

The Farming World



AND CANADIAN FARM & HOME

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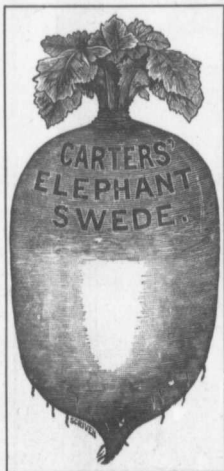
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The Farming World

Devoted to Country Life in Canada

J. W. WHEATON, B.A. - Editor

D. T. McAINSH, Manager

The Farming World is a paper for farmers and stockmen, devoted to the country in Canada, published on the 1st and 15th of each month, with illustrations.

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The Farming World

And Canadian Farm and Home

Vol. XXIII

TORONTO, 1 JUNE, 1904

No. 11

The Growing Time

JUNE is the banner month of the year on the farm. Everything is at its best. Progress and growth is at the order of the day. The farmer sees life in everything around him. The fields are shaping for the harvest that is to be. The trees are redolent with fragrance, a harbinger of the luscious fruit of the autumn time. Even the cattle and sheep in the meadows show forth the spirit of the season, while every living creature seems to realize that June time is the growing time, the best of the year.

Amid such surroundings the farmer's life cannot but be a happy one. He is in a position to rejoice above his fellows. He is close to nature, when nature is at her best. He has sown, and the fruits of his labors are to be seen on every hand. Surely nothing could be more pleasant or fraught with more of the blessings that make for happiness, peace and contentment. Truly, June is the best of them all.

Push Our Flour in the Orient

The Japanese government, so it is reported, has added wheat flour to its army ration. This in itself means little so far as enlarging the present market for wheat. But it may have an important bearing upon the future. If wheat flour becomes the daily food of two or three hundred thousand men, it will get a big introduction in the East. The soldiers, having acquired a liking for it on the battle field, will make known its good qualities when they return home, which cannot but greatly stimulate the demand for flour, and in consequence greatly enlarge the market for wheat in Asiatic countries.

When this time arrives Canada should be ready to secure a large share of that trade. At the Osaka Exposition last year Canadian flour received a splendid advertisement. This should be followed up by persistent efforts to push Canadian flour in Japan as much as possible. Sooner or later the time will come when Western foods as well as Western civilization will be sought for and as ardently desired by the people of the Mikado's country.

Changes at the O.A.C.

Some important changes have been decided upon in connection with the farm and live stock departments at the Ontario Agricultural College. Mr. G. E. Day, who has been professor of agriculture and farm superintendent, will be relieved of part of his duties and placed in charge of the department of animal husbandry. Mr. C. A.

Zavitz, now director of experimental work, will be promoted to the position of professor of field husbandry, or agronomy, as it is called in the United States.

This is a move in the right direction. Ontario is a live stock province if it is anything and should have at its agricultural college a department specially devoted to this branch of husbandry. Relieved of some of his former duties, Prof. Day will be able to make the department of animal husbandry of much greater value, not only for the college, but also to the stockmen of the province, than it has been in the past. Prof. Zavitz, in his new capacity, will have greater opportunities for demonstrating on a larger scale his expert knowledge of grain growing and field husbandry.

As Others See Us

Editor-in-chief "American Agriculturist," writes: "I must compliment you on your dairy number; it looks fine."

The "New Glasgow Times," Nova Scotia, in its issue of May 14th, says:

"THE FARMING WORLD for May 2nd is exclusively devoted to the dairying industry and contains invaluable information and advice to those engaged in the art of butter and cheese-making. The issue contains a letter on "Dairying in Nova Scotia," from the able pen of Mr. F. M. Logan, Government Inspector, with an accompanying illustration cut of the Acadia Dairy Company's building at Wolfville.

"We commend THE FARMING WORLD to our many friends engaged in agriculture. It is, without exception, the best farming magazine published in the Dominion."

Canadian Hard Wheat Wanted

Conditions are developing in some of the Western States immediately south of the boundary that may have an important bearing upon the future of wheat growing in Western Canada. The percentage of wheat known as the hard grades of wheat grown in Minnesota, and North and South Dakota is decreasing every year. While this is true, the demand from the big millers at Minneapolis for this quality is increasing. In Minnesota, the banner hard wheat state, there are 800 creameries in operation, indicating that many farmers no longer find it profitable to grow wheat at an average yield of about 15 bushels per acre.

The situation today is that the Minneapolis millers find it very difficult to get a sufficient supply of hard wheat to blend with the large supply of soft

wheats grown farther south, and they are now agitating for the removal of the duty on Canadian wheat going into the United States, in order that they may have access to the hard wheats of Manitoba and the Northwest Territories. Should the American government remove the duty, it will mean much to the wheat grower of Western Canada. It would to some extent solve the transportation problem by deflecting a large amount of wheat through American channels, instead of by the long haul to the east over the Canadian route. But such deflection would mean leaving the by-products from the grinding of this wheat in the United States to be used in feeding live stock to compete with ours in the world's markets. It is worth considering, therefore, if it would not be better to further develop our own milling facilities so as to remain as far as possible these by-products at home. Have our readers an opinion to offer?

The Farm Student

There was a time, not so many years ago either, when the farm student was very much in evidence in many parts of Canada, especially in Ontario. His arrival was due to the efforts of some private agency, which made a tidy sum by placing the sons of well-to-do Englishmen with Canadian farmers to learn our methods of agriculture. These students either gave their services free to the farmer or paid a yearly fee for the tuition received. Owing to the irresponsible character of many of these private persons, who only engaged in the work for the money there was in it, those brought out, for the most part comprised the "black sheep" of the family, and were shipped to Canada to be out of the way. They had no desire to learn farming of any kind, and in many instances became a public nuisance. Consequently the farm student idea got into disrepute and was discouraged by government immigration officials both at home and abroad. It is only fair to say, however, that not a few of these students of the better class, placed amid suitable surroundings, became faithful and valuable citizens and are today among the most prosperous and up-to-date of our farmers. They had means, which they invested wisely and well. But too many were of the shiftless, worthless class and of no use to any community.

Conditions are different today. The attention which is being directed to Canada at the present time in the old land, has aroused the British people up to the great possibilities of Canadian agriculture. Instead of sending out the "black sheep," many well-to-do

citizens are looking to Canadian agriculture for an opening of their brightest and best boys. They are making enquiries of government officials and others for places on Canadian farms where their sons may learn something of our methods of farming. These boys have or will have ample means to start farming on a liberal scale when their tuition is completed. Consequently the farm student idea appears in a more favorable light today and offers opportunities for bringing to Canada as settlers some of the best young men of the United Kingdom.

But in whose hands should rest the placing of these students on farms where they will be fairly treated and given such home comforts as they have been accustomed to in the old land? It cannot be left to a private agency, as the eagerness for gain would defeat the object in view, that of keeping these young men in Canada and inducing them to buy and settle on the land. The work must be looked after by some responsible government agency. In Ontario it might very well be undertaken by the Bureau of Farm Labor, which is now doing such efficient work in supplying the farmers of this province with farm help. By adding to this branch of the Crown Lands Department an inspection service throughout the country whereby suitable places may be secured and the students kept track of during their tuition period, the work could be effectively and well done. The officers of Farmers' Institutes might, for a small fee, undertake to look after the boys in their respective districts. At any rate the government should take action, and by some means or other arrange to have these students looked after. They are bound to come in increasing numbers during the next few years. In fact, during the past week or two there have been several well-to-do Britishers in this city making inquiries as to where suitable places could be secured for their sons who desire to engage in Canadian agriculture. The demand is urgent and the work should be placed in responsible hands and systematized if the most is to be made of the opportunity.

But will the Canadian farmer lose anything by taking up the work of teaching the young educated Britisher to farm? We think not. In fact, he has everything to gain and nothing to lose by it. For the most part the young men who are today seeking places as students on Canadian farms are manly, robust fellows, willing to work, and imbued with an earnest desire to learn Canadian agriculture and to make the most of the opportunities which the country affords. Such young men, in these days of labor scarcity, would surely be worth their keep, and very good keep at that. They should, however, be treated differently from the ordinary hired man, and should not, at the beginning at least, be expected to do the work of the fellow getting \$5 a month and

board. We heard of one case where a farmer asked a farm student to clean out six filthy pig pens on a public holiday, while he and his family went away on pleasure bent. This was a pretty severe test and of course the young man sought a new teacher. With fair treatment, however, the class of farm students coming to this country at the present time can be made useful and valuable citizens and while gaining their agricultural training, of very great help to the farmers in whose charge they are.

Manipulating Apple Prices

The following from the weekly report of March 26 of J. B. Jackson, Canadian Commercial Agent for Leeds and Hull, accounts for some of the queer tricks the apple markets at certain English centres play on Canadian shippers:

"I understand that a great number of Canadian apple shippers have been very much dissatisfied with the prices realized for their products at the principal ports here. It is well known here that when large quantities of apples are delivered at the ports, such as Liverpool, Glasgow and London, and larger shipments are also expected, that most shameful slumps are engineered by those interested, and the apples being sent on consignment and auctioned at the different ports, the prices are slaughtered, and the Canadian exporter is naturally disgusted. This happens more especially with the smaller exporters and those who are new to the business. The goods belonging to the larger and more influential shippers are quietly held, because it would not be in the interests of the commission men at the ports to have the large shippers treated in exactly the same manner."

To overcome this Mr. Jackson recommends shipping direct to inland cities and districts. This could be done by arranging with some responsible broker or provision dealer to take orders on commission for Canadian apples, and have them sent through in regular weekly shipments during the season to the different cities in the district. By trading in this way, Mr. Jackson thinks, the Canadian exporter would be able to fix his price at home before the apples were shipped and would get payment as against the documents attacked.

While things might work out as he suggests, speculation and manipulation of the market at the ports of entry could, perhaps, best be overcome by organizing co-operative fruit associations at home and compelling the English dealer to buy f.o.b. at local shipping points in Canada. A collection of several thousand barrels of apples of uniform quality and uniformly packed, at one central point would, we think, be a sufficient inducement to compel buyers to come from a long distance, even from Great Britain.

Excursions Begin

The East and West Peterboro and East Durham Farmers' Institutes will hold a big excursion to the Ontario Agricultural College, Guelph, on June 9th.

Grow More Corn

Farmers in Ontario, and in other parts of the Dominion where it can be grown satisfactorily, do not give as much attention to the corn crop as they should. There is more good, wholesome, succulent food for stock, especially for cattle, in a field of corn than can be got from any other crop. A farmer who has a ten acre corn field to fall back upon need have little fear that his supply of winter's feed will run short, provided he gives attention to housing and caring for it profitably.

By far the best way to preserve corn for winter's feeding is the silo. Every farmer who keeps cows or cattle of any kind, should have one. Though the silo's advantages are recognized by most farmers, it has not taken the hold upon our people that it should. In the states across our southern border it is not a question of whether the silo is the right thing or not, but how it can best be built. This should be the attitude of the Canadian farmer. The question with him should be how best to build one so as to get the best return for the money. This has been touched upon so frequently in these columns that it is hardly necessary to dwell upon it here. What is more important at the moment is to get the corn in the ground in good condition. Cultivate the soil well, plant good, plump, sure seed of some variety that is known to mature in your district, and with anything like favorable conditions a good crop is assured. When planted, cultivate regularly and as often as you can. In the meantime plan to build a silo for next fall's crop.

Horse Insurance

In European countries a flourishing business is done in horse insurance. Companies which engage in this line of insurance find it a most profitable business. One Scottish company, a year or two ago declared a dividend of ten per cent. on its capital stock, with an additional bonus dividend of two per cent. The operations of such companies are usually satisfactory.

In America, where there is a demand for horse insurance, there are no companies organized for this purpose. They should be able to flourish as well on this side of the water as in the old land.

Made Acting Head

Mr. W. J. Rutherford, one of last year's graduates of the Ontario Agricultural College, has been made acting head of the Animal Husbandry section of the Iowa Experiment Station, during the absence of Professor Kennedy in Europe. He has also been appointed by the U. S. Department of Agriculture to take charge of the co-operative range sheep-breeding experiments.

Auction Sales Growing

At Calgary last month over 400 head of pure-bred cattle were sold at a sale conducted by the Territorial breeders' Associations.

The Scugog Agricultural Society and the Port Perry Board of Trade, will hold a joint sale at Port Perry, Ont., on June 16. If sufficient encouragement is given, sales will be held monthly to sell by auction all kinds of farm animals.



Prior's Hero—Shire Stallion. Property of T. J. Berry, Hensall, Ont.

The General Purpose Horse

A good deal of discussion has recently arisen regarding the class to be found at all fairs, that for general purpose horses. What the draught horse is, or what he ought to be, has long been defined in a manner at least acceptably clear, and such is also the case with the various classes of light harness horses. Each of these animals has been bred of a size, and with, as far as possible, qualifications, adapting him to a certain kind of work. What that work is, and what qualities it calls for is also clearly defined and well known, but all this is radically different in the case of the general purpose horse.

As local conditions vary, so does the nature of the "general work" around the farm. In a district where mainly light harness horses are raised the general farm work will usually mean all the heavy labor of the farm, with little road work, for which lighter animals will be on hand, and more suitable. On the other hand, there will always be found in such districts animals, either overgrown specimens of good breeding, or those bred from large dams, but too large to be classed among the light horses, and too heavy to meet the demands of the market and, these are designated "general purpose" horses. Breeders of draught horses, too, often find among their crop of foals, undersized specimens, which, while possessing any amount of draught type and quality, they would never think of as a draught horse either on the farm or in the showing. These again, are relegated to the lighter work at home and, if good enough, are sometimes entered at the local shows, in the general purpose class.

Here we have two distinct classes of general purpose horses, each with claims that are equally strong, for if the breeder of draught horses says that he finds the light and active Clyde or Shire bred animal good enough to do his driving, the champion of the lighter race will reply that he does all the heaviest labor on the farm with a general purpose horse that has not a drop of draught blood in his veins. Indeed, were the breeding of a farm horse, one suit-

able for the labors of the average Ontario farm, alone to be considered, some modification of these would, without doubt, supersede either of the extremes in horseflesh; but, as is the case with most breeders, the horse must be one that will not only do the farm work, but he one that will sell to fill a place elsewhere, and it cannot be too strongly emphasized that the world's great markets for the general purpose horse are very nearly a thing of the past.

A few years back the cities of England wanted a "bus horse, and Canada supplied them. Just now the railroad construction in the West creates a temporary demand, in a country that will soon be shipping all kinds of horses itself. Our own cities, always a ready market for a good heavy draught, or a good light horse, now have no use for either small draught horses or overgrown light harness horses. So that, as there is no longer any market for them, or for any horse of the general purpose type, why attempt to encourage the breeding of such horses, either by typifying, by giving a too prominent place at shows or in any other way. It would seem rather premature to cut the class entirely out of the showing, as this class brings out, in many places at least, some very interesting exhibits, and seldom is a class of general purpose horses shown but it includes a few mares who, bred to a good heavy draught stallion with lots of substance, would prove profitable as the dam of real drafters of the right stamp and quality to sell well in the city to work there and last for years. At the same time there are to be seen equally often mares of the other stamp that when bred to a Thoroughbred, or even a pony Hackney would produce ideal saddlers or high-steppers. While this is the case, it is impossible to ignore the medium sized horses of Canada and do full duty to the plea of the good horse, but all attempts to typify the class leads directly to the question of how the general purpose horse should be bred, while as a matter of today's agricultural economy, he should not be bred at all, unless it be with an eye to the end produce an animal that will

class with either or some one of the breeds of a marketable typification.
J.W.S.

Supplying the Farmer With Help

There is no busier man in Toronto these days than Mr. Thomas Southworth, Director of Colonization for Ontario. In addition to his exacting duties connected with placing settlers in New Ontario and in directing the forestry work of the Crown Lands Department, Mr. Southworth is endeavoring to the best of his ability to supply the farmers of Ontario with the help they are sorely in need of. This in itself is no easy task and might well claim one person's whole time. Over five thousand applications for farm laborers have been received this spring.

To satisfy each of these five thousand applicants is, perhaps a superfluous task. Though there has been a greatly increased immigration of farm laborers this spring, it does not supply one-half of the men desired. Had the total number, reported at the seaports as destined for Toronto, been all farm laborers, there would not have been enough to fill the applications, though there would not have been a few hundred lacking. Up to May 1st there were reported as booked for Toronto, 4,600 persons. Of this number 1,400 have been placed on farms through the agency of Mr. Southworth. This does not, however, include many men hired at the station by farmers directly upon their arrival.

There is a larger proportion of experienced farmers this year among the arrivals. These are mostly from Scotland. A large proportion of the arrivals, though inexperienced, express a desire to work on farms, and are supplied with places, provided they are able bodied and willing to work. To show the proportion desirous of going on farms, the arrival of May 16th and 17th may be taken as an illustration. On those dates there arrived in Toronto from Great Britain (people from other European countries are not brought here), 135 people. Of these, only two had farm experience, though forty expressed a desire to work on a farm and were so placed. The remainder were mechanics of one kind or another and were left to shift for themselves.

Wages are a little higher than in 1903. The great bulk of the applicants only want men for eight months. For experienced men for this period wages range from \$20 to \$25 per month and board. Inexperienced men receive from \$15 to \$18 per month and board, according as they adapt themselves to the new conditions and show a willingness to make themselves generally useful. Quite a few married men with families, who desire to go on farms, have arrived this spring. It is more difficult to place these than single men. Comparatively few farmers have a second house on the farm for a married man, and those who have, are not the ones who are looking for help, as they keep the men they have for a longer period.

And the solving of the farm help problem depends in no small degree upon the period for which men are employed. When on a farmer's eight months' agreement is made, the farmer is compelled to look for help every spring. Last year, perhaps a thousand or two farm laborers from the Old Country, were placed upon farms for a six or eight months' engagement. As soon as their time was up these left for other places, and the farmer has to seek new help this spring. Had these been engaged for

the winter as well as the summer, they would have been on hand this spring. Besides, the training received would make them more valuable this season. As it is now, the farmer, who had the trouble of breaking in these inexperienced men last year, does not get the benefit of their training. On white some other fellow does. On most farms a good man is nearly as valuable in the winter as in the summer. And even if this is not the case, it will pay to engage by the year as one is more sure of his help for the following season. Wages for the year would total up very little more than for the eight months of the busy summer season, when men expect much higher pay. Mr. Southworth states that he has had fewer applications for help from the dairy sections than from the others. In these the men have work all the year round and consequently there are fewer changes. The largest demand comes from the fruit sections, where only summer and fall work is required. From many of the live stock sections there is a large demand for help, presumably to help put in the crop and take off the harvest, as the herdsman is usually engaged by the year. When he can possibly arrange it, every farmer requiring help for eight or nine months of the year, should make a yearly engagement and retain his help longer.

Ontario Crop Conditions

The crop report of the Ontario Department of Agriculture up to May 16th, shows that though the past winter has proven one of the most disastrous for fall wheat in the history of the province, under the good growing weather of May many fields are making an encouraging recovery. Last fall's report regarding fall wheat was very favorable. There was good growth, the Hessian fly did comparatively little damage and the crop entered the winter full of promise. But the winter and late spring were disastrous and the loss from winter killing ranges from 20 to 90 per cent. On the slopes or rolling lands and on fields well protected a few good yields may be recorded but on the whole the fall wheat fields when the snows went off were very patchy-looking. The greatest damage was sustained in the Lake Erie counties. Next in order of injury reported come the Lake Huron and West Middlesex groups, the Georgian Bay and Lake Ontario groups. During May many of the fields have made an encouraging recovery. A considerable portion of the fall wheat area will be resown to oats and barley and other spring grains for feed.

