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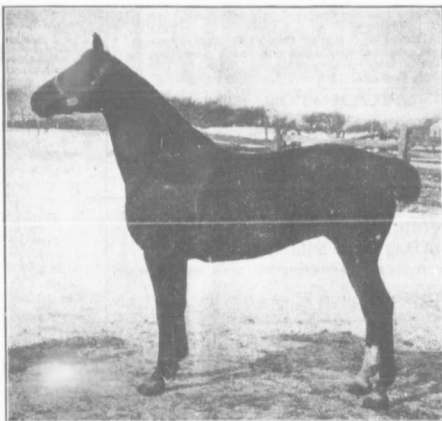
The Farming World

A Paper for Farmers and Stockmen

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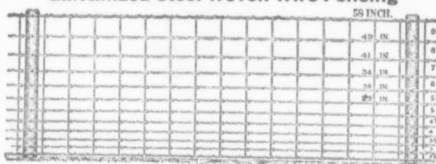
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The Farming World

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Always mention THE FARMING WORLD when writing to advertisers, please.

We beg to thank the numerous subscribers who complied with our request to send us copies of our issue of 15th June, 1904. We have a great many more now than we need.

A Chance for the Small Poultry Raiser

Many people raise poultry without endeavoring to make it a business. If prices are any criterion there is every incentive to increase the flock and the profit. George H. Stahl, of Quincy, Ill., the old-time incubator manufacturer, has sold hundreds of his famous 200-egg hatchers to people who are making good money with them. Of course some do not succeed as well as others, but with a hatcher like the Wooden Hen all elements of risk are avoided, as it is guaranteed to hatch every fertile egg, and the price, \$12.50, is within the reach of everyone.

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A number of complaints are reaching this office that THE FARMING WORLD is not coming regularly.

The Farming World

And Canadian Farm and Home

VOL. XXIV

TORONTO, 15 MARCH, 1905

No. 6

Wages for Farm Help Higher

THE most serious problem that has confronted the Canadian farmer in recent years is that of farm help. While conditions have improved somewhat during the past year or two, a scarcity still exists, and every spring sees farmers scurrying around to secure help for the busy summer season.

When this help scarcity became a reality a few years back it was the opinion of many farmers that it was only for a short time and that a year or two at most would see an adequate supply forthcoming at reasonable wages. But each succeeding year has brought no material change in the situation. Good experienced farm help is just as scarce as it ever was, and present indications are that it will continue to be so for some time to come. Consequently many farmers are becoming resigned to the situation and are adopting such measures in engaging help as will secure more permanency and greater efficiency in the work obtained. More are engaging men by the year instead of for the busy season only. Then more married men are being engaged, and homes supplied for them and their families. All this has a tendency to hold help for a longer period and does away with the necessity of looking for men every spring.

We have already stated that the situation has improved somewhat the past year or two. That improvement has been almost entirely due to the work of the Ontario Colonization Department, which, under the direction of Mr. Thos. Southworth, has been instrumental in bringing in thousands of old country laborers, who have relieved the situation very much indeed. In fact, had it not been for this source of supply, there would have been a famine in help by this time, instead of a scarcity, and real suffering would have resulted on many a farm. The Colonization Department, if it had done nothing more than this, would have fully justified its existence and amply repaid for the money it has cost the people of Ontario. But, in addition to supplying help, it has been effective in filling up New Ontario, and bringing in many thousands of desirable settlers. In 1900 3,000 immigrants came to Ontario, while in 1904 the number was over 25,000.

In 1904 between 5,000 and 6,000 British laborers were placed upon Ontario farms through the efforts of this department. Only a small percentage of these were experienced help. The great bulk were inexperienced men, but willing to work on Canadian farms in order to learn the business. It is encouraging to know that the English laborer who comes to this country thinks it more degrading

to clerk in a store than to work on a farm. According to his view he can do the most menial work on a farm and yet lose none of his social prestige. It would be a good thing for this country if more young Canadians had similar convictions, though a growing change for the better is noticeable in this regard even among our own people, and farming has advanced a peg or two upward socially. May it continue to climb.

Mr. Southworth states that farmers this spring are willing to pay higher wages for suitable men. In fact, this has become a necessity if men are to be had at all. Wages this season range from \$100 to \$140 per year and board for inexperienced men, men able and willing to work, and \$15 to \$20 per month, or \$175 to \$200 per year and board for experienced help. An experienced married man with a family will get a nice house, an acre or two

so. There is no more profitable animal for the farmer to raise than the sheep.

The wool outlook seems to be favorable for good prices the coming season. At the moment there is a slight lull in the market, a not unusual occurrence at this season, as buyers are getting ready for the new clip, and want it to come forward under conditions as favorable to themselves as possible. Supplies of domestic wools, both here and to the south of the line, are pretty well cleaned up, and the new clip will likely find a market practically bare of good stock. Wool should, therefore, bring good money, though the producer should not look for too high a figure.

On the whole, the sheep situation in this country has not been as favorable for many years. Sheep, lambs and wool sell at good prices, and there should be good profit in the business for the grower.

National Records Attract Attention in U. S.

The decision of Canadian breeders to nationalize their records has already attracted attention in the United States. The *Live Stock Journal* of Chicago, in its last issue, gives liberal extracts from Live Stock Commissioner Hodson's address, as published in *THE FARMING WORLD* of Feb. 10th. On the question of nationalizing the records it says:

"We would be glad to see government supervision of our American stud books, herd books and records. The mere government recognition is of no consequence.

"Our breeders' associations could as readily secure half-rates for pedigree stock as the Canadian breeders' associations, but entry fees is the only ambition, object and purpose of our stud books. Whether the animals are true to type, or however unsound, they gladly record them for the entry fees."

Evidently some Americans are not running over with enthusiasm in regard to the way their live stock records are managed. Canadian breeders know that more than one of their record associations exists for no other purpose than to secure a fee, and a very big fee at that. National records here may induce our American friends to do better in the future, and to be a little more reasonable towards their northern neighbor in the recognition of records.

Assistance to Horse Breeding

At the horse breeders' banquet in this city several weeks ago it was announced that the new government in Ontario was prepared to do something substantial towards improving horse breeding. What policy it will adopt in promoting this end has not yet been made known. It is, perhaps, a little too soon to ex-

DAIRY NUMBER

Every farmer is more or less interested in dairying. If he does not supply milk to a cheese factory or creamery, butter is made on his farm. Therefore, information of a practical nature on this subject should appeal to him directly.

The annual dairy number of *THE FARMING WORLD*, to be issued on May 1st, will contain a fund of practical information of value to every farmer. Several new and important features will be introduced. The number will also be well and suitably illustrated.

Advertisers will find this number of special value in reaching a good class of customers. Applications for space should be made early.

for a garden, milk, fuel, and fruit, and from \$240 to \$300 for a yearly engagement. Of course, this does not include the man's board. These prices are higher than many farmers have been accustomed to pay. But seemingly they cannot remedy matters and are compelled to pay a sufficient wage to induce help to work on farms rather than at other occupations.

The Boom in Sheep

The sheep boom has arrived. Breeders report a very active demand for breeding stock. What is somewhat unusual about this demand is that it comes from the Canadian farmer, who for the past few years has been reported to be giving up sheep raising. But a reaction has evidently set in and farmers everywhere are endeavoring to get into sheep raising as quickly as possible. It is a good thing for the country that it is

pect any definite pronouncement on the subject. And yet the season is here when farmers are most interested in what to breed and where the best stock for breeding purposes can be procured.

Whether anything special is to be done or not we believe it to be in the best interests of the business that a strong deputation of those interested in horse breeding, especially from the farmers' standpoint, should meet Premier Whitney or the Hon. Mr. Monteith at an early date and discuss the question with them. Already the fruit growers and the dairymen have sent deputations to lay before the Minister of Agriculture the claims of their respective industries. Why should not the horse breeders do so? Their industry is of as much importance to the country as either of the other two. Besides, there is a possibility that that element among horsemen which is more concerned in promoting the sporting rather than the practical end of the business may get in their way first.

Of course, it would be useless to send such a deputation without some definite plan to lay before the government. However, many horsemen are of the opinion that enough has not been done by the government in the past to promote horse breeding. If so, here is a foundation to work on. Let the breeders and those most interested from an agricultural standpoint get together and present to the government some plan by which further aid can be wisely and efficiently rendered. If more is to be done for horse breeding, and we believe more should be done, it is all important that the work should be started right and directed along lines that will result in the greatest benefit to the industry and the country at large.

There are several questions that have been discussed more or less frequently in recent years, such as the lien act, stallion inspection, syndicating stallions, etc., upon which horse breeders might convey their views to the government. Then the Agricultural College at Guelph has in the past come in for some criticism, because more was not done there in the interest of horse breeding. The chief complaint has been that no breeding horses of any kind are kept for the benefit of the students. At the stock judging school a few weeks ago horses had to be borrowed from a neighboring breeder in order that the lectures to the students might be properly given. This is hardly an ideal condition in an agricultural college. If horse breeders wish it improved upon it is their duty to wait upon the government and express their views upon this and other questions. Nothing has transpired yet to show that the new government lacks initiative. But no matter how progressive a government may be it will be glad to have the advice and the backing, if need be, of those interested in any action that might be taken, especially where the expenditure of public money is concerned. The officers of the various breeding associations should get together on this question. Strike while the iron is hot.

Dairy Instruction Work

During the past two weeks deputations from the Eastern and Western Dairymen's Associations have visited upon the Hon. Mr. Monteith, Minister of Agriculture, and discussed with him the instruction work to be carried on during the coming season. Both deputations asked that the number of instructors be increased. There are twenty-two employed in Eastern Ontario and ten in Western Ontario. The Minister was favorably impressed with the views expressed and a further increase in the work of instruction may be expected.

Two requests, preferred by the Eastern delegation, seem somewhat contradictory. They asked that their chief instructor, Mr. G. G. Publow, be allowed greater freedom in dealing with questions arising in his district instead of having to submit a number of them to the department. They also expressed a desire to have the work of instruction and the collection of the fees taken over entirely by the department and that the association be left with a substantial grant to carry on educational work by holding meetings.

These two requests hardly harmonize. But be that as it may, the Minister of Agriculture is held responsible for the monies expended by his department and must of necessity maintain some supervision over the work. In the past considerable freedom has been allowed the associations, and the instructors in prosecuting their work, and this is likely to continue for a time at least under the new administration so long as the work is efficiently and well done.

The request that the association be relieved of all responsibility in connection with the work of instruction is worthy of consideration. If the department were held directly responsible for the work of instruction in the factories it might work to the advantage of the industry in many ways. Of course, an arrangement of this kind would have to be carried out in the west as well as in the east. For the present, however, we do not anticipate any changes of this kind for the coming season, and the work will likely be continued as in the past, the department and the association co-operating in promoting the work of instruction.

Price of Cheese-Making Advances

At a meeting of cheese manufacturers in Stormont County the other day it was decided to raise the price for manufacturing cheese from 1 to 1½c. per lb., exclusive of hauling. A little advance along this line is to be expected. Wages, boxes and nearly everything used in manufacturing cheese have advanced 10 to 15 per cent. during the past few years, and it is only reasonable that a slightly increased charge for manufacturing should be made. The advance asked for by the manufacturers is not out of the way, and should meet with little opposition from milk producers.

This gathering of cheese manufacturers to fix upon a price is the first

of its kind, to our knowledge, ever held in Canada. Heretofore there has been no such jealousy shown between manufacturers, and makers also, that the patron has to a large extent had it all his own way. Because of this competition and senseless rivalry the price for making has been brought to a very low level, so low, in fact, that there has been no profit in the business, factory buildings and equipment have been allowed to get badly out of repair and the furnishings used to become of an inferior kind. Therefore, so long as the manufacturer is reasonable in his request, and does not attempt to take undue advantage of the patron, the latter should welcome a change that should mean better factories, better equipment and better service.

EDITORIAL NOTES

President Creelman reports that already thirty-two Farmers' Institute excursions to the College have been arranged for next June. The total number last year was about forty, which is likely to be exceeded this year.

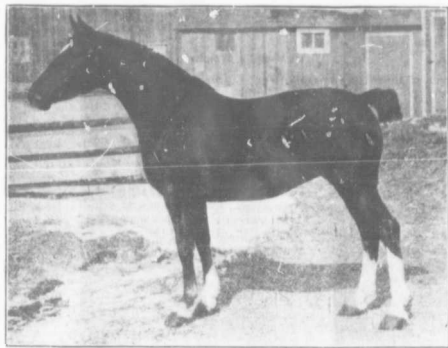
The Swift Company of Chicago, who a year or two ago bought out the Fowler packing establishment, of Hamilton, Ont., have decided to greatly increase the capacity of the plant and to kill a larger number of both hogs and cattle and sheep. This may be the thin edge of the wedge in the establishment of the dressed meat trade in this country on a large scale.

Elsewhere we refer to the decision of some cheese manufacturers to raise the price for making cheese. The gardeners of Ontario have recently organized. At a recent meeting they decided to advance the price of tomatoes to canners from 25c. to 30c. per bushel. Some canning factories have stated that they will shut down if this decision is adhered to. The gardeners also decided to grow no plants for sale to any person not a member of the association. But they had better try one thing at a time.

Canada's wheat exports show a decline, and British politicians have made a note of the fact in their eagerness to seize upon any circumstance that might be used as an argument against a preference for Canadian products. But the decline in our wheat exports is only a temporary one. They are bound to increase, as the great prairie lands of the west come into cultivation.

Argentine Students at O.A.C.

The Argentine Government has lately decided to repeat the work started five years ago, and has made appropriations for sending forty young men abroad to study agricultural and industrial conditions and methods. Twenty are to go to Europe, and twenty to North America. The one special condition is that no more than two shall go to any one university, with this exception: that more than two, but not more than six, may attend the Agricultural College at Guelph. These young men are, during their course at Guelph, required to pay full fees for outsiders, and have to board in town. The College is willing to allow them to receive instruction, but no Ontario students are thereby excluded.



The imported Hackney Filly, Terrington Bonibel. She has a first and junior championship for 1904 to her credit. Owned by Robt. Beith, Bowmanville, and will be offered at his sale on March 29th.

Correspondence

Selecting Seed Corn

EDITOR THE FARMING WORLD:

So many farmers failed last year in getting a good stand of corn, because of the bad seed planted, that I thought I would give you my method of getting good vital seed.

Everyone admits the value of good seed, but many fail in applying the principle in practice. I find it is important to test the seed corn. I don't bank so much on the test between folds of blotting paper moistened and put between plates, or even in a box of soil beside the kitchen stove moistened with warm water. Corn that has any vitality at all will grow under such conditions. But I do bank on its vitality when I plant it outside in a cold soil under natural conditions and then find 90 per cent. to 100 per cent growing.

There is more difference in the vitality of seed corn than most farmers think. It might be compared to two calves one sometimes sees on the farm. The one calf is a long-legged, flat-sided, ew-necked, scrawny, balloon calf, that for every dollar's worth of growth it has cost two dollars' worth of feed to produce it. That is like the seed corn of weak vitality. The other calf is a strong, vigorous, robust, growthy fellow, that every dollar's worth of feed gives two dollars' worth of growth, and that if you knocked him in the head you couldn't kill him if you tried. The other one should have been put out of the way shortly after it was born. This strong calf represents the seed corn of strong vitality.

How to secure this good seed is the question. I like to go out in the corn field early in September and select the seed ears before the corn is cut, and "select the largest ears, with the deepest kernels that will ripen before frost comes." That is the way a successful Minnesota corn grower puts it, and I think it is pretty hard to improve on that definition of the ideal seed ear. I have little use for many of the fancy points that some are inclined to harp upon. For instance, they want a very symmetrical ear, of cylindrical shape, very small cob, rows to run straight as a gun barrel, and to be well covered at both ends. Especially is the tip end to be well covered and a kernel to be slugged in at the very end. I am of the opinion that it makes very little

difference to the hog as to whether the rows are straight or crooked, or whether they have a few extra kernels on the body of the ear instead of at the end. If I find suitable ears of this type I wouldn't pass them by, but I would not neglect good ears if they didn't conform to all the fancy points.

As soon as the corn is selected I husk it, braid it up and hang it up over the kitchen chamber, where the pipe and chimney are, to get it thoroughly dried before hard freezing weather. If corn is thoroughly dried it will stand a test of 60 degrees below zero. If only partly dry when cold weather comes it will be weakened by every frost. Of course after being once dried I keep it dry, and when ready to plant I shell it. Before shelling I believe it is a good practice to cut off both ends of the seed ear in order to get uniform kernels to

plant for an even stand. I also believe it would be a good practice and improve the corn to plant half an acre or so to the best selected seed. Give it special attention in fitting the ground and cultivation, keep it at least 40 rods from any other corn to prevent mixing, cut off all tassels or barren stalks, and from this patch select the best ears for future planting.

T. G. RAYNOR,
Prince Edward Co., Ont.

Hold Mure Seed Fairs

EDITOR THE FARMING WORLD:

If there is one thing more than another which our farmers have to cope with every year, it is that of securing good seed. For a number of years back weed seeds have been rapidly on the increase, and if something is not done in the near future to check this spreading farmers will be unable to secure clean seed at any cost.

It is an old saying, and a true one also, "That whatsoever a man soweth, that shall he also reap," and almost all of our farmers are aware that if large plump seed is sown, large plump seed will be harvested, and that if small shrunken or broken seed be sown, the result will be otherwise than satisfactory when harvest time comes, as a large percentage of the seed will not grow, and weed seeds will grow up instead.

Experiments have been conducted at Guelph and other places, which illustrate the difference in yield from large seed and the other kinds mentioned. In barley alone, a difference of three bushels per acre more for large plump seed than small plump seed has been shown, of seven bushels per acre more from large plump seed than shrunken seed, and of ten bushels per acre more than from broken seed. This should be sufficient to show that the large plump seed should be more fully sought after, and it holds good for other grains as well as barley.

Any farmer who has the welfare of his country at heart would not object to paying ten or fifteen cents a bushel more for good large seed, which is thoroughly free from weed seeds, than for poor seed in which weed seeds might possibly exist.



The Hackney Mare, Priscilla, owned by Robt. Beith, Bowmanville, Ont., winner of championships at Toronto, St. Louis and Chicago in 1901. The photographer's snapshot does not do the mare justice, but there are shown a set of legs and feet that are hard to beat.

In my opinion there is no better means of obtaining such seed than by holding seed fairs throughout the country. Have, say, at least one in each county, where grain is principally grown. These fairs could be successfully conducted by farmers' institutes, if the matter were taken up by them and discussed more fully at the meetings, which are now being held.

Hoping this will meet with your approval.
J. H. STARRK.
Peterboro Co., Ont.

How to Increase Manure Supply

Editor THE FARMING WORLD:

How to increase the manure supply is one of the problems of farming in this province (P.E.I.).

In order to do this considerable swamp muck is mixed with the stable manure. This entails a good deal of labor. I have, however, adopted a plan which, I think, is a saving in this respect. My plan is this: I dig the muck in the winter and haul it into a pile in the field I intend manuring the following year. In the latter part of the summer I level the pile, making a square heap 20 or 24 inches deep. I then begin and haul manure from the stable, endeavoring to get a good coat on before frost sets in. I haul the manure as it is made in the stable during the winter, until I have as much stable manure as there is muck. About the first of April I begin at one side and turn the pile over, thoroughly mixing the two. In about three or four weeks the pile is ready for the land.

In this way I not only save labor, but the value of the manure is also increased. The winter's frost and summer's heat improves the muck, little or nothing is lost from the stable manure, as what leaks by the rain and snow goes into the muck, the muck which is mixed with it keeps the manure from over heating. The heating manure, on the other hand, decomposes the muck, making the plant food therein available.

E. G. GIBBINGS.
Queen's Co., P. E. Island.

Culture for Legumes

Editor THE FARMING WORLD:

The bacteriological Department of the Ontario Agricultural College intends to send out this year small quantities of nitro-culture for the inoculation of the seeds of the various legumes (peas, beans, vetches, clovers and lucerne or alfalfa). Whilst the distribution will be largely confined to Ontario farmers, the Ontario Department of Agriculture are permitting us to send a number of samples to other provinces.

The use of these cultures is not advised on those farms on which the various legume crops grow well, as such soils are already well inoculated with the useful bacteria which draw the nitrogen out of the air and feed it to the plants. But on those soils upon which legumes do badly and where there are no nodules on the roots, the use of these nitro-cultures is advised. When soils are deficient in other necessary plant food, as potash and phosphorus, these cultures will not give good results.

Applications for these nitro-cultures should be sent to the bacteriological Laboratory without delay, stating the kind of legume the farmer desires to plant and the amount of the seed that he intends to use.
F. C. HARRISON,
O.A.C., Guelph, Ont. Bacteriologist.

"Why don't you see a physician?"
"No, siree," answered Farmer Corn-torsal. "If I git cured it's got to be by patent medicine. Nobody gits his prier in the paper for being cured by a reglar doctor."—Washington Star.

Raising Calves for Milk or Beef

By C. W. ESMOND, Wellington Co., Ont.

Except in the case of pure-bred animals it is seldom profitable to follow the natural method of calf-raising. Experiments have shown that where ten pounds of whole milk produced one pound of gain, from twelve to fifteen pounds of skim milk did the same. Moreover, in these trials only milk was fed to the calves, whereas in practice, it is easy to add to the skim milk certain foods which will nearly or entirely replace the fat.

However, the mother's milk must remain the sustenance of the calf for several days of its early life. It is poor economy to acquire a few pounds of fat for butter at the expense of the young animal's digestive system. After about two weeks of whole milk feeding, a little skim milk can be introduced gradually and increased until it replaces the whole milk. At the same time, the milk fat must be replaced by some substance such as linseed meal. The feeding of fat cake with skim milk has neither theory nor practice to recommend it. Both are specially nitrogenous food, and together they form a ration entirely unlike the natural milk. Linseed meal on the other hand contains a large amount of fat, and is eminently suited to replace the milk fat.

After the calf gets a good start, other grains may be fed. A mixture of oats and corn made into a porridge may replace the linseed, and such a mixture has been found to give very satisfactory gains. As soon as practicable the calf should be taught to eat a little dry grain, such as crushed oats. This may easily be done by dusting a little of the meal on his porridge in the bottom of the pail after the milk has been drunk. A little clover hay should very early be placed before him, and he will soon be eating it.

"CHEESE" CALVES

Many farmers who send their milk to cheese factories are able to give their early calves a good start on whole milk and skim milk, but when cheese making begins, the value of skim milk is merely theoretical to them. It is under these conditions that the successful rearing of calves is most difficult. Two methods present themselves as a solution. The first is to breed the cows whose calves are to be reared early enough for them to drop their young early in winter. This plan, of course, assures plenty of whole milk and skim milk, and, moreover, it has the advantage of getting the calves started at a season when work is not pressing. But supposing this has not been done or that circumstances make it impossible, we have to face another issue. In so doing, we must keep in mind the supreme importance of raising good calves. If all the milk is sent to the factory, this means expense, either of labor or money, and which can best be borne, individual circumstances must decide. If help is sufficient a certain amount of the milk can be retained at home, butter made, and the skim milk fed to the calves. Under the same conditions it may be profitable to boil clover hay and feed the extract in lieu of milk. If help is scarce, however, it will probably be good policy to retain a certain amount of milk to feed directly. The amount need not be nearly sufficient for the calf's maintenance, especially if he has had a good start, but a certain amount should be fed, diluted with water if necessary, and warmed to blood temperature. A porridge of oats and corn may be fed in addition, or other grain which recommends itself. In this case,

corn should not form a very large part of the solid food. It would be best to feed oats and corn only once a day, and give only milk at the other meals. The feeding of dry grain and hay appears in this case in the other.

