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A Paper for Farmers and Stockmen

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TO THE EDITOR OF AMERICAN GARDENING:

In your issue of June 15, on page 209, I notice a 50¢ article on the Colorado Beetle or Potato Bug. For the benefit of your numerous readers I would advise them to try Hammond's Slug Shot. I have used it here this summer with excellent results on Potatoes, Egg Plants, Cucumbers and Squash. It is the best remedy I know of, simple and effective. I purchased two 50¢ bottles which I advertised in your paper, and they are very useful articles. The best time to dust the plants is early morning, as the substance adheres much better when they are covered with the larvae. Once they get a taste of it,

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Devoted to Country Life in Canada

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Raspberries and How to Grow Them

This berry succeeds best on light warm soil. The red varieties are propagated by suckers that come up from the roots of the old plants, the black caps by tips. The young canes grow up, turn over in the August and take root in the soil usually in August or September. In most sections the reds are cultivated in rows six to eight feet apart and the plants 2½ feet apart in the row. Then let the suckers fill up between to form a solid row. The blacks are usually planted in hills four or five feet apart each way. In order to get a big crop of large berries it is necessary to give liberal application of manure and good clean cultivation. I have found the size of years that I can keep up the size of my berries much better by cultivating right through the picking season. Run through with the cultivator after each picking to stir the soil, break up the crust formed by the tramping of the pickers and to form a mulch. An important point in raspberry growing is the summer pruning. As soon as the young canes reach a height of 3 feet, usually about the middle of July, we go through and cut off the ends of the canes. This checks the upward growth, makes them grow stocky and causes them to ripen up and form a better quality of wood, which is not so apt to freeze back in winter. We usually remove all dead wood and surplus canes in the spring. Three good varieties are: Marlborough for early, Cuthbert for main crop, and Golden Queen the best white variety.—Fred A. Sheppard, Lincoln Co.

If every young farmer who starts in business on the farm fully appreciated the value of good stock, scrubs would not last very long. Better begin with one good mare or one good cow than with two or more of inferior quality.

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Manson Campbell

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EDITORIAL NOTES

As shown in the Ontario crop report published elsewhere in this issue, dogs are still worrying sheep in Ontario. How long will our farmers have to put up with this serious menace to the successful prosecution of sheep husbandry?

It is reported that Professors Lochhead and Harrison will transfer their allegiance from the Ontario Agricultural College to the new Macdonald College at St. Anne's, Que., at the end of this year.

The supplementary estimates brought down last week show an addition of \$6,100 to the agricultural appropriation for Ontario for 1905. This with the regular estimates brought down some weeks ago makes a total of \$339,543 for agriculture, as compared with \$375,356 in 1904.

The bill making the runners on sleighs used in Ontario four feet apart has become law, but with a rider attached that it shall only become operative on the decision of county councils to put it in force, a provision that will lead to confusion if one county puts it in force and an adjoining one does not.

If the Globe and other leading Canadian daily papers would leave the embargo alone for awhile and agitate for the establishment of an export trade in dressed meat from this country, it would be more to the point. The removal of the embargo is not the *sine qua non* of the cattle raiser.

The Ontario fruit men are again complaining of inadequate facilities provided by the railways for the carriage of perishable fruit during the summer and fall. The representations made to the railway commission a year ago have evidently not borne fruit. The fruit men's request was a reasonable and fair one, and the railways should be made to adhere to it.

Mr. W. D. Flatt's enterprise in introducing choice Clydesdale fillies into this country is to be highly commended. An average price of \$285 for choice imported registered fillies is, however, not enough to recompense for the time, expense and responsibility attached to an importation of this kind.

The railway commissioners have issued an order fixing a maximum rate for carloads of cattle from C. P. R. and G. T. R. points in Ontario to Montreal for export. This order fixes a maximum rate ranging from 23½¢. at Sarnia and Windsor to 15¢. for points east of Cobourg and Belleville. From Kincardine and points on the northern lakes to Penetang the rate is not to be higher than 24½ cents per cwt. As high as 28¢. per cwt. has been charged for carrying cattle in carloads from western Ontario points to Montreal.