The winter rye acreage is small and suffered considerably from winter-killing. Clover suffered considerably. In Eastern Ontario the crop is reported fair to good, and in the West from good to poor. The May rains have given it a good start.

Little seeding was done in April this year. But early May was good seeding weather and seeding was pushed forward rapidly and pretty well completed by the middle of the month. A normal acreage was sown.

Considering the severe weather, live stock came through the winter in

good condition. The general health of horses is reported good, though distemper and broncho itch were reported in a few places. Horses are in demand. The greatest loss in cattle has been among early calves. Sheep are reported in fair condition, though lambing has not been altogether satisfactory. Swine have done well, though owing to cold and dampness many became crippled and young pigs frequently died. But on the whole, swine turned out well.

Owing to the need of longer feeding there is less hay and grain on hand than usual. However, if prices were good a considerable supply of these would be marketed. Most of the fat cattle have been sold, but a good number of store cattle are available in some localities.

Fruit trees have been greatly injured by mice. The injury from frost was not as great as was at one time expected. Fruit trees are about ten days late in blossoming. Raspberries and strawberries were badly winter-killed in places.

Progress Towards Good Roads

Slowly but surely, permanent road improvement is forging ahead in this province. Five counties, Simcoe, Lanark, Wentworth, Wellington and Hastings, have taken up the government's road improvement scheme and are working along lines laid down by the act regulating this work. The government scheme involves the taking over or the designation of certain roads in each county as leading roads. These are selected chiefly because they lead to the chief market towns of the district, and provide the most direct routes to all parts of the county. When the roads are selected, road improvement is begun on a permanent and modern plan. Improved machinery is used in grading. The roads are finished off with gravel or broken stone. In Wentworth, the county owns a complete roadmaking outfit. Crushed stone is used chiefly, and the county has a quarry of its own, with an up-to-date stone crusher. The roads are inspected by government experts, under the direction of the Good Roads Commissioner, before any government funds are just over to the county. This inspection insures permanency and uniformity in the work done. The work has been hampered in many places by the scarcity of labor.

In the townships, where the county system is in force, there is plenty of work yet to be done. The statute labor or commuted labor on the roads taken over by the county is utilized on the other roads. This leaves the township the same resources it formerly had, while it has less mileage of roads to look after.

One hundred and fifty townships have either wholly or in part adopted what is known as the commutation system of utilizing the statute labor. Instead of the farmer doing the work himself, his labor is commuted at so much per day. This amount goes into the general township fund for road improvement and is utilized by township officials in repairing roads and in permanent improvement. The scarcity of farm help has influenced the extension of this

system in late years very much. It does not pay the farmer to put his expensive help to doing roadwork when he can get his statute labor commuted for a nominal sum. The burden is then thrown upon the township to get help to keep the roads in repair and to carry on the work of improvement. There as well as in the country, the scarcity of labor is a drawback to successful work.

One effect of the changes that are taking place in plan for road improvement is that it secures more permanent and better equipped highways. The instructions sent out by the Good Roads Commissioner, emphasize the need of building roads for the future. Of course, a certain amount of labor and money has to be utilized every year in keeping the roads in repair. But as more permanent and better roads are built this amount will gradually grow smaller.

Good roads are essential to a country's development and progress, and there should be no hesitation on the part of every farmer in supporting plans for bringing them about.

EXPERIMENTING WITH CALVES

Agricultural stations and agricultural colleges are continually sending out reports of experiments that have been conducted for the purpose of determining how best to raise calves without the use of whole milk. All are agreed that butter fat and money has to be fed to calves. In these experiments it is always taken for granted that some fat containing substance must be added to the skim-milk to take the place of the butter fat, and all experiments are conducted along this line. This is a mistake to begin with. Olecake meal and all fat containing substances are difficult to digest. Skim milk is difficult to digest, in fact that is its only fault as a food for calves. Is it reasonable then to add indigestible substances to that which is already indigestible in order to make it digestible? Scours and constipation are alike caused by indigestion, and olecake meal and other fat-containing substances only add to the difficulty, the true solution of which is in the use of something of an aromatic nature that will enable the calf to thoroughly assimilate and digest the skim-milk.

Herbageum will do this. It is purely aromatic, and we give below some reports that amply prove the statement. These reports are not from college students nor professors, who are prejudiced against all things, except their own theories, but they are from men who make a living from the rearing and feeding of stock.

Messrs. Belyea Bros., of Oakville, Ont., report as follows: "We have thoroughly tested Herbageum. We feed it with skim-milk to calves and they do better on that feed than we ever had calves do on new milk. It prevents all scouring."

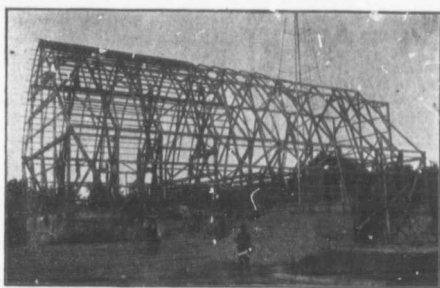
Mr. T. B. Watson, of Kirkwall, writes as follows: "I used Herbageum for my calves during the last year with separated milk and they did first rate, in fact I had better results than previously with olecake meal, and at less cost and with less trouble."

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Carbon Steel Wire, No. 7, having an average tensile strength of over 3,500 lbs. We would be pleased to send you free, post paid, a sample that will illustrate the spring.

THE H. R. LAMB FENCE CO., LIMITED LONDON, ONT. WINNIPEG, MAN.

Please Mention The Farming World when writing Advertisers



View of barn during course of erection on farm of Hon. John Dryden, Brooklyn, Ont. This shows part ready for corrugated roofing, part with rafters on and part without rafters. We hope to have a view of building completed for a later issue.

Modern Barn Building

Space Economized—Convenience Secured and Comfort of Stock Provided for

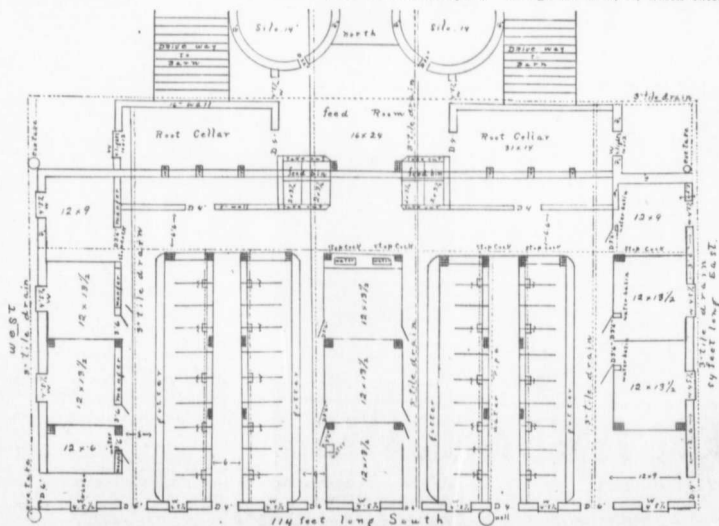
A good up-to-date barn and stable is a necessity on every Canadian farm. The long winters and the six or seven months of stable feeding required make good, warm, comfortable quarters for live stock indispensable to success in animal husbandry. More than this, the scarcity of farm labor makes it necessary that every convenience possible should be provided in order to facilitate the caring for and the feeding of live stock with the least expenditure of time and labor. The modern up-to-date stable has, therefore, an important place to fill on every farm, especially in the older parts of Canada, where mixed farming has become a necessity.

The accompanying illustration and plans are those of a new barn and stables erected by the Hon. John Dryden, Minister of Agriculture for Ontario, on his farm near Brooklyn. The barn is built on the most up-to-date plan, and no expense has been spared to make it fulfil the purpose the designer had in view. The barn is commodious, and the stables are planned so as to utilize all possible space. No heavy timber is used, the structure being erected on the plank-frame principle. This is less expensive, and makes as light and secure a structure as the old-time frame. No raising bee is necessary in order to put the frame in place. It is built bit by bit,

each addition to the structure being made secure as it is put in place. Mr. Dryden employed a foreman, and engaged men to work by the day, in erecting the structure. This plan worked well, and enabled him to have direct control of the material put into the building, and of the work as it went along.

The plan of the stables shown here-with leaves little further to be explained. The entire floor space is cement, with the exception of two or three stalls, which are laid with gravel and sand well tamped down. The four rows of cattle stalls are laid with 2-inch plank on the cement. The box stall partitions are made of wire netting, instead of boards, with one and a half feet of cement wall at the bottom. A perfect water system extends throughout the whole building, the water being pumped across the barn to a tank placed between the two silos. Near the top, a pipe from the tank comes across the feed room, and connects with the two small tanks shown in the plan, with a float in each. A float is also placed in the tank, and also an indicator to tell the amount of water in the tank. Six rows of drains extend across the building, the outlet being ten feet from the south wall, the whole length of the building. A walk ten feet wide extends the length of the building in front. It is made of stone and gravel laid with cement. The root cellars are part out and part under the barn, and are each 14 x 31 feet. The three squares in the root cellars, shown in the plan, are cement pillars for the foundation of the barn to rest upon. The squares marked similarly throughout the barn are cement pillars used for the same purpose. The feed room is 16 x 24 feet. In it are two feed bins, and it is used for pulping turnips, cutting green corn, and a feed-mixing room generally.

The two silos are 14 x 30 feet inside measurement, and are built of cement. They are so placed that the silage can be thrown directly into the feed room through the door, D, which extends



Plan of stables under Mr. Dryden's new barn at Maple Shade Farm.

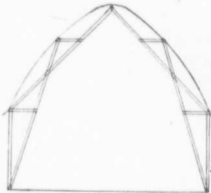


Diagram showing plan on which bent of plank frame barn is built.

from the bottom to within ten feet of the top of the silo. The silos are roofed over, and covered with Pedlars metal shingles. A Toronto windmill is built over the feed room, the two north posts being built into the silo walls, while the south posts rest upon the barn wall, but are securely fastened. The barn walls are 12 feet high. On these the frame is built. The west, north and east walls are 16 inches thick, the south wall 12 inches thick, and the inside roof cellar walls 9 inches thick.

The small plan cut shows how the bents are put together, and the structure of the framework. The bents are built of plank 2 x 12 inches and 2 x 10 inches, all well nailed and bolted. The rafters are made of boards cut six feet long and 10 inches wide, nailed three-joint together, and rest upon the posts. The posts are twenty feet high. The whole roof is covered with corrugated steel sheeting, 8 feet long by 33 inches wide. No board sheeting is used on the roof, only 2 x 2 inch scantling, nailed to the rafters. As will be seen from the accompanying diagrams, no cross beams or planks are used, thus giving an open space clean through the barn.

The granaries are located in the middle of the barn on the south side, and extend from drive floor to drive floor. The north side, from floor to floor, is reserved for storing bran, oats, the fanning mill, grinder, etc. The grinder is placed over the west feed bin, with a hole in the floor for the chop to fall through. This half of the floor is boarded over level with the top of the granaries.

The barn is 54 feet wide, 114 feet long and 45 feet high, not including the walls. The windmill rises to a height of 75 feet, thus giving plenty of power for all purposes.

Dipping Sheep

Dipping sheep is now recognized as an essential part of every sheep owner's duties. Without it he cannot hope to have a flock that is free from scabs, ticks, etc. Successful sheep raisers today practice dipping with as much regularity as shearing. They do it as a preventive of vermin and disease, and secure increased growth in both carcase and fleece.

It pays to dip sheep. To get the best of results it should be done twice a year, in the spring and also in the fall. For a small flock, up to one hundred, a small dipping vat may be used. When larger numbers are kept a swimming vat may be necessary, though, as a rule, better results will follow hand dipping than when the sheep are made to swim through a vat. For scabs, the dipping should not be hurried too much, and the work should be done as carefully as possible. The regular commercial sheep dips, if used according to directions, will give good satisfaction. A small investment in this every year will pay every sheep raiser.

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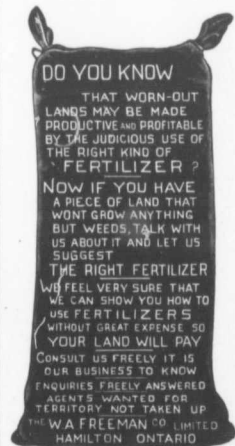
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Care of Horses' Shoulders

Many a farmer has trouble when warm weather comes with the horses' shoulders. The following on this point from "The Harness Gazette," is timely:

"It is not easy to obviate the effect of sudden and hard work on tender shoulders, and as all these horses cannot be worked one-half day at a time until their shoulders harden. Many will become sore under hard collars; many under sweat pads, then these will be cut in parts over the sore places; the hard collars on some will be removed, and larger ones with pads and holes will be substituted; some will receive applications of axle grease, and continue their work with their shoulders becoming worse; some collars will be cleaned each night, more will not; a few fortunate ones will have their collars removed at noon and cleaned, and instead of softening axle grease will have their shoulders (whether sore or not), washed with an astringent, such as a solution of one ounce of tannic acid dissolved in a quart of water; this will be repeated at night for a short time and will require from five to ten minutes per team per day. The shoulders so treated will not become sore, or, if already sore, will quickly heal, and the horses will be able to pull with comfort much heavier loads than can horses whose shoulders are as raw as their patience and willingness are great."

Sucklelets About Piglets

Under the above caption an ingenious American has compiled the following pertinent paragraphs on raising young pigs:

Young pigs cannot thrive on raw meal ration.

With plenty of milk the piglets are well provided for. With milk scarce, it may be extended by adding to it a porridge.

Early pigs will escape some of the diseases that belong to late weaners and attack the late pigs. The earlier ones call merely for thorough protection from severe cold snaps.

The piglet kept clean and louseless from birth is the one that soonest reaches the market size, or is the one that is best for breeding.

The invalid piglet is mighty poor property for the commercial swine-grower.

When your sow dines off her piglet, she is notifying you that you have been feeding her unbalanced rations. Take her warning and change her rations. This means that you need to know considerable of the scientific side of your work.

The piglets will do well or ill accordingly as you care for them property or improperly.

Clean pens, good pigs.

Dirty pens, sick pigs.

Sunlight, healthy pigs.

Warm rations, slow-growing pigs and costly pork.

Right rations, quick-growing pigs and cheap pork.

The filthy pig mirrors its owner.

Too much sweet food nauseates the piglet. The swine stomach naturally calls for sourish feeds, such as apples and sour milk.

Pigs will eat themselves to death on certain rations. Pigs will insist on being very much like humans.

The sow about to farrow should not be permitted to take milk of the first milking from a cow that has just calved.

The colostrum milk of the cow is generally fatal to the sow ready to farrow.

The pig is unfortunate when it falls into the hands of a know-nothing who knows it all.

Correspondence

The Bacon Hog the Staple Industry
 Editor THE FARMING WORLD:

Spring's work was not generally begun in this county until May and, since then it has gone on continually and the greater part of the seed will be sown by the 20th if operations are not interrupted by rain. The ground is working up well this spring, and farmers are having no trouble in preparing a good seed bed.

Fall wheat in this county wintered well and there was every prospect of a good crop when the snow went off. But the cold snap about the middle of April injured it more or less the county over and practically ruined it in some sections. It is doubtful if the county will average half a crop. Clover suffered in the same way but the extent of injury was a great deal less.

Stock wintered only fairly well, the severe winter was probably the cause. Feed is not very plentiful, the long cold winter made a greater supply than usual necessary to winter the stock. Prices are fairly good, horses are selling at from \$100 to \$200 and milch cows at from \$40 to \$50 each, and hogs at \$4.00 per cwt. There are a great many hogs raised in this county, our leading drover a short time ago shipped seven carloads to Montreal, paying the farmers over \$5,000 for them. Of course, this was an exceptionally large shipment, but as there are three different drovers and as they all ship each week, it is plain that the raising of the "bacon hog" is one of our staple industries. Eggs are 14c. and 15c. per dozen. Poultry is very high, and only chickens offered; they sell at from 60c. to 80c. per pr. Butter is 20c. per pound. The cheese market is very much discouraging. At the last meeting of the board, 645 boxes were boarded and sold at 65c. Last year it was worth, at this time, 75c. per pound. It would almost look as if it might pay better to make butter.

CANUCK,
 Prince Edward Co., Ont.

Fall Wheat Badly Killed Out

Editor THE FARMING WORLD:

Spring has been late here. Seeding is about finished. A very large acreage was sown. Fall wheat, clover, and the older meadows were all killed with the ice last winter. One farmer sowed 90 acres to fall wheat last fall. It was all winter killed. If we take the acreage sown last fall the yield in the township of Aldboro will not be 1 bushel per acre. I have visited nearly every section of the township during the past three weeks and only saw ten acres that promised two-thirds of a crop. Very little barley was sown owing to the amount of land in natural grass in the slashings and forests, large patches were killed out during the winter.

There will be a great many beans planted this spring on killed wheat and meadow lands. And also a larger acreage of corn than during former years. Feed is plentiful. Many farmers have their barns full of last year's hay. Early sown oats and barley look well and are growing nicely. The recent rain was very much needed, especially on hard clay land. Cattle are moving slowly, owing to low prices. Farmers are holding for higher values. Hogs are fetching somewhat, our last shipment sold for \$475 per cwt., and the market is looking firmer. The weather keeps cool here.

MICHAEL BAKER,
 Elgin Co., Ont.

A Definition of a No. 2 Apple

Editor THE FARMING WORLD:

The committee appointed by the American Apple Growers' Congress last season recommended as a definition of a No. 2 apple the following:

"Number Two apples may be 3/4 inch less in diameter than Number One Apples, and the outer consequence of the apples affected by delacement of surface, by scab, dry rot, worms or other defects, shall be hand-picked from the trees, and not bruised or skin broken, shall be of a bright and normal color and shapely formed."

This definition of a No. 2 apple is of the very greatest interest to the Canadian apple grower. We have in section 6 of the Fruit Marks Act a definition of No. 1 fruit that is in every respect satisfactory, and there is a constant demand for a definition of a No. 2; but the difficulty is that language appears to be hardly definite enough to mark out clearly the degree of imperfections that will be allowed in a No. 2 apple, because it is of course understood that a No. 2 apple is a defective apple.

The above definition of the Apple Grower's Congress has also been adopted by the International Apple Shippers' Association. Nevertheless, I cannot help thinking that this definition is not workable. The reference to the size of the apple might pass, though it is little better than using the phrase "Too small to grade No. 1." But the most serious objection is the admission of 20 per cent. of defective apples, with little or no regulation as to the degree of imperfection in the individual fruits. The inference is that the remaining 80 per cent. would be free from scab, dry rot, wormholes, or other defects. Virtually then, 80 per cent. would be No. 1 apples, except in the matter of size. Now is it of the least consequence of the qualities mentioned, so that practically a No. 2 barrel would consist of two grades, viz., fruit with wormhole and scab to the amount of 20 per cent. and 80 per cent. perfect fruit, slightly smaller than No. 1.

This violates the first principle of true grading, in permitting different qualities to go in the same package. I would therefore consider that, so far from making matters better, this definition makes matters worse. In looking for a description of a No. 2 barrel, the individual apples must be taken into account, and if certain blemishes are permitted, they must be permitted in each specimen. It will not do to distinguish between different specimens in the same package, except so far as to make a reasonable allowance—say 5 to 10 per cent.—for the inevitable errors that come in rapid work by the class of help that must be employed in packing fruit.

APPLE SHIPPER.

Investigation of Sills

Editor THE FARMING WORLD:

Under the above heading Mr. De Coriols has an interesting paper on page 38 of the recently issued annual report of the Ontario Agricultural College. He gives the result of the application of potash and nitrifying germs in garden soil to a soil deficient in potash but rich in organic nitrogen, as all black, mucky soils are.