FEED REGULARLY

In addition to proper food, good management and attention is necessary. The feeding should be regular and frequent. Three times a day for young calves is not too often. If we refer to natural conditions we see that the calf takes nourishment much oftener than this, and we must in our artificial conditions strive to simulate the natural as closely as practicable. It is necessary where calves are thus reared, to see that diarrhoea does not occur among them. A little lime administered in the milk is an excellent corrective for this trouble. We are assuming that the quarters are well ventilated, well lighted, well bedded and dry. These conditions immediately recommend themselves to the minds of thinking men.

However, a question which admits of discussion is whether the calves shall be stabled or allowed the run of a pasture during the hot months. If shade is abundant and water convenient, the pasture might be better, since it economizes labor. In the absence of these most favorable pasture conditions, it seems better to keep the calves inside during the hot days and let them out at night. The annoyance of flies and the intense heat are detrimental to the best development. In both these methods we should observe a precaution too often neglected, that of keeping water before the calves. The warm drink given periodically does not satisfy thirst in the heat of summer, and it is thoughtless at least, not to supply them means to quench it.

In closing, we must keep in mind that only the best calves are profitable, and it is unwise to allow a false notion of economy to control the method of rearing the future dairy cow or breeding animal.

Feeding Steers Tied or Loose

The report of Supt. Robertson, of the Nappan Experimental Farm, furnishes the following information in regard to feeding steers tied or loose.

Sixteen-year-old steers were used for this test in two lots of eight each, of as nearly as possible equal form, fatness and weight. In the heat of summer, and it is thoughtless at least, not to supply them means to quench it.

All were dehorned previous to beginning of test.

All lots were fed alike, as nearly as possible, from start to finish of test, and kept in the stable all the time, except on occasional fine days, when they were let out for a false notion of economy more than once a week.

The feeds were charged at the following prices: Hay, \$8 per ton; roots, \$2 per ton; ensilage, \$2 per ton; mixed meals averaged \$24 per ton; as per proportion fed.

The relative gains were for the tied steers 2,250 lbs., and for the untied (dehorned) steers 2,435 lbs., a gain of 185 pounds in favor of feeding loose.

"You turn old plug," said the farmer to his balky horse, "you actually ain't worth killin'—unless," he added, after second thought—"unless I could manage to get you killed by the railroad."—Exchange.

About the Breeds of Sheep.

The Sheep's Early History: How the Different Breeds Originated.

The history of the sheep differs from that of other domesticated animals materially, in that, while we have records to the earliest ages of the latter animals in a wild condition, together with pre-historic evidence of their evolution, sheep seem first to have appeared shortly after the advent of man. The domesticated flock was his first charge and care, and the one that met the most fully his primitive wants. There were at the same time, as now, many wild varieties of sheep in different parts of the then known world, but few of them would show a very close breed relationship to our domestic sheep, and, in fact, the writings of ancient authorities, such as the poet of ancient Rome, who, when he "tuned his harp to a slender oaten straw" wrote of the sheep, its care, and particularly laid down theories of breeding so sound, on selection and mating, that it seems quite plausible that our various breeds of domestic sheep have

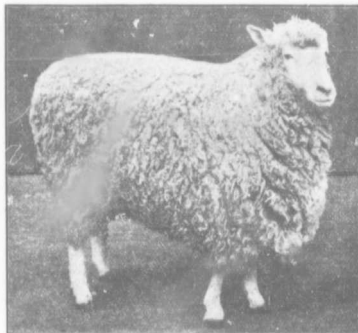
exhibit more or less tendency, when left to themselves to roam. This is particularly noticeable in the different branches of the Merino family.

From the earliest times can be found an appreciation of the importance of whatever tended towards the improvement of the flocks of sheep, and even royalty considered the subject as worthy of their attention. Roman Emperors paid large prices for representatives of improved breeds, and many of the kings of Europe considered a present of such an one quite as befitting to Royalty as the princely gift of the Arab steed from the stud of the munificent Sultan of the Orient. Ages ago, it was a crime punishable with death to export breeding sheep from England, and during the reign of the Imperial Tudors, it was the gift of a flock of sheep from the Emperor of Spain which laid the foundation for the English Cotswold, and all breeds descended from them.

and strong with heavy bone, and good sound feet that are not easily subject to foot diseases. The Cotswold has proved an eminently successful sheep for crossing on the Down breeds, and they figure in the original breeding of several other breeds of sheep.

LINCOLNS

Lincolnshire has for ages been celebrated for its breed of sheep. At one time a race of big, rough, scrawny, but hardy sheep, the breed was like the Cotswold and other breeds, much improved by crossing with rams from the flock of the immortal Bakewell, which gave to the race somewhat smaller size, but combined with improved quality, tendency to fatten, with earlier maturity. However much the breed may owe to this, it is certain that the basis for these improvements was a good one for the breed has proved a most popular one, especially in countries where plenty of good pasturage can be found. The Lincoln is the largest breed of sheep, frequently weighing over three hundred pounds. The face is free from wool and the head from horns, large, and the forehead narrows sharply backward. The neck is of about medium length, and well "set" on the shoulders, the back



A prize winning Lincoln ewe.



A prize winning Cotswold.

been developed in different localities, and from selections of type found locally the most suitable.

Two breeds of sheep are claimed, however, to have been the progenitors of our present flocks. These are the Argali of Asia, and the Musmon of Europe, the former being claimed to have been the original progenitor of the Oriental sheep, while from the latter descended the European breeds. A few of these wild sheep are still to be found in the mountains of Greece and in the Cretan Islands. Some shade of "ausability" is afforded to this theory by the records of ancient writers, particularly Pliney, who tells of the Musmon being crossed on the domestic sheep of his day. The early culture of the sheep was necessarily in the hands of the wandering, nomadic tribes and races, rather than the peoples who followed the tillage of the soil, their flocks constantly moving from place to place in pursuit of suitable pasturage. The shepherds following, constantly on the watch against marauders, sometimes, too, devoting part of their time to the performance of the same none too neighborly office on the flocks of others, made the keeping of sheep a less peaceful occupation than other branches of agriculture in the olden time; and thus it is, also, that many breeds of sheep

Some writers, indeed, claim an even more ancient origin for the Cotswold, averring that the first importations of this old breed of long wool sheep was made during the twelfth century, and that there are records of representatives of this same breed being exported back to Spain in the year 1467 by the royal permission of King Henry IV.

THE COTSWOLDS

are celebrated for their hardness and size, but it was not until after the time of Bakewell that the greatest improvement was effected in this breed by the judicious crossing of Leicester blood, and this happily gave greater smoothness, quality, and tendency to fatten without at the same time impairing their natural hardness, and has made them a very popular "combination" wool and mutton sheep. Their characteristics are a face of grayish or white, with a fleece that will comb eight to ten inches long, well adapted for the manufacture of heavy goods, and clipping from nine to sixteen pounds. Weight from 250 to 275 pounds. The head is strong and large, no horns, with a forelock or tuft of wool hanging over a somewhat "Roman" face the entire body except the face is well covered with long wool that hangs in curly ringlets, and the limbs are large

is straight and not quite so broad as the Cotswold, the fleece is the longest of all long wool breeds, is fine and lustrous in character, and sometimes corries to twelve inches in length. As high as fifteen pounds of staple wool has been clipped from a Lincoln. The legs are long and strong.

(To be Continued.)

Tonics for Hogs

It is well to keep constantly accessible to both pigs and old hogs some material that supplies lime and salt, to aid in bone-building, as an appetizer and to remove intestinal parasites. This mixture should be kept in a strong box, protected from rain; the quantity and frequency with which pigs will visit and eat of the mixture will often be surprising. The following is a mixture recommended: Charcoal, one and one-half bushels; common salt, four pounds; hardwood ashes (not logwood nor any dyewood), ten pounds; slaked lime, four pounds. Fresh water, good shade, additional food when on grass, and a dry bed free from filth, shelter from rain; and above all when confined have the area immediately large so that it will not become foul with droppings and filthy mud. These are the essentials for successful hog raising.

Horses' Feet in Winter

The farm horse may not be doing much work in the winter, but that is not to be cared for. If the horse is on the road more or less the legs and ankles become coated with mud or ice and should have attention as soon as the animal is brought to the stable. If he is standing most of the day it is essential that the floor, of whatever material it may be composed, be kept clean.

One good way of caring for the feet and legs of a horse is to wipe them dry with a moist cloth when the animal is brought in, then with a stick of wood give proper attention to the hoof. One of the fertile sources of rheumatism in horses is neglect of the feet and lower legs. You might well make it a business, in cold weather, to rub a little vaseline in the frog of the foot and over the hoofs generally two or three times a week and always clean this part as thoroughly as any other.

The Horse's Leg

If the feet and legs of the horse are defective the animal itself is of comparatively little value. In every horse there are necessary qualities of foot and limb, irrespective of breed. If the feet and legs are sound, and especially the latter, there will as a rule be very little wrong with the animal itself. Discussing the leg of a horse, *The Horse World* says:

It is a common saying that a horse should have "flat bone." This is but partially correct, for there is no such thing as flat bone in the legs of a horse. The leg bones are like the blade of a razor in shape, with the back of the blade turned to the front and the thin edge to the back. Such a bone presents a flat surface looked at from the side, but cut through a section will have an elliptical shape. When the leg appears to be round that fact is caused by lack of development of back tendons, and the presence of a surplus covering of coarse tissue. What we are after is a "flat leg." This is denoted by a clean, practically tissueless bone from the back of which the tendons stand out distinctly, and so that they can be readily grasped in the hand. From such a tendon and bone in the best draft horses of the Clydesdale breed and the improved English Shire the hair should grow as a silky fringe. Such hair or "feather," as it is often called, should not hide the bone and tendons nor surround the leg. Neither should it be coarse and kinky, like the dead horse hair stuffing of a sofa, or be so profuse in growth as to be plainly a nuisance. Hair of the right quality is a sure evidence of a flat compact "gunmetal" bone, and as a rule goes along with clean, well-marked tendons. Such bone is seen in the best class of the breeds mentioned, but it is by no means a special possession of these breeds.

When we have a clean leg and good joints the pasterns should be the next consideration, for no matter how nice may be the quality of the bone and tendons these good qualities are largely destroyed by a steep pastern, which makes the action stiff, stiff and sure to cause trouble from severe concussion. We require oblique pasterns to offset concussion—to gradually or easily convey the concussion from the feet to the pillar of the leg bones above it. Looking at the profile of the leg the angle of the front of the hoof should be exactly that of the pastern. Any serious departure from an angle of 45 degrees is to be considered a grave error not to be set right by paring or shoeing, and to be rejected, if possible, in breeding. A springy pastern possessed by a horse having clean bone and well-marked tendons with or without the finer hair

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alluded to above may be taken as indicative of free straight action. Action and quality go together, and it remains in examining a horse to see that this is the case when he is moved at a walk and trot. If his legs are properly set and his joints under proper control he will go and come without "padding," or "wobbling." The feet will be carried in a straight line, and rise and fall rhythmically, showing the shoe soles both fore and aft. A plummet line dropped from the centre of the knee and pastern joint and back of the foot and the same line hung from the hip joint should cross the centre of the foot and divide the gaskin in the middle. By this rule it will be easy to notice whether a leg good or bad is in or out of the proper position and whether the hind leg is crooked or sickle-hocked, hence prone to curbs and other ailments.

Spring Care of Sow

As the winter advances and the brood sow gets well advanced in pregnancy, she should be well looked after and be left largely to herself and not be run by horses or colts. She should not be allowed, or rather compelled, to drag herself over bars, rails, boards, troughs or other obstructions. While she should be allowed perfect freedom, she should never be compelled to wade mud holes or clamber over slippery bridges in getting to or from her pen. As the cold subsides and the warmer weather of spring takes its place, the corn that has been fed to keep up animal heat can well be replaced by other feed that is less fattening and better fitted to supply the elements of growth. The demands of the sow are heavy at this time and they should be met by feed so that her own vitality may not be reduced in order to supply the demands of her unborn litter.—*Frost Henry*.

Save the Wood Ashes

Wood is used for fuel on most Canadian farms and during the year there must be quite an accumulation of wood ashes, which in too many cases finds its way to the ash gatherer for a few bars of cheap soap.

Farmers making such an exchange do not know the value of the product they are bartering away. Wood ashes are especially valuable when worked in the soil about the roots of fruit trees. The flavor of fruit is improved by adding potash and wood ashes contain considerable potash. They are valuable whether leached or unleached, too valuable to be wasted.

Circulation Stopped It

"Hallo, Pat, I hear your dog is dead?"

"'ie is."

"Was it a lap dog?"

"It would lay anything."

"What did it die of?"

"It died of a Tuesday."

"I mean, how did it die?"

"It died on its back."

"I mean, how did the dog meet its death?"

"It didn't meet its death. It's death overtook it."

"I want to know what was the complaint?"

"No complaint. Everyone for miles round appeared to be satisfied."

"I wish to know how did it occur?"

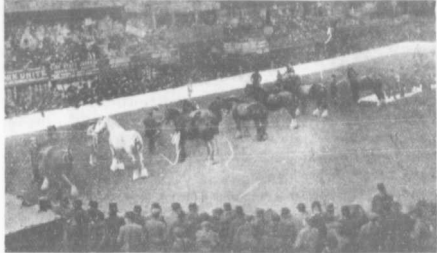
"The dog was no cur; he was a thoroughbred animal."

"Tell me what disease did the dog die of?"

"He went to fight a circular saw."

"What was the result?"

"The dog only lasted one round."—Our Dogs.



Judging the Shires, London Shire Horse Show, Feb. 1905. Royalty box shown in centre.

English Shire Horse Show

London, Feb. 25, 1905.

The Shire Horse Show, held in the Agricultural Hall, Islington, London, during the week was quite up to the average of recent exhibitions, although the number of horses present was not so large as in many previous years. This was not due in any way to inability to get entries, but was simply traceable to exigencies of space, the local authority having stepped in and reduced the number that the hall could accommodate. His Majesty the King has always manifested interest in this society and again this year he, accompanied by the Queen, made it convenient to visit the exhibition. His Majesty's horses were, however, not so successful as they have been on certain occasions in the past. During Their Majesties' presence on Wednesday last the opportunity was seized to award the championships in the stallion classes, in which section Lord Rothschild had exceptional success, while at a subsequent period his lordship added to his victories by annexing the challenge cup for mares.

As mentioned above, the entry was a smaller one than last year, as the following figures show: 1905, entries 651; 1904, entries 862; 1903, entries 680; 1902, entries 860; 1901, entries 667. As compared with last year the present figures show a decrease of 92 stallions and 91 mares and fillies and an increase of two geldings. It must be admitted that the all round reduction in numbers has been in many ways an advantage; of recent years it has been the practice to send up a lot of second grade horses with the intention of selling them off at the auction held in connection with the show. This is fortunately now put a stop to and the classes are now quite large enough, as well as a credit to the breed.

To revert to the stallion championship, the Shire Horse Society's gold challenge cup was awarded to Garton Charmer, a strong, sturdy, well-made four-year-old brown horse, by Morner of Botsford, while the reserve was Birdsall Minestrel, both of which horses are the property of Lord Rothschild, of Ting. Birdsall Minestrel is a fine five-year-old bay by Minestrel and won the champion cup a year ago. (A splendid photo of this horse appeared in THE FARMING WORLD of March 15th, 1904.) The cup for the best stallion in the older classes followed the above award, but that for younger stallions—won over three years old—was won by Mr. Max Michaelis' with Starborough Coronation, a three-year-old by that impressive sire Locking's Albert, while the reserve went to Mr. C. Bell's Norley Advance, bred in Cheshire.

The mare championship, as briefly mentioned above, was also won by Lord Rothschild, his representative being Princess Beryl, a very comely black five-year-old by Prince Harold, bred in Essex, by Sir Henry Ewart, the reserve going to the famous Dunsmore stud by the aid of Sir Albert Muntz's Dunsmore Fuchsia, who had previously won the junior cup, while Princess Beryl won the cup for the older mares. The cup for the best gelding was won by Mr. A. C. Sparkle's Oldfield Duke, which was the best in a strong section.

Planting Apple Trees

(Written for FARMING WORLD.)

In planting young trees on sod, care should be taken to make the holes large enough. From 4 to 5 feet across is not too large for standards. In digging the holes the sod should be taken off and laid on one side, then the top soil removed and the subsoil broken up, but not taken out. It is well to have holes dug sometime before planting the trees, in order that the soil removed may become mellow and friable, and made sweet by exposure to the air. When the trees are ready for planting the sod should be chopped up and laid in the bottom of the hole over the subsoil, and some top soil laid on that for such a height that when the tree rests on it the collar—that is the part of the stem which was level with the surface of the ground in the nursery—should be in the same position in regard to the surface of the orchard, or a little higher when fresh planted, in order to allow for the sinking of the made ground. Some people put rotten manure in the holes when filling up, but experience teaches that any stimulant of this kind is injurious when applied to the roots of newly planted trees, and that good mellow loam produces the healthiest growth and leads to the quickest and soundest establishment of the trees. At a later stage manure may advantageously be applied as a top dressing.

CUT OFF INJURED ROOTS

All roots bruised or broken during the removal from the nursery should be cut off with a sharp knife, a clean cut being made in a slanting direction, outwards. It is a common practice for the workman who is filling in the soil to make a hollow place with his spade for the reception of the roots. This is wrong. If anything the soil should be raised in a slight mound in the centre of the hole, and the tree placed on that, the roots at the same time being carefully spread out with the fingers over

the mound and some fine soil sprinkled over them and worked in under the crown so as to leave no vacant space there. When the tree is in position the hole should be filled up with the top soil, but no firming or tramping should be allowed until sufficient soil has been thrown in to cover the roots and prevent injury to them. In fact no tramping should be permitted until all the filling in has been done, with the exception of 2 inches, which with a heavy soil should be left loose and rather rough. As, however, the tendency of the soil is to work loose or lift round newly planted trees, it is necessary now and again to make it firm about them, as nothing checks growth more than hollowness of the soil at the roots. In light soils the trees may be planted more deeply than in retentive soils, and it may be desirable to give a thorough watering at the time of planting, or shortly afterwards. In heavy soils it is generally unnecessary to water, and sometimes hurtful, as the water makes a kind of puddle about the roots, which then sets hard and hinders their growth.

PROTECTING THE YOUNG TREES

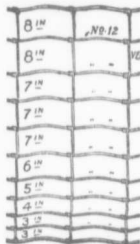
If the trees are not large, and the heads are cut back at the time of planting, it may not be necessary to stake them, and in such a case it has been found that large flat stones laid close to the stem, but not near enough to touch it, to form an effective counterpoise for the pressure of the wind, while preserving at the same time the surface of the soil cool and moist. This practice prevails in Brittany.

Where a stake is necessary it should be driven in and made fairly firm before the tree is planted, in order to avoid subsequent injury to and disturbance of the roots, and also for the greater stability of the stake. The common custom is to fasten the tree to the stake by one attachment only, generally close to the head of the stake, with rope or bagging, and causes the top of the stake to rub the bark, often inducing canker at this spot. Two attachments are better than one, as then the tree and the stake, when swayed by the wind, move in the same direction. Care should, however, be taken that, as sometimes happens where the stake and tree are tied at the top and bottom, they do not rub at the middle part of the tree post and stake. If there should be any chance of this, something should be placed round the tree or stake at the point of friction. Attention to these matters, and the removal of the bandages and the stakes will result in the clean, healthy stems on which the condition of the trees so greatly depends.

A CHEAPER WAY

When the trees are planted on sod which is intended to be grazed (and the grass in orchards should never be mown) some protection against animals will be required. An effective but somewhat costly protection is afforded by three young trees, united by short rails nailed on sufficiently close to prevent the growing of this bark. A cheaper protection of this kind may be obtained by setting two pieces of a large post sawn lengthways, with 8 inches in width, opposite each other, with their flat sides towards the tree, and uniting them by courses of rails; but, as the rails are much closer to the trees on this system than on the stone or posts system, there is danger that the bark of the tree should chafe against the top rails on the posts. This can be guarded against by tying haybands round the stem where it is likely to touch the

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rails, and if tarred twine be tied round the hayband and attached to the top rails, the swaying of the tree will be prevented. The cheapest protection is bushing with thorn bushes, which forms an effective guard, and on the whole the trees seem to do better when simply bushed than when protected with posts and rails. The air circulates more freely about them, and the weeds which always spring up around newly planted trees can be eradicated on the occasion of re-bushing. It is beneficial in the case of young trees planted in sod to pare the sod off thinly in a circle every other year for a distance of a yard or so from the stem, increasing the size of the circle as the trees grow, until they become thoroughly established, at the same time picking the soil lightly over with a fork, but not so as to injure or disturb the roots, as any loosening of the soil about these checks growth. In old pastures where there is often a depth of from 5 to 8 inches of fibrous mould, the roots strike into this, and the trees go ahead almost as quickly as on tillage, especially if some compost be applied to the surface and lightly forked in.

Stress has been laid on the planting and protection of young trees, because it is in the trees' early stages that attention is necessary. Unless the trees are kept in a healthy condition while growing, they cannot form large, fine specimens bearing full crops of sound fruit. With regard to the proper time of the year for planting, I think autumn is to be preferred to spring, though much depends on the season.

WHEN TO PLANT

If the trees could be lifted as easily as bedding plants and transferred immediately from the nursery to their permanent quarters, the early spring in genial weather would probably be the best time of the year for moving them, as is found to be the case with herbaceous plants. But as they often have to be sent long distances from the nursery, with their roots bare of soil, and remain for days out of the ground, the check just as the sap is rising is likely to be more severe than in autumn, when they are in a dormant state. It is often urged in favor of planting in early autumn that it enables the trees to make some root growth in their new situation before winter, and, consequent-



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ly, are better prepared to start into life in the spring. This theory is hardly sound, seeing that, after the leaf has fallen, the trees are not in a condition to make root growth. The chief advantages in autumn planting are that the trees feel the moving less if they have to travel a distance than they do in the spring, and that the winter rains help to consolidate the soil and render it fitter for root action in the spring than it would be if freshly applied then.

If the varieties be suited to the soil and climate, the trees well grown and healthy when planted, properly planted, protected, looked after and dressed, they will begin to bear a crop in five or six years time, though it is not advisable to allow them to carry a full crop at so early an age. Late frosts and insect pests will, however, often deprive the farmer of a portion of the crop which a good bloom may have led him to expect. It is not possible to guard against late frosts, but when the situation of an orchard is well chosen, on fairly high ground, but sheltered, these will be less destructive than on the low ground. The failure of an apple crop is due far oftener to insects than to frost, but unless the fruit growers of a locality take concerted action the labor of prevention by a single individual is lost, for take what steps he may to clear his orchard, they will always remain open to infection from the trees of negligent neighbors.

In Tasmania—which now exports immense quantities of apples—an act of legislature was passed a few years since which compelled owners under penalties to clear their orchards of destructive insects and keep their trees in a healthy condition.

W. R. GILBERT.

Want San Jose Scale Stamped Out

A deputation of fruit growers waited upon the Hon. Mr. Monteith, Minister of Agriculture, a few days ago and asked that the Agricultural Department conduct a series of experiments in the Niagara district, in order to ascertain the best method of combating the black rot in grapes and the San Jose Scale. They asked, also, for assistance in purchasing spraying material, and for the establishment of an experimental fruit station in the district.

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Geo. H. Greig, Secretary Manitoba Live Stock and Dairy Association.