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The Farming World

And Canadian Farm and Home

Vol. XXIV

TORONTO, 1 JUNE, 1905

No. 11

System in Breeding

IN breeding any class of live stock the farmer must follow some definite system or plan. "Off and on," or "hit or miss" breeding, whether of horses, cattle, sheep or swine eventually leaves the farmer poorer than when he began. No one but a millionaire can afford to change about from one breed to another or from one type to another, as a big drain on his pocket book will not be felt. The successful breeders of to-day are those who have had an ideal in their minds, and who have, as far as possible, lived up to that ideal in their breeding methods. Not only have they stuck to one breed, but have adhered to certain types of that breed. In this way only can permanent success be attained.

There is, perhaps, more lack of system shown by the average farmer in horse-breeding than in any other branch of live stock husbandry. The only factor in too many cases that "cuts any ice" in selecting a stallion is the amount of the service fee. But whether the service fee be high or low the animal selected should be one that fits into the system which the farmer has laid out for himself. Unless he does this the results will be disastrous. It is folly to try to raise draft horses from trotting-bred mares, and vice versa, and yet such ridiculous things as these are done, even in enlightened Ontario. Then we have farmers with mares of Clyde or Shire blood breeding them to Percheron stallions, a mixture that cannot but result in failure, so far as producing a sound, serviceable draft horse is concerned. The great objection to the introduction of the Percheron horse into this country at the present time is, not so much because of the breed, but because there is very little foundation stock in the country upon which the Percheron can be used to advantage. If a farmer has a mare with Percheron blood we would advise him to breed to a stallion of that breed, otherwise he should be very careful about indiscriminately mixing the breeds. Let some definite system or plan be consistently followed.

International Chamber of Agriculture

We have received a copy of the proclamation issued by the King of Italy on the proposal for an International Chamber of Agriculture, which opens in Rome this week, when representatives from the leading agricultural countries of the world will be present. One paragraph from the proclamation explains

the chief object of such a chamber. It reads as follows:

"The agricultural classes, generally the most numerous, and who exert everywhere a great influence on the destiny of nations, live disunited and dispersed, and are consequently unable to provide adequately for the improvement and rational distribution of the various forms of agricultural produce, and to safeguard their own interests on the markets, which, in the case of agriculture, are becoming every day more international."

While an international institution of this kind might effect some improvement along the lines indicated, we are doubtful about its being of much practical value. We are living in an age of keen competition, when strong rivalry exists between countries in securing and holding the world's markets for their agricultural products. It is the fellow who gets there first with the right kind of stuff who wins the day, and there is not much concern about the other fellow unless he is destined to be a strong competitor.

How U. S. Government Helps the Farmer

Though the Department of Agriculture at Washington is not an educational institution in the strictest sense, it has done and is doing much to bring home to the people of the Republic the importance and value of the farm and its productions. In Secretary Wilson's report for 1904 the results of some of the work accomplished are set forth and which cannot but be of value to Canadians.

The department some years ago introduced the hardy Swedish oat into the Northwestern States, where its high qualities as a yielder and resister of drought have been fully proven. It is now the popular variety in those states. In one instance, in Wisconsin, from the planting of thirty-three grains in the spring of 1899 there resulted a production of about 20,000 bushels in 1903, and 500,000 bushels in 1904. Although the highest legal weight of oats in the States is thirty-six pounds to the bushel, this variety commonly weighs from forty to forty-four pounds in the Northern States and occasionally reaches from forty-eight to fifty pounds to the bushel.

Alfalfa has attracted more attention in the eastern half of the United States during the past two years than any other crop. The department at Washington has demonstrated that it can be grown in every state in the Union. Varieties have been found that withstand the rigorous winters of the northwestern prairie states.

Other varieties have been found that are immune to the alfalfa leaf rust.