The oats were sown in lower pots and the photograph is shown when we would judge that the plants would be between five and eight inches high, and the rather hasty conclusion is drawn that the soil needed nitrifying germs more than potash, when it is very prob-

able that they were both equally required.

As a practical farmer I would be much interested in studying the effect of the above management on plots of not less than one-tenth of an acre, and allowed to ripen in the open air.

If the oats on a plot deficient in potash but rich in nitrogen, to which nitrifying germs have been added, do not go down and lodge on account of the rank, soft, sappy growth, it will be a revelation indeed to those familiar with such soils.

It would also be interesting to know the result of the addition of an application of potash along with nitrifying germs to the above mentioned soil. We would naturally suppose that the potash would supply this deficiency the nitrifying germs would liberate available nitrogen which, if there were sufficient phosphoric acid present in the soil, we would expect a record breaking crop from the otherwise almost worthless piece of land.

During the past year I have had the opportunity of seeing the results of experimental work both at the stations and also by the farmers on a large scale, in the black soils of Indiana, Illinois, and Wisconsin, and all, without exception, attest the value of potash on such soils. But this I do know, that the packing houses and phosphate rock fertilizer manufacturers have been forced, much against their will, by the demand of the farmers to continue continually increasing the percentage of potash in their fertilizers used in these sections.

This would not be done unless the potash was giving results. It is a great mistake to give out such conclusions unless the experiments work will warrant them, and I hope that the experiment will be continued this year, and that potash and nitrifying germs will be used combined on the same plot, as well as separately, and the crop allowed to ripen and the result noted.

But it is not necessary for the farmers who have unproductive peaty soils to wait for the college. Let them read the advice given on page 42, some reports on soils and fertilizers, and experiment for themselves. For the nitrifying germs can easily be obtained as explained in report by scattering some rich garden soil over the plot and the potash can be obtained from any fertilizer dealer at a reasonable rate.

G. F. MARSH, Grey Co., Ont.

Wants Ontario Pure-Bred Stock

Mr. W. J. Palmer, Director of Agriculture, Orange River Colony, in a letter to the editor of THE FARMING WORLD, dated April 10th, says:

"I may say that I am most optimistic in the outlook for development in this colony. It is amazingly fertile in most districts and with a fairly regular rainfall the soil will grow almost anything."

"There was a certain amount of good stock in the country, but a great deal of it was destroyed during the war. The government has recently passed an appropriation of \$1,000 (\$5,000 for the purchase of pure-bred Canadian stock, which we hope to procure in Ontario, and if the experiment proves successful we shall probably send for more."

Mr. Palmer is a Canadian and was formerly manager of the City Dairy Co., Toronto. He went to South Africa last fall and has been engaged since his arrival there in organizing the work of his department and in addressing meetings of farmers throughout the country. The movement he has initiated to secure pure-bred stock from Ontario, may in the future prove of great advantage to the stock breeding interests of this province.

Iced Cars for Butter

Iced cars for the carriage of butter to Montreal began running on the C. P. R. and G. T. on May 14th, and will continue till the end of the season. Creamery men should take advantage of this service to get their product to the seaboard. The butter should be cooled to at least 40 degrees before being put on the cars. No cheese will be taken on these special iced butter cars. The cars will leave central points on the railways on regular days each week.

Salting Cows

A thing that is sometimes lost sight of under pressure of other work is that of salting the cows. However, carelessness in this regard may be a rather expensive oversight. At the Mississippi Experiment Station three cows were kept without salt for four weeks and their milk record kept during the last two weeks of this period; then they were given the usual allowance of salt for two weeks, and on comparing the milk records it was found that the cows gave 454 pounds of milk during the first period when salt was withheld and 564 pounds during the second period when salt was furnished, a difference of 110 pounds of milk in two weeks in favor of salting.

Watch the Separator

Too many operators take it for granted that their separators are doing good work and fail to test the skim-milk. No greater mistake could be made. Most standard makes of separators will do good work if properly managed, but the separator is a machine and cannot manage itself. If the speed is right and the bowl properly balanced and the motion uniform, and the milk at the right temperature, there will be very little butter fat left in the skim-milk. But if any one of the conditions above enumerated is not right, it should be there will be fat lost in the skim-milk. The skim-milk ought to be tested every day.

Sterilization of Milk Cans

An interesting test of the effect of cleaning milk cans and making them germ free before milk is poured into them by the use of hot steam has been made in Germany. Some time during the hot summer time two milk cans were selected for the test. One was thoroughly well cleaned in the ordinary way scrubbing with hot water; the other was sterilized by steam for thirty minutes. In the first the milk went sour in twenty-three hours; in the second in twenty-eight and one-half hours; and the first can was found, on examination, to contain twenty-six times as much bacteria as the other. The same experiment repeated in winter showed that the sterilized milk can will keep the milk sweet for nine hours longer than the other. Milk that has been deprived of most of its germs by pasteurization will remain sweet in cans thoroughly sterilized by steam for about twice as long as if put into cans cleaned in the ordinary way.

Butter from Unripened Cream

At the O.A.C. Dairy School, two lots of butter were made from pasteurized cream. One of these was cooled immediately after separating, culture was added and it was churned at once. The score for flavor was 42 out of 45. The other lot was ripened in the usual way, and scored 41.5 for flavor. It is another illustration of the practicability of omitting the ordinary process of cream ripening and yet securing good flavor.

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have machine-cut gears turning on ball-bearings which run under oil. They have no worn threads or any other "no-trivance causing needless friction. The gear wheels are of high-grade steel, permitting reduction in their size and weight. The suspension of the separator bowl from the spindle is a decided and most important improvement on the old-fashioned plan, in which the bowl is balanced on top of one or more heavy worm-thread spindles held rigidly in position by two or even more bearings. For close skimming it is unexcelled.

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25-30 Wellington St., West, Toronto, Ontario

Three other lots made, one from pasteurized sweet cream, which was afterwards ripened, one from ripe cream pasteurized, and one from unripened cream, and scored respectively for flavor, 41, 40, and 40 out of 45. In this case the pasteurization of the cream when sweet added one point to flavor and the pasteurization of the cream when ripe did not add any value to the flavor.

Milk to a Finish

As long as you can succeed in getting more milk from the udder by any sort of manipulation, the job of milking is not finished. Many farmers prefer to milk their cows themselves rather than leave it for careless help to do. All the milk the cow has, almost to the last drop may be secured by persistent manipulation of the udder. And the "strippings" are thus secured which are richer in butter fat than the milk that is drawn before them.

An instance illustrating this occurrence at a farm gathering recently. Persons had been asked to bring samples of milk to be tested. Quite a number brought samples and when the tests were read before the audience it was found that the highest one tested 9 per cent. The man said he forgot to take out a sample while he was milking, but after he had finished milking his one cow (he lived in a town and only kept one cow) he thought of the sample he was to take to be tested. As he had the bottle in his pocket, he went to the cow and stripped her till he got enough for his sample. He thought, no doubt, at the time that he was getting an honest sample, of his cow's milk, but we know that the sample which he secured was perhaps twice as good as the correct sample, of her milk would be. It has been proven that while the first milk drawn may test as low as 1 per cent, and the last or "strippings" may test over 10 per cent, it is doubtful if a fair sample of the cow's milk would test over 5 per cent.

The cow owner, who must leave the job of milking to his hired help, should see that it is perfectly done. Thoroughness in milking is equally as profitable as thoroughness in any other part of the work of the farm.

Temperature and the Keeping Quality of Milk

H. W. Conn, of the Connecticut Experiment Station, writes recently on this subject, summarizes his conclusions as follows:

1. Variations in temperature have a surprising influence upon the rate of multiplication of bacteria. At 50 degrees these organisms may multiply only five-fold in twenty-four hours, while at 70 degrees they may multiply seven hundred and fifty-fold.
2. Temperature has a great influence upon the keeping property of milk. Milk kept at 95 degrees (heat of the cow's body) will curdle in eighteen hours, while the same milk kept at 70 degrees, will not curdle for forty-eight hours, and if kept at 50 degrees, the temperature of an ice chest, may stay perfectly keep without curdling for two weeks or more.

3. So far as the keeping property of milk is concerned, the matter of temperature is of more significance than the original contamination of the milk with bacteria.

4. Milk preserved at 50 degrees or lower, will keep sweet for a long time, but it becomes filled with bacteria, a more unwholesome type than those that grow at higher temperatures. Old milk is not fit for market, even though it be perfectly sweet.



Photo showing result of Fertilizer Experiments conducted on the farm of J. W. Clarke, Brant Co., Ont. (See description on this page.)

Bean Growing in Ontario

By J. O. LAIRD, Kent Co., Ont.

Not much is known about the botany and history of the bean. It belongs to the large order leguminosae, and perhaps the most common genera are Phaseolus and Faba.

Beans were cultivated in the United States some years before they were introduced into Canada. Their advent to Canada was in 1855, brought over by Collins Handy, of Morpeth, Ontario. He obtained the beans from a farmer in the State of New York. Since this time the industry has grown very rapidly, having become a very important crop to the farmers of Kent and Essex.

Beans are a profitable crop in many ways. They have a good many advantages over cereals. For example, they mature earlier, in about ninety to one hundred days. The farmer is thus enabled to get his returns sooner. Again, they distribute the work on the farm more equally to the different seasons of the year, as both the seeding and the harvest are later. The beans are a healthful and valuable food without the cost of manufacture, while the straw or fodder is especially good for fattening sheep and cattle, as it contains from fourteen to fifteen per cent. of crude protein and three to six per cent. fat, both of which are very important in the growth and fattening of live stock. We have fed a large quantity of bean straw to sheep, and have always found that they did exceedingly well, even with very little grain. Beans do not take as much plant food from the soil as cereals, and, after harvesting, the land is left in a moist, mellow condition, and with a little surface cultivation it is ready for sowing fall wheat. Here, too, we might mention the fact that bean picking gives employment to a large number of poor women and girls, who would otherwise not be able to earn a good livelihood. They make from fifty cents to one dollar per day.

Beans will not grow over a very wide area of the Province of Ontario. Their cultivation is restricted to the Essex Peninsula, although they are also cultivated to some extent in the county of Elgin. But Essex and Kent are the two chief counties for the production of beans in Ontario, or even in Canada.

KINDS OF SOIL REQUIRED

Beans grow best on a well drained clay or sandy loam. As to the crop that should precede the beans, we would recommend clover. Clover is not hard on the soil, and when turn-

ed under it supplies a good amount of humus to the soil as well as increases the soluble nitrogen in the soil.

The proper preparation of the soil is an essential part in the successful production of a good crop. Therefore, it is necessary that the land should be in a good state of till, also that proper fertilizers be applied. The clover soil should be plowed about five inches deep early in the fall, then rolled to start the capillary action, and afterwards harrow to prevent excessive evaporation. Of course, it is sometimes impossible to get all the bean ground plowed in the fall. In that case spring plowing will have to be resorted to. The manure is then applied; do it before plowing. After the soil has been left in this state for about six weeks it will be thoroughly decomposed, and may be cultivated either way without tearing up large pieces of sod. On this land should be applied about eighteen tons per acre of farm-yard manure, which is a general fertilizer, as it contains the three principal elements necessary for plant growth, viz.: nitrogen, potash and phosphoric acid. If it is impossible to apply farm-yard manure, use phosphoric manures, the amount depending upon the fertility of the soil. Phosphoric acid, although found to some extent in all soils, is more likely to become exhausted than the other two elements, as it goes largely to the growth and ripening of the grain, and the grain being sold off the farm, the phosphoric acid, as a consequence of this, will become deficient in the soil. The two remaining elements of plant growth mentioned are usually in sufficient quantity in the soil. Beans being a leguminous crop, have associated with them certain bacteria which in their process of growth change free nitrogen to a soluble form, which can be made use of by the plant in its growth. In this way the most costly of the three elements is supplied. Potash goes largely to the growth of the fibre of the plant, and as the straw is fed on the farm the potash is therefore returned to the soil.

After the manure is applied in the fall the ground should be ribbed up, and left this way over winter. As early in the spring as it is sufficiently dry the land should be worked down to a fine state of till, and keep it frequently stirred till the beginning of June. The beans may be planted from the first to the twelfth of this month.

VARIETIES GROWN

The two varieties most largely grown are the Dwarf Pea and medium field beans. These are both small, white beans, the Medium being about half an inch long by a quarter of an inch thick, while the Dwarf Pea beans are somewhat smaller and more nearly round than the Mediums.

In selecting beans for seed one must be careful to get proper seed, as beans that are more than two years old cannot be relied upon to germinate.

Beans are planted with a two-horse plow, in rows twenty-eight inches apart, each hill of beans being about six inches apart in the row. Some, however, of late years, have used the seed drill by letting every third tube run. This way, of course, does not plant them in hills, but it has been found very satisfactory.

Beans germinate very quickly on suitable soil. In about a week after planting the young plant will appear above ground. When but a few inches high cultivation should begin. The cultivation consists in using a two-horse scuffler about every ten days or, if there are frequent showers, the land should be cultivated after each shower, in order to break any hard crust that may be formed. It is a good plan to go through the beans two or three times with the weeder. If this is done, sometimes it is not necessary to hoe them. But as a general rule it is best to go through the crop at least once with the hoe. The beans come into bloom about the middle of July. After this all cultivation should cease. Irrigation after this time is injurious, because the blossoms are very easily knocked off.

The Yield from Commercial Fertilizers

Last summer I experimented with commercial fertilizers on barley. Three plats of one-third acre each were arranged side by side. No. 1 was sown one week before seeding with 200 lbs. of acid phosphate. No. 2 plat was sown at the same time with 100 lbs. each of acid phosphate and muriate of potash mixed. Both plats were sown, after the grain was two inches high, with 60 lbs. each of nitrate of soda. No. 3 plat was not fertilized at all. The soil was clay loam on an elevation in the middle of an eleven acre field.

The whole field was seeded at the same time with barley and the same work put upon it as on the plats. The results are as follows: Plat No. 1 yielded at the rate of 80 bushels per acre; plat No. 2 at the rate of 50 bushels per acre; and plat No. 3 with no fertilizer at the rate of 30 bushels per acre. The plats fertilized were out in head fully one week earlier than the unfertilized part, which is quite marked in the accompanying photograph.

J. W. CLARKE,
Brant Co., Ont.

Road Instructor for Nova Scotia

Mr. C. R. Coutlee, of Aylmer, Que., has been appointed good roads instructor for the Province of Nova Scotia. Mr. Coutlee received his early education and training at the Royal Military College, Kingston. Since graduation he has been employed on important work from Montreal to Vancouver, and is now practicing engineering at Vancouver, B.C. He is a member of the Canadian Society of Engineers and is regarded as an expert on highway construction.

Nature about the Farm

Migration—Aphids—Slugs—Gophers, and Ground Squirrels

EDITED BY C. W. NASH

BIRD LIFE

The season of spring migration is nearly over, but as yet birds are not abundant, and some few of the hardy species are as well represented as usual, but the warblers, fly-catchers, wrens and vireos, which comprise some of our most valuable insect destroyers, are remarkably scarce, they may, however be only delayed by the unfavorable weather we have had, in which case they will come with a rush when conditions improve. It is possible, though, that the severe cold of the past winter may have extended to the Gulf states and that many birds perished by reason of it. The cold waves which sometimes reach these southern states where the birds are wintering, destroy thousands of them and create a scarcity of the species affected, which lasts for several years. A case in point is that of the Bluebird, which some years ago was so reduced in numbers, that its scarcity was remarked all over its usual range. This scarcity was caused by a severe and prolonged cold wave which swept across the southern states and killed hundreds of thousands of birds, the Bluebirds being among the chief sufferers. Fortunately they were saved from complete extermination and have lately increased considerably, so that if they do not receive another setback we may hope to see them again established on every farm in the country.

The loss of bird life during the migrations is enormous, not only are vast numbers destroyed by storms and cold, but millions are killed by dashing themselves against lighthouses and high buildings. Fatalities of this kind usually occur among those species which fly at night and then only when the earth and sky are obscured by fog or rain. On such occasions the lighthouses present an irresistible attraction, and the unfortunates dash against the glass, only to fall dead on the gallery, or flutter, stunned and helpless into the water below. The strings of telegraph wires, too, are responsible for the death of a great many. These things, combined with human cruelty and carelessness, readily account for the continued scarcity of valuable bird life.

INSECT LIFE

The awakening of insect and plant life in Canada is one of the most interesting phenomena that nature presents. The change from the death-like sleep of winter, to the forceful activity of spring, is so rapid and complete that the process is difficult to follow and harder still to realize. But little more than a month ago, we were struggling with snow drifts and the earth was ice bound; today the trees are out in leaf, the Tulips, Violets, Marsh Buttercups, and scores of other wild flowers are in full blossom and insects are moving everywhere. On the 10th of May I examined the opening buds on some of my trees and to my surprise found well developed aphids (plant lice) on a good many of them, some being badly affected. A good spraying with a solution of hard soap, one-quarter of a pound to a gallon of water, got rid of them at once, though I expect to have to go over the trees again when the weather settles. I find that early in the season a wash of this strength is quite sufficient, while later on, double the quantity of soap would be required, and if

the leaves had curled it would not be altogether effective then.

I have strong hope that we shall not be seriously troubled by insect pests this year, last summer having been very unfavorable for the development of insect life. Wireworms, however, are remarkably abundant, and as against these creatures I have not yet been able to find an effective remedy. Slugs, too, are particularly numerous in market and flower gardens; these can be easily destroyed by lightly scattering lime, salt or wood ashes over the ground just at dark when the slugs are moving out to feed, or large numbers may be trapped by laying shingles upon the ground frequented by them. They will take refuge under these shingles at daylight and may then be captured.

As yet I have not seen very many of my chief abomination, the cutworms; this may be an off season for them, if so, the country will profit considerably by their absence. Other localities may not be so fortunate; where they do occur, they may be kept well in check by the use of a poisoned bran bait made up in the following proportion: Take 40 parts by weight of bran, 1 part of Paris green and 1 part of sugar or molasses,

add just enough water to this mixture to make a moist mash (not wet) and distribute it in small lots (about a tablespoonful in each) along the rows in the garden or field. Be careful not to put it where poultry or stock can get it, or there will be trouble.

CORRESPONDENCE

J. L. H. Ancestor—Q: Will the plant called the Purple Lady's Slipper grow under cultivation, and when should it be transplanted.

Ans.—All the plants known as Lady's Slippers (Genus *Cypripedium*) may be readily grown under cultivation either as house plants or in the open garden. I have tried nearly all the species both ways and have been successful with them. The one you refer to is, I suppose, the Showy Lady's Slipper (*Cypripedium spectabile*), which used to be abundant in your country. The plants should be taken up when they are in full blossom, which, in Wentworth, will be towards the end of June. They require a soil rich in humus, but are not particular as to aspect.

Mrs. J.W.G., Grand Forks, B.C., writes: "The workings of the little animal that tunnels along underground and does not show itself outside of its runs, seems to be paralyzed, so I suppose the poisoned wheat has destroyed it, but the gray ground Squirrel is sitting up beside his hole in the ground and chirping as loudly as ever in spite of all the meals I have set before."

(Continued on page 438.)

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THE HOME WORLD

What is a true rest? Not idleness, but peace of mind. To rest from sin, from sorrow, from fear, from doubt, from care; this is true rest. Above all to rest from the worst weariness of all—knowing one's duty and yet not being able to do it. Perfect rest, in perfect work; that surely is the rest of blessed spirits, till the final consummation of all things.
—C. Kingsley.