Some Live Topics from Western Canada

Manitoba Shorthorn Breeders Take a Firm Stand

Manitoba Shorthorn Breeders

The meeting of the Western Shorthorn Breeders, called by Mr. E. R. James to discuss the subjects mentioned in his letter published in *THE FARMER* and the *World* on Feb. 15th, was largely attended. The discussions were animated, especially with reference to the apportionment of grants to shows by the Dominion Shorthorn Association directorate. One criticism was that the election of the executive was cut and dried and that the Manitoba representatives had no voice in the election. Some present wanted to form a provincial association, but in view of the unanimous decision to nationalize the records action was deferred. The following resolution passed unanimously shows the feeling of the meeting in regard to nationalizing the records:

"Resolved that in the opinion of this meeting of Shorthorn breeders of Manitoba, it is absolutely essential to the future welfare of the interests of the breed in Canada that the Dominion Shorthorn Breeders' Association should be nationalized, and that the head office be moved to Ottawa;

"And further, be it resolved that if the controlling body of that Association refuse to nationalize the Shorthorn records, that a meeting be convened at the earliest possible date, of representatives of Shorthorn breeders of the Northwest Territories, British Columbia and Manitoba, with a view to organizing a national Shorthorn herdbook, under the provisions of the Act governing live stock records."

Another important resolution urged upon the Dominion Shorthorn Association was that they remove the present barrier against some of the best British Shorthorns, and make easier the improvement of our Canadian Shorthorn herds by changing the requirements of the rule that all British Shorthorns shall trace to Vol. 20 Coates', to read Vol. 30 Coates', and that five or ten years hence the mark shall be Volume 35 or 40 Coates', and so on, similarly at set periods, depending whether a quinquennial or decennial period be decided upon.

The reasons advanced for this change are that under present regulations many first class animals, including prize winners in England, are ineligible for registration in the Canadian herdbook, and that the supply of eligible bulls, owing to large buying by the Argentine and other countries is every year becoming more limited. To keep up the standard of Canadian breeds it is necessary to widen the record so as to take in more animals of proven merit.

Manitoba Breeders

The week of February 20th was breeders' week in Winnipeg. The annual meetings were well attended and considerable interest shown in the future development of the Prairie Province.

The important discussion at some of the meetings was the nationalizing of the records. The cattle breeders passed a strong resolution endorsing the scheme. At the horse breeders' meeting the "weaknesses of the Lien Act" were discussed. One of the weaknesses is that it does not compel the enrollment of stallions, and recognizes studbooks of doubtful standing. The cattle breeders showed considerable interest in the Territorial market for pure-bred stock, which field was being canvassed thoroughly by the Ontario live stock associations. It was felt that something more should be done to advertise Manitoba stock in the Territories. The Cattle Association also passed a resolution asking that more be done to encourage live stock at the Brandon Experimental Farm. The sheep and swine breeders discussed more the practical side of sheep and swine husbandry.

Secretary Greig's report of the work of the associations was very satisfactory. He stated that the supply of bacon hogs in Manitoba was increasing rapidly. Live Stock Commissioner Hodson, J. H. Grisdale, Ottawa, and others addressed the meetings.

The following officers were elected for the different associations:

HORSE BREEDERS

Pres., Stephen Benson, Neepawa; Vice-President, W. G. Washington, Nings. Representatives of Breeds—Clydes, A. Graham, Pomeroy; Shires, J. J. Whiteman, Boissevain; Percherons, Lowe, Killarney; Hackneys, John Wisheart, Killarney; Coachers, Dr. Stephenson, Carman; Thoroughbreds, R. I. M. Power, Carberry; Standard-bred, Dr. Little, Winnipeg; Suffolk Punch, Graham Galbraith, Brandon. Representative to Winnipeg Fair Board, Dr. S. J. Thompson, Winnipeg; Brandon Fair Board, Henry Nichols.

CATTLE BREEDERS

Pres., J. G. Barron, Carberry; 1st Vice-Pres., A. Graham, Roland; 2nd Vice-Pres., Hon. W. Clifford, Austin. Representatives—Shorthorns, E. R. James, Rosser; Herefords, Bing, of Glenella; Aberdeens-Angus, S. Martin, Rounthwaite; Galloways, Wm. Martin, St. Jean; Holsteins, M. Oughton, Stone-wall; Ayrshires, W. Champion, Reaburn; Red Polled, H. V. Glendinning, Bradwardine; three additional directors, Stephen Benson, John Graham and R. C. Henders. Representatives to fair boards—Winnipeg, James Bray; Brandon, Wm. Chalmers.

SHEEP AND SWINE BREEDERS

Pres., Dr. S. J. Thompson, St. James; Vice-Pres., W. E. Baldwin, Manitoba. Directors, representing swine breeds—Berkshires, J. A. McGill, Neepawa; Yorkshires, Waldo Greenway, Crystal City; Tamworths, R. S. Preston, Pilot Mound. Directors representing sheep breeds—Cotswolds and Leicesters, Geo. Allison; Shropshires, J. C. Stuart, La Riviere;



Stephen Benson, President Manitoba Horse Breeders' Association.

Oxford Downs, Alex. Wood, Souris; Southdowns, W. W. Fraser, Emerson. Representatives to Winnipeg Exhibition Board, W. G. Styles, of Rosser.

Territorial Sheep Breeders

The Territorial Sheep Breeders' Association held its annual meeting at Maple Creek. The meeting passed a resolution asking the government to impose a duty on all classes of wool entering Canada that are produced in this country; the meeting also asked that fine wools be removed from the free list, and that wool rags should be subjected to a duty of 10 cents per pound, and shoddy 25 cents per pound. The officers for 1905 are:

President, G. W. Quick, Maple Creek; First Vice-President, J. A. Turner, Calgary; Second Vice-President, Bryce Wright, De Winton; Directors J. D. Wilson, Forres; Jas. McNaig, Lethbridge; S. W. Paisley, Lacombe; Fred Grant, Walsh; Ed. Fearon, Maple Creek; Auditor, F. Exham, official auditor.

Winnipeg Fair

The Winnipeg Industrial Fair had a successful year in 1904. After paying some \$15,412.84 back debts, the association has a balance on hand of \$3,508.39. The city expended \$55,000 on buildings for the Dominion Exhibition. The total attendance for the ten days was 309,000. A rather curious feature to easterners is an expenditure of \$20,000 for horse races alone. In fact the total appropriation for horse races is equal to the total prize list for other classes, including live stock.

Preparing for the Dominion Fair

The citizens of New Westminster, B.C., are beginning to exert themselves in regard to the Dominion exhibition to be held in that city next fall. The fair grounds will be enlarged and the accommodation, especially for live stock, greatly improved. Last year there were 910 animals on the ground, and it is expected that the number this year to provide for will equal 2,000 head. An effort will be made to secure the Governor-General to open the exhibition.

Live Stock Judging Schools

Beginning on Feb. 20th and to be continued till April 1st, a series of live stock judging schools is being held in the Northwest Territories under the auspices of the Territorial Department of Agriculture. The instructors and speakers at these schools are Robert Ness, Howick, Que.; C. M. MacRae, Ottawa; C. R. Cottrill, Milton, and M. D. Geddes, Calgary.

Manitoba Dairymen

The Manitoba Dairy Association met in convention at Winnipeg on Feb. 24. Secretary G. H. Greig, in his report,

stated that the industry in Manitoba seemed to be undergoing a period of depression, owing to the popularity of wheat farming. The advisability of taking steps to institute travelling dairies was raised in order to arouse more interest in the business.

The officers elected for 1905 are: President, Mr. W. B. Gilroy, Austin; First Vice-President, J. Ring, Crystal City; Second Vice-President, W. M. Champion, Reburn; Secretary-Treasurer, Geo. H. Greig, Winnipeg. Directors, Messrs. Steel, Glenboro; Munroe, Winnipeg; Murray, Winnipeg; Beavis, Cartwright; Black, Winnipeg. Representative on the Winnipeg Board, W. B. Gilroy.

Alberta Dairy Meeting

A meeting of delegates from the Government creameries in the Northwest was held at Calgary on Feb. 10th at the request of Dairy Commissioner Ruddick, to discuss the creamery situation in general and to receive suggestions as to the general management of the creameries. Mr. Ruddick in his address stated that since the Government started the creameries in the Territories in 1896 over 5,000,000 lbs. of butter had been made, netting the sum of \$1,005,490.54. The average price for the summer season varied from 17.09 cents in 1897 to 20.98 cents in 1904. The average cost for making was 3.61 cents per pound. Creameries cannot be self-sustaining on a manufacturing charge of 4 cents per pound until the annual output is 40,000 lbs. per annum. British Columbia, the Yukon and the Orient were the chief markets for the butter.

Mr. Ruddick stated that his Department would continue to manage the creameries for another year at all events, but he advised further organization in order that the business could be carried on jointly by the creameries whenever the Government found it necessary to withdraw from the work.

Western Dairymen Appoint Instructors

The directors of the Dairymen's Association of Western Ontario met in London on Feb. 28th. Supt. Putnam was present to discuss the work of instruction for the coming season. It was

decided to employ ten instructors, seven for cheese, two for butter and one for both. The following nine men were chosen, the tenth to be chosen later:

J. Scott, Callaghan; C. C. Travis, Eden; F. Hens, Strathroy; Alex. McKay, St. Marys; James Burgess, Strathroy; Robert Greene, Trowbridge; Frank Hoops, Dorchester; C. W. McDougall, Guelph, and Fred Dean, Strathroy.

A special committee was appointed to wait on the Hon. Mr. Monteith to discuss the work of the Association. A resolution was passed showing the board's appreciation of the services and ability of the Hon. John Dryden, ex-Minister of Agriculture.

A Good Cow of Fifty Years Ago

In an American farm journal of fifty years ago, the following lines descriptive of a good cow appeared. It will be interesting to compare them with what the 20th century cow ought to be:

"She's long in the face, she's fine in her hump,
She'll quickly get fat, without cake or corn;
She's clean in her jaws, and full in her chine,
She's heavy in flank, and wide in her loin.


She's broad in her ribs, and long in her rump,
A straight and flat back, with never a hump;
She's wide in her hips, and calm in her eyes,
She's fine in her shoulders, and thin in her thighs.

She's light in her neck, and small in her tail,
She's wide in her breast, and good at the pail;
She's fine in her bone, and silky of skin—
She's a grazer's without and a butcher's within.

"Wake Up"

Wake up! gentlemen! Wake up! Take the up-to-date FARMING WORLD. Every issue gets better and better; you are missing a lot of good solid information.—Salem Franklin, Norfolk Co., Ont.

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Tubes and inaccessible corners are breeding beds for bacteria. That's why there are none in the Melotte.

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In this no chance taken, but guarantee only—
"London" springs of wire, rolled, not knitted. (warranted by the makers.)
These strands or girders, each to each, so solidly secured by this machine, with tough steel wire automatically prepared or spaced. Thereby produce a barrier so perfect that well do ye exclaim, "Eureka!"
"This London Fence Machine no equal hath on this broad earth,
"That doth in speed or perfect product bear comparison."

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The Ottawa Winter Fair

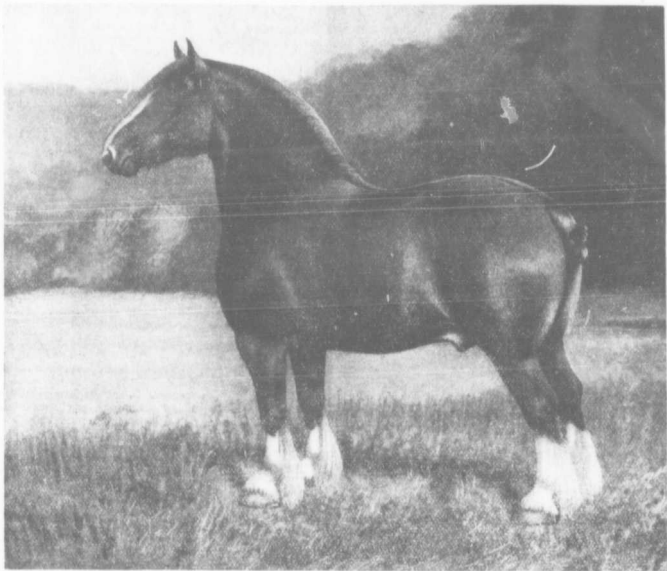
The Eastern Live Stock and Poultry Show was held at Lansdowne Park, Ottawa, March 7-10, and while under some disadvantages owing to the second disaster to the pavilion and the consequent absence of horses, still it put up a creditable showing, both in entries and attendance. The presence of the "ponies" at last year's show, together with the National Live Stock convention, made things in general a good deal livelier at the meeting of 1904, but in the classes shown the rule was larger entry lists, with better general quality. In the

FAT STOCK

classes the contest was between good ones. Jas. Leask, of Greenbank, had out a string of choice ones; W. C. Edwards & Co., had strong and classy representatives of the Pine Grove Short-horn herd, and Jas. Wilson & Sons, of Fergus, Ont., were also to the front with

were of a kind that made them well worth the placing they got, and it only requires a little competition to show the public what a breeder Col. McKee really is. In grades, the competition, though not represented by the numbers out at Guelph, was good and strong. Jas. Leask was on deck as usual, with a splendid roan fellow, and got first place. D. B. Scott, of Fergus, came second. Leask third again, and T. J. Graham, of Mossgrove, fourth—a good strong class, the centre of keenest interest. Leask again scored one and two with a splendid pair of yearlings, and the show would have been a poor one without the western men, for it was Jos. Lind-say, of Fergus, who got third, with Geo. Armstrong, of Speedside, fourth. In three-year cow or heifer, Jas. Wilson & Sons, of Fergus, got 1st on a beautiful heifer, and it began to look as if that carload of live stock that came

ably choice ones, while Geo. Stewart, of Burford, in bacon hogs, was the leading winner. R. Reid & Co., of Hintonburg, exhibited a lot of excellent Tamworth swine. J. Richardson, of South March, won first and second in sows 6 months and under 9, and A. M. Stewart, of Dalmeny, Ont., was placed in a few classes, the majority of the prizes going to R. Reid & Co., of Hintonburg, their stock being of fine quality and from imported stock. In Berkshires W. Wilson, of Brampton, had a good pen out, getting second and third on sows 6 months and under 9, first, second, third on sows under 6 months, second on barrow under 6 months, with Reid & Co., first on barrow under 6 months, first on sow under 9 months and fourth on sows under 6 months. Bacon pure-breds for export, J. E. Brethour got first and second, Reid & Co. third, with Stewart, of Dalmeny, next in line. In grade bacon hogs G. Stewart, of Burford, landed first and second, with Wilson, of Brampton, third. Best carcasses,



Clydesdale Stallion, Premier Prizes (10245), a son of Prince Alexander (8699), dam Mars of Myston (12865). He is a fair representative of the stock which Alex. Galbraith & Son have on hand both at Jamesville, Wis., and Brandon, Manitoba.

a fine heifer, which showed the careful fitting that has landed them once at least the championship at Guelph Winter Fair in 1903. In most classes of live stock better fitting was noticeable, the fat and export steers showing a closer approach to "finish" than last year. In two-year Short-horn steers Mr. Joseph Armstrong, of Speedside, Ont., had it all his own way with two very nice breedily-looking animals and also first in yearlings. Pritchard Bros., of Fergus, got the red for Short-horn steer under one year. W. C. Edwards & Co. in three-year cow or heifer, had to beat a good hard one from the stable of Jas. Leask, but the former firm had it their own way in heifers of all ages, having a splendid string out that did a lot to make the show worth coming to see. In Galloways, the herd of Col. McRae, of Guelph, were the only exhibits, but they

down from Guelph would wear lots of color on the return trip. Leask came second in this class, with R. Reid & Co., of Hintonburg, third. In two-year heifers Leask stood first, with J. Armstrong, of Speedside, second. Leask was again first and second in yearlings, and won the championship with his yearling red and white steer. In export steers there was some competition, but the prize went to Jas. McQueen, of Elora, second to Jas. Leask and third and fourth to T. Graham, of Mossgrove. In

SWINE

the bacon breeds were in preponderance, and excellent pens were shown by a few of Ontario's leading breeders. J. E. Brethour, of Burford, Ont., had out a number of fine and uniformly useful types. Jas. Wilson & Sons, of Fergus, were also out with a few remark-

able ones, some change in placing. Brethour got sweepstakes, Reid & Co. second and third. Stewart, of Burford, one, two, three in grades; Brethour winning sweepstakes lots in living and dead hogs.

SHEEP

The entry list in sheep was not a large one, but the competition was often close, especially in the Shrops, of which good representatives were sent by Lloyd-Jones Bros., of Burford, and W. C. Edwards, of Rockland. There were excellent pens of ewes, and strong competition in wethers. Lt.-Col. McCrae showed Cotswolds. In Oxford's J. A. Richardson, of South March, and J. A. Jull, of Guelph, were out, the former getting the bulk of the prizes. W. C. Edwards & Co. had rather the best of it in Shrops, while Lloyd-Jones had one first. (Continued on Page 247.)

In the Dairy

Don't Make Fodder Cheese

The Montreal Produce Merchants' Association has issued its annual circular to the dairymen of Canada, repeating and emphasizing its former objection: "That the manufacture of fodder cheese is detrimental to the interests of all and should be discontinued."

The circular then continues: "The experience of the past has shown that for the most part cheese made from fodder milk is not of a quality good enough to enhance the reputation of Canadian cheese or increase its consumption by the British public. Further, it has been found that on the average the quantity of cheese produced during our grass season is about as much as can be consumed at prices profitable to the producer."

"The Association appreciates the fact that the disposal of milk produced before the opening and after the close of the cheese season is an important question, but in view of the improved methods introduced in the manufacture of butter in recent years, and the superior quality now produced from fodder milk with increased demand at remunerative prices, the British public, in a confidential recommendation that wherever possible butter should be manufactured instead of cheese during the winter season, or say from the 15th November to the 1st of May."

The Farm Separator Pays

That the farm separator pays is well shown by J. F. Breen, a well known Wisconsin dairyman. He makes the following comparative statement as to receipts from the whole milk and farm separator system:

"In the spring of 1901 we had on our farm a herd of grass cows, and standard cows here given us for the month of June of that year for milk taken to a creamery in comparison with the same month in 1902 for cream from a hand separator. For the month of June, 1901, our six cows gave an average of 172 pounds of milk per day, or 5,160 pounds for the month. This milk tested 4.2, which gave us 216.72 pounds of butter, which sold at 20 cents a pound, bringing an income of \$43.34 for the month, of \$7.22 per cow. For making and selling the butter the creamery company charged 2 cents per pound and the over run.

"In June, 1902, we had the same herd of cows that gave an average of the same amount of milk, i.e., 172 pounds daily, or 5,160 pounds for the month. This we separated with a separator, skimming out 17 pounds of hundred, or 872 pounds of cream for the month. We sent the cream to the same creamery where we had sent the milk the year before. This they made into butter and sold for the over run, a saving of 2 cents a pound. The cream testing 30, giving us 263.1 pounds of butter, or 46.44 pounds more butter than was made from the same quantity of milk the year before. This increase, if sold at 20 cents, the price of the year before, would give us \$9.28; but because of the saving of 2 cents per pound in making, sold for 22 cents, another saving on the 263.1 pounds of butter of \$5.26, making a total saving of \$14.54 for the month; or, in other words, those six cows made for us in the month of June, 1901, without a separator, \$43.34, and in June, 1902, with a separator, \$57.88, or an increase of \$14.54 per cow. That is, the separator made our income increase in our income of 35 per cent."

This is only the money received from butter alone. When the difference in

the feeding value of the skimmed milk when fed right from the separator, warm and sweet, and milk that has stood in a sour, dirty tank, and then drawn several miles on a hot day, we must add another sum to the farm separator's credit.

Care of Milk in Winter

If the cow be kept clean and the milk be drawn in a cleanly manner into a clean pail by a clean person and be removed shortly after straining from the barn, there is no reason why winter milk should have a "cowy odor." This "cowy odor" is usually caused by filth which drops into the milk during the milking, or is absorbed by the milk from the foul air in the stable.

Milk should be removed from the stable before it cools to the temperature of the stable air; otherwise it will absorb taints rapidly.

After straining the milk does not usually require any special cooling other than that which takes place from the cold air, if it be stirred occasionally to prevent the cream rising and to insure uniform cooling throughout the whole mass of milk. It is also necessary to prevent the milk freezing in order to obtain the best results.

If sent to a winter creamery, it should be delivered as least three times a week. If manufactured on the farm, it should be made into butter as soon as possible after it is drawn from the cow. The longer that milk is kept before being made into butter, the poorer will be the product.—Prof. H. H. Dean, O.A.C., Guelph.

Guelph Dairy School Notes

During the school term we aim to conduct a limited number of experiments chiefly for the benefit of the students. In February a number were conducted that are of interest to dairymen.

IN THE DAIRY STABLE

The experiments with cows receiving 4, 8 and 12 lbs. of meal per day will not finish until the end of March, but the general results indicate that about 8 lbs. of meal per day is sufficient for the average cow giving three to four gallons of milk daily.

Two calves on hay, silage, skim milk, bran, oats and oil cake gained 101 pounds in 21 days during February. Two other calves fed on a similar ration except that the oats and oil cake were replaced with "Blatchford's Calf Meal," gained 76 pounds in 21 days.

IN THE TESTING ROOM

The use of an 18 c.c. pipette for sampling cream produces relatively lower results in ripe than in sweet cream. Where the Babcock test is used it places a premium on sweet cream.

There is a strong desire on the part

of owners of cream gathering creameries to have the spring balance made a legal scale. We have used one of these for weighing milk in the dairy stable for about fourteen years. In a recent test it was only once ounce short on twenty pounds. So far as we can see there is no objection to its use.

CHEESE MAKING

In cutting curds at different stages of firmness we found that cutting a curd very carefully when slightly tender gives the best results.

Three brands of cheese color were tested and found to be all of equal strength and the general results were alike, so far as could be determined by examining the curds. The cheese are too green for testing at this date.

FACTORY BUTTER

Pasteurization of ripened cream at 185 degrees F. vs. heating of similar cream to 130 degrees F. The cream was a mixture of cream-gathered and that obtained from whole milk. It contained 35 per cent fat. The cream was allowed to ripen naturally for 24 hours. The acidity was .54 per cent and the flavor was poor and typical of this class of ripening. Half of the cream was pasteurized at 185 degrees F. and the other half was heated to 130 degrees F. The Farrington Pasteurizer was used in both cases and the covers were left off. The flavor was improved in each case by the heating. The cream was cooled to 52 degrees and churned 18 hours after this treatment. No culture was added and practically no further development of acid took place in either cream.

When the butter was examined a few days after being made there was a difference of opinion as to which was of better quality. When examined again in about two weeks' time there was still a difference of opinion as to the relative value of the two samples. Most of the judges thought the butter made from heating to 185 degrees F. was "cleaner" in flavor. Both lots were inferior butters.

FARM DAIRY

Several trials were made, comparing temperatures of 75 degrees F. and 95 degrees F. for separating milk with the hand machines and it was found that the loss of fat in skim milk was nearly double by running the milk through at the lower temperature. In most cases the milk was "old" and the loss greater than would be the case with fresh milk. However, these tests indicate the importance of having the milk at a temperature of 85 to 95 degrees in winter for good results.

From experiments conducted Miss Rose is of the opinion that the ripening of cream is not an important factor in the length of time required for churning, and if the churning temperature be properly controlled very little extra loss of butter is obtained in the butter-milk.—Prof. H. H. Dean.

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The Songs of Earth

The songs of earth are not all sung
 Not while a human heart may beat
 The measure of love's cadence sweet:
 Not while a woman through life's pain
 Can rule her lips to smile again:
 Not while a man who toils alone
 Earns bread and leaves the tempter's
 stone:
 Not while earth's children wake to cry
 Until they hear a lullaby.
 No, no, the songs are not all sung,
 Love's language ever finds a tongue.

The Wife of Our Governor-General

(Canadian Good Housekeeping.)

THE home life of the family now resident at Rideau Hall is an exceedingly happy one, and circles about one gracious and womanly figure—the centre of admiration, love and devotion, Her Excellency the Countess Grey. And none better deserves this affection and devotion than does the beautiful mistress of Government House, for hers is a nature bright, thoughtful, tactful and sympathetic.