Through the efforts of the department, plants have been secured that will grow on the alkali lands of the Southwest. The forage value of these plants, as well as methods required for their cultivation, are now being investigated.

The breeding and improvement of corn has received special attention. The main object of this work has been the selection of strains of corn best adapted to the different sections of the United States. Extensive breeding investigations of oats have been carried on mainly for the purpose of producing a profitable variety for the rich farm lands of the corn growing states where oats are used in rotation with corn. The production of a more desirable oat for meal also forms part of this work.

In addition, there has been a variety of work conducted, all bearing directly upon helping the farmer to help himself. Practical tests were made the past season with nitrogen-fixing bacteria for use in connection with leguminous crops. This work has been very successful. Investigations have also been made as to the cause of the so-called "toxic" disease in sheep in the northwestern states. More and more attention has been given to the forestry question. Plants are being brought in from foreign countries to diversify the industries and to enable farmers to grow what has been and is costing the people of the United States large sums of money.

County Councils and Good Roads

It is about fifteen years since the agitation for good roads began in Ontario. At that time those who had the hardihood to advocate better roads were not listened to by the average township councillor. He was seemingly afraid of a general raid upon the township treasury for funds to build new roads. The farmer himself kept aloof for a time, but as the agitation spread he gradually became convinced that good roads were a necessity to the progress and prosperity of the country. But all this has been changed. While the farmer is as thoroughly convinced as ever of the need of good roads, he is not being directly appealed to at the present time. The appeal is being made to his representatives in the township and county councils, and what is more, in contrast with a decade ago, no one is more sympathetic toward the movement or more eager for good

roads than these same municipal officers. They are the parties who control the funds for the time being, and their co-operation means an earlier realization of the blessings of good roads than if the appeal had to be made through the people to them. Where councillors are lukewarm on this question of road improvement, farmers should bring pressure to bear next New Year's.

The greatest advance towards permanent and efficient good roads was the creation of the million dollar road fund a few years ago by the Ontario Government. Already eight counties—Lincoln, Wentworth, Wellington, Oxford, Simcoe, Hastings, Lanark and Victoria—have secured about \$250,000 from the government for road improvement, which means that about \$750,000 has been expended in these counties alone upon the roads within the past two or three years. Several other counties are now planning to take advantage of the Government's wise provision and a few more years will see the majority of the counties of the Province working upon a comprehensive and permanent scheme for road improvement.

The essential feature of the Government scheme is leaving roads controlled and maintained by the county instead of the townships. A county application for a grant must be accompanied by a plan showing the roads to be designated as county roads and giving reasons why such roads have been chosen. The government engineer then goes over the roads in the county thus selected, making a detailed report of the approximate cost of improving them, etc. If this report is satisfactory, a government grant is given equal to one-third of the total cost of the work, which will average about \$1,000 per mile. In this way the roads thus improved are practically under government supervision and to a certain extent provincial roads.

There has been some little friction between township and county councils over the matter, the former, whose consent has to be secured before any roads can be set apart for county purposes, objecting because they have no control of the expenditure and patronage resulting therefrom. Besides, the system of electing county councillors provides no connecting link between the two bodies. This will be remedied when Mr. Monteith's bill comes into force constituting the review of the townships as county councillors. But whether this be remedied or not, the scheme for road improvement under the act can only be successfully carried out through the counties. To allow the townships to receive the grant and to expend it upon local road improvement would be neither conducive to permanency nor efficiency. Some larger body must do the work, and the only one available is the county council. There is also a distinct financial gain in having this body do the work, as all incorporated towns and villages have to pay their share, which they would not be called upon to do were the money expended by the townships. This share of the towns and villages towards the work will average about 30 per cent., and the only one available is the county council, there

through the original intention of the framers of the government act was that the money should be given through the county councils, there

has always been a feeling that after the time limit had expired the money would be available for township purposes. This has prevented progress, and township officials, feeling that sooner or later they would have control of their share of the grant, refused to co-operate with the county officials in a general road improvement scheme. By an amendment to the act, introduced last week by the Minister of Public Works, all this will be changed and the county councils made the only medium through which the government grant for road improvement will be made. This will, no doubt, have the effect of bringing many townships into line, and though their consent will have to be secured as formerly, refusal to give it will mean that no government money will be expended at all in their district.