The Song of the Birds

The song of the birds this morning
Awakened my dreaming eyes;
The song as I listened filled me
And thrilled me with glad surprise—
The "Tweet, tweet, tweet!"
Oh, isn't it sweet!
The song of the birds in springtime!

It carries me back to childhood,
When, blithe as the robin's song,
I played in the nearby wildwood—
Those days were ever so long!
The "Tweet, tweet, tweet!"
Was ever so sweet,
The song of the birds in springtime!

Oh, everything's new in springtime!
And everything's young—save those
Who travel the long, long pathway
That ever to old age goes;
Yet "Tweet, tweet, tweet!"
Sounds just as sweet
As it did in the far-off springtime.

Then what is the use of sighing?
If one has the heart of spring,
There's nothing to fear in dying,
That ever new life does bring.
O heart, keep sweet,
As "Tweet, tweet, tweet!"
The birds sing out in the springtime.

The Flowers of the Field

By M. E. G.

In the present season when we are devoting so much of our time to the care of the gardens and cultivation of flowers, it is important that we should "consider the lilies of the field" and the woods. We have the mis-taken idea that man is all important in this world and that everything was created for his use and pleasure. If this were so very few wild flowers would grow, but there are millions that grow, blossom and die each year without being seen by human eye.

It might be easy to "consider the lilies" which grow indoors, and we must "consider the lilies" of our flower gardens. And, if we are so unfortunate as to occupy a back seat in church on Sunday, we can scarcely help considering the lilies, the artificial flowers, of the milliner. All these have their beauties, but there is no greater pleasure in this line than to go to the fields and woods and to consider the wild flowers. Each month, yes, each week and almost each day, of summer brings a fresh blossom or foliage to our notice.

We might spend days studying mosses. There are many varieties each one growing more beautiful as we learn more of it. Shakespeare has

said there are "tongues in trees, sermons in stones, books in the running brooks, and good in everything." These mosses frequently resemble trees in miniature. Though we do not know their Latin names, nor even their every day name, it is a pleasure to know them by sight, and where they may be found.

It is not necessary now to mention each flower as it appears. The earliest field flower is the beautiful yellow dandelion. Everyone knows it. It is considered a weed, but were we in a country where dandelions are unknown, we would probably send here for seed and propagate it in our gardens or in flower pots. Perhaps everyone does not know that its leaves are useful in early salads, and that its flowers give the lovely tint to our June butter.

Another flower which is familiar to all is the wild violet, but when you see it growing to larger size and in greater profusion in some deep wood, you prize it more. Besides this violet there is a pretty yellow one, the Johnnie-jump-Up, and there is also a pale tinted violet with white upper surface, which is also sweet scented and can be found nearly all through the summer. There are the common lilies or trilliums, white, red and pink. And every one knows that pretty yellow lily called "Adder's Tongue," from its spotted leaves, or sometimes dog-tooth violet, though it is

the root, which root emits a spicy odor equal to the ginger of the drug store.

I have heard the lady's slipper, or moccasin plant, grows in this province, though I have never found it. Another beautiful flower which is not very useful in a bouquet owing to its short stem, is the waxy, creamy white flower of the May apple, or mandrake. Then there are the many blooms of the wild fruit trees and berry bushes. The many plants which grow in or near water, the most beautiful of these being the white water lily. I once had the pleasure of going to a pond of those early in the morning when each white head was closed and sleeping on its green leaf pillow, and then I waited for them to open.

There are some scarlet flowers that I call the sweet balm. I have seen them in only one place; that was in autumn, in a deep, shady ravine. In September and October the woods are still beautiful, the ferns and foliage being still beautiful, while white and purple are the prevailing colors among the flowers, and the feathery, yellow sprays of golden rod attract the eye even at a distance; but these are more to be admired singly than in bunches, and will bear considering.

Now, you say, it is all right to talk of these things, but how can the busy housewife go to the woods and fields? A woman's whole life is a warfare against dirt, and like the woman of



A Log Cabin for a Summer Home.

really a lily instead of a violet. I could take you in May to a patch of blood root, which is one of the daintiest, pure white blooms, with very pretty pale green foliage and with blood-red roots. Then we have the wild diacontra, or Dutchman's breeches, or bleeding heart. These, with the wild, sweet scented phlox, are among the common flowers.

Perhaps you do not know that we have also very plentifully, the wild lily of the valley, not quite so sweet as its cultivated sister. Very beautiful for bouquets are the mitreworts, the true and the false. The wild honeysuckle is not so lasting as the cultivated variety. And how many have found the wild ginger. This plant sends up a velvety leaf, while its flower lies near

the rhyme, in the end she will lie down and die and be buried in dirt. We fight dirt every day and finally it conquers us. I believe we could fight it longer if one-half day every month we dropped the struggle and went to the deepest wood, where the air is pure and household germs are unknown, where we can get close to nature and away from household worries. I think some women are born tired, and tired out, they die long before their allotted four score years, and they can't expect to enjoy a future beautiful world because they deliberately pass through with their eyes shut, what is a beautiful enough world for anyone, and they do not go out to seek its beauties. Let us live a simple life and we will get time for considering the lilies of the field.



Hickory

A Tale of the Lakes

By Eric Bohm

Author of "How Hartman Won."

[COPYRIGHT]



CHAPTER XX.—(Continued.)

Laying down the paper—so that anyone might read—he went to the woods again; and with long and steady strokes swung his axe all day, putting the finishing strokes upon his fallow; while with labor of the body, he calmed the fever of the soul.

CHAPTER XXI.

For days, even for weeks, the discovery of the divers was in everybody's mouth. Tom rarely met anyone but the matter came up for discussion. At his own home, his mother and Jim both talked of it; and more than once the brothers had an argument about certain points of detail, and the probability of future findings. But Tom parried everything and suspicion was not aroused.

At the Ross's, too, Genie and her father, as well as George, would grow animated when talking of the villainy of the smugglers, and the just retribution meted out to them by a righteous Providence. Elsie scarcely said a word. Sometimes a far-away look came into her eyes, but that was all. Had Armstrong been talking to her again?

But with Tom, work had become a passion. It needed mighty energy and tremendous force to calm his brain; and it was lucky that he had with his one pair of hands his fallow to cut. Underwood had to be chopped down, trees felled, trimmed, and cut into lengths for snaking; and the whole finished before the spring work commenced. The neighbors marvelled at his vigor and energy, and at the long stretch of leveled fallow accomplished in so short a time.

"What a lot he's done," said George. "Always at it. Day in and day out, never stopping. I wonder where he learned it all?"

"In the lumber camps, no doubt," replied his father. "Jim says that there's not another man in the whole settlement could do it," said Genie.

"It's time he said a word for his brother. I've no patience with Jim," said Elsie; and to this they all assented.

The spring opened, and while the brush of his fallow was drying for the turning, Tom did his plowing, and prepared his little clearings for the season's crops. Corn planting time—that period in May, when the white oak-leaf in Indian parlance is as big as a squirrel's ear—soon arrived. Maples, beeches and hickories were already covered with verdure; and as the days grew longer, thrushes, robins, and orioles filled the air with song.

One evening, Tom had finished his day's work. He had made ready for the morrow's planting, and was watering a little plot of pansies that he had put in beside his house some weeks be-

fore, when a ringing laugh attracted his attention. Elsie and Genie Ross were coming up from the road.

"It's the funniest thing out," said Genie, lowering her tone as they approached, "a regular riddle. To think of a sensible man, with no one to provide for but himself, working as if his very existence depended on the number of hours he could put in."

"I think he has good reason," returned Elsie, warmly. "To be cut off without a dollar, everything being left to his brother, is enough to put any man on his mettle."

"But that's not it," said Genie. "Tom is no more thinking of Jim when he is working, than I am of you."

Tom commenced to whistle, and the conversation dropped.

"This is delightful," he cried cheerily, as they approached. "I'm through for today, and was just watering my pansies. Have they not done well?"

"Yours are the finest bed I have seen, and what a variety you have," said Elsie.

"Only four kinds," was his answer; and stooping down he pulled a cluster tinted with amethyst. "The light ones suit you best Elsie. Let me fasten these on please. The dark ones are for Genie."

"May I gather some?" Genie asked.

"Certainly. I was going to pick them for you."

"Thank you. How pretty they are."

"They are very sweet," said Elsie. "To think of your being florist, and farmer and woodsman and—"

"Everything else you can think of," said Tom quickly, "a jack, but not a master."

"That remains to be seen," said Elsie. "It looks as if to succeed with you only means to try."

"That should be a man's motto, whatever he makes of it," responded Tom. "Well! I must go on," said Genie. "I promised to visit little Katie, one of my scholars; and it will take all my time to run over there and get back before dark. Are you coming, Elsie?"

"Katie is not Elsie's scholar," said Tom, dryly; and turning toward her, he continued, "why not stay with me until Genie's return, Elsie? I have something I would like to show you."

Elsie considered for a moment, and on Genie urging, she consented.

"It won't be dark for an hour yet, and I'll be back as soon as I can," said Genie, as she tripped away.

"I am very glad you stayed, Elsie," he exclaimed, as Genie reached the gate. "There's something I want your approval upon. It is my grove of hickories."

And he led the way to a little clump of saplings on the other side of the house. They formed a double line in the form of a half moon; and in the open centre he had already found time

to construct a rustic seat made of branches of the same wood.

"What a unique idea! and such symmetrical lines!" cried Elsie in surprise. "You could not have planned them."

"Oh, no. It was simply a thick grove of young hickories that happened to be growing here. So I lined them out and took up the rest by the roots, to make the surface clear." He did not tell her of the odd charm that the name of Hickory had for him.

"How well you have done it, and how beautiful they will be when they grow larger!"

"I am glad of your approval," he exclaimed, earnestly.

"But such a labor; and this seat. How did you get it inside the crescent?"

"That was easy. I just took the parts required from the hickories I cut down, and bringing them inside, put them together."

"To make this delightful seat. You are a strange man, Tom. It seems to have been nothing but toil ever since you came home."

"Is it not good to toil?" he asked. There was a tender tone in his voice, as they partially faced each other on the little rustic seat.

"Oh! yes it is," she replied, quickly averting her face. "It shows a purpose in life."

"But not the only purpose. It is only a means to an end. You cannot believe it is the only thing I live for, Elsie."

"I never thought it was," she replied slowly.

"Nor it never has been. No matter how or where I have worked, there has always been something over and beyond it all."

"That is the mystery of your life."

"Perhaps it is," he said, looking intently into her eyes. "Would you like to hear it, Elsie?"

"I don't know," she replied in an agitated tone, "but there is one question, it may be a silly one, that I would like to ask."

"Ask anything you like; for I have much to tell you."

"Still, not now, please—but that little old purse of mine—did you keep it?"

"Keep it! Why I have carried it every day of my life! Here it is!"

A little, crumpled, brown leather purse, with a tiny steel clasp, lay in his hand. The color of the original leather was all gone; and there were little cracks in it here and there. It would not have held money with safety now; but it was not required to. It did not matter.

"There is no commercial value in it," he continued with a light laugh as he handed it to her; "but it's the richest treasure ever owned; worth its weight, not in gold, but in priceless gems."

A flash of crimson mantled Elsie's cheek, mounting quickly to her temples. A tender glow filled her eyelids, but she did not speak. Her heart was too full. Tom's pulses beat faster, and she thought came again of that meeting in the woods years and years ago. It seemed like a century and yet only yesterday.

"I am glad you kept it," she said at last. There was a slight tremor in her voice.

"The keeping was mutual," came in measured tones from his lips. "I kept it, but it kept me like a human soul."

"Why not tell me? I can bear it all now."

(To be continued.)

THE ROSE TEA Is GOOD TEA

THE BOYS AND GIRLS

Baby Alice and the Cow

"When Baby Alice first saw a cow with a bell around its neck, she thought it so funny that nothing could induce her to leave the spot. She stood watching the cow until it slowly walked away. Then, when the bell began to ring, she turned delightedly to her mother, exclaiming: 'O mamma, does the cow ring the bell when she wants the calf to come to supper?'"

It Was a Fox

RESULTS OF THE PRIZE COMPETITION AND LIST OF WINNERS

The majority of the votes cast by the readers of this page are in favor of calling the animal, whose picture we printed on May 2, a fox. It was not quite a unanimous decision, for eight competitors thought it was a wolf, three a coyote, and two called it a coon; but far the greater number were emphatic in asserting it to be a fox. And a fox it truly was.

The competition was a very interesting one, and the results are most creditable to those who took part in it. The young people in the FARMING WORLD family evidently know something about animals.

Here is the judges' verdict. First prize goes to William F. Boa, Lachute, Que.; second, Monta Skinner, Pine Orchard, Ont.; third, John Hulburt, Kempville, N.S. For the fourth place there was a tie between Horace Cameron Stewart, St. George, N.B., and Ernest Gordon, Stapledon, Ont., and we have therefore allowed an extra fourth prize to these two competitors receiving equal recognition. Honorable mention is also won by John A. Campbell, C'Leary Station, P.E.I.; Hilda Gallagher, Hampton Village, N.B.; Bertram M. Andrew, Seckerton, Ont.; and William J. Smilie, Inwood, Ont.

A word of explanation is necessary in regard to the first and second prizes. The second would have been entitled to first place had it not been for quite a large number of mistakes in spelling and grammatical construction in the original manuscript. As it appears in print on this page, these mistakes have been corrected. The judges, however, in comparing the merits of the different essays, looked upon neatness of manuscript, good spelling and correct form as an important part of their general excellence. Facts well expressed was what they wanted. Perhaps all our young readers might take a hint from this. Good grammar, good spelling, good writing, and good punctuation are of great importance, not only in prize competitions, but always. You will find it worth your while to be careful on these points.

To all these prize-winners FARMING WORLD has pleasure in extending its congratulations, and to all the competitors also, for while not all could win the prizes, every one has made a creditable effort, and has helped to make the competition a success.

Three of the essays are as follows:

FIRST PRIZE.
The animal in the picture, to all appearance, is a fox. He is standing at the mouth of his burrow; a breeze of wind has evidently wafted scent of some kind and he is smelling to find out what it is. If it is some kind of game, he slips quietly off through the

dense under-bush, creeps along until he sights it, and then crawls through the weeds and grass until he gets close enough to make a rush upon it unawares. If, however, it is a hunter, or dogs, he slips quietly into his burrow, and is not seen until danger is past.

His burrow is in the thick bush, on a hillside; sometimes it is in the under-bush, and sometimes it is not. There are generally four entrances, or exits — one main entrance and exit and one at either side. My uncle and I once commenced digging a fox out of his burrow, but he escaped. We discovered the main entrance, and two side entrances, or exits, but failed to discover the main exit; therefore, when we had been digging for some time, all at once there was a flash of red fur, and the fox was gone through the main exit we had failed to discover.

The fox is one of the worst enemies of the poultry yard. He will catch and kill any kind of poultry, e.g., hens, ducks, turkeys, geese; he will catch a hen, carry it for a small distance,



In his Working Clothes.

and if not chased, will lay it down, then worry it a little, shake all the loose feathers off it, pick it up and start for his burrow, leaving no sign of his having killed a hen but the feathers scattered on the ground. If the fox, however, catches too heavy a fowl, say a full grown turkey or goose, he takes hold of it by the neck, throws it over his back and trots off with it.

One time my neighbor, upon arising in the early morning, heard his geese cackling, and going out saw a fox and the gender of the flock fighting; however, the fox on seeing the man, ran off, or it is hard to say what the result would have been.—Wm. F. Boa, Lachute, Quebec.

SECOND PRIZE.
I think the picture is that of a fox, of which we have several kinds: the red, crossed fox, and silver grey, the red being the most common in Ontario. They are quite frequently seen near our forest. The fox lives on animals

and birds, which it catches and kills for itself. In this matter it is very cunning. It walks slyly and slowly, in a crouched position, until quite near its prey; then with long strides it moves quickly, until it can grasp it.

I remember a few years ago, we had a flock of goslings feeding along the banks of a creek, when a fox made a raid on them, killing four. The boys, hearing the squall of the geese, went out and found that the fox had taken one away and the others were lying dead. He would have come back and taken them if the boys had not brought them up.

Their den, where they keep their young, is about five feet deep in the ground. To this there is a long road dug out, with several turns in it; this road is from twenty to thirty feet long and never in a straight line.

There was a den near our place, and an English gentleman who wished to get some young ones brought some men and dug all day and did not reach the nest, so they left it and came back in the morning, to find that the mother fox had taken the little ones away. They had the satisfaction to know what she had stored up in her hole. They found pieces of crows, squirrels, skunks, woodchucks, lambs, rabbits, and different kinds of fowl.

Foxes are quite bold, and when they are hungry will come quite near the buildings after something to eat. It is not an unusual thing for us to hear the hounds after them in the winter, and to see the hunters going home, carrying them over their shoulders.

A full-grown fox is about three and a half feet long and eighteen inches high. They have long fur and a very bushy tail. They move with long, graceful strides, and in the woods when hunted will out-distance a dog—MONTA SKINNER, Pine Orchard, Ontario.

THIRD PRIZE

The animal in the picture is a fox. The fox is a very shy creature. It lives near a forest, in a sandy and rocky place where it can dig its den. The den is not straight all the way through, but zig-zags along. It is about two feet deep and ten feet long. They have their young about the middle or last of April. The old mother fox plays sad havoc among our lambs in May and June, to help feed them with. They also steal and carry off domestic fowl.

One Sunday morning my brothers went out to look at the sheep and lambs, when they saw an old fox playing with a lamb. They came home and got a gun and shot it. After that they went up and dug out the little foxes. They got four out in all and two dead. They brought them home and when I first looked at them I thought they were little red dogs. The boys sold them all for pets.

When hunted with dogs, the fox runs in a circle until it gets to a good place; then he turns sharply again, and as the dogs go straight ahead it gives him a great deal more time to get away and hide himself.

The fox can be caught sometimes in a steel trap, if it is properly smoked and oiled. He is also caught in snares set along his path. The snares are made of several strands of brass wire twisted together. An old log fallen across a stream is a good place to set a snare, as Mr. Reynard does not like to get his feet wet in going across. The snare is set in spring-pole fashion.

Foxes are of different colors: red, cross, silver-gray and black. Mostly red and cross foxes are caught here. Silver-gray and black foxes are valuable. After foxes are caught and skinned, the skin is stretched on a board. My mother once caught a fox, black and red, spotted all over, which was very pretty.—JOHN HULBURT, Kempville, N.S.

IN THE KITCHEN

Cooking Utensils

In the preparation of foods the question of cooking utensils is one of very great importance, and especially so in these times when novelties and new ideas are being pushed to the front. Competition makes it incumbent upon the manufacturers to lessen the cost and this is sometimes done greatly to the detriment of the goods. It will be better for you to economize on the cost of your food, eating that which is simple and less expensive, rather than to make a saving by the purchasing of cheap utensils. This caution applies, of course, to the glazed, enameled and so-called agate ware goods rather than the old-fashioned iron kettles, which were not so easy to contaminate. It often proves that the cheapest is in reality the most expensive. While such reliable brands as the Agate Nickel Steel Ware and Aluminum cost more, in the purchase of it not only has the safety been found in its healthfulness, but it has the qualities of durability that makes it economical. These cautions are of special importance during the season when acid fruits are largely in use.

Good Things for the Table

STRAWBERRY PIE—Have ready a freshly baked shell of rich pastry. Beat the whites of two eggs to a stiff froth, gently add half a cup of sugar, vanilla to flavor, and a pint of perfect berries. Heap into the pastry shell by the spoonful and bake in a slow oven until firm to the touch.