One's first impression upon meeting Her Excellency is of her lovable womanliness—her gracious and charming femininity—and this impression is strengthened with each time of meeting. Greeted with kindly courtesy and unaffected naturalness, one immediately feels at ease in her presence, while her real and personal interest and her tender thoughtfulness for others at once win the heart.

Lady Grey is extremely fond of children, and is very good to the little ones connected with the vice-regal household. In fact, all who are connected with the household have already followed the example of the tenants at home, and are devoted to Her Excellency, who takes a warm and personal interest in their doings and pursuits.

Lady Grey is a charming companion, bright, clever and intensely sympathetic. She possesses a keen sense of humor, and an enthusiastic appreciation of life. Her daughters adore her, for she is to them companion as well as parent, sharing their pleasures and enjoyments, their sports and their pastimes.

Her Excellency's particular hobby, though not her only one, is horticulture, and she is especially fond of landscape gardening. She loves plants and flowers and has a real and scientific knowledge of them. Yet it is noticeable that while her predecessor, the Countess of Minto, was seldom seen without flowers to wear or carry, this is by no means the case with the present chateleine of Government House and her daughters.

Lady Grey is a very talented artist, and her rooms at Rideau Hall are full of beautiful works of art from her own clever brush. Another of her accomplishments is enameling, and the dainty green enamel butterflies which her daughters often wear are bits of Her Excellency's handiwork. She is very fond of music, and is a skillful pianist, as is her youngest daughter, the Lady Evelyn Grey. To these she adds another accomplishment in that she is

an excellent sick nurse, and her intelligent knowledge of that art combined with her common sense and practical business ability, make her counsel invaluable in organizations for hospital work or district nursing. She has already visited the various hospitals of the Capital, and also of Montreal and has given evidence of her great interest in the work of the Victorian Order of Nurses. Her excellent business capacity makes her a valued addition to all charitable and benevolent organizations, and she is by no means chary of her aid and patronage whenever the cause is a deserving one.

But Lady Grey is not admired only for her qualities of mind, her accomplishments and her charming personality. She is a beautiful woman. Her features are becoming familiar to Canadians through her photographs, which, however, hardly do her justice. In figure

she is above the medium height, with a stately and dignified bearing, quite free from the slightest suspicion of laughtiness. Her hair, in shade a light brown, is abundant, and always carefully and becomingly arranged. Her eyes, too, are brown—hazel-brown—and very expressive and her smile is particularly winning. Her complexion is exquisite, with the freshness and delicate texture of a child's, and its softness is enhanced by the dainty touch of creamy lace which she usually wears at her throat, for Lady Grey, as an artist should, thoroughly understands how to dress.

The world is a looking-glass,

Wherein ourselves are shown,
 Kindness for kindness, cheer for cheer,
 Coldness for gloom, repulse for fear.

To every soul its own.

We cannot change the world a whit,
 Only ourselves which look in it.



Her Excellency, Countess Grey.



Stuck Fast.

Two Nights On a Snowbound Train

By Neil Mack

THE newspapers have been telling of blockaded railroads in various parts of Ontario, and particularly in Nova Scotia and New Brunswick. Twenty feet of driven snow across the railway track is an obstruction that even the most powerful snowplow can do little against, and when the engine and plow have gone as far, and with as much force, as they can, there is nothing for it but to stay there till the road is cleared or till assistance comes from the nearest station. Snow is a hard fighter; in January an engine on one of the Nova Scotia railways was run at full speed into a heavy drift, and the result was that another engine went down and brought her back—a wreck.

Reading some of these reports of storms and blockades brought to mind an experience of my own a few years ago, when the train on which I was travelling stuck fast in a drift, and was held "or nearly forty-eight hours. It was on one of the eastern roads and in the month of February, just after a heavy snow and wind storm had swept across the country from the Atlantic. "Bad weather for travelling" was what everyone said, and there was reason to think so before the journey was over.

We had gone some twenty miles, with increasing difficulty, when in an open stretch of farm country the engine and snowplow came to a stop and could be forced not a foot further. A drift of snow nearly as high as the plow itself effectually blocked the way. It was then about the middle of the afternoon, and when the word was passed through the passenger car that we were stalled, we prepared to spend the night as comfortably as possible. There were fifty or more passengers, mostly men, but including also several ladies and children.

By five o'clock everyone was hungry. But the supply of eatables was limited. From under the seats a half-dozen or so lunch baskets were brought out, which were no more than sufficient for the women and children. For the rest

of the party the resources of the news agent were drawn upon, but all he was able to furnish were some oranges and fancy biscuit. It was a light supper, and even then something must be left for next morning.

We all became very neighborly. Before, we neither knew nor cared to know one another, but now that we were "in for it," as one of the boys said, we soon became as intimate as if we had all been next-door neighbors. It was a miscellaneous party, but everyone was disposed to make the best of it. For what else could we do?

And, after all, we had a very good time that evening; at least we would have thought so had it not been that we were snowbound. We all organized ourselves into an entertainment committee. Two or three of the gentlemen read some short stories aloud; a quartette of two violins, a mouth organ, and a jew's harp was organized and did good service, while everybody who could, sang; then some games were produced and finally several of the men exchanged travellers' tales, some of which were truly wonderful. By this time, the younger folks had fallen asleep, and one by one we all picked out a place for the night. There was not much choice; the car seats were all alike, and we could do no more than pile up our coats for bedding and our valises for pillows.

In the morning we woke to find that through the night the storm had filled in the track behind us as well as ahead of us, so that we were more effectually stuck than ever. It was not a pleasant prospect for the day. But something to eat was our first concern. The little left over from the night before would make but a mouthful for half a hundred persons. Four of the men volunteered to tramp across the snow, on snowshoes found in the baggage car, and get a supply of food at the nearest farm house. They returned several hours later with bread, butter and milk, which were received almost as gladly as timely succor would be received by a famished garison.

At noon two engines, with snowplow and crew of shovellers, reached us from behind. Other engines followed, until

there were five in a line. But before they could push us ahead, the snow bank in front must be shoveled away, and the "wreckers" at once set to it. Meanwhile, the fireman was having difficulty in keeping steam up in our own engine; the water was exhausted, and in place of it the train crew fed the engine with snow.

All the rest of the day, the shovellers persevered in their almost hopeless task; and all day long we in the car tried to be cheerful. The day before, there had been some snowdrifts in our experience, but this had gone now, and at six o'clock, with still no sign of release, we prepared for another night on the car. The second night was much like the first, only that the supply of oil gave out and the car was left in darkness.

We were stalled on Wednesday afternoon; late on Friday morning the road was cleared, and the train succeeded in getting away. It was none too soon, for, with all our supplies exhausted, another night would have been almost unbearable. You may be assured that every one of the fifty passengers was thoroughly glad when the end came to our imprisonment. As for myself, while I have never since been on a blockaded train, I have had a wholesome respect for snowbanks.

A Use for Old Newspapers

Here is a hint that the writer got from the head clerk of a big hotel. We know the germs that lurk in dust, and how disagreeable, as well as unhealthy it is to inhale it while sweeping. Now the way that the carpet sweepers at this resort keep down the dust while wielding the broom, is to wet newspapers, wring them out slightly, and tearing them into small pieces, scatter them all over the surface they are going to sweep. The little dampening brightens the carpets without injuring them in the least, and the moist paper effectually keeps down the dust, or at least the greater portion of it, by catching it on itself. The paper is then burnt, which is the quickest and neatest way of getting rid of it. When brussels carpets have become somewhat dingy, the water in which the paper is wet might have a little turpentine added to it, as it has a refreshing and brightening effect, and has a tendency to keep the carpet free of insects and moths.

One way to prevent the dust from entering the throat and lungs while sweeping, is to tie a small sponge over the mouth and nose. A person can breathe all right through the porous sponge, and it takes up the dust which would otherwise be inhaled.

"Clean"

One man can say a word and it is as superficial as a saucer, another man can use the same word and it is as profound as possible. I heard a scavenger say the other day, when he had swept a street, "Now, I think it is clean," and the very next day I heard a surgeon say the same thing, "You must have your instrument clean, but I don't think the scavenger and the surgeon used the word with precisely the same meaning. When a surgeon uses the word "clean" he uses it with almost incredible intensity. When a scavenger uses that word he means something quite different from the scavenger. They are both employing the same term, but one with almost incredible depth of power, and the other with a considerable amount of shallowness.

Well, an one can use the word "virtue," but the meanings are divided by an infinite gulf.

THE BOYS AND GIRLS

A Song of Snow-Time

Sing a song of snow-time
Now it's passing by,
Million little fleecy flakes
Falling from the sky;
When the ground is covered,
And the hedg, and trees,
There will be a gay time
For the chickadees.

Boys are in the school house,
Drawing on their slates
Pictures of the coating place,
And thinking of their skates;
Girls are nodding knowingly,
Smilingly about,
Thinking of a gay time
When the school is out.

Three o'clock, four o'clock,
Bang! goes the bell;
Get your hats and cloaks and wraps,
Hurry off pell-mell!
Bring along the coasters all
If you want some fun;
Up to the hill-top
Jump and slide . . . run!

Steady now! Ready now!
Each in his place!
Here we go, there we go,
Down on a race!
Sing a song of snow-time,
When the flakes fall;
Coast-time, skate-time,
Best time of all!

The Mysterious Player

"Molly," mamma called, softly, "don't, dear! Baby's just beginning to get sleepy."

The sharp little patter of trills and scales on the piano kept on, undiminished.

"Molly, stop playing at once!" Mamma's voice had the ring of command in it, but the patter of notes still continued. She did not dare to move, for baby's eyes were narrowing drowsily to little blue slits, and they must not fly open again. When at last the noise stopped, they were shut, and baby had landed on Noddle's Island after a long trip on a "choppy" sea.

Molly tiptoed into the room. "Molly," mamma said, gravely, "didn't you hear me tell you to stop drumming on the piano?"

"Why, I never, mamma!" whispered Molly, surprised, "haven't been in the music room at all!"

"Then it must have been Faith, but it didn't sound like her. She really plays little tunes?"

"Faith's out in the hammock, mamma."

"Why!" mamma said. "And the boys are gone. Who could—Hark!"

The patter of notes again, running up and down the keyboard. Molly's eyes grew big with astonishment.

It was a queer little tuneless jig, with rests and "andantes" and "fortissimos" playing tag through it, and A flats and B sharps stepping on each other's heels.

Then it stopped short. Mamma held out her hand to Molly, and they stole part to the music room door together. No one there. Peter Purr lay curled on the sofa in a doze, not looking at all as if he had just seen a ghost. So the queer little mystery stayed undiscovered until, a day or two after, Molly suddenly stepped right into the middle of it. She

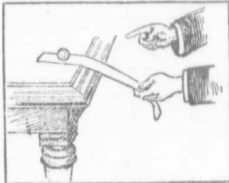
was hurrying through the hall when she heard the piano "going" again in the funny way.

"O, my!" she thought. "There 'tis playing on itself again—why-ee!"

For she had stopped at the door, and there was Peter Purr playing a tune all to himself! Peter Purr! Who ever would have thought? Molly stood and watched him do it. He leaped from the piano stool to the keyboard, and whisked lightly back and forth, in great delight at his own music. His soft, padded toes stuck the notes gently and made funny trills and quavers. Over and over again the tune played under his feet, and then it came to a sudden end. Peter Purr leaped down to the floor, and before Molly could unscrew the little round "O!" of astonishment her lips made, he was fast asleep on the sofa.

The Standing Coin

Take a long, narrow strip of paper and upon it place a five cent piece in an upright position, as shown in the picture. Take the end of the paper in the left hand and strike it rapidly and



forcibly with the right. Give a sudden pull, and you have the paper in your hand, while the coin stands in the position it did before. It would seem as if the coin must fall, but try it, and with a little practice you will be able to accomplish the trick.

Some Good Conundrums

We won't vouch for the novelty of all the following brain-twisters, for no one ever broaches a conundrum in a company but some one has heard it before. However, not one of you have seen all of these:

Why is the letter A the best remedy for a deaf woman? Because it makes her hear.

Why is bread like the sun? Because when it rises it is light.

Which was the largest island before Australia was discovered? Australia.

What trade should be recommended to a short person? Grocer (*grow, sir*).

When is money wet? When it is due (*due*) in the morning and missed (*mist*) in the evening.

What is the difference between the Prince of Wales, an orphan, a bald-headed old man, and the gorilla? The first is an heir apparent, the second has re'er a parent, the third has no heir apparent, and the fourth has a hairy parent.

What is larger for being cut at both ends? A ditch.

Why is a watch dog bigger by night than by day? Because he is let out at night and taken in in the morning.

Under what conditions might hand-

kerchiefs be used in building a wall? If they became brick (*be cambric*).

If Rider Haggard had been Lew Wallace, who would "she" have been? She would have "Ben Hur."

Which is the most dangerous season of the year to walk in the woods, and why? In the spring, because the trees shoot, the flowers have petals, and the bulrush is (*bull rushes*) out.

If the alphabet were invited out to supper, which of the letters would get there late? All those letters which come after "L."

Mother's Way

Whenever I am had all day
Until I'm really shamed to pray,
I wait till mother comes to say,
"Good night, dear child." That's mother's way.

And then, somehow, I don't know why,
I tell her everything and cry.

She hugs me then and tells me away
I feel less sad. That's mother's way.

And mother kneels down by my bed
And pulls my face close to her head,
And we both snuggle down and pray,
That's why I'm glad for: mother's way.

Three Things

Three things to love: Courage, gentleness, affection.

Three things to admire: Intellect, dignity, and gracefulness.

Three things to hate: Cruelty, arrogance, and ingratitude.

Three things to delight in: Beauty, frankness, and freedom.

Three things to like: Cordiality, good humor, and cheerfulness.

Three things to avoid: Idleness, loquacity, and flippancy.

Three things to cultivate: Good books, good friends, and good humor.

Three things to contend for: Honor, country and friends.

Three things to govern: Temper, tongue, and conduct.

Two things to think of: Death and eternity.—Henry Van Dyke, D.D.

Politeness Taught in School

Said the teacher to the grammar class,
To which our boys belong.

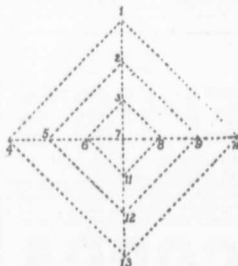
"The horse and cow is in the field,
Now, what in that is wrong?"

"The cow and horse is in the field,"
Spake one in manners versed;

"Because, you know, 'tis more polite
To mention ladies first."

Try to Solve This Puzzle

The puzzle is to trace over the dotted lines without going over any part of a



line twice until the whole diagram has been covered, the pen to be taken off the paper only once between starting and finishing.

Guests of Every Day

Homely work is mine to-day,
Floors to sweep and dishes to lay,
Plates to wash and clothes to mend;
Work which never seems to end,

Yet I pray,
Not as One to dwell apart,
In the spare room of my heart,
But as one to whom my prayer
May confide the smallest care,

Thus I pray,
Lord, be Thou my Guest to-day!

At the closing of the day,
When once more my heart shall say,
In this busy life of mine:

"All the glory, Lord, is Thine!
Christ, I pray,
Be the Guest of every day!"

Oil on the Coffee

The cup of black coffee had on its surface a little oil. This oil shimmered, it gave forth delicate, changing colors, like oil on water. The man who was about to drink the coffee gazed at it with delight.

"The oil," he said, "tells me all I want to know about the coffee. Now, without tasting it, I am sure it is superb."

"The whole secret of making coffee," he went on, "lies in extracting and retaining this oil. This oil it is which gives coffee its aromatic and delicious taste. This oil it is also which stimulates you, which makes you feel, after you have drunk, strong and gay."

"Good coffee—the kind with oil added on it—can only be made by excellent cooks. In millionaires' houses or in hotels where they employ French chefs, you are likely to get it. But the average housewife does not know how to make this oil kind of coffee at all."

Concerning Molasses

Molasses is the product of sugar cane, which is raised in the south, mostly in the State of Louisiana, says a writer in "Canadian Good Housekeeping." Planting is done in January. Pieces of cane six feet long are planted in furrows a foot beneath the ground. The new cane springs from each joint. In this country, planting is done once in two years. It is a strange fact that in Cuba the planting is done but once in twenty years. The cane grows to the height of eight or nine feet. In October, when the crop is taken, the stalks are cut off a foot from the ground.

In the boiling house, the cane is placed on an endless belt and passes through a set of rolls. These press the juice out and it runs into a tank below. As the partly crushed cane continues on the belt, it is sprayed with water, which gathers the remaining saccharine. It then passes through another and tighter set of rolls, which extract this remainder. After leaving this set of rolls, the cane is crushed to a pulp and is used for fuel. The juice collected in the tank is now boiled to the point of crystallization, when it is placed in a centrifugal pan revolving at a high rate of speed. The molasses is thrown out and the raw sugar stays in the pan. This is known as "firsts," fine in quality and large in grain.

The juice thrown out by the centrifugal process still contains forty to fifty per cent. of sugar. It is mixed with an equal quantity of fresh saccharine, put through another boiling and again placed in the centrifugal pan. By the addition of this fresh saccharine before the second boiling the planter secures a second run of "firsts" sugar. The molasses thrown

Flourfax Fables.

The Young Wife and the Honest Grocer.

A young wife decided to go to house-keeping and do her own marketing.

"Now I want to save all the money I can," she told the grocer.

"I am going to buy just as economically as I can, and I am going to do my own cooking and bake my own bread."

She saw some eggs.

"How much are eggs?"

"Well, we have them at various prices. The best are thirty cents a dozen."

"My, how expensive! Haven't you some for twenty?"

"Yes m'am, but I can't recommend them."

"But we are trying to save money."

"True, but you can't afford to save money on eggs, butter and flour."

"Those are three things you want good and you can't have them too good."

You can save in lots of ways but don't do it on the necessities."

"What is your best flour?"

"Royal Household."

"How much does it cost?"

He told her.

"Have you cheaper flour."

"Yes, cheaper in price but really not as cheap in the end. You see in Royal Household Flour you get the largest amount of flour value for your money."

"What do you mean by 'flour value'?"

"The largest amount of wheat nutriment—of pure flour."

"The cheaper the flour the less nutriment it has in it and the more bran."

"The bran is in all flour till its taken out."

"It's all taken out of Royal Household Flour, and that means the best machinery and the best milling."

"An' another thing, madam, perhaps you haven't heard of the new process used in making Royal Household Flour."

It is purified by Electricity and that seems to make all the difference in the world in flour."

"Everybody wants 'Royal Household' now—they seem to think it is healthier, and I guess it is."

Suddenly she looked suspicious at the earnestness of his argument.

"Don't you make more money on Royal Household Flour?"

"No m'am—not as much as we make on cheaper priced flour."

"Then why do you recommend it?"

"Because when a customer once tries 'Royal Household' our trouble is all over. It sells itself after that and we never have any complaints. If you send to The Ogilvie Flour Mills Co., Limited, Montreal, they will send you the Royal Household Recipes."

"Well; send me a barrel of 'Royal Household' then; and I'll have some of those 30c. eggs too."

FLOURFAX.

Carrots are good for those having a tendency to gout.

out of the pan again goes through this boiling and centrifugal process and the sugar now taken is known as "seconds." After each boiling, the molasses naturally becomes poorer in quality, being robbed of its saccharine strength. The sugar taken out becomes darker and of finer grain. Still another sugar is secured by allowing the molasses to stand in tanks for several months. The sugar remaining is deposited by this method and is known as "thirds." It is so fine in grain as to be almost powder. The molasses having had all the best richness removed is of the poorest quality. Such is the process of making to-day. The planter wants the sugar. Molasses is simply a valuable by-product.

A Codfish Dinner

Hard boil as many EGGS as there are to be persons. Boil potatoes till they are nearly done, slice them out and slice them into a skillet in which thin slices of bacon are crisping. In another dish shred a very little unsoaked salted codfish, cover it with water and cook until tender, and the water has all evaporated. Add a cup of cream to this and turn it over the potatoes and bacon. The salt of the bacon and codfish is sufficient for the dish. A little pepper may be added if desired. To serve, pile the potato on a large platter and garnish with the eggs and parsley.

How Sugar is Made White

The way in which sugar is made perfectly white, it is said, was found out in a curious way. A hen that had gone through a clay mud puddle went with her muddy feet into a sugar house. It was observed by some that wherever the tracks were, the sugar was whitened. This led to some experiments. The result was, the wet clay came to be used in refining sugar. It is used in this way. The sugar is put into earthen jars, shaped as you see the sugar loaves are. The large ends are upwards. The smaller ends have a hole in them. The jar is filled with sugar, the clay put over the top and kept wet. The moisture goes down through the sugar, and drops from the hole in the small end of the jar. This makes the sugar perfectly white.

CABBAGE, PEASANT STYLE—Cook a head of cabbage for fifteen minutes; drain and return to the saucepan with two ounces of butter; simmer till tender, chop and mash, seasoning with salt, nutmeg and pepper; stuff a linen bag two and a half inches in diameter with this and put under a weight until cold; cut down in even slices with a sharp knife, through bag and all, as you would a sausage; dip in egg and crumbs and fry. Dish alone, or serve half of the cabbage mashed and heated with cream in the centre, and lay the slices around it.

Spinach has great aperient qualities and is far better than medicine for sufferers from constipation.

LIQUOR AND TOBACCO HABITS

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SUNDAY AT HOME

A Creed

I believe in human kindness
 Large amid the sons of men,
 Nobler far in willing blindness
 Than in censure's keenest ken.
 I believe in self-denial,
 And its secret throbb of joy;
 In love that lives through trial,
 Dying not, though death destroy.

I believe in love renewing
 All that sin hath swept away,
 Leavenlike its work pursuing
 Night by night and day by day;
 In the grace of its reminding,
 In the glory of its revivings,
 In the glory of beholding
 Its perfection—I believe.

I believe in love eternal,
 Fixed in God's unchanging will,
 That beneath the deep infernal
 Hath a depth that's deeper still!
 In its patience—its endurance
 To forbear and to retrieve,
 In the large and full assurance
 Of its triumph—I believe.

—Norman Macleod.

Getting Ready for Sunday

Old-fashioned mothers used to have a forehanded habit of taking Saturday afternoon as a getting-ready day, in which to see that all necessary preparation was made for the Sabbath. They had learned that he secret of readiness lies in doing as many things as possible beforehand. So the children were called in from their play a long hour or more before "sundown" on the Sabbath. They were sent up to the "spare room" to lay out on the "best bed" there the things that were to be worn on Sunday, for themselves and the younger children.

Provision had to be made for both fair weather and foul, for it was a foregone conclusion that everybody was to go to church, whatever the weather. There were little white skirts with crisp ruffles over which dand hands had toiled, perhaps, but with no thought of drudgery; best hat and Sunday ribbons must come out, and every hook and eye and button be in place; even the handkerchief and Bible were placed ready.

Meanwhile the boys were busy out in the woodshed or up in the barn-chamber. Each pair of boots must have a "Sunday shine." Suits had to be brushed, the torn hat-brim carried to mother to be mended. All this was the boys' and girls' own business. If they forgot or neglected or refused it, there was a mother who would know the reason why.

Have we outgrown the need of such a day of preparation? The house-keeper's Saturday is proverbially the busiest day of the week; the busy school teacher crowds it full of odds and ends for which she can find no other time, while in these days of children's parties one breathless week is allowed to lap into another with no blessed bridge of sleep and rest and preparation, even for the little ones. To our minds this is all wrong.

There is a readiness of mind, as well as of body and apparel, which should be looked out for. The repose of spirit which ushered in the old time Sabbath was in itself a benediction. Work and playthings had been put away, and with them something else that might be call-

ed the week-day spirit. A beautiful leisure seemed to be in the air. There was room for "cuddles," time for loving. Imagine children growing up in such a household hating Sunday.

