May).
16. Inspectors report number of candidates for above examinations. (Not later than 16th May).
23. Empire Day. (1st School day before 24th May).
24. Victoria Day. (Friday).
31. Assessors to settle basis of taxation in Union School Sections (before 1st June).

## The Royal Military College of Canada



**T**HERE are few national institutions of more value and interest to the country than the Royal Military College of Canada. Notwithstanding this, its object and the work it is accomplishing are not sufficiently understood by the general public.

The College is a Government institution, designed primarily for the purpose of giving instruction in all branches of military science to cadets and officers of the Canadian Militia. In fact it corresponds to Woolwich and Sandhurst.

The Commandant and military instructors are all officers on the active list of the Imperial army, lent for the purpose, and there is in addition a complete staff of professors for the civil subjects which form such an important part of the College course. Medical attendance is also provided.

Whilst the College is organized on a strictly military basis the cadets receive a practical and scientific training in subjects essential to a sound modern education.

The course includes a thorough grounding in Mathematics, Civil Engineering, Surveying, Physics, Chemistry, French and English.

The strict discipline maintained at the College is one of the most valuable features of the course, and, in addition, the constant practice of gymnastics, drills and outdoor

exercises of all kinds, ensures health and excellent physical condition.

Commissions in all branches of the Imperial service and Canadian Permanent Force are offered annually.

The diploma of graduation, is considered by the authorities conducting the examination for Dominion Land Surveyor to be equivalent to a university degree, and by the Regulations of the Law Society of Ontario, it obtains the same exemptions as a B. A. degree.

The length of the course is three years, in three terms of 9½ months each.

The total cost of the course, including board, uniform, instructional material, and all extras, is about \$800.

The annual competitive examination for admission to the College, takes place in May of each year, at the headquarters of the several military districts.

For full particulars regarding this examination and for any other information, application should be made to the Secretary of the Militia Council, Ottawa, Ont.; or to the Commandant, Royal Military College, Kingston, Ont.

H.Q. 94-5,  
9-09.

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To purchase a Life Insurance Policy and thereby create for yourself an immediate estate sufficient to meet all liabilities in case of your death. At the same time, you would have a valuable investment in case you survive. Write NOW for particulars.

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**KILL  
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**USE** your Cultivator in the spring on the seed bed. Use it on the summer fallow. In the fall start thistles and weeds growing to be winter-killed. Every time you go over your fields, the Cultivator earns you money. Cultivate!

**T**he Frost & Wood "Climax" stiff-tooth Cultivator is all steel. It holds its points at the proper cutting angle, where they cut thistle and other roots below the surface and kill the weeds. Or you can interchange the 10-inch points for narrow points and rip the weeds out roots and all. The Relief spring on each tooth prevents breakage when obstructions are met with.

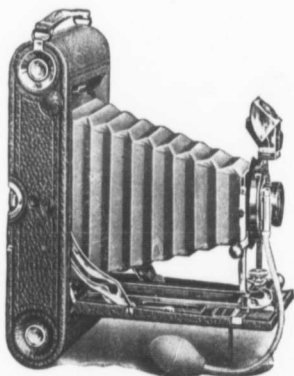
The great feature of this Cultivator is that it has strength enough to stand the hardest kind of work. Strength is built right into it,—see the heavy frame, the strong legs and the stiff trusses. Get the "Climax" and you have a crop-getter and a weed-killer that will last a life-time. Figure up for yourself what weeds are costing you in money—then remember that systematic use of the "Climax" will eliminate this loss and we are sure you will want to know more about this implement. Will be glad to give you further particulars.

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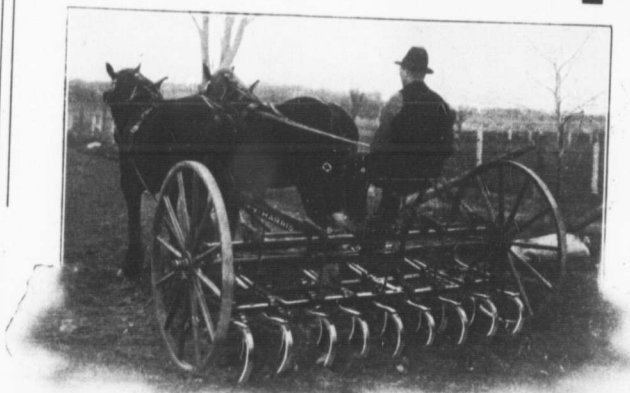
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By all means do everything possible to make and keep the soil productive—but weeds flourish in a rich soil as well as the crops, so it is important to keep your fields free from weeds.

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## New Automatic Oiling

**The most important Cream Separator improvement  
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The new automatically oiled De Laval Cream Separators are now being supplied in all sizes, and this improvement constitutes another great step forward in cream separator construction—the one thing possible in betterment of the previous De Laval machines of the present type.

The new system of De Laval automatic oiling is distinctively different from any other splash or spray system in that there is a constant regulated feed of fresh oil and discharge of used oil. Other splash systems use the same oil over and over, until it soon does more harm than good.

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De Laval agents will be glad to exhibit the new machines and demonstrate the working of the new automatic oiling system, which more than ever enhances De Laval superiority in every feature of cream separator practicability.

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