STRAWBERRY TART—Make a short piecrust, adding a fourth of a cup of sugar and a teaspoon of baking powder for two cups of flour. Line a deep pudding form with the pastry, brush with white of egg, dust with cracker crumbs and fill with fresh strawberries, adding sugar to sweeten. Beat the yolks of three eggs with a fourth of a cup of sugar until light, add six macaroons crumbled fine and one and a half cups of cream. Pour over the fruit when crust is half baked and finish baking. Cover with a meringue made of the whites.

FARMERS' FRUIT CAKE—One pound sour dried or evaporated apples, soaked over night in warm water. Drain off water and simmer two hours in two cups molasses. One cup melted butter, half cup thick, sour cream, two teaspoons soda, one cup brown sugar, four eggs, four and a half cups sifted flour, browned in the oven, cassia, ginger, cloves, nutmeg, lemon rind grated, each one teaspoonful. Bake in moderate oven.

BREAD PRUNES—One cup of sour milk, two cups of bread crumbs, one cup of flour, one half cup of butter, one cup of chopped raisins, one small cup of preserved strawberries, one cup of sugar, two eggs, one teaspoon of soda, one teaspoon of cinnamon. Mix sugar and butter to cream; soak bread in milk with soda, mix and add the other ingredients. Steam two hours. Serve with whipped cream.—Mrs. Albert Marion.

CORN MEAL BATTER CAKES—One and three-quarters cups of corn meal, a scant half cup of flour, two eggs, one and a half pints of sour milk, two teaspoons of sugar, one-half teaspoon salt and one teaspoon soda. The meal must be the coarse corn

meal, not the bolted variety. The milk should be thoroughly soured. Soak the meal over night in the milk. In the morning beat the eggs well into it; mix the flour, sugar, soda and salt and sift into the first mixture. Beat thoroughly, let it stand a few minutes and bake in small cakes on a hot griddle.—H.M.

BUTTERMILK BREAD—For three good sized loaves use one quart of sour buttermilk, one generous cupful of butter, one teaspoonful of soda and three-quarters of a quart of flour. Heat the buttermilk to the boiling point, stirring it frequently to prevent curdling. Put the sugar in a large bowl and pour the hot milk on it. Now gradually sift into this mixture a quart of flour, stirring all the while. Beat well; then cover and let it stand in a warm room over night. In the morning dissolve the soda in three tablespoonfuls of water, and add to it the batter, together with the salt and butter, melted. Beat thoroughly; then gradually beat in the remainder of the flour, reserving, however, half a cupful for kneading. Sprinkle the board with flour, and turning the dough upon it, knead for 15 or 20 minutes. Divide into three parts, and shape into loaves. Place in buttered pans, and put into the oven immediately. Bake for one hour in a hot oven.

How to Cook Prunes.

Few persons really know how to cook prunes. Yet if properly cooked they are delicious as well as much to be desired on the ground of health. Wash carefully, cover with cold water and let stand over night. In the morning place both prunes and the water in which they have been soaking in a porcelain or granite steppan, and stand on the side of the range. Let heat slowly and simmer gently until the fruit is perfectly tender, then add one tablespoonful in sugar for each pound and let stew slowly for five minutes longer. Remove from the fire and cool. Another method calls for the same process except that the sugar is omitted. This method is preferred by some people. But whether sweetening be added, the long soaking and slow cooking will mean a delicious result. Serve with sweet cream.

A Rhubarb Pie Hint

I began to make a rhubarb pie when I found I did not have rhubarb enough by one-half. There was no way to procure more, and company was expected, so the pie must be made. I took the strawberries left from breakfast, put them on top of the rhubarb until the plate was full enough, first slicing or cutting each berry into bits, then add a good full cup of sugar, sprinkled on a little flour, a pinch of salt, and a tablespoon of water. The strawberries gave the pie a delicious flavor and tempting color and the flour thickened the juice. We often use this recipe now in preference to the plain rhubarb pie.

Chocolate Filling—One cup each of grated chocolate, sweet milk and sugar, stir carefully until it boils to a thick cream, and spread on layers while warm.



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HEALTH IN THE HOME

The Benefit of Yawning

A good, wide, open-mouthed yawn is a splendid thing for the whole body. A yawn is nature's demand for rest. Some people think they only yawn because they are sleepy. But this is not so. You yawn because you are tired. You may be sleepy also, but that is not the real cause of your yawning. You are sleepy because you are tired, and you yawn because you are tired.

Whenever you feel like yawning, just yawn. Don't try to suppress it because you think it is impolite to yawn. Put your hand over your mouth if you want to, but let the yawn come. And if you are where you can stretch at the same time that you yawn, just stretch and yawn. This is nature's way of stretching and relaxing the muscles.

Don't be afraid to open the mouth wide and yawn and stretch whenever you feel like it. Indeed, if you are very tired but do not feel like yawning, there is nothing that will rest you so quickly as to sit on a straight-back chair and lifting the feet from the floor push them out in front of you as far as possible, stretch the arms, push the head back, open the mouth wide and make yourself yawn.

Those tense nerves will relax, the contracted muscles will stretch, and the whole body will be rested. Do this two or three times when you are tired and see what it will do for you.

Two Good Hints

My husband, who is a traveling man, suffered from acute stomach trouble from much hurrying and badly cooked food. On one occasion he went into a drug store in a little country town and told his trouble to the man who kept the store. The druggist said, "Don't take any medicine, but just get an egg, break it raw into a glass, pour in enough vinegar to cover it, pepper and salt well, swallow it, and that will settle your stomach all right." With very little faith my husband carried out the directions and found it acted like a charm. It enabled him to finish his journey in comfort.

The small callous spot on the sole of the foot, from which so many housewives suffer, can be cured by placing a bit of absorbent cotton, saturated with olive oil, on the spot each morning before putting on the stocking or shoe. If a corn has developed in the middle of the callous spot, touch with a little turpentine every evening upon retiring, and the corn will come out in a little while. Apply the turpentine with a toothpick or the wrong end of a match, so it will not do any harm. The oil will then soften the hard skin around it, and a bit of pumice will do the rest.

Keeping Turpentine

I should like to sound a note of warning in regard to keeping turpentine in a warm room. It can be cured by placing it off on the top shelf of my open kitchen closet. We always add a little of it to the water with which we wipe up our hard wood floors—it gives such a good clean odor—and one warm Tuesday morning while we were ironing, it suddenly exploded and frightened us fearfully, it sounded just like a pistol. Fortunately no serious harm was done, although the fragments of glass were thrown all over the kitchen and the clean clothes were liberally sprinkled with the turpentine.—F. B.

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SUNDAY AFTERNOON

It is Enough

Dear Lord, if love should pass me by
While still the sun shines in the sky,
And somewhere hearts to hearts reply,
It is enough.

Dear Lord, if fame should pass me by
While breathes the great ideal sigh,
Though dead unto my own soul's cry,
It is enough.

And, Lord, if wisdom pass me by,
If only by some spirits high,
Thou answerest the heart's great why
It is enough.

The Habit of Prayer

A minister of some experience has lately made the assertion that out of every ten church members, so far as he has been able to find out, only three have a fixed daily habit of sincere prayer. It is to be hoped that his experience is misleading. Yet many Christians, it is certain, neglect prayer in a manner most dangerous to their souls; and too many more merely say their prayers daily and never really pray at all except in times of crisis. The habit of earnest prayer is a habit of strength and peace. The young Christian needs prayer even more vitally than older disciples. Let us early form the habit of this seeking-God daily and never let it go.

Preferring One Another

The humble man seeks at all times to act up to the rule, "In honor preferring one another; Servants one of another; Each counting others better than himself; Subjecting yourselves one to another."

The question is often asked, how we can count others better than ourselves, when we see that we are far below them in wisdom and in holiness, in natural gifts, or in grace received?

The question proves at once how little we understand what real wisdom of mind is. True humility, comes when, in the light of God, we have seen ourselves to be nothing, have consented to part with and cast away self, to let God be all. The soul that has done this, and can say, So have I lost myself in finding Thee, no longer compares itself with others. It has given up forever every thought of self in God's presence; it meets its fellow men as one who is nothing, and seeks nothing for itself; who is a servant of God, and for His sake a servant of all.

A faithful servant may be told that the master, and yet retain the true spirit and posture of the servant. The humble man looks upon every, the feeblest and unworthiest, child of God, and honors him and prefers him in honor as the son of a King. The spirit of Him who washed the disciples' feet makes it a joy to us to be indeed the least, to be servants one of another.—Andrew Murray.

As One Grows Old

Why should not a man be happy when he is growing old, so long as his faith strengthens the feeble knees, which chiefly suffer in the process of going down the hill? True, the fever heat is over, and the oil burns more slowly in the lamp of life; but if there is less fervor, there is more pervading warmth; if less of fire, more of sunshine; there is less smoke and more light. Verily, youth is good, but old age is better, for the man who forsakes not his youth when his youth forsakes him.—George Macdonald.

FROM THE SEWING ROOM

May Manton's Hints

MISSSES' HOUSE JACKET 4721.

Pretty, tasteful morning jackets are always in demand and make attractive garments for breakfast wear as well as for use during the hours spent in one's own apartments. This one is designed for young girls and is exceedingly youthful and graceful, its broad collar drooping well over the shoulders and the fitted back giving a trimness and neatness to the figure. As shown the material is sprigged muslin trimmed with frills of embroidery, but there are countless others which are equally appropriate.

The jacket is made with fronts and back, the back being laid in tucks to the waist line and the fronts being gathered at the upper edge and stayed by means of an underfacing. The case collar is



4719 Corset Cover,
32 to 40 bust.



4721 Misses' House
Jacket, 12 to 16 7/8.

arranged over the whole and the neck is finished with a little frill. The sleeves can be in either flowing style and finished with frills or in bishop style with cuffs as may be preferred.

CORSET COVER 4719.

Shapely corset covers that fit nicely yet are not over snug are in constant demand and never can be too numerous. This one is peculiarly pretty and attractive, is eminently simple and can be made of any of the materials in vogue for underwear. The model, however, is of linen batiste with insertions and frills of embroidery and bands of heading.

The corset cover is cut with fronts and back, which are laid in narrow tucks to the waist line, and is closed at the centre with a box joint in shirt waist style. Over the upper edge and at the waist line are applied bands of heading that are threaded with ribbon by means of which the size is regulated.

WOMAN'S BOX COAT 4720

Loose box coats make exceedingly smart wraps that are eminently comfortable as well. This one is adapted to all the range of cloaking materials but is shown in tan colored cloth with touches of darker velvet and is stitched with corticelli silk. The special features of the model are the mandolin sleeves and the additional lapels which are exceedingly effective. When liked, however, plain sleeves can be substituted for the larger ones, as shown in the small sketch.

The coat is made with fronts and backs and is shaped by means of shoulder, under-arm and centre back seams. A pocket is inserted in each front and the closing is made invisibly by means of a fly. The extra lapels are applied under the fronts and collar and roll over with them on indicated lines. The mandolin sleeves are cut in one piece each and are finished with plain cuffs, but the plain sleeves are in regulation coat style with uppers and unders.

NINE GORED TUCKED SKIRT 4694.

Skirts that are tucked to be snug at their upper portions and fall in folds below the stichings have become quite general and are both becoming and graceful. This one includes also a shaped yoke that allows of perfectly snug and smooth fit over the hips. The model is made of champagne colored voile with pipings of brown and trimmings of tiny gold buttons, but any material soft enough to allow of tucking is equally appropriate.

The skirt is cut in nine gores and laid in groups of tucks that are stitched with



4720 Box Coat,
32 to 40 bust.



4694 Nine Gored
Tucked skirt,
22 to 30 waist.

corticelli silk. The upper edge is joined to a round foundation yoke, over which the shaped one is applied, and the upper edge can be finished with a belt or cut on dip outline and under-faced by bound.

The Care of Clothing

The careful woman sets apart one day in each week for mending. Such things as may need it are looked over and carefully repaired; hooks and eyes that have become loose are sewed on, buttons replaced, and dresses that are frayed out at the bottom are rebound with either velvet or braid, which freshens the garment wonderfully.

Damp, mud-stained skirts should be hung where they will dry immediately. When dry they should be thoroughly brushed and shaken before being replaced in the closet.

As soon as warm weather arrives, the careful woman gathers up all winter clothing, and cleans, brushes, and packs all winter garments into dark chests or closets, out of the way of dust and moths.

After the white embroidered dresses have been washed in two soapy waters, rinse well through two waters, the last one having a moderate amount of indigo bluing in it. Do not make the mistake of putting Frussian blue into the rinse water, or they will turn yellow before spring. After the blue water they should go through a thin gum-arabic water. This, also, should be slightly blueed. Dry in the hot sun, sprinckle, fold, and roll up tightly for a few hours, and iron on the wrong side over a piece of thick flannel. This will cause the figures of the embroidery to stand out in bold relief, and the dress will look as good as new.

When perfectly dry, fold each dress carefully, wrap loosely in good clean paper, and write the owner's name plainly on each package, so that there will be no need of trying to find the right dress.

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Pruning at Planting Time

Any person having a knowledge of fruit growing, can, upon passing through an unknown district, come to a pretty accurate conclusion regarding the amount of care given to fruits in that locality, simply by the manner in which the plantations are kept pruned. It is a lamentable fact, that in very many districts, orchards, instead of being carefully pruned each succeeding year, are allowed to go untrimmed, and in a short time present a thick, tangled mass of crossed, unhealthy growth.

The subject of "pruning" is one upon which a great amount may be written, but in this article we desire to deal more especially with "pruning at planting time."

There are few subjects in connection with the fruit-growing industry that should be given more careful consideration than should the preparation of trees for planting after they have been received from the hands of the nurseryman. All orchardists are well aware of the fact that the young tree makes its start either in the upward or downward grade during the first two or three years after being planted, and if it makes a good growth and produces a nice healthy crop during those seasons, one may be satisfied that by proper management he will in time have a fine specimen. On the contrary, however, if the growth during those two or three years is not a good one, the chances are the tree will never make a presentable appearance, nor pay for the labor necessary to keep it living.

How to prune at this extremely important period of the life of a tree is a problem that has proved a stimulating block to many who have not had considerable experience in this branch of horticulture, and the fear of cutting away too much has more often been the cause of error than has the too free practice in pruning instrument. In many instances trees, bushes and vines undergo no trimming operation at all, but are planted just as they are received from the nursery. Such practice is extremely injurious to the stock and is worthy of nothing excepting severe condemnation.

We all understand that the act of transplanting must, of necessity, be a severe shock to a tree when we consider that probably one-half or more of the fine fibrous roots, and some of the larger ones, are left in the ground when it is dug from the nursery row. To counteract this loss, we must exercise intelligent pruning at the other end of the tree, and the top growth should be cut back a corresponding amount. It should be cut back more, for the roots, as well as being reduced to such an extent, are also loosened from the soil, and before they may perform their regular proper functions, they must make a new union therewith. As a rule, also, the stock has to be shipped some distance and as a result the roots become more or less dried out. It is always noticed that when trees are not sufficiently pruned, that the growth made, if any, is a very weak one; the trees are stunted and the injurious effects are never overcome.

There are other reasons why severe pruning should be resorted to at this stage, even if the plant could, without it, overcome the shock of transplanting. It is natural for the sap to flow toward the extremities of the branches and thus cause a new growth to be produced from that point. The result in a few years would be long, slender whips, which, when the bearing time came, would, on account of their slender form, be unable to bear

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the load in an upright position, and consequently would be bent over and broken off, and the tree would be greatly damaged, if not lost. By trimming back the first and each successive year, the flow of sap is kept in check and side shoots are forced out, and this causes considerable expansion in the remaining part of the branch and also greatly increased strength. It is very patent from these reasons, and others that could be given, that pruning at planting time should be resorted to.

How shall we go about it? We must be very careful in the outset, for we know that this trimming is a means to an end, and upon these early operations the form of our future tree greatly, if not altogether, depends. As a general rule, 3/5 feet to a feet from the root to the point of the trunk where the top is to start, is sufficient. Secure the young tree and begin trimming off the branches, cutting away those of weaker growth first, and trim off all branches but three (or four) most of them, and have these remaining branches come from the trunk in such a manner as to be the foundation of a nicely shaped head, if at all possible. Occasionally this is impossible the first year, but it is not often the case, and as a rule can be done the second year.

Having selected the branches to be the foundation of the head, cut all back to three or four buds on each branch. As is the case with all other work, there is a correct and an incorrect way to do this. The correct way is to cut it so that the bud nearest the end will be on the outside of the branch. As a result of this action the new growth will lead outward and level the top of the tree, and therefore prevent close and crossing limbs; while the incorrect way is to leave the end bud on the inside of the branch and thereby induce a crowded, tangled growth, which is sure to be the result.

In some trees it is quite a difficult task and a problem for an experienced grower, to lay the foundation and form a good head. This is the case in many of the varieties of the Japanese plums.

At planting time all broken and split roots should be trimmed also, and should be cut in such a manner that the sloping wound faces downward, as such a method does not render it so easy for any water to enter the root and cause the beginning of decay.

All bushes, plants and vines should be carefully thinned and cut back at this stage.

An orchard of trees with well shaped heads is as easily obtained as any other if a little care is exercised in the outset, and the pruning of trees, etc., at planting time demands careful consideration and intelligent action, for "as a twig is bent, so is the tree inclined."

JNO. B. PETTIT,
Wentworth Co., Ont.

Fruit Injured by Frost and Mice

Reports received by the Fruit Division, Ottawa, show that the damage to fruit trees by mice has been most serious in Ontario and Quebec. The damage to nursery stock has been particularly severe, fully 25 per cent. of all stock "heeled in" out doors has been destroyed. In some cases 50 per cent. of all orchards of three years or more were destroyed.

Where young orchards had clean culture throughout the season, the injury was almost nothing. Where weeds, grass or clover crop protected the proportion of loss increased. For-

est trees and hedges suffered to an equal extent. The loss will probably reach 25 per cent. on young trees.

Some growers protected their trees from mice by throwing two or three shovelfuls of loose earth about the trunks of the trees. Others protected them by tramping the snow about the trees after the first heavy snowfall, repeating it after a thaw. A most effective protection is furnished by wrapping building paper about the trunk of a tree for one or two feet, tying it in place with a stout cord, a light veneer, such as is used in making baskets, cut in pieces about four in. and held in place by a stout cord, is also effective and has this advantage that it protects the trees from sun scald as well as mice.

Comparatively few have attempted to save their trees. Where the inner bark has not been removed, the tree may frequently be saved by keeping the tree moist until the growing season. The damage by frost, though serious enough in Ontario and Quebec, will not affect to any great extent the amount of fruit put upon the market this year, except in the case of plums and pears. The Flemish Beauty pear proved one of the hardiest varieties. Plums were killed in some of the heavy plum-producing districts, and the buds are so seriously injured everywhere as to render a heavy crop this year improbable. In the Essex peach district probably 50 per cent. of the trees will be killed outright. The Niagara district is not so seriously injured. Cherries are also injured severely in bud. Small fruits escaped with less injury.

Do Bees Injure Fruit?

Mr. John Fixter, Foreman Central Experimental Farm, Ottawa, conducted experiments to determine whether bees injure fruit. The test was made with peaches, pears, plums, grapes, strawberries, and raspberries. The question of "bees and fruit" has been a vexed one for years, as we all know; and a certain class of fruit-growers has been persistent in its denunciations against the honey-bee. The results of Mr. Fixter's experiments have been, like those of all others, fairly made; namely, that bees can not and do not injure good sound fruit, but simply take the juices from those already punctured.