We have no special measures of reform to offer. We would merely like to suggest that, if Sunday is "the jewel of the week," it shines the brighter for a fitting setting. Many a busy man or woman who has somehow "got out of the habit of churchgoing" would find the way smoothed to getting back into the good old paths by a little purposeful and forethoughtful preparation. That is the point—the purpose. Week-day tasks can be put aside. Week-day recreation may be taught for one day to give place to their betters.

The Sunday heart, in fine, may be put on with the Sunday garment.

He is Near

Jesus is nearer than the seat you sit upon, nearer than the handkerchief that wipes the tears away. He is nearer than the arm of the loved one upon which you lean. Jesus is where you are at this moment. He is passing by. He is going to speak to you. He is going to call you. He is going to lay that wounded hand on your heart to arrest your attention and open your eyes, to awaken new ideas, new loves, new fountains. He is going to touch new springs. He is going to give you a chance. God help you to take it!

Heaven on Earth

Not to one of all the unnumbered generations whose dust is blown upon the desert winds has it been permitted to breathe one syllable or letter of the awful secret beyond the grave. And yet the faith of man has not been shaken, nor, for all the deep, unbroken silence, has he ever ceased to believe that He who called us into being will bless, will save, will cherish the souls which He hath made. And all Christians have dwelt with rapture on the glowing symbols of the poet of the Apocalypse. Yet even these passages do not thrill the hearts so keenly as others, which simply tell of a life without life's agonies and the vision of God undertaken by mistis of sin. If we desire heaven we must seek it here—if we love heaven we must love it now. Heaven means holiness; "Heaven means principles. Heaven means to be one with God.—Frederic W. Farrar.

A Prayer

O my God, Thou, and Thou alone, art all-wise and all-knowing! I believe that Thou knowest just what is best for me. I believe that Thou lovest me better than I love myself, that Thou art all-wise in thy providence and all-powerful in Thy protection. I thank Thee, with all my heart, that Thou hast taken me out of my own keeping, and hast bidden me to put myself in Thy hands. I can ask nothing better than this, to be Thy care, not my own. O my Lord, through Thy grace I will follow Thee, whithersoever Thou goest, and will not lead the way. I will wait on Thee for Thy guidance, then will I act in simplicity and without fear. Amen.



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Improved Steel Frame.	8 1/2 - 9 1/2 - 10 1/2 - 11 1/2 - 12 1/2 - 13 1/2 - 14 1/2 - 15 1/2 - 16 1/2 - 17 1/2 - 18 1/2 - 19 1/2 - 20 1/2	8 to 20

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IN THE SEWING ROOM

May Manton's Hints

SHIRT WAIST 4951

Fresh variations of the shirt waist are constantly appearing, and always are met with enthusiasm and favor. This one is eminently attractive and can be utilized for all waistings, washable ones unlined or those of silk or wool over the fitted foundation. As illustrated, however, it is made of white Mar-rias, held by pearl buttons. The tucks are stitched to yoke depth only, so providing soft fullness below, and the closing is made through the regulation box plait. The sleeves are the new ones that are full at both shoulders and wrists and are finished with pretty shaped cuffs.

The waist consists of the lining, fronts and backs, the back being drawn down in gathers at the waist line, while the fronts are made to blouse slightly over the belt. The sleeves are made in one piece each and the neck is finished with a regulation stock.

TUCKED BLOUSE OR SHIRT WAIST 4972

Daintily blouses, finely tucked, make attractive features of the incoming season and are to be seen both in lingerie materials and in the many soft, thin silks. This one is adapted to all available fabrics and can be made either lined or unlined, but in the case of the model combines Persian lawn with trimming of embroidery and lace insertion, and is made without the foundation. There is a wide box plait at the front, made in regulation shirt waist style, which can be trimmed as illustrated or left plain as may be preferred. The tucks at the back extend from shoulder to waist line, but those at the front form a yoke and provide becoming fullness below the stitchings.

The waist consists of the fitted foundation, fronts and back, and is closed at the centre front either invisibly as



4972 Tucked Blouse or Shirt Waist, \$2 to 40 bust.

4951 Shirt Waist, \$2 to 42 bust.

illustrated, or by means of buttons and button holes worked through the centre of the box plait. The sleeves are full at the shoulders and also at the edges of the deep cuffs.

GIRL'S GUMPE COSTUME 4971

Guimpe dresses are always attractive worn by young girls and are among the smartest of the season's models. This one is made in an entirely novel manner with a dress that combines a plaited skirt with a waist that gives a chemise effect, and is held by the ornamental straps. In the case of the model the material is bright wool plait, trimmed with plain color edged with black and combined with a guimpe of Persian lawn, but possibly variations are almost without number. Plaids and

checks make a feature of the season, but plain colors never were more attractive and the design is suited to washable fabrics as well as to those of wool.

The costume consists of the dress and the guimpe. The guimpe is tucked to form a yoke, the tucks supplying becoming fullness below the stitchings, and includes full sleeves gathered into straight cuffs. The dress consists of waist and skirt, the waist being fitted by means of shoulder and under arm



4971 Girl's Guimpe Dress, 6 to 12 yrs.

4886 Child's Party Dress, 2 to 8 yrs.

seams, and held in place by the straps. The skirt is in one piece, laid in backward turning plaits.

CHILD'S PARTY DRESS 4886

Little girls are always charming wearing frocks that fall from the shoulders, giving unbroken lines. This one is especially attractive, and is adapted to dancing school or party wear, but can be rendered simple enough for everyday occasions, by choosing plainer material. As illustrated it is made of pale pink chiffon veiling, and is trimmed with ecru lace and bandings of velvet ribbon. It can, however, be reproduced in muslins as well as in simple wools and silks and the frills can be of the material in place of lace. The frills over the shoulders together with the straps are exceptionally becoming in addition to making a decorative effect. The dress is made with a shallow yoke to which the full fronts and backs are attached. When made low this yoke is cut on indicated lines, when high is finished with a standing collar. The straps and frills are arranged over the shoulders and the closing is made at the back. The sleeves form puffs above the elbows, which are arranged over fitted foundations and can be finished with frills in elbow length or with the deep cuffs that extend to the wrists.

The price of each of the above patterns postpaid is only 10 cents. Send orders to The Farming World, Morang Building, Toronto, giving the size wanted.

Pointed Paragraphs

No, Cordelia, the railway tie is not a four-in-hand.

The woman who tries to marry for money gets all she deserves.

The harder a job the easier it is for a lazy man to dodge it.

Poets who write promissory notes are the ones who are long remembered.

Some alleged self-made men are not finished; they are too small for the job.

A wise wife never reminds her husband of the fool things he said when courting her.

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MUSICAL AUTHORITIES.

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and add to the home enjoyment.
Catalogue No. 41 free on request.

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ORGAN CO., LIMITED
QUELPH, - - ONTARIO
Canada's Largest and Best
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I WOULD LIKE EVERY WOMAN

to write for our Spring styles and samples of our \$4.50 to \$12.00 suits in cloth, silk and lustre, also raincoats, skirts and waists. Write me to-day.

Manager, SOUTHCOTT SUIT CO.,
Dept. F, London - - - Canada.

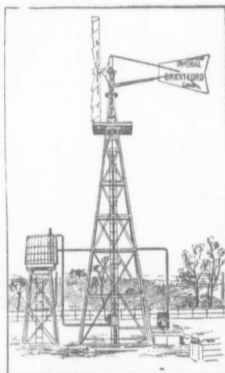
STRAWBERRIES NEW YORK

Bring the \$1.00 Prize Winner
GLEN MARY, DUNLOP SAMPLE
Others under the same name.

A Dollar Will Buy
six high plants to raise fruit's 300 to 400 quarts. Send for list.
A. W. Smith, Boscawen, Ont.

Farmers' Sons Wanted
with knowledge of farm
work in an office, 60 a month with advancement;
steady employment; must be honest and reliable.
Branch office of the association are being established
in each Province. Apply at once getting full particu-
lars. THE VETERINARY SCIENCE ASSOC., London, Can.

WINDMILLS



Brantford Steel Windmills are in a
class by themselves. There is only one
Best—that's ours. Write for Catalogue.

We also manufacture
IDEAL GAS AND GASOLINE ENGINES.
GOOLD, SHAPLEY & MUIR CO., Limited
BRANTFORD, CANADA

Nine Nations

Now Use Liquezono. Won't You Try It—Free?

Millions of people, of nine different nations, are constant users of Liquezono. Some are using it to get well; some to keep well. Some to cure germ disease; some as a tonic. No medicine was ever so widely employed. These users are everywhere; your neighbors and friends are among them. And half the people you meet—whom you are—know some one whom Liquezono has cured.

If you need help, please ask some of these users what Liquezono does. Don't blindly take medicine for what medicine cannot do. Drugs never kill germs. For your own sake, ask about Liquezono; then let us buy you a full-size bottle to try.

We Paid \$100,000

For the American rights to Liquezono. We did this after testing the product for two years, through physicians and hospitals after proving, in thousands of different cases, that Liquezono destroys the cause of any germ disease.

Liquezono has, for more than 20 years, been the constant subject of scientific and chemical research. It is not made by compounding drugs, nor with alcohol. Its virtues are derived solely from gas—largely oxygen gas—by a process requiring immense apparatus and 14 days' time. The result is a liquid that does what oxygen does. It is a nerve food and blood food—the

most helpful thing in the world to you. Its effects are exhilarating, vitalizing, purifying. Yet it is a germicide so certain that we publish on every bottle an offer of \$1,000 for a disease germ that it cannot kill. The reason is that germs are vegetables; and Liquezono—like an excess of oxygen—is deadly to vegetal matter.

There lies the great value of Liquezono. It is the only way known to kill germs in the body without killing the tissue, too. Any drug that kills germs is a poison, and it cannot be taken internally. Every physician knows that medicine is almost helpless in any germ disease.

Germ Diseases.

These are the known germ diseases. All that medicine can do for these troubles is to help Nature overcome the germs, and such results are indirect and uncertain. Liquezono attacks the germs, wherever they are. And when the germs which cause a disease are destroyed, the disease must end, and forever. That is inevitable.

Asthma
Abscess—Anemia
Bronchitis
Blood Poison
Bright's Disease
Bowel Troubles
Cancer—Cancer
Consumption
Croup
Constipation
Cough—Cough

Hay Fever—Influenza
Kidney Disease
La Grippe
Leucorrhoea
Lewy's Disease
Malaria—Neuralgia
Nervous System
Piles—Parasitism
Pneumonia
Rheumatism
Rheumatoid—Rickets

Dysentery—Diarrhea
Eradicant—Dropsy
Erysipelas
Erysipelas
Erysipelas
Gout—Gout
Gout—Gout

Skin Disease
Stomach Trouble
Throat Trouble
Tuberculosis
Typhoid
Typhoid
Typhoid

All diseases that begin with fever—all inflammation—all acute germ diseases—all the results of impure or poisoned blood. In serious diseases it acts as a vitalizer accomplishing what no drug can do.

50c. Bottle Free.

If you need Liquezono, and have never tried it, please send us this coupon. We will then mail you an order on a local druggist for a full-size bottle, and we will pay the druggist ourselves for it. This is our free gift, made to convince you; to show you what Liquezono is, and what it can do. In justice to yourself, please, accept it to-day, for it places you under no obligation whatever.

Liquezono costs 50c. and \$1.

CUT OUT THIS COUPON

When this offer may not appear again. Fill out the blanks and mail it to the Liquezono Company, 104-106 Wabash Ave., Chicago.

My disease is.....

I have never tried Liquezono, but if you will supply me a bottle.....

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The Farm Garden

One of the most important things, about the most neglected things, about the farm is the garden.

Physicians tell us that plenty of good vegetables is one of the greatest aids to health and a few cents in the garden may save dollars in doctor bills.

The best soil for a garden is sandy loam, but any soil except heavy clay will answer; a southern slope will be a help. I would prepare as follows: In the winter or early spring apply a good coat of well rotted manure as early in the spring as the land is fit to work, plow the ground just deep enough to turn the manure under well, then in a few days harrow well two or three times, and if the soil is as mellow as it should be it will be ready to begin planting.

For the benefit of those who have no experience in the garden business, and do not know what kind of seed to plant of the different vegetables, I will give a condensed list of some of the best: Beans (pole), Lady Wife, Wax, Saddle Back or Rust Proof; beets, Crosby's Egyptian and Edmond's Turnip; cabbage, Early Jersey Wakefield, Late Danish, Ballhead; carrots, Oxheart; cauliflower, Snowball; celery, Giant Pascal; sweet corn, Early Premo, Stowell's Evergreen; cucumber, White Spine; lettuce, Nonpareil; melon, Musk, Strawberry, Water, Cold, Early Hungarian, Honey; onions, Yellow Danvers; radishes, Rosy Gen, Early Scarlet, Turnip-rooted; tomatoes, Spot Cash and Livingstones; pea, First of all and Heroine; squash, for summer, Early Crookneck and Late Hubbard.

I would advise the farmer to buy his early cabbage and tomato plants, as this will give him earlier vegetables than he can probably raise himself, and will be about as cheap. I would also advise him to buy onion sets, as they are about

as cheap for the busy farmer as seed is, and you are surer of a crop. You had better send to some reliable seedsman and get a catalogue and make out your order at once. Do not sow the seed in beds, but in drills about three feet apart, and as long as desired. This will give room for the horse cultivator and will greatly lessen the labor of keeping the weeds down. It also will keep the land mellow, help to retain the moisture and result in making the vegetables grow better. Be sure and attend to the garden the first thing. Do not let the garden go till the rest of the crop is in, but put it in as early as the ground is fit to work. You must use a little judgment in putting in the different seeds, as radishes will do to sow as soon as the frost is out of the ground, and melons will not do to be planted till the ground is warm and dry.

In the above I have not tried to give any expert advice, but just my own practical experience and I hope it will be of help to some one—E. E. Ebe, Prince Edward Co., Ont.

Growing Asparagus

Asparagus comes quite early if properly taken care of, and is a very nutritious and palatable vegetable. For its best development it needs a rich sandy loam. Where it can be so done it is best to plant in rows about five feet apart and three feet in the row. However, it will do fairly well planted in a bed, the plants being set about a foot each way and letting them take the entire space.

One or two year old plants may be used, and the Palmetto variety is considered best. The soil should be prepared quite deep, thoroughly mixing the vegetable matter with the soil, so as to cause it to hold much water, and to keep it loose.

The plants should be set four to six

inches deep, spreading the roots out well. The soil should not all be filled in over the plant at once. If set in the spring the soil can gradually be worked in, but if set in the fall it should be filled in with manure, so as to keep the soil from getting so hard that the young shoots can not work their way to the surface. Thorough cultivation should be given and no shoots should be pulled till the third year.

Growing Onions for Pickling

I had a desire for some small onions for pickling. I had never raised any before. I obtained two packages of seeds and had them planted in a bed 3 feet wide by 12 feet long, in rows about 12 inches apart. The soil, a rich black loam, which had been heavily manured three years before, was deeply plowed in the spring and dragged up fine and fine. The bed sanded to the north a trifle, but this did not would have been better on top of the knoll, where it would have had the direct rays of the sun. It was raked very fine and the seeds planted in rows far enough apart to be cultivated easily with the hoe.

The weeds were kept out of the rows by hand pulling. Besides this bed I had two rows about a rod long of set onions. Most of my bed onions grew much too large for pickling, though I got enough for this purpose. From the bed and set rows I sold many bunches, thinning them out of the rows as I needed them.—S. C. Millie.

Grow Pansies

The pansy is everywhere, and everybody is having some. It has gained experience with this charming little flower. It is very popular, and is called the "pet of the flower garden." Its innate beauty endears it to the hearts of all, young and old. It is perennial in its nature; is very hardy; endures cold,

hard winters with safety and greets us in the spring with a profusion of bright blossoms.

Pansy seed may be sown in different ways—in a hot bed or in open ground. If sown in the spring, it is as soon as possible, so as to secure flowers during the early spring rains. Seeds sown in a cool place in May or June will produce fall flowering plants.

To have good plants, rapid and vigorous and beautiful flowers, the soil must be taken into consideration. Good rich yellow loam well watered is adapted to plant or flower culture. Young plants produce the largest flowers and the most wholesome in appearance. The old, worn-out plants should be replaced. If the plants come into bloom at mid-summer, the flowers will be small at first, but will increase in size and beauty as the weather becomes cooler. To have flowering a pansy bed at mid-summer locate it some place in the shade on your lawn or flower garden, keep a good supply of water, with the chill taken off, to water it with. A bed located in any situation will give rich, beautiful flowers in spring or autumn.—P. E. Buchner, Norfolk Co., Ont.

An Ideal House Plant

In our part of the community at least, the Hibiscus is very rare, yet there are very few plants so generally satisfactory blossoms, for its leaves are a dark shining green, and are not dropped off at the bottom as it grows at the top, as so many plants do. And the blossoms are gorgeous and very freely borne, beginning when but a little slip of a plant and growing more numerous as it increases in size.

It does not require a large dish in proportion to its size, but it will grow as tall as one's head, and mine have always developed into shapely specimens without pruning, a fact which is decidedly in their favor, as many plants require more cutting back than they are apt to receive at the hands of an amateur. They form fine plants for the many people who only keep a few in number, and want these to be extra good specimens, especially if they can give plenty of room to develop naturally.

Last year at our horticultural fair, the first prize for flowering plants not otherwise classed, was awarded an Abutilon, well grown, and pretty of course, but not a good patch on my Hibiscus at home, but I had not thought of showing it, simply because it was not mentioned in the list.

They do not seem to care much for liquid fertilizer, though perhaps they grow a little more rampantly if it is used, but common, good garden soil, and attention to its needs as regards watering, will fill the bill of its requirements. It is not as I know, ever insect enemy, and that is the reason I present aphid, but I keep this in check by rubbing up fine some leaf tobacco and covering the top of the soil with it.

The aphid shows their sense by vacating the premises as soon as the water soaks the smell out. I have many plants in my collection, but none are more generally satisfactory with so little care as it is.

There is a kind with variegated leaves. This I have never tried, but mean to do so in the near future, for if the colored leaves have the same substance and gloss of the green ones, they must be beautiful indeed. I by no means advocate the discarding of the old standards like geraniums and begonias, but why not invest a few cents once a year at least in a plant of a new family—to us? The result is interesting at least, and often most satisfactory.—Florence Holmes, Sutton, Que.

The FAT of THE LAND

Recently published at \$5.00, now to be given away free. Read on.

WHAT THEY SAY.

Mr. C. C. JAMES, Deputy Minister of Agriculture, Ontario, says:

I procured a copy of "The Fat of the Land" last May and have only recently read it. Meanwhile I have been lending it to others to read, and the opinion of all has been that it is a very readable, suggestive and helpful book. It is the story of a man of means, broken down in health through strenuous city practice, who sought the country for health and enjoyment. The book is well written and keeps up the interest to the end. The question will at once arise: "Is there anything in it for the ordinary farmer who has to start with small capital?" There certainly is, some of the most important principles of the present day agricultural practice are worked out in a most interesting form. I would like to see our hard working, close thinking, undemonstrative Ontario farmer sit down to read this book. He will enjoy it. He will be able to compare experiences with his own, and he will be able to get much out of it for his own work. I have known many of the Ontario farmers being misled by any of the methods proposed. He is shrewd enough to take such advice as is applicable to his own conditions. It is a stimulating book and one need not believe it all, or accept all the statements to be benefited by it. I believe it will do good to the struggling farmer as well as to the rich city man who longs to change his stuffy city office for the free air of the country.

DR. JAS. W. ROBERTSON, late Commissioner of Agriculture, Ottawa, says:

I read "The Fat of the Land" with keen interest. It is a book which reads in a very pleasant way many possible, if not actual, achievements by the application of intelligence and good business management to farming problems and affairs. I count it wholesome reading.

Mr. F. W. HODSON, Dominion Live Stock Commissioner, Ottawa, says:

I received a copy of "The Fat of the Land," and have read it very carefully. It makes a good deal of useful information and should be read by every farmer in Canada.

The publishers of THE FARMING WORLD have arranged for a new edition of this book bound in paper, and in every respect as complete as the \$1.50 edition.

This new edition is not for sale, being reserved for use as a FARMING WORLD premium.

A copy will be sent, post free, to anyone who sends us \$1.20 for two new subscriptions for one year, or \$1.00 for one new subscription for two years, and who asks for "The Fat of the Land" as a premium.

The book will not be ready for some weeks, but send in the subscriptions now, and we will send it as soon as it is ready. Fill up and cut out the coupon on page 247.

Ask for "The Fat of the Land," as it will only be sent to those who read this special offer.

Potato Yields in England

Correspondents announce some remarkable potato yields as the result of their fall digging, despite the rather unfavorable season.

One farmer says he raised, without the aid of a fertilizer, from one small Grange Defiance potato weighing a quarter of an ounce, 36 pounds. Another claims to have realized seed of Lincoln, from a half-ounce Eldorado. In another case 7 pounds of Eldorados are alleged to have produced 3,019 pounds.

According to still another farmer a ton to each pound of seed was the rate of yield of a crop of Eldorados. The same farmer says that 190 plants of Duchess of Cornwall potatoes produced 840 pounds. From 2 pounds of Eldorados, in another instance, were realized 2,491 pounds, after a struggle against caterpillars and aphids. The yield per acre reported about 8 pounds. The farms averting these remarkable yields are in the adjoining county of Lincoln, and the name of the farmer is given in each case.—Frank W. Mahin, Nottingham, England.

Pruning Tomatoes

An experiment with a certain method of pruning tomatoes was tried last year with gratifying results. When the plants in the hot-beds had six strong leaves developed, which was on May 23rd, the tops were nipped off and the plants given more room, being placed 5½ inches apart in the frame. The object of pinching off the top of the plant was to cause new shoots to develop at the axils of the leaves in order to have six branches bearing early tomatoes instead of the one cluster usually found on the top of the plant. These were planted out on June 6th, alongside other plants unpruned. On June 22nd half of the pruned plants were again pruned, all laterals being taken out and the six main branches only being left, the other plants were left to grow at will, and it was found that they produced the early ripe fruit, though not the largest early crop. This system of pruning is very promising. The further advanced the axillary shoots are when the plants are set out the larger the early crop is likely to be. In the experiment last year the plants were not started nearly early enough to get the best results. While the first fruit was ripe on the unpruned, Sparks' Earliana, on July 29th, there was very little ripe on that date.

Two varieties were under test, the Sparks' Earliana—one of the best, if not the best—an early variety, and the Matchless, a main crop root. We would advise all market gardeners to give this system a trial this year.—W. T. Macoun, Central Experimental Farm, Ottawa.

Crop Rotation

Mr. W. C. Shearer, addressing an Institute meeting in Eastern Ontario, recently, spoke as follows, in reference to crop rotation: "I would recommend a four years' rotation as follows: First year, hay or clover; second year, a mixture of oats, barley and flax, for hog feed; third year, corn, roots or some other hoed crop; fourth year, barley or oats. Too many farmers make the mistake of taking off two or three crops of hay. This is not a good method, as the soil is robbed of too much fertility. The second year, when the mixed crop is grown, the field should be given a shallow plowing with a gang plow, and harrowed in August. The object of this is to get all the weeds in the soil to germinate. About the end of September, the field should be plowed down. Do not plow too deep, five or six inches is sufficient.

FINANCIAL NEWS AND NOTES

Grand Trunk Pacific Bonds

The first issue of Grand Trunk Pacific bonds last month met with a magnificent reception among the markets of Great Britain and Canada, being subscribed for ten times over.

The Grand Trunk Pacific Railway was incorporated last year, and authorized to operate the annual Transcontinental Railway from Moncton to the Pacific Ocean, and to construct the western section from the ocean eastward to Winnipeg. The Dominion Government, by way of aid, to this western section, will guarantee the interest on a certain proportion of its bonds.

The bonds now issued are those guaranteed by the Grand Trunk Railway. The issue consists of \$15,000,000 four per cent. bonds, payable in 1955, and were offered at 99½. They are bonds of the prairie section and the Lake Superior branch of the eastern section. These bonds should prove a satisfactory four per cent. investment, and the confidence in them by investors is shown by the subscription list of \$160,000,000 for the \$15,000,000 issued. When the Grand Trunk Pacific bonds are guaranteed by the Dominion Government are issued they should sell at a still better price.

How the Money is Employed

An article which appeared in these columns last week pointed out that the total accumulations of the savings money of the people of Canada in the hands of the chartered banks, the Government Savings Banks, and the loan companies, aggregated \$44,483,946. It is interesting to follow this matter further, and, looking on the other side of the question, see what disposition is made of these and the other moneys passing through the hands of these institutions.

The amounts deposited in the Post Office and Dominion Government Savings Banks, which on 31st January amounted to \$61,766,545, may be briefly dismissed, as it is easily seen that this large amount is diverted from business channels, and takes the place of a Government loan to that extent, the Dominion Government practically borrowing that amount from the small savings depositor, instead of on a debenture loan from the capitalist.

The available funds of the two chartered savings banks of Canada amount to \$25,814,271, which includes \$24,272,388 of deposits and \$850,000 of paid-up capital. Among their investments are Dominion and Provincial securities and Canadian municipal and school bonds \$12,518,497, other bonds \$1,754,551, loans on stocks, practically brokers' loans, \$9,154,818, and cash and bank balances \$2,294,726.

The total funds of the loan companies of Canada aggregate \$162,531,693 (1902, the latest figures available). This includes capital and reserve funds of \$63,154,965, deposits \$21,068,743, and debentures, payable in Canada, \$18,570,983, payable elsewhere, \$84,278,346; other sources contribute the balance, \$25,449,567. Nearly all of these funds are secured or invested in real estate, the loans and mortgages secured in this way representing \$118,118,553 and property owned \$31,610,144, other loans amounting to \$12,802,996, and cash \$5,103,369.

The thirty-four chartered banks showed on 31st January the large sum of \$712,400,722 available for their various investments. This sum includes capital

\$80,378,420 and reserve funds \$54,194,497. Notes in circulation \$58,021,073, savings deposits in Canada \$132,270,620, and other deposits \$179,471,366. The investment of these sums may be generalized as follows: Dominion, provincial and municipal securities \$25,548,235, other debentures and stocks \$39,389,212, brokers' loans \$84,399,191, current loans \$43,355,663, bank premises \$10,256,829, cash and cheques \$76,668,302, due from banks in Great Britain and foreign countries \$29,646,270.

These figures show that of these total funds aggregating \$962,522,231, the various municipal, provincial and the Dominion Governments obtain the use of over \$100,000,000 through deposits, or bonds, or debentures purchased, about \$160,000,000 is loaned on real estate or invested in such property, \$93,000,000 is used in call loans in Canada and elsewhere, secured by stocks and bonds \$446,000,000 loaned out for commercial purposes and \$41,000,000 invested in various bonds and stocks. The large amount of \$94,000,000 goes out of the country in loans and bank balances, \$46,000,000 of which is included in the above amount as loans on stocks. Cash and cheques held account for about \$83,000,000.

New Banks

The crop of new banks in Canada of late is a prolific one. Following the Sovereign and Metropolitan which started business in 1902, and the Crown, which started in 1904, we have the Farmers' Bank of Canada, Citizens' Bank of Canada, Northern Bank and Pacific Bank of Canada, which were incorporated at the 1904 session of the Dominion Parliament, now seeking an extension of one year in which to commence business. The Penny Bank of Toronto has obtained its charter and the Monarch Bank is seeking incorporation.

The past few years have been profitable ones for the banks, and this is making others of our enterprising people desirous of participating in these profits.

The market quotations for many of our bank stocks now stand at from 150 to 250, and it can be readily seen that these stocks, purchased when the bank started business twenty, thirty or forty years ago at par, and which have paid dividends ranging from five to ten per cent. almost from the beginning, have been very lucrative to the investors. It must be remembered, however, that every new bank does not succeed in obtaining a paying business.

Definitions

Draft—A financial document used in raising the wind. The proceeds will be secured by breezy individuals are often blown in.

Cheque—An order for money depending for its value on the autograph in its southeast corner. Payment is sometimes stopped, when it is written "check."

C. M. Hays, President of the Grand Trunk Pacific Railway, is credited with saying that the total cost of this great line would be \$148,000,000.

Correction

We regret to note that in our article on note circulation, which appeared in the issue of 1st March, the amount of bank notes in circulation \$64,507,394 was inserted by our printers as \$65,507,394. The correct amount averages about \$10 for each of us. We hope our readers have each their share in pocket.

Have You Any Money?

The best place for
your savings . . . is

The Bank of Toronto

SAVINGS DEPARTMENT

Because Money deposited there is safe.
It can be added to or withdrawn at any time.
It will grow, through your additions to it, and your interest payments every six months.

YOUR SECURITY

Paid-Up Capital - - \$3,000,000
Reserve Fund - - 3,300,000
Total Assets - - 27,000,000

Head Office and 1 Branches, Toronto, Ontario.
5 Branches in Montreal, P. of Que.
30 Branches in Ontario.

Settlers Low Rates West

via the Chicago and North-Western Ry. every day from March 1st to May 15th, 1905; settlers' one-way second class tickets at very low rates from Chicago to points in Utah, Montana, Nevada, Idaho, Oregon, Washington, California; also to Victoria, Vancouver, New Westminster, Rossland and other points in the Kootenay District. Correspondingly low rates from all points in Canada. Write for full particulars and folders to B. H. Bennett, General Agent, 2 East King Street, Toronto, Ont.

\$3 a Day Sure Send us your address now and we will show you how to make \$3 every day the easiest way you ever saw. Send your address and we will mail you the business fully, remember we guarantee a clear profit for every dollar you invest. Write at once.
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LEARN VETERINARY DENTISTRY in a 4

\$2000 a year. We teach you at home in three months of your spare time by illustrated lectures, and grant diploma with degree. Particulars free.
The Detroit Veterinary Dental College, Detroit, Mich.

WOMEN! I will send free information to any lady of a safe, reliable, harmless remedy—a simple home treatment. MISS M. RAMEY, Dept. LL, 30 W. Ferry Street, Buffalo, N.Y.

Caustic Balm Gives Wonderful Relief

Berlin, Ont., March 22, 1904,
The Lawrence-Williams Co., Cleveland, Ohio;

I have been using several bottles of Gombault's Caustic Balm and found wonderful results. Kindly send me full information in regard to agency, as nearly all who once give it a trial want a bottle of it.

M. S. STROME.

ABSORBINE

REMOVES
RHEUMATISM, ENLARGEMENTS,
THICKENED TENDONS,
INFILTRATED FAT, and any
other OBSTACLES TO
LAMENESS, ALLIANS' PAIN
without laying the bones up. Does not
sting or burn. Send for the full size
bottle, delivered. Pamphlet 12c free.
A. HOSKINS & Co., for sale in \$1.00
bottle. Cures syphilis, Weeping sores,
BROOKLYN, E. River, near Brooklyn
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Catarrh, Foul Breath

IF YOU CONTINUALLY KHAWEK AND SPIT AND THERE IS A CONSTANT DRIPPING FROM THE NOSE INTO THE THROAT, IF YOU HAVE FOUL, SICKENING BREATH, THAT IS CATARRH.

Large Trial Package Free—Quickly Cures.



Any person having catarrh always has a bad breath. The sense of smell and taste are nearly always totally destroyed in time, so that the person who has catarrh does not realize how loathsome their disease is. They continue their k'hawking-k'hawking and spitting and spitting about promiscuously until they are shunned by everyone, and the sight of them is enough to make a well person sick.

In order to prove to all who are suffering from this dangerous and loathsome disease that Gauss' Catarrh Cure will actually cure any case of catarrh quickly, I will send a trial package by mail free of all cost. Send us your name and address to-day and the treatment will be sent you by return mail. Try it. It will positively cure so that you will be welcomed instead of shunned by your friends. Write to-day. C. E. GAUSS, 2507 Main St., Marshall, Mich.

QUESTIONS AND ANSWERS

Growing Tobacco

Can you give me some information as to growing tobacco? If you cannot, can you tell me where I can get a circular treating on tobacco culture.—W. E. G., Lambton Co., Ont.

Tobacco culture is a large topic and it would be impossible to do more than touch the fringe of the subject here.

Tobacco requires a comparatively short season for its growth; is sensitive to frost, but has been successfully cultivated in several parts of Canada, notably in Essex County, in Ontario, and in Quebec. Its quality is greatly modified by soil and climate, and in comparative-ly few sections is it of large commercial importance. The different kinds of tobacco are grown on soils varying from coarse, sandy, pine barrens, to heavy clay limestones. The heavy shipping tobaccos are grown on soils containing a large proportion of clay, or which for other reasons are very retentive of moisture. On lighter soils a thinner, more delicate leaf is produced, which cures to a light yellow color. The kind of tobacco grown should be adapted to the nature of the soil. The most essential fertilizers in the culture of tobacco are nitrogen, potash and lime. Tobacco is said to be no more exhaustive to the soil than corn or other grain. The addition of fertilizers tends greatly to in-

crease the yield. To grow tobacco successfully the first essential is to secure a soil well supplied with organic matter, either by applications of barnyard manure or by turning under green manure crops. Tobacco is grown from seed. Plants for the field are raised by sowing the seed in a hotbed, cold frame or open air beds, depending on the climate of the locality. The field for tobacco should be cultivated as for a garden. Rows are usually marked 3½ to 4 feet apart, the fertilizers used are applied in the row and beds thrown up over them. Hills are made on heavy clay lands about 3 feet in the row; on lighter lands the elevated beds are sufficient. Water seed bed thoroughly before the plants are removed. When the largest leaves are about 2½ inches wide the plants are large enough to set out in the field. Crop requires hoeing as soon as plants become well rooted, followed by shallow cultivation. When the bud or button is well out at the top of the stalk it is broken off. By this means the leaves grow larger, ripen more evenly, and their quality and appearance are much improved. Tobacco is harvested by cutting down the whole plant or gathering the leaves separately. The crop is considered ripe for harvesting when most of the leaves have turned a greenish yellow color and become thick and brittle, so that they crack when folded together. This takes place within 80 to 120 days after transplanting. We have not space to deal with the curing here.

A few years ago Dr. Saunders, Central Experimental Farm, Ottawa, issued a pamphlet on tobacco growing in Canada. A copy might be had on application if it is not out of print.

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 herein notes on current legal matters of interest to farmers. Address your communications to "Legal Column," The Farming World, Toronto.

Payment for Son's Work

A worked at home on his father's farm until he was twenty-five years of age. Nothing was said between him and his father about the latter paying him wages for his work. A is now leaving the home. Can he recover wages for his work since he came of age?—S. E. M.

No. A son working at home upon his father's place would not be entitled to recover for work and labor in the absence of an agreement to that effect. There was no agreement in this case.

To Quit Lease

I have a rented place under a straight lease for five years. The lease has two more years to run, but I wish to remain on the place for one more year only. The rent is payable half-yearly in advance, on first of April and October. How can I get out of the last year?—J. R., Islington.

A.—Unless you can obtain your landlord's consent to your surrendering your lease and quitting possession of the place at the end of the fourth year, or unless there is some provision in the lease (which we presume is written) permitting you to determine or end the term by some fixed notice or otherwise at the date you desire, you cannot escape liability for the rent for the fifth year of the term.

POTASH

Potash as Necessary as Rain

The quality and quantity of the crops depend on a sufficiency of

Potash

in the soil. Fertilizers which are low in Potash will never produce satisfactory results.

Every farmer should be familiar with the proper proportions of ingredients that go to make the best fertilizers for every kind of crop. We have published a series of books, containing the latest researches on this important subject, which we will send you if you ask. Write now while you think of it to the

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Farm Implements and Conveniences

A "Dump" for a Sled

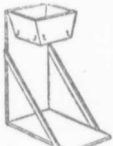
Dump carts for hauling manure and other articles are usually associated with wheels, but for hauling out manure in winter the wheel part is not practicable. Here is a dumping arrangement applied to a sled—an idea borrowed from the dump in from those used for grading



railroads. Any one can see from the cut how the principle is applied. The "dump" must be pivoted high enough so that when the pin is pulled the "dump" will be sufficiently inclined to empty all the contents a side of the sled. Such an arrangement will be found most convenient for stable work in winter.

Portable Grain Holder

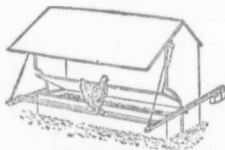
More than once have we caught a little villain shivering and holding the bags in an icy granary while the lusty men sweated over turning the fanning mill and scooping up the grain. And we have seen men holding sacks in the busy threshing season when the simple contrivance illustrated in the accompany-



ing cut could do the work better. The upright plank is an inch thick, three and a half feet long and fifteen inches wide. The bottom plank is of the same dimensions except that it is a foot and a half shorter. The hopper is easily constructed, and the hooks secured at any hardware store, or possibly improvised at home from bent nails. The base of the hopper is wedged from the perpendicular plank so that the bag may wrap all the way around.

Self-Feeder for Poultry

A perfection feed hopper is shown in the cut. It is 8 inches wide, 2½ feet high and 3 feet long. The roof projects over the perch on which the fowls stand while feeding. The method of



constructing the perches and the weight and attachment to the lid over the grain is clearly shown in the picture. The weight on the arm should be adjusted to the size of the fowl. This box may be made of any length desired, but the height and width are about right.—B. T. Wagner, Lewis County, Mo.

Build an Implement Shed

Many farmers do not place much dependence upon shelter for prolonging the "life" of farm implements. At least, it seems so to me. In riding through the country we see at almost every farm one or more (generally more) costly implements that are being allowed to "weather it." This is by no means the proper way to do, and in this letter it is my purpose to warn people against it.

Let us figure a little. A good implement shed can be had cheaply, for not more than say \$25.00, with facilities for all implements and a buggy besides. Say a farmer buys a binder, which, of course, would cost at least \$100.00. If this binder were allowed to set out, in three or four years it would not be worth anything at all, except for "old junk." With proper care and shedding it will last at least twice as long, possibly longer, and so with other implements. Plows, if allowed to rust, are hard to make smooth, but if axle grease is applied when they are put away the whole trouble will be avoided and the plow will last much longer.

Thus, the cost of the shed is nothing compared with the serious damage and cost of the implements. By all means have a good implement shed and use it, and also apply plenty of paint to all farm implements as well as vehicles. Hoping this may be of some benefit to my Canadian brethren.

B. P. WAGNER.

To Trap Rodents

The late Captain Kidd, our piratical countryman, had a habit of sending his captives to a watery grave by making them walk a plank blindfolded, the victims stepping from the end of the board into the sea. After much the same idea a resident of Elkins, W. Va., plans to rid us of our rats and mice. The advantage over Captain's Kidd's plan, how-



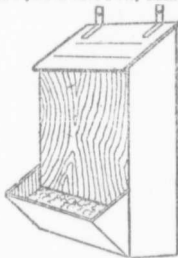
ever, is that the rodents will not have to be captured and blindfolded in advance.

A little tank of water is provided, with an incline board leading to a landing above the water level. The landing is hinged at its centre, so that when weight is applied to the rear half it tilts. On a wall in the rear is a small hook or shelf, on which is placed a tempting morsel. When Mr. Rat ascends the incline and tips merrily toward the bait his weight tilts the landing, and down

he goes into the water. The landing quickly rights itself, ready for its next visitor who will soon join his unfortunate companion in the watery depths beneath.

Shell and Grit Box

A very necessary article for keeping fowls in health where they are confined within a yard or have a very small space



is a shell and grit box. The one shown in our sketch meets all requirements, is easily made, and can be readily removed if deemed advisable.

A Scrape for a Poultry House

A handy scraper for use about the poultry house or the nest boxes where pigeons are kept for squab raising, or for scraping orchard trees is shown in the cut. It is made from a worn out section



of a moving machine. A hole is in the centre and a rod with lead on one end and nut on the other passes through the knife section and through the handle, the nut drawing the whole tightly together.

Strength of Steel Wire

The question is often asked: What is the real difference in steel wire that makes one kind so much stronger than another, though both look alike? The difference is generally owing to the chemical quality of ore from which the pig iron was made, and also to the difference in treatment of the metal through its various stages of manufacture.

Carbon is the element more directly responsible than anything else for the strength of steel. Carbon hardens and strengthens the metal, and when properly assimilated, adds greatly to its toughness.

It should be borne in mind, however, that hardness can be obtained in low carbon steel by working it under certain conditions, but hardness thus obtained is at the expense of toughness and adds scarcely anything to the strength.

According to tests made by the Page Wire Fence Co., wire containing 3 per cent carbon has 90 per cent more strength than common steel wire. A high carbon wire No. 9 gauge has an average strength of 2,400 lbs., as compared with 1,300 lbs. for common wire of the same gauge. As high carbon steel costs only a little more than other grades it is evidently poor economy to use low grades under any circumstances.

Miss Mayfair—Miss Furby certainly carries her age well.

Miss Maryland—Yes, she started out with her twenty-fifth year three years ago, and she hasn't dropped it yet.

In the Poultry Yard

The Chicken Crop

As soon as you find that Biddy remains on her nest all night, you may depend on it that she means business. If her nest is in a quiet, suitable place remove the egg, or eggs, she is sitting on, and scatter some flour of sulphur in it, and also rub some under the hen's wings, as a precaution against lice. Now select eleven or twelve medium sized, strictly fresh eggs, and carefully place them under the would-be mother. If the other hens have access to the nest the eggs should be all marked as some of them will probably lay there. Now, after Biddy is set simply leave her alone, for she understands her business perfectly. Don't be afraid she will starve to death if she remains on the nest for a couple of days at a time. You need not carry food and water to her when she is on the nest. Just wait; when she is real hungry she will fly to look for food. When you see her off, give her a good dinner, and then quietly go and look to see if her eggs are all right.

If you find one or two eggs out and if the other eggs are soiled or wet wash them with warm water. When the time has arrived for the chicks to be hatched don't disturb the hen; if you do you will probably cause her to tramp on the little, tender chicks and kill them. Curb your curiosity to see how many chicks are hatched and just wait. No, they are not hungry. Don't give them a particle of food for at least 24 hours. Their first meal should consist of a hard boiled egg. Afterwards oatmeal, moistened with milk or water and bread crumbs should be given. Keep them in a warm place, and give them plenty of pure water. They will thrive well if properly attended.

Now, farmers' wives, if you want to raise a good crop of chicks, don't procrastinate. On your own farm 10 hens quite early, and had about 75 chicks. There is money in early chicks.

A. R.

Market for Clean Eggs

No matter how fresh an egg may be if it is not clean it will not attract customers. It pays to go to considerable trouble to have eggs bright and clean before sending them to market. To clean eggs it is not necessary to use much water. Do not put the eggs in water to clean unless it is necessary. If it is necessary then rub dry afterwards. For most stains on eggs a damp cloth will clean them. In any case always rub dry. If this is not done the eggs will have an appearance that is not natural. There is on freshly laid eggs a mucilaginous covering which gives it a velvety appearance peculiar to new eggs. Water removes this making the egg have an older appearance and destroying its keeping qualities, as this covering makes the shell impervious to air. Nevertheless eggs should be cleaned in order to get the highest market price.

The story is told of two girls in New York State who were on the lookout for some way to make a living. They had seen that most of the eggs marketed were dirty and also ascertained that the good customers at the grocery always took the clean eggs when they could get them, paying more for them than for dirty ones. With them to think was to act. They rented rooms, paid the market price in cash for the eggs; cleaned them, packed them in clean, new cases and shipped them to a popular and fashionable market in New York city, setting a price five cents above the market price for eggs. The eggs were strictly fresh, as they had not only cleaned them, but had tested every one

of them. They sold at the price asked at once, and the commission merchant wrote to them to send more of the same kind and he would give them seven cents above the market price for eggs. They were soon buying all the eggs, not only in that town, but in all adjoining towns; secured larger rooms, and became wealthy by cleaning eggs that other people sent to town dirty. This shows that it pays to have the nests so that the eggs will be kept clean and carefully cleaned and test all eggs before sending them to market.

Good Egg Record

At the Central Experimental Farm a pen of 12 White Leghorn pullets, hatched between May 25th and June 15th, 1904, laid an average of fifteen eggs each during January last. Some of them produced as many as 17 eggs each during the month. These pullets were fed a ration composed of a mixture of grain made up of one part wheat and one part oats; mash, made up of two parts shorts, one quart ground oat and one part finely ground barley; cut bone, beet, and oyster shells.

Producing Eggs in Winter

Desiring to obtain information that would be helpful in enabling farmers to produce more winter eggs, we submitted the following questions to a number of prominent poultrymen:

- (1) Is a modern, up-to-date poultry house necessary for the successful production of winter eggs?
- (2) At what age do hens give the best return in winter eggs?
- (3) What ration have you found to be most profitable for winter egg production?
- (4) What have you found to be the greatest hindrance to successful winter egg production?
- (5) What is the difference in cost between producing eggs in winter and in summer?

(6) Provided he has the proper equipment, is there anything to prevent a farmer producing winter eggs?

John O. Allan, Scotch Line.

(1) No and yes. No, if that means one built to an architect's plan with swinging feed trays, etc., etc. Yes, though as far as the necessity of a dry and comfortable place is concerned a lean-to, to the cattle byre is good, as the heat may be allowed to flow from one to the other by having part of the partition of poultry netting.

(2) Pullets that are mature before the cold weather comes on, say by December 1st.

(3) Breakfast and supper of any good sound grain in litter. Dinner of cut bone or meat scraps. This every farmer can handily obtain. When butchering save the blood, mix with hash and give a little (a very little at first) at noon. Save livers, lights, beef heads, etc., and freeze them. Cut up and feed raw. A small bone cutter will cut them when frozen very easily and rapidly. On no account cook the meat, as that makes it more of a fattening food than a laying ration. Clear water, gravel and lime before them at all times is necessary, and if this feeding, with comfortable quarters, does not make good winter layers it would be better to have a few pot pies, and get something else. Clover is a very good food and one that farmers can have. Just scrape up the seeds and clovertops from the bottom of the horses' mangers twice a week and throw them to the hens.



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(4) Uncomfortable buildings, overcrowding and too heavy a grain ration. Also immature pullets and late moulting hens.

(5) I would not like to estimate, but it is certainly not so great as the difference in the selling value of the eggs.

(6) Certainly not. The average farmer carries enough stock to keep him at home the greater part of the day in winter, and he has every chance to give the poultry care also. It is not hard work, but it takes constant attention.

W. M. Lockwood, Melbourne, Ont.

(1) The main object is to construct a house that will exclude all moisture and wind, and yet give the poultry plenty of good fresh air. If the house is too closely built the moisture will condense on the walls and ceilings on frosty mornings. This will be of greater damage to fowl than cold, clear frost. I have seen birds have their combs frozen in buildings that gathered moisture, as I have stated, while in open sheds or rudely constructed out-buildings they would not show the least sign of frost.

(2) Hens give the best returns at from six to eighteen months old.

(3) I usually feed in the morning a mixture of chopped oats, barley and wheat dampened a little, a handful of beef meal to twenty hens added, will have good results. At noon some rough grain, a little meal (for this I use beef heads cut up and boiled until the meal can be removed from the bone, slice up and feed to the hens. A little clover chaff scattered on the floor or in the scratching pen is excellent for green food. At night I feed corn or wheat. It is necessary to keep plenty of grit and fresh water before them all the time.

(4) Improper feeding, poor and filthy housing, and extreme cold.

(5) I believe from experience that the cost of producing eggs in winter is about 25 per cent greater than in summer.

(6) There is nothing to prevent a farmer from producing eggs in winter if he has proper equipment, with good judgment and experience the two latter are the most essential.

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 made, 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.