For the observations along this line, four colonies of equal strength were taken; and on each was put a super divided into three compartments. In one of these compartments was put sound fruit; in another one, punctured fruit; and in the third sound fruit beamed with honey. The bees began at once to work on the honeyed and punctured specimens, and apparently both were going to be demolished. At the end of six days the hives were examined, and it was found that the punctured specimens were destroyed; those dipped in honey were thoroughly cleaned but uninjured; and those not treated were in sound condition. Fruit dealt with in a similar way was also hung about the apiary; but in every instance the bees were unable to feed on them. More weight is added to the results of these experiments from the fact that they were made during the summer when no honey was coming in from natural sources. Some of the colonies were even depleted of their stores in order to make the test thorough; but many of the bees died of actual starvation while luscious fruit lay appetizingly around.

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The story of this "factory farm," as he persists in calling it, is one of absorbing interest, not only to those who live on farms, but to townspeople as well. There is a vast amount of detail explaining how he worked out his theories, and the wonder is just how he is able to make his story so fascinating. Not only does he give the items of revenue and expenditure, but he tells us all about the fencing, planting, building and stocking his 500 acre estate. Altogether this book is the most important one that has been presented to the agricultural community for many years.

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QUESTIONS AND ANSWERS

Milking Goats

Could you tell me through THE FARMING WORLD of a farmer who makes a business of raising goats, a good milking strain?—E. P. SMITH, Pontiac Co., Que.

We do not know of any farmer in Canada who breeds milking goats. If any reader knows of one we would be glad to have his name and address. There are some breeders of milking goats in the United States, but the Angora goat leads in that country, and it is not of the milking kind.

Cow Eating After-Birth

Could you give me any information on cows eating after-birth. What can be done for same, and what harm does it do to milk and general health of the animal?—ALEX. MCC., Algoma District, Ont.

All animals will eat the after-birth if they get a chance. But it should not be permitted as the practice is most disgusting. The after-birth should in every case be removed from the stable or away from the animal and buried. The practice, however, will do the animal little harm beyond tainting the milk for a few days. If eaten right after calving it would not affect the milk longer than the milk is ordinarily fit for use. A cow should have some laxative and nourishing food at this stage. It is always a good plan to give the first milk, which should be taken from the cow as soon as possible after the calf is dropped, to the cow. Of course, a pint of it should be given the calf. This will prove a healthful laxative, and as this milk is very different from what she ordinarily gives, there is no danger of begetting the habit of milking herself in the cow.

Value of Ashes

What is the value of a bushel of ashes if used on the land?—J. E. W., Glengarry Co., Ont.

If used in hardwood ashes, on the average, about 5 per cent. of potash and one per cent. of phosphoric acid. Of course, we are assuming that the ashes are clean, and have not been leached. If a bushel weighs, say 40 lbs., there will be in it 2 lbs. potash and 4 lbs. phosphoric acid. Commercial potash is worth about 4½ cents per lb., and phosphoric acid about the same or a little over 4 cents. This would make the potash in a bushel of ashes worth 9 cents and the phosphoric acid 1½ cents, or a total of 10½ cents. There is also in ashes a large amount of lime. Ashes will do good to most soils. Where the soil is sour ashes would be of great value, or where there was abundance of organic nitrogen in a none too soluble condition it would be valuable. In any case it is better to utilize all the wood ashes on the land than to trade it off for soap, as is commonly done in the country.

Planting Evergreens

Would you kindly let me know when is the best time to set out evergreen trees? Has the old or new moon anything to do with their growing? Is June a better month than May?—A. J. D., York Co., Ont.

For Ontario, the best month during which to plant evergreen trees is May, say from the middle of the month to the first of June. This year, perhaps, owing to the lateness of the season, planting could be carried on well into June. As a rule, June is usually too

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dry, and evergreens set out in dry weather would need a lot of watering and care. As compared with deciduous trees, evergreens are very hard to grow, and have to be handled with the greatest care and provided with good growing conditions or the percentage of loss will be very great. Some special information on tree planting will appear in next issue.

The moon has about as much to do with tree planting as has with the application of hair tonic on a bald head to make the hair grow.

ABOUT RURAL LAW

In this column will be answered for any paid-up subscriber, free of charge, questions of law. Make your questions brief and to the point. This column is in charge of a competent lawyer, who will, from time to time, publish hereafter, with his views of interest to farmers. Address your communications to "Legal Column," The Farming World, Toronto.

Promissory Note

Q.—A, who is a friend of B, borrowed from B \$500, and gave a note payable six months after receiving notice from B, that is, in order to obtain payment, B must give A six months' notice. The note has been running for several years, and the interest has been paid regularly. 1. What is the legal status of such a note, and is it negotiable?—J. H. W.

A.—We presume that it appears on the face of the note that it is payable six months after notice, as for instance, if it says six months after sight. If this is so, it will just be like an ordinary note and will, of course, be negotiable. If this condition does not appear on the face of the note, and the note is payable at a definite future time, it would be negotiable before it became due, and the holder could demand payment when it came due without having to wait the six months, but if A had to pay it then he would have a remedy over against B. If it were negotiated after it became due, according to its face, the holder would take it subject to the right of A to demand six months' notice.

Right to Renewal of Lease

Q.—A leased some ground from B. This was a provision in the lease that B would, at the expiration of the term thereby granted, lease A, for a further period of ten years the land, provided that A should desire to take a further lease of the premises. It was also a provision that A was to have two months to remove any buildings he had put up, and to vacate the premises. At the expiration of the term, A continued to occupy the usual and made no move to remove his buildings or get out, but never told B that he wanted a renewal. At the expiration of the two months B ordered him to vacate the premises, which he refused to do, and demanded a lease for ten years, according to the terms of the first lease. Can B oblige A to give up possession of the premises?—T. H.

A.—No. Under the terms of the lease it was not necessary that A should demand from B a lease. The existence in fact of a desire for the further lease is all that is essential. It is merely a matter of proving the existence of that desire, and we would think that the conduct and circumstances narrated above would be sufficient to establish it.

Obstruction on Highway

Q.—The owner of a house abutting on the highway, placed a trap-door in the sidewalk in order to obtain an entrance to his cellar. He never got permission from the council to do this. The hinges of the trap-door projected about an inch above the sidewalk. The house was then purchased by B, who continued to use the trap-door. C, while walking along the sidewalk, stumbled and was hurt. 1. Has C any right to sue B for the damage?—G. D. O.

A.—No. No doubt the trap-door was a nuisance, and the man who originally placed it there could have been sued if he still occupied the property, but B could not be said to be continuing the nuisance, as he had no title to the highway, and strictly speaking, no right to remove it. If, therefore, the accident was not caused during or by reason of B's uses of the trap-door, he would not be liable.

Horse Frightened by Whistle

Q.—I was driving along the road past A's saw mill when the whistle of his steam engine started to blow, and frightened my horse, and he ran away and damaged the buggy. 1. Can I make A pay for repairing it?—M. L. G.

A.—The mere fact that your horse, while being driven along the highway, has been frightened by the whistle is not sufficient to make A responsible for damages resulting from your horse running away. You would have to give some evidence of negligence in the use of the whistle, or perhaps that its use might be expected to cause such an accident, so as to cause it to be a nuisance to the highway.

Rights of Inheritance

Q.—A, who was an illegitimate child, died, leaving a wife but no children. His father and mother are both living. 1. What will become of his estate?—L. McK., Ontario.

A.—His wife will get one-half and the Crown one-half.

Nature About the Farm

(Continued from page 428.)


fore him. Can you suggest anything for him besides traps and guns?

Ans.—Gophers and Ground Squirrels are great pests all over the West and are somewhat difficult to deal with on a large scale. The poisoned wheat is efficacious early in spring, when food is scarce, but as the season advances and the natural food of the animals becomes abundant, they are apt to reject the poisoned bait. They can, however, then be destroyed by using bi-sulphide of carbon. Make up some balls about the size of a walnut, from rags or the fibre of old rope, or even fine grass, saturate the ball with bi-sulphide of carbon and push it as far as possible into the burrow of the squirrel, then close the burrow with a sod or some earth; this is best done soon after a rain. Do not pour the bi-sulphide on to the ball until you are ready to put it into the burrow, as it is very volatile. Keep the bi-sulphide carefully away from fire, even that of a pipe or cigar, for the vapor is very explosive. In all other ways it is quite safe to use and handle.

In order to save trouble and avoid wasting material it is as well not to put a dose of bi-sulphide in a burrow, unless a squirrel has been seen to enter it.

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Two Common Poultry Troubles

SOFT EGGS AND EGG BOUND

All poultry keepers at some time or another experience trouble with either one or another of the above common ailments of poultry, and a few words to FARMING WORLD readers as to the cause and treatment will not be out of place.

Soft eggs are sometimes the result of fright, but more often the trouble is due to over-stimulating and unsuitable food, or to want of lime. When soft eggs are frequent, see that the birds have plenty of oyster shell and grit and remember that on no account must maize or wheat be fed for a time, and twice a week give a large teaspoonful of sulphate of magnesia in the drinking water to every ten birds. A valuable tonic and one which every poultry keeper should have at hand, consists of: $\frac{1}{2}$ lb. of sulphate of iron (green coppers), $\frac{1}{2}$ fluid oz. sulphuric acid. The two ingredients should be well mixed with a gallon of hot water and be stored in earthenware or glass jar, for the mixture would eat its way out of tin in a very short time—labelled poison. It should be well shaken before use, and the usual dose is one tablespoonful of the mixture to a gallon of water. As a rule, it should not be given oftener than twice a week.

Egg-bound hens are suffering from inflammation of the egg passage or the accumulation of surplus fat in and around the intestines. If birds be provided with large, airy, sunny, scratching quarters, and are fed on non-fattening rations, there should be no trouble of this sort, though sometimes the disorder may be caused by the straining in passing a very large egg. If caused by internal fat, the bird will often die on its nest. Pullets, which become egg-bound at the beginning of their "lawyer," generally come right of themselves, but if the hen be really over-fat cure is out of the question. The only way of any service to pass the egg is to dip the finger in oil and to put it up the vent, so breaking the egg; every particle of shell must, however, be got away or inflammation will set up. Hold the vent over boiling water, feed the bird—which must be separated from its mates—on light food, giving it only tepid water to drink, with additional green stuff and lean meat. When putting it back into its coop after treatment, give a dose of 15 drops of epsom salts and do not allow it with the other birds for at least a week. H.W.S.

Turkey Culture

Avoid inbreeding.
Avoid exposure to showers.
Turkeys fatten on beach nuts.
Nests should be on the ground.
Feed the young little and often.
Turkey broilers is the latest fad.
Seven eggs is considered a sitting.
Curd is excellent for young stock.
Turkeys need plenty of grass range.
Do not let the young become chilled.
Turkeys will shrink one-third in dressing.
No "sloppy" food must be given the young.

The bronze is the largest of the turkey family.
A good start is everything in rearing turkeys.

See that the parent stock is strong and vigorous.

Turkey hens are profitable until 5 years old.

It is a good plan to change gobblers every year.

Let the fowls fast for 12 hours before killing.

It requires 28 days to hatch a turkey egg.—A Few Hens.

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The Farming World - Toronto

In and About Quebec

Potatoes are proving good property nowadays, 50 cents a bushel is being paid, delivered to the cars, for shipment to the New England market.

Butter and cheese are both very low. At Cowansville a number of buyers were on hand at the last meeting of the board. About 937 boxes of butter changed hands at 12 1/2c, and 161 boxes of cheese at 6 1/2 to 6 5/8c. 450 boxes of cheese offered was not sold, and 63 packages of butter. Six of the buyers complied with the guarantee deposit clause of the Boards constitution, and qualified as bidders. The bulk of the goods offered were sold subject to factory inspection.

At the recent sale of Ardennais horses at St. Jerome, by the Provincial Department of Agriculture, the following prices were realized:—

Gamin sold to Agricultural Society No. 2, of Terrebonne county, price \$400; Rico sold to M. Therrien, St. Jovite, price \$650; Malou sold to M. Albert Lemieux, Victoriaville, price \$500; Bulot sold to John Cahill, Lowe, Wright Co., price \$855.

More than three hundred persons were present at the sale, and the stallions were very favorably commented upon.

Four horses had previously been sold to agricultural societies in Bellechasse and Lake St. John. The Minister of Agriculture reserved for the Compton Model Farm, "Valentine," which is considered the best stallion of the breed yet imported. This horse was greatly admired by all present. Several Ontario horse breeders were present and make purchases, but the Deputy Minister, M. Gigault, would not allow the horses to be sold outside the Province, because they had been imported solely in the interests of the Quebec farmers. Another importation is expected this year. The season has been most favorable for seeding thus far, the weather being a fine time for ten days at a time, followed by a couple of days' good rain. Under such conditions grass is as far advanced now as it was the same date last June, and vegetation of every description is growing very fast. It is too early to talk about fruit prospects yet, for a frost may mar the present splendid showing at any time. Farmers are discouraged at the dairy outlook, but the cows must be milked.

The Compton Model Farm creamery is the first in the province to commence gathering cream daily, and already the quality of its product has noticeably improved. The Coaticook creamery is turning out 2,000 lbs. of butter a day already, and in June a daily output of over 3,000 lbs. will be exceeded. Mr. Gerin is the proprietor. H.W.P.

Prince Edward Island

Fine weather, though rather cool up to May 18. Some welcome rain fell on May 17 which started up the grass wonderfully. The clover meadows look excellent, and a good crop of hay is anticipated. Seeding is well advanced and the Ontario farmers are planting potatoes. On account of the high price of potatoes, more than usual will be planted this spring.

CHARLOTTETOWN MARKETS

Butter, fresh, 24 to 25c; beef, gr., per lb., 6 to 7c; beef, small 7 to 12c; pork 6 to 6 1/2c; mutton, 5 to 7c; per lb.; fowl per lb., 7 to 12c, very scarce; ducks, per lb., 9 1/2 to 10c; lard, per bucket, 11 to 12c; butter, tub, per lb., 20c; flour, per cwt., \$2.40 to \$2.50; eggs, 12 to 13c; oatmeal, per lb., 9 1/2 to 3c; potatoes, per bush., 35 to 40c; codfish, 10 to 50c. each, according to



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size; lobsters, to to 20c. each; hay, per cwt., 65 to 70c.; oats, 35 to 37c. per bus.; turnips, per bus., 20c.; wild geese 75c. to \$1 each; apples, 24c. per doz., and very scarce.

A number of men have been working at the new lobster hatchery since last fall. The building is now completed and the hatchery will shortly be in operation. The hatchery has a capacity of 150,000 young lobsters each season. It is situated one and a half miles from Rocky Point.

A handsome stallion, Princeton, 894, arrived by the Halifax on May 17, for T. Warren, Filton Cove, Lot 6.

Mr. R. Roberts sold a good driving horse recently for the sum of \$115.

Mr. D. T. Fraser Kingston, Lot 31, has sold his pure-bred Yorkshire boar to Isaac Smith, of New Wiltshire.

Five schooners have recently been loading with produce at Montague. A large number of potatoes have been marketed at satisfactory prices to producers.

The directors of the P.E.I. Dairy Association, in order to obtain data of work done by our best dairymen, and also to encourage the production of milk, offer prizes for the coming season as follows: The sum of \$204.00 divided equally between the three counties to the patrons contributing the largest amount of milk to cheese and butter factories, per acres of land under cultivation by them. For the cheese season, \$40.00, and \$22.00 for the butter season to each county. Cheese season from June 1st to November 1, next; prizes: 1st, \$20, and \$10, 3rd \$7, 4th \$6, 5th \$5. Butter season: 1st \$10, 2nd \$7, 3rd \$5. Each patron competing must have at least fifteen acres of land under cultivation and the milk produced must have an average of at least 35 per cent. of fat. A.R.

Purchase New Quarters

Among the important manufacturing plants destroyed in the disastrous fire that swept Toronto April 19th, was that of the International Stock Food Company. Their plant was completely destroyed and the company was forced to secure temporary quarters at the Granite Skating Rink, a building containing a large amount of floor space.

While occupying these temporary quarters, the demand for International stock foods was so very heavy that the company would have been fully justified in purchasing a large factory suitable for their purposes, but owing to the present difficulty it was found impossible to find one sufficiently large. Being, therefore compelled to look to other sources, the company finally closed negotiations for a three storey and basement building, having a frontage of 121 feet on Yonge street, the leading business thoroughfare of the city. The building is 120 feet deep and will give room to install a plant with a capacity three times as great as the one destroyed by the recent fire. The office will occupy one-half of the ground floor. The shipping facilities are good, and the new factory will be a model and the largest of its kind in Canada.

The company desire us to state that, while their entire stock of Dan Fatch lithographs and International Stock Books were destroyed, an order was at once placed for 20,000 copies of each. They are now in position to send, free of charge, copies of these to any of our readers, who will write them, answering the following questions: (1) Where did you see this notice? (2) How many head of stock have you? These are worth having.

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Stock Gossip

Mr. R. Corley, Belgrave, Ont., writes: "Our Shorthorns have come through the winter remarkably well and are about to go out on the grass in good breeding condition. Sales have been good at fair prices. We have two sappy young bulls left yet. They will be sold at a bargain to an early purchaser. Our crop of Lincoln lambs are very promising, both in number and quality. We had two set of triplets, which the ewes are raising, except one. The remainder of the lambs were chiefly twins."

Geo. Amos & Son, Ont., write: "In order to change of advertisement, we beg to report the following recent sales: To J. A. Cockburn, Aberfoyle, Ont., the Campbell Rosebud cow Lulu, by Admiral (8908), with C. C. at foot, by (imp.) Ben Lomond; to Quarry Bros., West Montrose, one bull; to Tyson Bros., Guelph, one bull; to Kyle Bros., Ayer, Ont., the good Scotch cow, Rose of Towie 4th, by (imp.) Red Light, dam Rose of Towie (imp.), by New Year's Gift, with b.c. at foot by Clipper Hero—44785, junior champion bull at Toronto last year, and the Campbell Rosebud heifer, Rosebud 18th, by (imp.) Prince George.

"Our herd has come through the winter well. We have an extra good bunch of young bulls coming up, by Village Captain—39914, (imp.) Spicy Marquis, gold medal bull at Toronto for the past two years; imp. Ben Lomond and imp. Goodbrook's Golden Fawn, and out of Mystic, Flora, Golden Drop, Rosebud, Gilt, some are from imp. sires and dams.

"We have a few choice heifers and young cows for sale, of straight Scotch breeding, including an extra good roan yearling heifer from (imp.) Mina, and sired by Bapton Chancellor (imp.), a son of the noted Silver Plate, fit for show purposes."

H. Cargill & Son, Cargill, Ont., write:

"Notwithstanding the severity of the past winter (the worst in our experience) and owing probably to the fact that Providence was kind enough to provide an ample supply of good roots and provender, inquiries there, their attendants kind and painstaking, and their stables comfortable, our herd of Shorthorns have gone out to grass in better shape than ever.

"The herd now consists of 102 imported cows and bred heifers, 5 imported bulls, 3 home-bred yearling bulls, 3 home-bred yearling heifers, 3 imp-in-dam yearling heifers, 48 calves (26 bulls and 22 heifers) and a few more still to come.

"While the days of the 'boom' are apparently over, we think we have no cause to worry about it as we believe the trade today is in a much more healthy condition, it is being settled down to a legitimate basis, and judging from the numerous inquiries there would appear to be a lot of people still wanting cattle of the right sort, and willing to pay a fair price for them.

Trade with us during the winter

was necessarily quiet on account of the difficulty, in fact, we might almost say the impossibility, of obtaining a sufficient number of dirigible balloons to provide transportation for our numerous customers, the Grand Trunk Railway having gone out of the transportation business temporarily, and the St. Louis people having cornered the balloon market, probably simply to show Santos-Dumont upon his arrival that we make some in America also, and that he is not the "only one." However, in the face of all this trouble we can not complain but we have but three yearling bulls (just turned the year) and six heifers of similar age still for sale.