The Farming World Man on the Wing

Attention is called to the auction sale of pure-bred Shorthorns to be held on March 23rd by Mr. Geo. H. Johnson, of Balsam, Ont. Like his brother, Mr. Arthur Johnson, of Greenwood, he has long been a breeder of the reds, white and roans, and his herd partakes of the excellence that has characterized the stock of this renowned breeder. Splendid individuals, and bred in the purple, will be offered at this sale, and the catalogue shows a list of them that will take some beating. Write for one.

Gossip

Alex. Galbraith & Son, Janesville, Wis., and Brandon, Man., write: "We have 36 stallions on hand to-day, nearly all from three to five years old and every one of them a good one."

Mr. G. A. Brodie, Bethesda, Ont., writes: "I have a very useful lot of Shorthorns 2 years old with calves at foot or bred to imp. 'Director,' which I offer very cheaply; also five choicely bred bulls, from 10 to 20 months old, from good sires and remarkably good animals, for sale at reduced rates."

In Clydes, I am offering my "Baron's Pride" (imp.) mare "Gipsy Maid" in foal to "Horse," also two choicely bred colts (imp.) rising one and two years.

In Shrops. I offer a few imp. Mansell ewes and a number of ewe lambs from imp. stock."

Wants Remounts

Mr. W. Staley Spark, of England, who spent some time in Canada last winter as a special officer of the Department of Agriculture at Ottawa, to give instruction in horse breeding, has been in Toronto recently and had a conference with the Hon. Mr. Monteith, at which the question of the supply of remounts in its relation to Ontario was discussed. Mr. Spark is representing the remount department of the British War Office. If the Dominion Government does not take any action in regard to a remount station, Mr. Monteith stated that probably his department would take up the matter, so far at least as to act as intermediary in some plan to bring together those who have horses for sale and the War Office representative.

Judges for Horse Show

The Canadian Horse Show committee met last week. While the judges for all the classes were not appointed, several were arranged for, as follows: Thoroughbreds, Dr. Rutherford and Wm. Hendrie, Sr.; Hackneys, R. P. Strickler; drivers and roadsters, Dr. Sinclair; heavy draught, Robert Graham; hunters and saddle horses, Messrs. W. S. Snark and Colin Campbell. Prize lists and entry forms are now ready and can be had on application to Henry Wade, Parliament Buildings, Toronto.

Clydesdales for Canada

A good few Clydesdales continue to find their way to Canada. Last week Mr. David Cargill, Assiniboia, shipped three very good animals—a two-year-old filly and a couple of three-year-old stallions. The filly was purchased from Mr. Wm. Dunlop, and was got by the Baron's Pride horse Dunure Castle out of a dam by Mains of Airies. The horse were both purchased from Mr. Peter Dewar, one of them being Favorite Blend by Royal Favorite, which he showed recently at Glasgow, and the other, Maple Leaf, a handsome big horse by Marmon out of the celebrated prize-winning mare Ellen Terry, by Flashwood. The animals, as will be seen, were all of excellent breeding, and likely to sustain the reputation of the breed in the Dominion. Mr. Jas. Kilpatrick has also recently sold two very good specimens of the breed to Messrs. Bayden & McDonnell, Exeter, Ontario. These were Knockinlaw, a three-year-old bred by Mr. Robert Forrest, Knockinlaw; and Swanbank, a four-year-old, bred by Mr. Maxwell, Sparnelbank, Galston. The former is by the famous Lord Dundonald out of a mare by Height of Splendor, while the latter is by Prince Shaps out of a St. Blaise mare. Both are nice quality young horses.—North British Agriculturist.

Provincial Auction Sales

The provincial auction sales being held this month promise to be successful. In all 104 bulls and 57 females are to be offered. With the exception of one Hereford bull and two Hereford females to be offered at Guelph they are all Shorthorns. At the Ottawa sale held on March 10th 29 bulls and 13 females were offered, and at the Port Perry sale on March 14th 18 bulls and 10 females were offered. Sales will also take place at Campbellcroft on March 16th and at Guelph on March 22nd. At the former 15 bulls and 10 females will be offered, and at the latter 51 bulls and 24 females.

A special feature of the sales this year will be the offering of handsome ribbons. Prize-winning animals will be sold first and the ribbons will go to the purchasers. Following the prize-winners, the animals will be sold according to age. Certificates and transfers and breeding lists will be supplied at the time of the sale. Every convenience is provided for purchasers who may desire to obtain stabling for animals for a short time for any animals purchased.

Canadian Pony Society

The Canadian Pony Society held a very successful meeting on March 3rd. The President, Mr. G. V. Foster, was in the chair, and H. M. Robinson, Hon. President, and Mr. E. T. Campbell, Vice-President, were also present.

Secretary Gerald Wade reported on behalf of the delegates to the Canadian Horse Breeders' Association and stated that the Canadian Horse Show Committee had given thirteen classes with prize money amounting to nearly \$500 to pony classing.

Horse Owners Should Use

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SUPERSEDES ALL CAUTERY OR FIRING.

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A large number of fine Clyde stallions and fillies for sale. My aim is to import the best and sell them to my customers as low a price as possible, which will insure their coming back another time. Four miles south of Guelph, Ont.

O. SORBY

Guelph Ontario, Canada

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Send Description Lowest Cash Price. W. E. MINTON, KANSAS CITY, MO.

It was decided to give a silver challenge cup at the National Exhibition. The society are also donating a handsome cup, valued at \$75, at the coming Canadian Horse Show.

The treasurer, A. Taylor, announced that since the annual meeting a number of new members had joined the society, and that the society now is one of the largest in the point of membership in Canada. A resolution was passed endorsing the third annual Open Air Horse Parade, to be held in Toronto on July 1st, and it was decided that the members should do all they could to make the entries in the pony classes at the coming Canadian Horse Show as large as possible. It was announced by the chairman that in addition to the pony classes at the Canadian Horse Show, the Horse Show Committee have added the following class at the request of the society.

Class 78, pony brood mare, 14 hands and under, in foal, or foal at foot, 1st prize, \$15; 2nd prize, \$10; 3rd prize, ribbon.

Aberdeen-Angus Sales

The average price at some of the annual Scottish sales of Aberdeen-Angus cattle held last month show an appreciable increase as compared with the average a year ago. The highest average at the Perth sale was made by the Baronet of Ballindallock, who secured an average of £164 17s. for his lot. The highest price paid was 300 gs., paid for a Pride bull of the Ballindallock herd. The other averages were far below this. Few American buyers were present.

London Fair Dates Fixed

The Western Fair, London, will be held this year from September 8th to the 16th inclusive. The directors have decided that no member of the association shall act as judge.

The Port Perry Sale

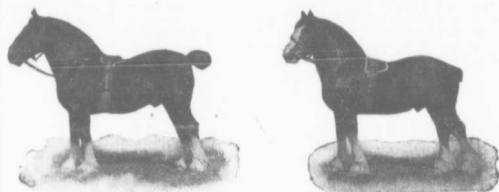
The Port Perry auction sale, which took place on March 14th, afforded a splendid opportunity to secure some good breeding stock at reasonable prices. Some of the offerings were choice young Shorthorn bulls up to two years old; thick, fleshy and well grown. The females offered were from one to four years old, those of breeding age being in calf or had calf at foot. Among them were some good young cows and heifers that should make grand foundation stock for any one desiring to start a herd of Shorthorns. Prices and fuller particulars will appear next issue. Among those who contributed to the sale were:

John Davidson, Ashburn; Colwill Bros., Newcastle; Wm. Ormiston, Columbus; W. E. Dyer, Columbus; J. W. Disney, Greenwood; T. C. McAvoy, Balsam; Sam Johnson, Ashburn; John Duff, Myrtle; James Jackson, Scugog; Thomas Redman, Port Perry; James Leak, Greenbank; Thomas Graham, Port Perry; Wm. Pollock, Seagrave; J. McRoberts, Shirley; Alex. Jeffery, Whitby, and John McKintyre, Columbus.

Shorthorn Breeders to Meet

A special general meeting of the Dominion Shorthorn Breeders' Association has been called for 1.30 p.m. on Friday, March 24th next, to consider proposals submitted by the Department of Agriculture, Ottawa, for nationalizing the Shorthorn records and for establishing the record office at Ottawa. The meeting will be held in St. George's Hall, Toronto, and a full attendance is requested.

CHAMPION CLYDESDALES BY CLYDESDALE CHAMPIONS



For Three Successive Years GRAHAM BROS.

Have won the Clydesdale Stallion Championship at the International, Chicago, and similar honors at Toronto.

1904 Baron Sterling 1903 Cairnhill 1902 Young McQueen
Sire Baron's Pride Sire Ethiopia Sire McQueen

Also a multitude of other important prizes.

We have select stallions and mares to sell, winners here and in Scotland among them. We can offer MORE SONS AND DAUGHTERS OF BARON'S PRIDE than any other American firm. Stallions to get pure-breds. Stallions to get grades. Mares for all. Prices are low—any single breeder can afford them. Correspondence solicited. Catalogue on request.

GRAHAM BROS., CLAREMONT, ONT., CANADA

T. H. HASSARD, V. S.

DEALER IN

CLYDESDALES,
COACH AND HACKNEY
STALLIONS

35 head now on hand, including noted premium horses in Scotland.

LONG DIST. TELEPHONE, MILLBROOK, ONT.



Smith & Richardson's CLYDESDALES

Our Clydesdale Stallions and Mares have wintered nicely, and we now have a number for sale at reasonable prices, amongst them the Toronto Show winner, BARON GARTLEY, 1st and sweepstakes.

Address : Columbus, Ontario.

STATIONS—Oshawa and Brooklin, G.T.R.; Myrtle, C.P.R.



Canadian National Exhibition

The annual meeting of the Canadian National Exhibition was held in Toronto on Feb. 25th. There was a large attendance of representatives present. President McNaught in his annual address referred to the successful fair of 1904, the best in the history of the Association. The second week of the fair always looked after itself. If improvement was to be made on previous undertakings the receipts of the first week would have to be increased. The passing of the city by-law to expend \$300,000 upon improvement of the fair was referred to with satisfaction. The finances of the Association are in splendid shape. \$30,000 had been handed over to the city, as the profits of the past year, and in addition over \$7,000 had been added to the reserve fund.

The President having intimated his desire to resign, Lieut.-Col. McGillivray moved a resolution expressing the wish of the meeting that Mr. McNaught again allow his name to go up for election to the board with a view to his retaining the presidency another year. A resolution was also passed asking for the amendment of the constitution to cancel the membership of representatives of organizations no longer in existence, or which have no material interest in the exhibition, and adding such societies as were actively engaged in the encouragement of manufacturing, agricultural or horticultural industries.

Over thirty candidates offered for election to the board of directors, from which the following were elected: W. K. McNaught, J. A. McGillivray, Dr. Andrew Smith, Hon. Nelson Monteith, R. J. Score, H. R. Frankland, George H. Gooderham, John G. Kent, Robert Miller, Ald. O. B. Sheppard, S. E. Briggs, Ald. Dunn, Col. F. I. Lessard, Ald. Lynd, John A. Cooper, R. Y. Ellis, Noel Marshall, W. K. George, Joseph Oliver, Ald. Robert Fleming.

The following old directors did not offer for reelection: Hon. John Dryden, A. F. McLaren, M.P., and W. E. Wellington.

A Record Breaking Cow

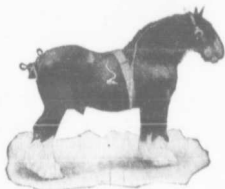
Since the new year ten Holstein cows and heifers have been admitted to the Record of Merit on account of their high official tests for butter fat. Each test covered a period of seven days and was under the supervision of the Dairy Department of the Ontario Agricultural College. The record of Ianthe Jewel Mechthilde is the largest official test yet made in Canada by a mature cow of any breed.

1. Ianthe Jewel Mechthilde (3708), at 6 y. 28 d. of age; milk, 503 lbs.; fat, 22.11 lbs.; butter, 25.8 lbs.; owner, Jas. Rettie.
2. Maud of Kent 2nd (2808), at 12 y. 7 m. 25 d. of age; milk 478.2 lbs.; fat, 18.20 lbs.; butter, 21.2 lbs.; owner, P. D. Ede.
3. Queen De Kol 3rd (1823), at 7 y. 6m. 17 d. of age; milk, 432.3 lbs.; fat, 16.93 lbs.; butter, 19.7 lbs.; owner, Jas. Rettie.
4. Annie Schuiling (2715), at 4 y. 9 m. 21 d. of age; milk, 409.9 lbs.; fat, 15.59 lbs.; butter, 18.1 lbs.; owner, Jas. Rettie.
5. Clarice (3823), at 6 y. 8 d. of age; milk, 421.4 lbs.; fat 14.50 lbs.; butter, 16.9 lbs.; owner, W. S. Schell.
6. Jewel Sylvia (2195), at 7 y. 3 m. 26 d. of age; milk, 367.8 lbs.; fat, 13.71 lbs.; butter, 16.5 lbs.; owner, Jas. Rettie.
7. Winnie R's Gem (4748), at 7 y. 2 m. 8 d. of age; milk, 409.3 lbs.; fat, 13.04 lbs.; butter, 15.2 lbs.; owner, P. D. Ede.
8. Daisy Albino De Kol (3098), at 4 y. 9 m. 1 d. of age; milk 333.4 lbs.;

International Importing Barn

Sarnia, Ont., J. B. HOGATE, Prop.

Branch Barn, Lennoxville, P.Q.



A few first-class Stallions yet left for sale. Clyde, Shire and Hackney. Write and find out what I can do for you before you buy elsewhere. Why pay \$2,000 for a stallion when you can buy one just as good, and perhaps better, for \$1,500; or \$1,500 when you can get as good for \$1,200; or \$1,000 when you can get as good for \$800? Having no salesman, no agents, no partners, importing large numbers, paying cash for them, I can sell you stallions worth the money; ages from three to six years. Terms to suit the buyer. Will pay railroad fare for customers east of Toronto to Sarnia. Write

J. B. HOGATE

Sarnia, Ont. - - or Lennoxville, Que.

Alex. Galbraith & Son

JANESVILLE, WISCONSIN

Offer for sale a magnificent collection of

CLYDESDALES

also a few choice SUFFOLKS, PERCHERONS, BELGIANS and HACKNEYS. Prices, terms and guarantee to suit the buyers.

25 YEARS AT THE FRONT

Address as above

New Catalogue ready

CLYDESDALES AND HACKNEYS.

My new importation of **Clydesdale Stallions** has arrived here, and is of the same high class quality as usual, carefully selected from among the best **Studs in Scotland**. My old customers and all lovers of a good **Clyde** are invited to see them. I have **Two First-Class Hackneys** yet for sale, well worth the price put on them. Phone to residence.

WM. COLQUHOUN,

MITCHELL, ONT.

ONTARIO Provincial Auction Sales

OF

PURE-BRED CATTLE

(Registered)

MALES AND FEMALES OF BEEF BREEDS

Will be held by Local Management,

Under the auspices of the Live Stock Associations of Ontario,
at the following points:

Campbellcroft, March 16 **Guelph, March 22**

All Stock inspected before being accepted. Only good representatives of the various breeds will be offered.

For Catalogues and full particulars apply to

A. P. WESTERVELT,

Secretary Live Stock Associations - Parliament Buildings, Toronto

fat, 12.32 lbs.; butter, 14.3 lbs.; owner, W. Rivers.

9. Mercena Schuling (3947), at 3 y. 9 d. of age; milk, 336.4 lbs.; fat, 11 lbs.; butter, 12.8 lbs.; owner, Jas. Kettie.

10. Buffalo Girl's Posch (4080), at 2 y. 5 m. 11 d. of age; milk 347.7 lbs.; fat, 10.57 lbs.; butter, 12.3 lbs.; owner, P. D. Ede.

In all cases the amounts of milk and butter fat are actual; the butter is estimated on the basis of 83.7 per cent. fat, according to the rule of the Association of Agricultural Colleges.

YOURS TRULY,

G. W. CLEMENS,

Sec'y Holstein-Friesian Association, St. George, Ont.

Some Dairy Cow Records

From Sept. 1 to Oct. 27 records of forty-seven cows were approved by the American Holstein-Friesian Association. Only one of this number commenced eight months after freshening. It was made by a five-year-old cow that dropped her calf Oct. 30, 1903. Commencing her record July 14, 1904, two hundred and fifty-eight days after calving, she produced in fourteen months 20,067 lbs. fat, an average of 1.478 lbs. per day.

Two thirty-day records were approved, the largest of which was made by a four-year-old cow. She produced 66,921 lbs. fat, an average of 2.231 lbs. per day.

Of the seven-day records eight cows averaged age 7 years, 4 months, 6 days, days from calving 16, milk 440 lbs., fat 14.457 lbs.; twelve four-year-olds averaged age 4 years, 4 months, 27 days, days from calving 15, milk 393.5 lbs., fat 13.321 lbs.; seven three-year-olds averaged age 3 years, 3 months, 26 days, days from calving 28, milk 312.8 lbs., fat 11.056 lbs.; twelve two-year-olds averaged age 2 years, 3 months, 13 days, days from calving 24, milk 283.9 lbs., fat 9.321 lbs.

Perhaps the most remarkable record in the list was that of a heifer that dropped her calf at 4 years, 12 days old. She produced 46,369 lbs. fat in thirty days, an average of 1.545 lbs. fat per day. Her average for the best seven days was 1.643 lbs. fat.

Included in the seven-day records is one Canadian cow, Emma Wayne 2d, 71321, age 6 y. 7 m. 5 d., days from calving 25; milk 342.1 lbs., fat 12.234 lbs. Owned by George Rice, Tillsonburg, Ont.

Handling the Bull

The bull should have a ring in his nose when he is a year old, and if he is headstrong—earlier. As soon as the wound is healed he should be taught to lead by it and always be handled by a staff. Daily grooming will improve the bull's looks and do him good. Never fool or play with a young bull. Teach him to mind, and as he grows older never allow him a chance to know that he can do anything else. It is a mistake to trust him if he is gentle.

One of the important items of a bull's care is to look after his feet. Keep the hoofs well trimmed. It may be necessary to throw the bull in order to saw off his hoofs. Let the bull have plenty of sunlight during the winter; a good sun bath is essential to the health of the animal. See that he gets plenty of exercise. The bull should never be kept in a dark pen. His quarters should be in a light, airy box stall where he can be fed regularly where he is in sight of the herd of cows.

"I manage to keep my boarders longer than you do," said the first landlady. "Oh, I don't know," rejoined the other. "You keep them so thin that they look longer than they really are."



Hollymount Farm

Mitchell, Ont.

Scotch Shorthorns.—A few young stock of both sexes, bred from very choice imported sire and dams. Write, or call on

Wm. Thompson

Box 104 - - Mitchell, Ont.

Imported Shorthorn Bulls

Of the best breeding. Canadian bred bulls sired by Imported Bapton Chancellor. Also cows and heifers.

A number of choice Yorkshires, all ages, for sale. Write

H. J. DAVIS, Woodstock, Ont.

Shire and Clydesdale Horses, Shorthorn Cattle

Choice Stock on hand at all times. Customers never disappointed.

Phone

J. M. GARDHOUSE, Weston, Ont.

SPRINGBROOK STOCK FARM.—A few splendid bull calves by imported sires and dams; also two fine young heifers. Head headed by Golden Conqueror (Imp.) 56040. Write for prices, or call on

AMOS SMITH, Huron Co., Trowbridge P.O., Listowel Station.

You must not imagine that because we sold some Shorthorns at Hamilton recently we have no more to offer.

BECAUSE we have quite a number yet, both male and female, and **GOOD ONES TOO.**

Write us if you are in the market (it only costs 2 cents), and we will frankly tell you whether we have what you want.

John Clancy,

Manager.

H. OARQILL & SON,

Cargill, Ont.

Dispersion Auction Sale of

Scotch Shorthorn Cattle

Work Horses, Farm Stock and Implements

The property of GEO. H. JOHNSTON, Balsam P.O., Ontario, 5 miles from Claremont Station, on C.P.R.

THURSDAY, MARCH 23rd, 1905

47 HEAD SCOTCH SHORTHORNS

9 particularly good young bulls, including the imported two-year-old stock bull, Choice Korad - 50020 - 38 females, including Fames, Crimson Flowers, Miss Hamdens, Marr Standfords, Kinellar Howies, Kinellar Minns, and other good trials. Trains at Claremont Station, C.P.R., will be met evening before and morning of sale. Catalogues sent on application.

GEO. H. JOHNSTON, Balsam, Ont.

On Wednesday, March 22nd, Mr. W. G. Howden, Columbus, Ont., near Myrtle, C.P.R., will sell his entire herd of 47 head of Scotch and Scotch-Topped Shorthorns by auction.

Advertise in The Farming World

FOR SALE

Two young Shorthorn bulls fit for service, good individuals and good colors, by Imp. Prince Napoleon and Bowhill General from English Lady and Kivra dams. Needing room and wishing to purchase a stock bull, I will price low if taken at once.

GEO. B. ARMSTRONG, TEESWATER P.O., Ont.
Teeswater, C.P.R. Mildmay, G.T.R.

CLOVER LEAF LODGE HERD OF SHORTHORNS

Choice young stock from grandly-bred Scotch topped cows. A number from choice milking strains. This herd headed by Scotland's Challenge (Imp.) Well-bred Lincoln sheep. Also Barred and White Rock Poultry and Bronze Turkeys.

R. CORLEY,

Wingham, Ont. Belgrave P.O. and
C.P.R. Sta. G.T.R.

Maitland Bank Stock Farm

Choice young bulls and heifers of finest Scotch breeding, herd headed by imp. Scotland's Fame. Young stock imported from dams and dams, and choicest breeding. My stock and prices will interest you.

DAVID H. MILNE,

Ethel P.O. and Sta., G.T.R., Huron Co., Ont.

EVERY Breeder that used **WILHELM'S** **BROOD MARE SPECIAL** for the last few years will recommend it to others. The only safe remedy for mares that cannot raise a good, strong, vigorous foal. In cases where it has been used five years, it gave the best satisfaction. If you had trouble in past years with weakly foals, try my special for brood mares and be convinced that it is not an absolute necessity to have your foals and that it is an unnatural condition to have them die at from ten to ten days. Price \$1.00. Address J. Wilson, V. S. Lock Box 175, Shakespeare, Ont.

Wm. Grainger & Son**Hawthorne Herd of Deep Milking Shorthorns**

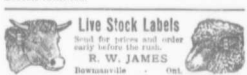
Aberdeen Hero (imp.) at head of herd. Present offering, 6 good young bulls by Scotch sires. Come and see what we have. **Londesboro Sta. and P.O.**

MAPLE LODGE STOCK FARM

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

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

CHAS. RANKIN, Wyebridge, Ont. Importer and breeder of **Shorthorn Cattle and Oxford Down Sheep.** Herd headed by Fries of Scotland (imp.). For Sale Female and all kinds of ages, from noted Scotch families.

**Live Stock Labels**

Send for prices and order only before the end of the year.
R. V. JAMES
Bownessville, Ont.

DAVID McCRAE, Janesfield, Guelph, Canada. Importer and Breeder of Galloway Cattle, Clydesdale Horses and Cotswold sheep. Choice animals for sale.

HOLSTEINS

Some fine young stock of both sexes and grand milking strains. Write or call on
W. SUHRING,
Sobringville P.O. and Sta. G.T.R., Perth Co., Ont.

DENTONIA PARK FARM

COLEMAN P.O., ONT.

We have a number of young stock of both sexes for sale.

JERSEYS, GUERNSEYS AND AYRSHIRES

Prize-Winners Wherever Shown.

Prices consistent with quality.

Correspondence solicited.

**"NETHER LEA" AYRSHIRES**

Offering this month 4 bulls, 15 nos.; 3 choice bull calves, 5 nos.; bull and heifer calves just dropped. Napoleon of Auchenland (Imp.) at head of herd, whose dam has a record of 72 lbs. per day. Prices low. T. D. McALLAN, Danville, Que.