"Spring has opened up beautifully here, we think we are fully as far ahead as usual, trees all out in leaf, and never saw the grass better; so that with favorable weather conditions for a time we have reason to hope for another bountiful harvest and therefore a continuation of the prosperity enjoyed for some years past.

"In conjunction with Messrs. W. G. Pettit & Sons, we purpose holding what may be practically called a bull sale in Hamilton on 8th of November next, when all the bulls we have of this season, which are old enough and in shape to offer, will be sold to the highest bidder. This will be the first opportunity our people have had to buy at their own valuation a lot of bulls of similar merit and breeding, and we trust it will be appreciated by them, so that this or a similar sale may become an annual affair as in Scotland. It is possible that there may be a few females offered also. Make a memo of the date and arrange to take a bull home with you as he will get there in ample time to get early show calves for following years.

Some of our recent sales follow: H. McLean, Wyoming, Ont. The red bull Marshall Victor, sired by imp. Golden Drop Victor, out of the Mayflower cow imp. Marion.

Arthur Smith, Sparta, Ont. The red imp. bull, Lord of the Snows, by the Dutch bull Golden Fawn (76786), out of imp. Snow Girl.

Geo. H. Johnston, Balsam, Ont. The roan imp. bull, Choice Korai, sired by Dutchie's Choice (86956), out of a Shatin Korai, imp. Korai 70th.

R. M. Lawson, Burke's Gardens, Va. The red bull Lancaster Fame, sired by the home-bred bull Famous Perfection, and out of the Lancaster cow imp. Lancaster Pet.

Israel Groff, Alma, Ont. The roan imp. heifer Princess Royal 23rd, sired by the Crombie bull Lord Raelan (72295), and out of imp. Princess Royal 21st. Also the red heifer Blythesome 26th, sired by Famous Perfection and out of the Marr-bred cow Blythesome 23th.

Farmers' Institutes

Supt. Putnam has completed arrangements for the annual meetings of Farmers' Institutes to be held during June. These in most cases will be purely business meetings, though at some few, a series of practical talks by competent workers have been arranged for.

Horse Owners

Look to your interests and use the safest, speediest and most positive cure for ailments of your horses, for which an external remedy can be used, viz.:

GOMBALTT'S CAUSTIC BALSAM



Prepared exclusively by GombalTT, of the French Government Stud.

SUPERSEDES ALL CAUTERY OR FIRING.

Impossible to produce any scurf or Atheria. The safest best remedy ever used. Takes the place of all treatments for mild or severe action, for every ailment of horses or horses from horses.

Every bottle of Caustic Balsam sold in Western Canada is guaranteed to give relief in 10 days per bottle. Sold by druggists, or sent by direct mail, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAVARRE-WILLIAMS COMPANY, Cleveland, Ohio
21 FRONT ST. WEST, TORONTO



A Bad Hitter

may not be wholly --

TO BLAME

for his Bunches and Bruises

Absorbine

Trade Mark Registered

Copyrighted: will remove the inflammation and bunch. \$5.00 per bottle, delivered. Manufactured by

W. F. YOUNG, P.D.F., Springfield, Mass.

LYMAN SONS & CO., MONTREAL Canadian Agents



Have Power and Repairs. Make Smooth Lumber suited to a H.P. up for the farmer or the lumber man. Also Shingle Mills, Lath Mills, Bush Mills, Planers and Hay Presses. Catalog FREE

120 Leach Mill & Co., Box 907, New York, ATLANTA, GA.



ROCK SALT for horse and cattle, in ton and car lots. Toronto Salt Works, Toronto

BUCHANAN'S UNLOADING OUTFIT

Works well both on stacks and in barns, unloads all kinds of hay and grain either loose or in slabs.

Send for catalogue to

M. T. BUCHANAN & CO., Ingersoll, Ont.

DAVID McCRAE, Jansfield, (Guelph, Canada).
 Importer and Breeder of Galloway Cattle, Clydesdale
 Horses and Cotswold Sheep. Choice animals for sale.

KILMARNOCK STOCK FARM
 Clydesdale horses and a pair of fine bred and Scotch
 topped Shorthorns for sale, a number of fine individuals of
 Fries, Shorthorn Leavy, Scotch topped Shorthorn
 from such hard bred as Lord MacRae. Royal Tim. Aberdeen
 and other sorts of choice Scotch breeding. Young animals of
 both sexes for sale. Write or call on W. HAY, Tara P. O. and
 Macdon. G. F. S.

HILLBURST FARM.
 Hampshire Down Sheep, the coming breed,
 direct importations. Scotch topped Shorthorn
 from imported sires and dams of deep milking
 strains. J. A. S. COCHRAN, Hillhurst
 Station, Compton Co. P. Q.

Brampton Jersey Herd

Leading herd of prize-winning Jerseys throughout
 Canada. Headed by three Champion bulls. Only
 prize-winning strains of best milk and
 butter records kept. Choice males and females
 always for sale. Prices right. H. M. BULL &
 SON, Brampton P.O. and Sta. C.P.R. & G.T.R.

"NETHER LEA" AYRSHIRES

Offering this month 1 bulls, 13 heifers, 3 choice
 bull calves, 3 cows, 1 bull and heifer calves just
 dropped. Napoleon of Auchincorn (imp.) at
 head of herd, who has a record of 72 lbs.
 per day. Prices low. T. D. McCALLUM,
 Danville, Que.

FOR SALE

Ayrshires, all ages. Eggs for hatching, from
 Leghorns, Hamburgs, Lovings, Chickens,
 Ducks and Turkeys. Also five pure Collie pups.
 For further particulars write to

W. STEWART & SON, Menie, Ont.

IMPROVED YORKSHIRE SWINE

Of good breeding and feeding quality, and the
 right bacon type. From superior imported
 stock.

IRA JOHNSON
 Hagerville Sta., Baltimore P. O., Ont.

A FEW GOOD CANADIAN BRED

Shorthorns and Fillies

Some of the pets of such horses as McQueen
 from fine registered mares. Also a number of
 good geldings.

A. Torrance, - Markham, Ont.

GLENAVON STOCK FARM

W. B. ROBERTS, PROP.
 Pure-bred Cattle and Berkshire Swine. Young
 stock of both sexes for sale. Write or call.
 Sparta P. O. Station, St. Thomas,
 C.P.R., G.T.R., M.C.R.

MAITLAND BANK STOCK FARM

Shorthorn Bulls fit for service. Also cows and
 heifers, imported and home bred. Prize win-
 ners of Scotch breeding. Moderate prices.
 Call on or write to D. MILNE & SON,
 Ethel P. O. and Sta. G.T.R.

VALLEY HOME STOCK FARM

Breeder of Scotch-topped Shorthorns. Herd
 contains the fashionable top types such as Minnie
 Ury, Clippers of straight Scotch breeding, and
 the best kind. Both sexes for sale. Corres-
 pondence invited. Visitors welcome.

NEIL DOW
 Tara Sta., G.T.R. P.O. and Tel.

Pleasant Valley Shorthorns

Herd of leading Scotch families, such as Fills,
 Orange Blossoms, Myrtle, Killbuck Bonanza
 (Campbell), Nonpareil, Bonanza, Rosedale,
 Golden Prop. Headed by imp. Old Lancaster.
 Write your wants or visit personally.

GEORGE AMOS & SON,
 MOFFAT STATION P.O., C.P.R.

Choice Yorkshires

Young Stock from Fries Imported and Home
 Bred Boars and Sows

Young Boars fit for service and Sows ready
 to breed or already bred. Choice sows not
 skin. Prices right. Write or call on

J. A. RUSSELL
 Precious Corners P.O., Cobourg Stn., G.T.R.

The Calgary Sale

Mr. F. Hodson, Dominion Live Stock
 Commissioner, writes:

"The fourth annual sale under the
 auspices of the Territorial Pure-bred
 Cattle Breeders' Association, which was
 held in Calgary on May 11th and 12th,
 was a pronounced success. Over three
 hundred cattle were disposed of at very
 satisfactory prices. One hundred and
 twenty-five Shorthorn bulls were sold
 at an average of \$105.00 and fifty-four
 lots at an average of \$20.50. Seventy-six
 Hereford bulls averaged \$127.50 and
 the Hereford females realized an
 average of \$91.00. As usual, good cattle
 well brought out were in demand at
 good prices. One Hereford breeder sold
 fifteen two-year-old bulls at an average
 of \$162.50. These were all strong, well
 grown 'breedily' looking animals of ex-
 ceptional quality. The rancher did not
 want a bull less than 18 months old,
 and he should be well grown, and must
 be strong enough to rustle with the
 herd, and hold his own with other bulls
 of the ranch. The large number of
 yearlings offered by Shorthorn breeders
 accounts in part for the lower average
 as compared with Herefords. As an
 instance of this, one breeder offered
 four sons of Trout Creek Hero, calves
 of excellent quality from 12 to 14 months
 old. They were sold at prices ranging
 from \$55 to \$70. Immediately after-
 wards the same breeder offered a number
 of two-year-olds not of as good
 quality or breeding, but big framed,
 strong boned cattle; these sold readily
 at prices ranging from \$125 to \$135.

"Breeders of pure-bred cattle aiming
 at the production of bulls for the ranches
 will do well to hold their cattle until
 they are at least 18 months old; better
 still, 2 years old. They must also be
 bred for plenty of size and good strong
 bone; and they must offer their cattle
 for sale in good condition, with the skin
 and hair indicating vigorous health and
 thrift."

Montreal Horse Show

The fifth annual Montreal Horse
 Show, held on May 11-14, was a success.

There were in all about 160 exhibitors.
 While many of the cities were
 owned in Montreal, a large number
 of excellent animals came from a dis-
 tance. Two of the largest exhibitors
 were Toronto firms; these were
 Messrs. Crow & Murray, and Geo.
 Pepper & Co. Government House,
 Ottawa, sent a few choice animals
 which were well shown by the son
 of the daughter of the Governor-Gen-
 eral. A few entries in the pony classes
 came from Boston, Mass., and E. H.
 Weatherbee, New York, had forward
 a string of high jumpers.

The classes numbered over sixty
 and in some of these the entries num-
 bered from about a dozen to over a
 score. The quality was usually of a
 high order, and in some cases many
 really high class animals had to leave
 the ring unrewarded. This was par-
 ticularly true in the cases of the saddle
 horses, hunters and single horses in
 harness. Pairs were also well repre-
 sented and of excellent quality and
 fitting.

The breeding classes were not
 strong, although good prizes were of-
 fered. In Thoroughbred stallions,
 calculated to improve the breed of
 saddle horses and hunters, there were
 just enough animals to fill the three
 awards. The breedily, bay aged horse
 Barefoot won 1st for Wm. Anderson,
 Pointe Aux Trembles. Five out of
 seven entries appeared in the class
 for Standard-bred roadsters. These
 were not a very high class lot, the
 majority being plain and only moder-
 ate goers.

Brookside Ayrshires

Cows from this herd won 1st, 3rd and 4th in
 Dairy Test at Ontario Winter Fair, Dec. 1902,
 and 1st and Sweepstakes over all breeds, Dec.
 1903. Royal Star of St. Anne's, -790, at head
 of the herd. Will have a few calves to spare
 after January 1st.

H. & J. ICKEE,

"Brookside," Norwich, Oxford Co., Ont.

Woodroffe Dairy Stock Farm.

Six grand young bulls still on hand will be sold
 cheap. If taken before the 1st of June.

SEND FOR CATALOGUE OF STOCK.

September Yorkshires ready for shipment.

J. G. CLARK, Proprietor, OTTAWA, ONT.

Woodstock Yorkshires and Shorthorns

Young bulls fit for service, imported and
 Canadian bred. Also cows and heifers.

Yorkshire Boars fit for service and young
 sows in pig. Imported Show Boars. Young
 pigs all ages, in pairs not akin.

H. J. DAVIS, Woodstock, Ont.,
 Importer and Breeder, Shorthorns and Yorkshires.

HOLSTEIN BULLS

Two Holstein Yearling Bulls for sale, ready
 for work, apply to WILLIAM SUERLING,
 Solbrigville, Ont.

ONTARIO VETERINARY COLLEGE, Ltd.

Most successful Vet. Institution in America.
 Prof. A. Smith, F.R.C.V.S., Principal,
 Temperance St., Toronto, Can.

A. G. GORMLEY

BUSINESS-VENTURE STOCK FARM
 Breeder and dealer in Canadian and imported
 Clydesdale Horses and Berkshire Swine
 of good breeding and best pedigree type and
 quality. Address or call at Unionville Sta. and
 P.O., Ont.

HACKNEY-WELSH PONY STALLION

DUKE OF YORK

By Royal Standard E.H.S.B., C.H.S.B.
 5 years old. 154 hand. Dark Brown.

Winner of a First Prize at the Ontario Show
 and a Toronto and International Exhibition

For Cards and other information apply to
 BROADVIEW PONY FARM,
 Danforth Road, TORONTO



Live Stock Labels

Send for price and order
 early before sale runs.
 R. W. JAMES
 Downsville, Ont.

Yorkshire Swine Clydesdale Horses

A large number of fine Yorkshires to choose from. A few
 good registered Clydesdale mares. Shorthorn Bulls and heifers
 from grandly bred sires and fine pedigree type and quality.
 A. E. HOSKIN, COBURG STN. and P.O., ONT.

Ayrshires and Yorkshires

Choice February and March Calves,
 sired by Prince of Barchesie (imp. in
 dam), and Deep Milking Dams. At
 bargain prices if taken soon. An extra
 good Yearling Bull. Yorkshires of different
 ages.

ALEX. HUME & CO., NENIE, P.O.

FOR SALE

7 Ayrshire Bulls from 1 to 16 months
 old. Good individuals from high class
 stock. Prices right.

C. S. AVILWIN,
 Freeman P.O., Ont.

MABLE LODGE STOCK FARM

Scotch Shorthorns, Choice Milking
 Strains, Prize Winning Leicesters,
 Young Stock for sale—imported
 and home bred.

A. W. SMITH, Mable Lodge, P.O., Ont.

CLOVER LEAF LODGE HERD OF SHORTHORNS

Chosen young stock from grandly bred Scotch-topped cows. A number from choice milking strains. Well-bred Lincoln Sheep. Also Harred and White Rock poultry and Bronze Turkeys.

R. CORLEY

Belgrave P.O. and
Sta., G.T.R.

Wingham, Ont.
C.P.R.

RIDGEWOOD PARK STOCK FARM

Pure Scotch Shorthorns
Clydesdale, Shire,
and Hackney Horses

A number of fine young half-bred Hackney fillies for sale.

E. C. ATTRILL, Mgr., Goderich, Ont.

ASHLAND STOCK FARM

PURE SCOTCH-TOPPED SHORTHORNS

Cows bred from such noted bulls as Aberdonian, Royal Tun, Utah, Ben Macduie, Marengo, Heydon, Duke Imp., Golden Ale Imp. (in dam). Present stock bull, Big Gammy, dam Fins, sire of Marengo, a Mar. Masie bull by a son of Royal Sailor. Fine young stock of both sexes for sale.

J. MARSHALL, Tara Sta. G.T.R., Jackson, P.O.

Glenview Stock Farm CLYDESDALES and HACKNEYS

All imported Stock
Two Grand Young Hackneys for
Sale

W. Colquhoun, Mitchell, P.O.
and Station, G.T.R.

Dentonia Park Farm,

COLEMAN, P.O., - ONT.

FOR SALE—During the next six weeks—your stock of both sexes

JERSEYS, GUERNSEYS

and AYRSHIRES

Our prizes won at Toronto and Ottawa this year give only a fair idea of the quality of the stock. Our prices are consistent with such quality. Correspondence solicited. Photographs and full particulars will be sent on request.

JOHN H. DOUGLAS,

BREEDER OF

SHORTHORN and

AYRSHIRE CATTLE

YORKSHIRE SWINE

Young stock of all ages and both sexes for sale.

Warkworth, P.O.

CAMPBELLFORD STA., G.T.R.

Waverly Stock Farm

R. BEITH, Prop., Bowmanville, Ont.
FOUR CLYDESDALE STALLIONS
FOR SALE

Prince Priam, 6 years old, by Prince of Albion (by Prince of Wales), dam Jessie Anne, winner of over 20 first prizes in Scotland.

The Treasurer, a year, by Lord Stewart, dam the Treasurer.

These are all horses of grand quality and heavy scale, and are both prize winners and proved sires. Write or call on

R. BEITH Bowmanville, G.T.R., Ont.

The show of Clydesdale stallions was confined to three animals. Mr. Robert Ness had forward two excellent imported horses, 3 and 4 years old, and W. V. Henderson, Sault au Rapids, showed the mature horse, Tinwald Shaw. The Ness entries were Killarney by Baron's Pride, and Durward's Type, by Durward Lely. Tinwald Shaw, a six-year-old horse, is by Duke of Rothney. Last year this horse won 1st, beating Killarney, but this year the positions were reversed, the three year old, Durward's Type, coming into third place. This class was judged by Dr. Andrew Smith.

The show of draught horses in harness was particularly fine, many of the large transportation companies of Montreal showing their best animals, which had evidently been specially fitted up for the contest. In the single class shown to Scotch carts, seven grand weight movers competed. They would range from 1,600 to 1,800 lbs., and were chiefly of good Clydesdale character.

The show of light draught horses was small. The class called for pairs not to exceed 2,800 lbs. in weight. Three pairs competed. Two of these were of Clydesdale type and marking. One pair had the hair trimmed off the legs, which detracted much from their appearance. In spite of this foolish trimming they got into second place as the third team were of light general purpose type.

The competition for the Governor-General's prize was disappointing. The conditions were the same as at Toronto. Only two animals were entered and only one came before the judge.

The show was favored with fine weather and the attendance was quite satisfactory, especially during the afternoon and evening performances.

Military Camps Want Farmers' Horses

Farmers are being solicited to send their sons and spare men with their horses during the latter part of June to the camps of the Canadian Field Artillery. The work is very light, averaging less than four hours each day. The horses are well fed and cared for under the supervision of experienced officers and regular veterinary surgeons. Each battery requires about 25 teams of draft horses and 25 saddle horses. The pay for each draft horse is \$13 and for each saddle horse \$12. About 30 drivers will be required for each battery, who will receive \$6.50 each. This amounts to about \$2.50 per day for each man and team with everything found. Farmers who may wish to engage in the work are requested to write to the officer commanding the field battery in their district, stating how many horses and men they can furnish.

To Import Stock for the College

The Hon. Mr. Dryden and Prof. Day, of the Ontario Agricultural College, sail on June 10th for England. The objects of their visit is the purchase of pure-bred stock for the College farm. A visit will likely be made to Denmark to look into the bacon industry there.

OAK LODGE YORKSHIRES

Years of careful breeding have made the Oak Lodge Yorkshires

the Standard of Quality for IDEAL BACON PIGS.

The Championship against all breeds has been won by this breed for 3 years at the Provincial Winter Fair, on foot and in dressed carcass competition. Prices are reasonable.

J. E. BRETHOUR, - BURFORD, ONT.

IMPORTED

Clydesdales and Shorthorns

Messrs. Smith & Richardson, Columbus Ont., Importers of Clydesdale Horses and Shorthorn Cattle, STATIONS, Ottawa and Brooklin, G.T.R. Myrtle, C.P.R. Forty miles east of Toronto. Long-distance telephone at residence, near Columbus. Telegraph, Brooklin.

GRAHAM BROS., CLAREMONT, ONT.