MAPLE CLIFF DAIRY AND STOCK FARM

Breeders of Clydesdales, Ayrshires, Tamworths and Berkshires.

For Sale—Special offering this month of boars of both breeds fit for service.

R. REID & CO.,

Sta. and P.O. near Ottawa. Hintonburg, Ont.

Aberdeen-Angus Cattle

Choice young stock from our prize-winning herd. A few of both sexes for sale. Call on or write to
W. H. STEWART,
Lucasville, P.O., Ont.

Hereford Bulls at Buyers' Own Prices

Sired by imported bulls and out of imported or home-bred dams. A few heifers also on offer. We have six good things for the coming show at prices that will make them go.

W. H. HUNTER,

Near Orangeville, Ont. **The Maples P. O.**

Ashland Stock Farm.

Pure Scotch-Topped Shorthorns. Cows head from imported stock of grand Scotch breeding. Young stock of both sexes for sale.
J. MARSHALL, Jackson P.O., Ont.
Tara Station G.T.R.

Shorthorns, Clydesdales and Shropshires for Sale.

Bulls and heifers of approved breeding and quality. Clyde Hillies, imported and home bred. Shearing and ram lamb, imported. Mansell. Prices Moderate. **G. A. BRADLEY,**
Bethesda, Ont., Stoneville Sta.

RIVERSIDE HOLSTEINS

80 Head to select from. Six choice Bulls, 8 to 11 months old, whose dams are in the Ad- vanced Registry, with large official records; sired by Johanna Run 4th Lad. Sire won prize and grand sweepstake at World's Fair, St. Louis, 1894.
Matt Richardson & Sons, Caledonia, Ont.

FRONTIER FARM, Lewiston, N.Y.

BREEDERS OF REGISTERED

Polled Jersey Cattle, Red Polled Cattle

„Cheviot Sheep„

Now for sale, one Polled Jersey Bull, 1 1/2 yrs. old, Red Polled Bulls, one 2 yrs., one 14 mos., and one 10 mos. old, one female. Cheviot Sheep to be exchanged for registered Jersey Cows and Heifers.
A. MOHR, Lewiston, N.Y.

Prince Edward Island

During the latter part of Feb. we have had a snow storm almost every second day. March was ushered in with snow flurries. The oldest residents of the province admit that this winter is the most severe in their recollection. The railway line has been blockaded with snow for about twenty days, and during that time only two trains have been able to make a through trip from Summerside to Charlottetown. The winter steamers are at time of writing on the thirty-sixth day of the blockade. Very few foreign papers have been received during the month of February.

The loss to Island merchants and shippers on account of the ice blockade is very great.

No foreign mail has reached the Island from Feb. 22nd up to March 2nd. The attendance at the market was very small on Feb. 28th.

CHARLOTTETOWN MARKETS

Beef qr, per lb, 45¢ to 6¢, small 8 to 12¢; mutton, per lb, 6 to 8¢; butter, fresh, per lb, 24 to 25¢; eggs, per doz., 25 to 28¢; flour, per cwt., \$2.70, per bbl., \$9 to \$7.00; potatoes, per ton, 30¢; oatmeal, per lb, 35¢; hay, per ton, pressed, \$14.00, per cwt., 85 to 90¢; straw, per cwt, 50¢; beefs, per bu, 60¢; chickens, per lb, 9 to 10¢; oats, per bu, 45¢; turkeys, per lb, 12 to 14¢; pork, per lb, 6 to 6 1/2¢; carrots, per bu, 50¢; turkeys, per lb, 15 to 16¢; rabbits, each, 25 to 30¢; smelts, 12¢ per doz.

SUMMERSIDE MARKETS

Barley, per bu, 55 to 60¢; beef carcass, per lb, 9 to 5¢; buckwheat, 50 to 55¢; eggs, per doz., 30¢; butter, per lb, 18¢; calf skins, per lb, 16¢; 65¢; hay loose, 16 to 17¢; straw, pressed, 8¢; hides, per lb, 65¢ to 63¢; flour, per cwt., \$2.75; oatmeal, per cwt., \$2.75; oats, per bu, 40¢; wheat, per bu, \$1.10 to \$1.80; pork, per lb, 6¢; potatoes, per bu, 20 to 22¢; turkeys 15 to 16¢; geese, per lb, 10¢; turkeys, per lb, 14 to 15¢; ducks, per lb, 8 to 10¢; chickens, per lb, 6 to 10¢.

Saunders and Newbig, have purchased from F. Bell, Royalty, three of the finest Shorthorn cattle shown in recent years. They will be kept for the Easter market. One tipped the scales at 1,600 lbs. The three are part of the Shorthorn herd shown by Mr. Bell at the Provincial Exhibition, and which took second prize there.

Some of our farmers report great damage to their orchards by the great amount of snow on the trees.

Good crops of hay are expected this year. The snow covers the tops of the fences in some parts of the country. One farmer made the remark: "We shall need no fertilizers this year."

One of our citizens states that he saw two robins on Feb. 27th.

An early spring is anticipated. Only three mails arrived at Souris during the month of February.

It is reported that two King's County farmers shot valuable trotting horses owing to scarcity of fodder. A. R.

BOOKS AND BULLETINS

SUPPRESSION OF TUBERCULOSIS IN CATTLE—Address by Dr. Lorenz. Issued by C. Bischoff & Co., 88 Park Place, New York.

GRASSES AND FORAGE PLANTS—Bulletin 23. Experiment Station, Clemson College, S.C.

STEER FEEDING—Bulletin 76. Animal Husbandry Section, College Station, Texas.

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

METALIC
WRITE FOR PRICES
METALIC ROOFING CO.
LIMITED
TORONTO, CANADA
CEILING

MONKLAND HERD
YORKSHIRES

Good Quality. Easy feeders
JAS. WILSON & SONS,
Fergus P. O. and Sta., G. T. R. and C. P. R.

HILLHURST FARM.

Hampshire Down Sheep, the coming breed,
direct importations. Scotch topped Shorthorns
from imported sires and dams of deep milking
strain. JAS. A. COCHRAN, Hillhurst
Station, Oshington Co. P. Q.

ELMDALE STOCK FARM

Outsized Sheep Berkshires Swine
Close to or direct from imported stock. Good
young stock of both sexes to select from.
Prices reasonable. Write or call.
J. SLATER, Burtonville P. O., Burtonville Sta.,
Midland, Ont.; Thornhill, Metropolitan Ry.,
Markham Tp., Ont.

IMP. YORKSHIRES

SPRING LITTER

From TORONTO and other winners.

\$8.00 A PAIR

Ordered now, send for pedigree, etc. Speak quick.
A. W. Smith, Toronto, Ont.

Our offerings this Spring are

HOLSTEIN CATTLE
and **YORKSHIRE PIGS**

Both Sexes

Will offer Yorkshires later on. Stock of the
best of breeding.

J. M. LEE & SONS
Bimco, Ont.

MAPLE GROVE
Yorkshires

I have for sale a choice lot of December Pigs,
also Boars fit for service and Sows in farrow,
from imported and home-bred sires.
T. J. COLE, Box 158, Bowmanville, Ont.

CHAMPION BERKSHIRE HERD OF CANADA. Winner of Championship at leading shows for several years. Splendid importations of new blood, the championship winners of England. Young pigs, imported and home-bred for sale. Pens at Ixington, near Toronto. **W. H. DURHAM,** Box 1052, Toronto.

OAK LODGE
YORKSHIRES

This herd won the PREMIER CHAMPIONSHIP for BREEDER OF LARGE YORKSHIRES at St. Louis WORLD'S FAIR. Boars and Sows of all ages, close to PRIZE-WINNING STOCK, for sale. Prices reasonable.

J. E. BRETHOUR, BURFORD, ONT.

Advertise in The Farming World.

ARID FARMING.—Bulletin 91. Experiment Station, Logan, Utah.

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

STINKING SMUT IN WHEAT, PREVENTION OF.—Bulletin 89. Experiment Station, Brookings, South Dakota.

PROGRESS IN AGRICULTURE.—Evidence of Dr. Saunders, Central Experimental Farm, before Committee on Agriculture and Colonization.

ALFALFA OR LUCERNE.—Bulletin 46. Central Experimental Farm, Ottawa.

EMMER AND SPLIT.—Bulletin 45. Central Experimental Farm, Ottawa.

TESTING CORN FOR SEED.—Bulletin 96. Experiment Station, Urbana, Ill.

MARKET CLASSES AND GRADES OF SWINE.—Bulletin 97. Experiment Station, Urbana, Ill.

VALUE OF SWAMP LANDS.—Booklet issued by the German Kali Works, 93 Nassau St., New York.

BEEF PRODUCTION.—Bulletin 79. State College, Ames, Iowa.

INSECTS INJURIOUS TO CORN.—Bulletin 95. Experiment Station, Urbana, Ill.

PROTEIN IN WHEAT.—Bulletin 113. Experiment Station, Lexington, Kentucky.

CABBAGE INSECTS.—Bulletin 114. Experiment Station, Lexington, Kentucky.

BUREAU OF INDUSTRIES REPORT FOR 1903.—Ontario Department of Agriculture.

THE BABCOCK TEST FOR FARMERS.—Bulletin 114. Experiment Station, Durham, N.H.

REPORT OF LIVE STOCK ASSOCIATIONS. MANITOBA REPORT 1904.—G. H. Greig, Secretary, Winnipeg.

COMMERCIAL FEEDING STUFFS.—Bulletin 147. Experiment Station, New Haven, Conn.

APPLE MAGGOT.—Bulletin 109. Experiment Station, Orono, Maine.

FIELD TEST OF WHEATS.—Experiment Station, Lexington, Kentucky.

ICE COLD STORAGE.—Book by Madison Cooper, Minneapolis, Minn.

REPORT OF THE CHEMIST.—Central Experimental Farm, Ottawa.

WIND SEEDS.—Bulletin 116. Department of Agriculture, Ottawa.

BALDNESS AND FALLING HAIR
ABSOLUTELY CURED

FREE SAMPLE



I Guarantee to Grow Hair an Inch a Month if you are afflicted with baldness or falling hair or any disease of the scalp, write to me and I will send you a Free Sample and the cure of the hair and scalp and a Free Sample box of my remedy. I have practiced for 20 years in diseases of the hair, skin and scalp, having prescribed for thousands in the United States, such as Singsol, Cooper & Co., Chicago; Essenheim Dry Goods Co., Milwaukee; Golden Rule, St. Paul; Geo. B. Peck Dry Goods Co., Kansas City, and in other leading cities of the United States. I guarantee to grow hair, stop hair falling out, remove dandruff, quickly restore luxuriant growth to thinning scalps, eyebrows, eyelashes and restore the hair to its natural color. Send 2c postage. Write to-day for Free Sample and Booklet.

PROF. J. H. AUSTIN, Bacteriologist,
26 McKee's Theatre Building, CHICAGO, ILL.

Three Useful Books

The following are three books just issued by Morang & Co., Toronto, that will be found very useful for farmers:

MAKING POULTRY PAY.—This is a new book by Edwin C. Powell. The author in preparing this work has drawn largely from the experience of practical poultry keepers, and has produced a hand-book of poultry keeping that should prove a safe and convenient guide for those who keep few or many fowls.

The book is well illustrated by views of the leading breeds of fowl and by plans of poultry houses and appliances.

FARM GRASS.—In this extensive work the author, Mr. W. J. Spillman, of the Bureau of Plant Industry, United States Department of Agriculture, has endeavored to present in connected form the main facts concerning the grasses grown on farms, in so far as, at least, as these facts are of interest to farmers. Actual practice in grass growing has been set forth, every phase of the subject being viewed from the farmer's standpoint.

SUCCESSFUL FRUIT CULTURE.

—By S. T. Maynard, formerly Professor of Horticulture, Massachusetts Agricultural College. This is a practical guide to the cultivation and propagation of fruits. The author has aimed to make a book that is up-to-date in every particular, and to cover the entire practice of fruit growing from the starting of the seed or cutting to the marketing of the fruit. It is written from the standpoint of the practical fruit grower, who is striving to make his business profitable, and at the least cost. The work is suitably illustrated.

How She Hangs Them

"So, to put it slangily, you think that Mrs. Henpecker wears the trousers in that family?"

"Well, no; I wouldn't say it that strong, I would say that she hangs her skirts up with the trousers stretcher."

What kind of fur did Adam's wife wear? Bear (bare) skin.

Market Review and Forecast

The Trend of Markets—Supply and Demand—The Outlook

Toronto, March 14, 1905.

Bad roads are still affecting trade in the country districts, though they cannot last much longer. In spite of this, however, the outlook for general trade was seldom or ever better than at present, orders for spring delivery in a number of lines of goods having exceeded those of a year ago. There has been more demand for call money, which rules steady at about 4½ per cent. Discounts remain steady at about 6½.

WHEAT

There is nothing new in the wheat situation excepting it be that the speculative element is hard at work, and the effort to corner May wheat is still on. This element may run up the price at any time to suit their own purpose, but it will be no more than a temporary jump. It would seem that the only place where there is a scarcity of wheat is in America. There was a report last week that wheat had been shipped from Europe to New York for the milling trade. Aside from this there is a liberal supply of wheat in sight, the world's total last week being 79,735,000 bushels, as compared with 73,538,000 bushels a year ago. Shipments from Russia and Argentina show large increases, and on the whole there seems to be no great indication of a scarcity. But everything from now on will depend upon the growing crop. In the southwestern states, where the winter season is about over, the winter wheat situation is reported to be encouraging, with less damage from winter killing than a year ago. Locally the market is quiet at about \$1.00 for red and white, 97c to 98c for spring, and 88c to 90c for goose.

COARSE GRAINS

The oat market continues to hold its own. Wholesale quotations at Montreal range at about 46c. Here prices are steady at 40c to 41c, shippers' quotations, at outside points. Business in both barley and oats continues quiet at quotations. Corn is firm and there is a good demand at 43½c to 47c for Canadian, Chatham freights.

BRAN AND SHORTS

A large export demand has been the feature of the milled market the past few weeks. A great deal of Manitoba bran has been sold recently in this way. Some millers are reported oversold, but there has been no change in prices, which rule steady at quotations.

HAY AND STRAW

Hay rules steady and no material change in prices is reported. Receipts, however, are increasing somewhat, owing to better weather, which may have some effect on prices. Montreal quotations are \$8 to \$9.50 for baled timothy, as to quality, and \$6.50 to \$7 for clover and \$7 to \$7.50 per ton for mixed. Here timothy sells at \$8 and mixed clover at \$7 on track Toronto.

The demand for straw is not so good still prices rule at about \$6.

POTATOES AND BEANS

There is an easier feeling in potatoes at Montreal, with a steady market reported here.

The bean market is strong, owing to small offerings and prices are steadily advancing.

EGGS AND POULTRY

Eggs are on the down grade. The milder weather has induced a weak feeling and even lower values are looked

for soon. At Montreal new laid at 22c in case lots here at 21c to 22½.

There is little doing in poultry, excepting in a purely local way.

DAIRY PRODUCE

Cheese cables have materially advanced and holders on this side have advanced their prices to 11c and 11½c, or a little above cable limits. There is evidently a much better feeling, and the remaining stocks of held stuff are expected to be cleared off very shortly. It is reported that some Ontario fodder cheese has sold at 10½c and that several contracts have been made for April cheese at that figure. The impression now is that very few fadders will be turned out, though if buyers put up the price the goods will be forthcoming.

The butter market is in a somewhat unsettled condition. There is not enough new milk creamery to meet the demand, while the supply of held stuff is more than the market will take. Most of the latter offered is not of very desirable quality, and consumers do not want it. At Montreal good held stuff has been selling at 27c to 28c, and new milk creamery at 30c, in a jobbing way. A year ago new milk creamery sold at 31c per lb. The market here rules steady at 27c to 28c for creamery prints and 22c to 24c for choice dairy rolls. Tubs and large dairy rolls sell at 19c to 22c per lb.

LIVE STOCK

Generally speaking the live stock market has been active during the past week, with prices higher in several lines. Exporters ruled a shade higher and buyers have been offering a premium for prime steers. In fact, everything in the cattle line has been active except inferior butchers' cattle, the demand for which has been very dull. The market for exporters was the best for some time past, prices being fully 10c per cwt. higher for all grades. Choice export cattle sell at \$4.40 to \$5 and good to medium \$4.25 to \$4.40 per cwt. In the butchers' line there have been too many of the commoner grades offering, for which there is no demand. Choice lots sell quickly at \$4.25 to \$4.65; fair to good \$3.75 to \$4, and other quality \$2.50 to \$3.75 per cwt. There has been a good enquiry for feeders, with short-keepers in most demand at \$4.25 to \$4.55 per cwt., and light to medium \$3 to \$4. Feeding bulls bring from \$3 to \$2.50 per cwt. Stockers are in fair demand at \$3 to \$3.40 per cwt. for best and \$2 to \$3 for common. Calves sell readily at \$3.50 to \$6 per cwt., and choice milch cows bring from \$35 to \$35 each.

The sheep market continues strong and firm, with receipts on the light side, with the exception of that for export sheep, which are ruled a trifle easier. Export sheep are quoted at \$3.50 to \$5.12½ and mixed at \$3.50 to \$4.50 per cwt. Grain fed lambs sell at \$6.50 to \$7 and barnyards at \$5.50 to \$6.50 per cwt. Spring lambs bring from \$2 to \$8 each.

The hog market is on the upgrade and prices during past week advanced

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	
	14	13	13	10	10	10	10	10	10	10
Wheat, per bushel.....	\$ 1.02	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08
Oats, per bushel.....	41	46	50	50	50	50	50	50	50	50
Barley, per bushel.....	47	48½	55	55	59	59	59	59	59	59
Peas, per bushel.....	67	66	77	78	78	78	78	78	78	78
Corn, per bushel.....	47	57½	65	66	66	66	66	66	66	66
Flour, per barrel.....	4 50	5 70	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00
Bran, per ton.....	17 00	18 00	22 50	22 50	22 50	22 50	22 50	22 50	22 50	22 50
Shorts, per ton.....	10 00	20 00	22 50	24 00	24 00	24 00	24 00	24 00	24 00	24 00
Potatoes, per bag.....	80	80	35-40bu	30-40bu	30-40bu	30-40bu	30-40bu	30-40bu	30-40bu	30-40bu
Beans, per bushel.....	1 10	1 80	1 80	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Hay, per ton.....	8 00	5 50	11 50	13 00	13 00	13 00	13 00	13 00	13 00	13 00
Straw, per ton.....	6 00	6 00	9 00	9 50	9 50	9 50	9 50	9 50	9 50	9 50
Eggs, per dozen.....	22	22	26	27	26	26	26	26	26	26
Chickens, per pound, d.w.....	12	11	per 1 00	1 00	per 1 11	1 11	per 1 11	1 11	per 1 11	1 11
Ducks, per pound, d.w.....	14	11	per 1 00	1 00	per 1 11	1 11	per 1 11	1 11	per 1 11	1 11
Turkeys, per pound, d.w.....	17	16	20	20	16	16	16	16	16	16
Geese, per pound, d.w.....	12	11	16	16	11	11	11	11	11	11
Apples, per barrel.....	3 00	3 50	3 50	3 50	5 00	5 00	5 00	5 00	5 00	5 00
Cheese, per pound, d.w.....	11½	11½	11½	11½	11½	11½	11½	11½	11½	11½
Butter, creamery, per pound.....	28	30	30	30	30	30	30	30	30	30
Butter, dairy, per pound.....	24	22	24	25	20	20	20	20	20	20
Cattle, per cwt.....	5 00	5 00	4 85	4 85	4 00	4 00	4 00	4 00	4 00	4 00
Sheep, per cwt.....	5 00	5 00	4 75	4 75	4 50	4 50	4 50	4 50	4 50	4 50
Hogs, per cwt.....	6 00	6 00	5 75	5 75	5 50	5 50	5 50	5 50	5 50	5 50
Veal Calves, per cwt.....	6 25	6 00	5 00	5 50	5 00	5 00	5 00	5 00	5 00	5 00

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at the regular wages paid for such work, it leaves me a net profit of \$30.00 per acre. As to the quantity of seed, I would rather exceed eighteen pounds to the acre than sow less.—S. S. Herzer, Waterloo Co., Ont.

Handling Manure

I am going to give you my experience in handling manure. To begin with, I have a twelve foot air motor that gives me power to grind grain, to saw all small sized wood, to run pulper and to cut all our feed and bedding. Everyone knows that cut straw will soak up more liquid than uncut straw. It also leaves the manure in better shape for top dressing.

We wheel the manure out into a covered shed, mixing hog, horse, cow and hen manure together. Every two weeks we haul it out to the fields that have been plowed in the fall. The manure is put in large piles about three feet deep flat on top. If I have more straw than I want I will pile it on top about 8 inches deep. This keeps them from drying out on top. In the spring, as soon as the ground is ready, we give the field one stroke with the carbin harrow, spread the manure, and go over the field again with the harrow, sow the grain and seed heavy with clover and grass.

I have been following this plan for 10 years and never had a load of manure firefanged or missed a good crop of grain, and always got a good catch of clover and grass.—James Sloan, Greenville Co., Ont.

The Ottawa Winter Fair

(Continued from Page 223.)

to his credit. Telfer Bros., Paris, were the only exhibitors in Southdowns. They also showed Hampshires, but met strong competition in this class from James Bowman, Guelph. R. H. Harding, Thorndale, was the only exhibitor in Dorset Horns, and Lloyd-Jones Bros. in grades and crosses.

IN THE DAIRY

test there were about ten head of cows entered. J. G. Clark, of Ottawa had two Ayrshire cows; Mr. Neil Sangster one aged Holstein cow and one heifer about 22 months of age, which in spite of having slipped her calf before due, gave a good account of herself in milk, testing 2.07. The winner of first place is an Ayrshire grade, sold last year at auction by R. Reid & Co., of Hintonburg, to Mr. T. A. Spratt, of Billing's Bridge. Her mark was 110.7 points. She gave during the 48 hour test 89 lbs. milk of better than 4 per cent butter fat. The second prize winner is a Holstein owned by Neil Sangster, of Ormstown, P.Q. Her test was 110 lbs. of milk, testing 2.8 per cent of butter fat.

MEETINGS

As at Guelph a series of meetings were held during the show, at which a number of practical addresses were delivered on live stock and dairy subjects. Among those who delivered addresses were: Hon. Sydney Fisher; W. Staley Spurr, Professors Day and Dean, of O.A.C.; J. H. Grisdale, Central Experimental Farm; G. H. Clark, Chief of the Seed Division; Robt. Miller; A. W. Smith; John Jackson; J. M. Gardhouse, and R. Clark. Owing to lack of space the report of these meetings is held over for next issue.

Ottawa Sale

The provincial auction sale of Short-horns, held at Ottawa on March 10th, was a success. 20 males sold for \$1,544.50, or an average of \$77.23; 13 females sold for \$1,038.00, or an average of \$79.85. The 33 head sold for \$2,582.50, or an average of \$78.26 each. Fuller report next issue.

Manure Spreaders

At dairy conventions now there is a great deal of talk about manure spreaders. It is remarkable what excellence is claimed for this machine in the way of improving the crops. This talk was not by agents, either, but by men who had used the spreader on one part of the field and the old method of hauling out in piles and spreading in the spring by

hand on the other part of the field. Of course, the most perfect plan is to have the spreader machine where it can be emptied into from the stable door and hauled out every day and spread directly. This is the approved plan, taking all things—drying, leaching, escape of ammonia, and all—into consideration. It is worth your while to examine into this.—Jersey Bulletin.

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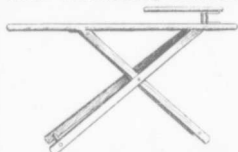
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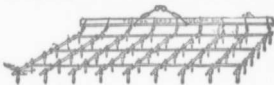
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