Canada's leading Horse Importers

Clydesdales and Hackneys Stallions and Mares.

Farm one mile from station on C.P.R.

Write for Catalogue.

T. H. HASSARD, V.S.

DEALER IN

CLYDESDALE,
COACH AND
STANDARD
BRED
STALLIONS

My last importations were taken directly from the boat to the Toronto Spring Station Show, where they won highest honors.

MILLBROOK, - ONT.

Bawden & McDonnell

EXETER, ONT.

Importers of

Clydesdale, Shire and Hackney Horses

Bright Star 3 yrs., Vol. XXVI, sire Good Gift 1904, dam Lightstone Lass, by Lightstone Ltd., G.A. Great Steering by Young Duke of Hamilton 112.

Buller (Hackney), imp. by the famous Bonfire 201 dam Fanny by Norfolk Swell and reliable.

A number of other equally good breeding, and individual size and quality to be seen at their stables, or described on inquiry.

EXETER P. O., Ont., and Sta. G. T. R.

Farmers' Sons Wanted with knowledge of farm work and fair inclination to work in an office, \$60 per month with satisfactory steady employment in winter for horses and reliable. Branch Office of the association are being established in each Province. Apply at once giving full particulars. THE VETERINARY BUILDING ASSOCIATION, London, Canada.

MARLE CLIFF DAIRY AND STOCK FARM

Breeders of Clydesdales, Ayrshires,
Tamworths and Berkshire.

For Sale.—One Clydesdale Stallion, 3 years old, one Tamworth sow, in pig to imported boar; two sows and two boars, 2 months old, imp. in dam; two Berkshire Boars fit for service. Address: Marle Cliff, near Ottawa, Hintonburg, Ont.

Champion Berkshire Herd OF CANADA

For several years back the York Lodge herd of Berkshires has won the championship at Toronto Exhibition on foot and in dressed carcass competition. All pigs show great growth and size. Young pigs from the best price sows and boars for sale at reasonable price.

W. H. DURHAM, PROPRIETOR, MALTON P. O., ONT.

It's Good for Calves

You had best write us about the prizes we are offering for the heaviest calves shown at the Fairs throughout Canada this year. You may have a winner among those calved since January.

CARNEFAC fed calves not only win prizes but they win profits—a few cents spent for CARNEFAC adds dollars to the sale price. Such has been the experience of many thousands of good farmers and stockmen; there is no reason why it should not be yours. Try it. It costs but a trifle.

CARNEFAC is a food and a tonic. It is made in Canada by Canadians.

CARNEFAC

ARDEN, MAN., Aug. 26th, 1903.

THE CARNEFAC STOCK FOOD CO.,

Dear Sirs,—I fed the Poll Angus Grade calf that won the first prize at the Winnipeg Exhibition held last July, on your Stock Food. I do not think I could have made such gain without its use. At the age of from five to six months old he made a daily gain of five pounds.

Yours truly,

(Sgd.) W. J. HISCOCK.

CARNEFAC STOCK FOOD CO., WINNIPEG, 65 Front St. East, TORONTO, ONT.

Thoroughbred for Canada

Mr. John Hutchison, Newarkhill, has sold to the order of Mr. J. Johnston, Assinibia, Canada, the thoroughbred stallion Topsywayer, by Balmoral, out of Highdown, by Highborn. This is a beautiful bay 15 1/2 hands high, standing on short legs, and with good bone. He is intended to mate with the native ponies of the district. Mr. Johnston, who has bought him, is the eldest son of Mr. Joseph Johnston, of Wellwood, Ayr.—North British Agriculturist.

How a Prize Winning Fat Steer was Fed

The white steer that won the sweepstakes for its owners, James Wilson & Son, of Fergus, at last year's Winter Fair, weighed 1,800 lbs. and was only two years old. He had been fed in the stable three times a day for a year on the following daily ration: Hay, 5 lbs.; roots, 1/2 bushel turnips; pea meal, one quart; oat chop, three quarts; bran, one quart, and oil cake one quart.

Range Cattle Conditions in B.C.

Range cattle conditions in British Columbia are reported in fair condition and few losses have occurred. Female stock suffered most, and it is likely the calf crop will be below the average.

Beef keeps low in price. Heavy horses, weighing from 1,150 up are in good demand and realize good prices. More of this class are being bred every year, mostly in Kamloops and south of there. These sell better in B.C. than in the North-West.

It is expected that if the legislation asked for by the recent National Live Stock Convention comes into force, putting a minimum valuation of \$75 per head on all horses coming into Canada it will have a stimulating effect on B.C. trade with the Territories.

The total cattle exports from B.C. ranches totals to from 10,000 to 11,000 head during the year. The Kootenay trade is supplied mainly from the North-West, most of the B.C. range-finished cattle going to the coast cities.

Summer School for Nature Study

A summer school for teachers will be held at the Macdonald Institute, Ontario Agricultural College, Guelph, from July 5-20, inclusive. Dr. Muldrew will have charge of the work.

H. CARGILL & SON,

Importers and Breeders of SCOTCH SHORTHORNS

Present offering SEVEN GRANDLY BRED BULLS. Also a large number of grandly bred young heifers, imported, imported in dam and home bred. Call on or write to

H. CLANCY, Mgr.

H. CARGILL & SON,
Cargill P.O. and Sta. G.T.R.

PRIZE WINNING SHIRE HORSES

WE INVITE all wishing to purchase Shire Stallions or Fillies of high quality to visit the stables of the undersigned and inspect the largest and best stock of Imported and Canadian bred in Canada.

Morris & Wellington

Railway Station, Welland, G.T.R.

Fonthill, Ont.

A1 Wheat Lands

IN MANITOBA, EASTERN ASSINIBOIA and SASKATCHEWAN VALLEY.

All selected lands and near stations, elevators and market towns in the best districts of Western Canada.

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Market Review and Forecast

The Trend of Markets—Supply and Demand—The Outlook

Toronto, May 27th, 1904.
A fair volume of business is reported in general trade. Wholesale houses report remittances as being a little slow. Money is more plentiful at about 5 per cent. on call. Discounts are steady at 6 to 7 per cent., the ruling rate being about 6 per cent.

WHEAT

The wheat situation has improved since last writing and prices are about 5c. per bushel higher. The speculative element has had something to do with the advance, though unfavorable crop reports and a shrinkage in the visible supply in the United States and Canada have had something to do with it. Owing to the advance on this side there is very little wheat being exported, and yet Toronto seems to be getting all the wheat she requires for present needs. Manitoba market rules firm and higher. There is a scarcity of winter wheats here and the decline at outside points does not materially affect the market for winter grades in Ontario. Red and white is quoted here at 95 to 96c.; goose at 85c., and spring at 90c. at our baled straw.

COARSE GRAINS

There is little to report about coarse grains. The market for oats, barley and peas rule steady at quotations. Corn is steady at 45 to 46c. for Canadian wheat, and 60 to 62c. for American in car lots.

EGGS AND POULTRY

The egg market rules strong with prices at country points fully 3 cents per dozen higher than at this time last year. The outlook for pickling is not very bright as prices are too high. Under Toronto local demand stocks are not accumulating. From 15 to 15½c. are the ruling prices both here and in Montreal for case lots.

There is a demand in the Maritime Provinces for turkeys. In Ontario there is little doing in poultry excepting in a local way.

POTATOES AND BEANS

The potato market is easier and plenty of supplies are coming forward. Quotations here are lower at 90 to 95c. for car lots on track.

The bean market is inactive.

HAY AND STRAW

Hay prices have kept up wonderfully well considering last year's big crop. The late spring and cold winter have had considerable to do with this. There is quite a good export demand and dealers' stocks are large supplies among the farmers in Quebec, but this is doubtful. Quotations here for baled hay are \$9 for car lots on track, and \$5.50 per ton for baled straw.

WOOL

There is little activity in wool as yet. Owing to the backward season very little new clip is coming forward. Receipts of unwashed are fair with prices steady at 95 to 105c. Washed is quoted at about 100c.

DAIRY PRODUCTS

The cheese market has taken quite a sharp turn upwards since last writing and from 85 to 87c. are the ruling prices on the local markets this week. The market, generally speaking, shows a firmer tone. The better quality of goods being made and the smallness of the make have had something to do with the advance.

Butter has also assumed a better tone and a steadier feeling prevails

though prices have not advanced. The English market is reported dull, though prices are reported to have touched bottom and are not likely to go any lower. 15½ to 15½c. Montreal quotations, is a pretty low figure for grass creamery butter. Quotations here are 17 to 18c. for creamery prints, and 15 to 16c. for solids. Choice dairy rolls sell at 11 to 13c. in a jobbing way.

LIVE STOCK

Business at the Toronto cattle market this week has been brisk. The run of live stock has been heavy. Cattle were in active demand for export owing to shipping from Canadian ports. The best cattle are wanted, some of the choice ones selling at \$5.20 per cwt., with quotations at \$4.90 to \$5.20 for choice, and \$3.75 to \$4.25 for medium to good. Butchers' cattle rule steady at \$4.65 to \$4.75 for best, \$4.30 to \$4.60 for good ones, and \$4 to \$4.25 per cwt. for medium quality. Short steep feeders in good condition sell readily at \$4.50 to \$4.80, and lighter weights at \$4 to \$4.50 per cwt. Good stockers sell at \$3.35 to \$3.75, and common ones at \$2.50 to \$3.25 per cwt. Milch cows sell at \$30 to \$60 each, as to quality. Calves have ruled weaker owing to extra supply. Quotations are \$2 to \$10 each and \$3.50 to \$4.50 per cwt.

The offerings of sheep and lambs are not heavy, and with an active demand everything sells readily. Export ewes sell at \$4 to \$4.50; grain-fed yearlings at \$5.50 to \$5.75 per cwt., and spring lambs at \$2.50 to \$5.50 each.

The run of hogs has been lighter and prices have advanced to \$5.15 for select bacon hogs and \$4.90 for lights and fats.

HORSES

The horse market continues active with a good demand for all kinds of serviceable horses. As Tuesday was a holiday, the usual sale at the Repository, Toronto, was not held. On Friday a big sale of hunters, drivers, and saddle horses was held, all of which sold at satisfactory prices.

TORONTO JUNCTION

The run of live stock at the Union Stock Yards, Toronto Junction, has been large during the week. The run of export cattle offered has been good. Prices ranged from \$3.50 to \$5.20 with some very choice ones going a little higher. The bulk sold for \$4.80 to \$5.10. Butchers' cattle, 1,150 to 1,200 lbs. each, sold at \$4.50 to \$4.75 for the best, and \$4.40 to \$4.50 for good, with other quality lower.

MARITIME MARKETS

Halifax, May 24th, 1904.

Market conditions are none too favorable at present for farming interests. There has been a very inactive market for cheese and butter, and for a time a deadlock was practically established between buyers and sellers. Dealers just now are conceding slightly better prices, and some business is being put through. Potatoes have declined, and while a cent a pound is not a bad price for tubers, some growers in the Cornwallis Valley, who a few weeks ago held their stocks for a dollar a bushel, will regard the present turn as unsatisfactory. The egg market has strengthened, and this article is now jobbing at 15 cents in Halifax, there being some scarcity here owing to large quantities being absorbed by the picklers. Apples are now practically out of the market, there being nothing obtainable but a few nonpareils, which are selling at from \$3.50 to \$4. There has been an advance in evaporated apples, and this article is now coming almost entirely from Ontario.

Hay has kept very steady throughout the season, the best quality selling at \$14 per ton. It is well firmed up a little but the island situation is understood to be unsteady as stocks are rather heavier than usual. Feeds are very firm but the demands in the Maritime Province are light from now onward. The pork season has about ended, there being no demand for anything now excepting a few light hogs. Turkeys are much wanted, as high as 17c. per lb. being paid. All kinds of poultry are scarce at this season. Native rhubarb is on the market at 2½c. per lb. This and aspara-

The Canadian Produce Markets at a Glance

The highest quotations of prevailing prices for standard grades of farm produce in the leading markets on the dates named. Poorer stuff lower.

Date	Toronto	Montreal	St. John	Halifax	Winnipeg
	27	26	25	25	25
Wheat, per bushel.....	\$ 96	\$ 98	\$	\$	\$ 85
Oats, per bushel.....	33	36	43	43	35
Barley, per bushel.....	47	50	54	54	38
Peas, per bushel.....	63	71	75	75	35
Corn, per bushel.....	40	54	55	56	....
Flour, per barrel.....	3 80	4 90	4 50	4 60	3 70
Bran, per ton.....	15 00	19 00	23 00	23 50	15 00
Shorts, per ton.....	18 50	20 00	24 00	24 50	18 00
Potatoes, per bag.....	95	85	60	60	65
Beans, per bushel.....	1 40	1 45	1 90	2 00	....
Hay, per ton.....	9 00	10 30	13 50	14 00	10 00
Straw, per ton.....	5 50	8 00	8 00	8 00	....
Eggs, per dozen.....	15	16	14	15	15
Chickens, per pound, d.w.....	12	13	....	....	....
Ducks, per pound, d.w.....	....	....	12	12	....
Turkeys, per pound, d.w.....	14	15	14	14	17
Geese, per pound, d.w.....	....	14	14	14	....
Apples, per barrel.....	3 00	4 25	4 00	4 00	4 50
Cheese, per pound.....	8½	8½	9	9½	10½
Butter, creamery, per pound.....	18	17	20	18	20
Butter, dairy, per pound.....	13	13	15	15	15
Cattle, per cwt.....	5 20	5 00	5 00	5 00	4 00
Sheep, per cwt.....	4 50	4 50	5 50	6 50	4 00
Hogs, per cwt.....	5 15	5 50	5 50	5 50	5 25
Veal Calves, per cwt.....	4 50	4 50	4 50	4 50	....

gus are about the only Nova Scotia green stuff yet seen at the country market.

Flour is again firmer in sympathy with the highest price of wheat. Sugar advanced another five cents per cwt. today, making this article cost 40c. per cwt. more than at this date last year. There have been very heavy arrivals of West India cane sugar this spring and the local refinery now advertises its product as made entirely from this material. Porto Rico molasses has advanced one cent per gallon, but Barbados molasses has declined about one cent. Provisions are very dull but selling prices remain steady. All other lines are unchanged.

Trade has been fair during May. The weather for the most part has been cold, but there has been a few very warm days. Vegetation throughout the province is looking well and shows as much growth as can be expected at this date. Apple trees are in bloom and look well. A report from P. E. Island says some farmers have finished scabbing, so the season in the country cannot be as backward as some have supposed.

BOOKS AND BULLETINS

JOURNAL OF THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND. Volume 64, giving an account of the proceedings for 1903.

REPORT OF THE MINISTER OF AGRICULTURE for the Dominion of Canada for the year ending October 31, 1903.

AGRICULTURAL CLUBS IN RURAL SCHOOLS. A survey. Bulletin, series 8, number 10. College of Agriculture, Ohio State University, Columbus, Ohio.

FEEDING VALUE OF SOFT CORN FOR BEEF PRODUCTION.—Bulletin 75. Agricultural Experiment Station, Ames, Iowa.

NURSERY INSPECTION AND SAN JOSE SCALE. Bulletin 110. Agricultural Experiment Station, Lexington, Kentucky.

FERTILIZER INSPECTION.—Bulletin 101. Agricultural Experiment Station, Orono, Maine.

REPORT ON AGRICULTURE for the Province of New Brunswick for the year 1903.

AGRICULTURE AND HOME-MAKING.—Report of the Kansas State Board of Agriculture for the quarter ending March, 1904. F. D. Colburn, Secretary, Topeka, Kansas.

HESSIAN FLY IN 1902-1903.—Bulletin 111. Experimental Station, Lexington, Kentucky.

REPORT OF STORRS AGRICULTURAL EXPERIMENT STATION, 1903-04. Middleton, Conn.

THE WHEAT GRASSES OF WYOMING.—Bulletin 59. Experiment Station, Laramie, Wyoming.

WHEAT GROWING.—Bulletin 60. Experiment Station Laramie, Wyoming.

PREVENTING CONTAMINATION OF MILK.—Bulletin 91. Experiment Station, Urbana, Ill.

CITY MILK SUPPLY.—Bulletin 92. Experiment Station, Urbana, Ill.

FATTENING STEERS OF THE VARIOUS MARKET GRADES.—Bulletin 90. Experiment Station, Urbana, Ill.

ONTARIO AGRICULTURAL COLLEGE.—Report of its work and that of the Experimental Farm for 1903. Published by Ontario Department of Agriculture, Toronto.

FATTENING STEERS OF THE VARIOUS MARKET GRADES.—Bulletin 90. Agricultural Experiment Station, Urbana, Ill.

CITY MILK SUPPLY.—Bulletin 92. Agricultural Experiment Station, Urbana, Ill.

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EGGS—Barred Plymouth Rocks, "National Strain," large selected birds and splendid layers.—\$1.00 per 15, or \$2.00 per doz. REGINALD WARREN, Gamebridge, Ont.

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CANADIAN POULTRY REVIEW.—Best poultry paper published. All poultry practical. Poultry on the farm a specialty. 5c a year; three years \$1.50. Sample free. Toronto, Ont.

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BUFF WYANDOTTES. Eggs for sale—three grand pens to select from—each pen headed by first prize winner at Canada's greatest Great Winter layers, best table fowl, \$1 per dozen, fall crop guaranteed. W. MOELER, 11 Bert Street, Toronto.

FOR SALE—Incubators on three years' payment, the Chatham Incubators, guaranteed to give best satisfaction; stock on hand for immediate delivery, shipped freight prepaid. Write for catalogue or call on the exhibitor, No. 178, Peter Street, Montreal, Cole and Co., Agents.

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PREVENTING CONTAMINATION OF MILK.—Bulletin 91. Agricultural Experiment Station, Urbana, Ill.

NITROGEN BACTERIA AND LEGUMES. Bulletin 94. Agricultural Experiment Station, Urbana, Ill.

INFECTIOUS ABORTION AMONG CATTLE.—Vol. III, No. 12. Missouri State Board of Agriculture, Columbia, Mo.

CORN GROWING.—Vol. III, No. 11. Missouri State Board of Agriculture, Columbia, Mo.

MINERAL MATTER AND GRIT FOR CHICKS.—Bulletin No. 2. Agricultural Experiment Station, Geneva, N.Y.

POTATO SPRAYING EXPERIMENTS IN 1903.—Bulletin 241. Agricultural Experiment Station, Geneva, N.Y.

HOLSTEIN-FRIESIAN HERD BOOK.—Volumes V and VI. Published by Canadian Holstein-Friesian Association. G. W. Clemons, Secretary, St. George, Ont.

THE MOISTURE CONTENT OF BUTTER.—Bulletin 76. Iowa State College, Ames, Iowa.

FEEDING VALUE OF SOFT CORN FOR BEEF PRODUCTION.—Bulletin 75. Iowa State College, Ames, Iowa.

REPORT ON AGRICULTURE FOR 1903.

CROSSING SWEET CORN.—Bulletin 170. Agricultural Experiment Station, New Brunswick, N.J.

WESTERN NEW YORK HORTICULTURAL SOCIETY.—Proceedings of the 40th annual meeting held Jan. 27th and 28th, 1904.

FOOD PRODUCTS.—Report of Connecticut Agricultural Experiment Station for the year ending Oct. 31st, 1903.

REPORT of the Western New York Horticultural Society for 1903. Secretary's office: Chamber of Commerce building, Rochester, N.Y.

Canadian Good Housekeeping, the only household monthly in Canada, \$1 a year. The Ideal Cook Book, with about a thousand recipes, bound in oil-cloth boards, \$1, both for only 50 cents if you pre-order. The Farming World, who will get one new yearly subscription at 60 cents.

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