Horse Judges Unfairly Criticized

The recent Canadian Horse Show has come in for a lot of one-sided criticism at the hands of one or two of Toronto's daily papers. In a manner that would show to any horseman their utter unfitness to deal with the question, these journals have blindly gone at the job of calling management, judges and horses down, without regard for rhyme or reason, cause or consequences. Criticisms have been made, which, if made by a man with the least knowledge of the question he was handling, would make him ashamed to ever look an honest horse in the face again. In one case a very valuable and high class mare was shown which had, on the inside of one hock, a small patch of white hair, left from an old cut. This mare, in common with the other entries, was examined by competent veterinarians, and pronounced sound not only in this, but in all other particulars. Probably while the "Smart Alec" representative of one of these journals was standing at the ringside while this class was being judged by the most capable and reputable judges procurable, some stable boy from the barns of an opponent near his elbow, pointed to the mark, and asked the newspaperman to look and see the spavin on the horse getting the money. This mare is then branded as unsound, and the judges scored for awarding the prize to an unsound horse. If all horses are examined for soundness before being permitted to enter the ring, then there would seem to be no further responsibility resting with the judges on that score, for they are to presume that all are equally sound. If they were to do otherwise they would be still more liable to criticism from these same sources.

No useful purpose can be served by a technical criticism of an event of this kind. If the work is done by incompetent, or incapable writers, and such is most palpably the case, then only harm to the best interests of the horse, and all horse lovers, and the show itself, can result. It is a simple "squal" from some sore-headed exhibitor, then surely no self-respecting journal should undertake to criticise a judge of good reputation, merely on his miserable little account. There is no surer way to get a whole lot of corruption inside the show-ring, and of doing a great deal of damage to the show itself, than by making the position one which a respectable

horseman will refuse to occupy, and the choice will be narrowed, and the end to be sought will be farther away than before. A crowded ringside is at the best a very poor place to judge the merits of a horse from; and a very excellent one indeed to hear all sort of stupid ignorance aired as horse knowledge.

Thinks We Should Have Dead-Meat Trade

Speaking at a dinner in his honor at his own town, Mr. John Ross, of Meikle Tarral, Scotland, who judged the champions at Chicago last December, and afterwards visited Guelph, made the following comment upon his visit:

"He reluctantly left Chicago and entered Canadian territory, and as they approached Guelph, they came upon more friendly-looking farmers, larger and with a touch of home about them. Referring to the production of beef on the other side, he said, strengthened very considerably by what he had seen and heard on the other side, he believed he was not singular in thinking that an all dead-meat trade would, in the long run, suit both countries best, and could be so regulated that the mixing process, which is now going on to the injury of both, could be stopped, to the great advantage of both consumers and producers."

Coming from a representative Scotchman, his opinion on the dead-meat trade is worthy of note.

Farmers' Institute Development

At the annual meetings of Farmers' Institutes which take place this month, the work of the institute and plans for future activity should receive special attention. It is a question whether it would not be better to dispense with set addresses and to devote the time of the annual meeting wholly to the business of the institute, and to discussing ways and means of making its work more effective in reaching the farmers of the district. At any rate a good live discussion on this topic should be an important feature of the program.

The institute has undoubtedly reached a stage in its development when a branching out into new lines is necessary if interest in its work is to be retained and increased. What new lines of work shall be undertaken the officers and members should in a large measure determine. Just as speakers versed in various subjects are required to meet the needs of the different localities where the winter meetings are held, so one district may wish to take up one new line of work, and another something different. A new feature that institutes might well add to their present work is the plowing match. It could be conducted by every institute with profit to all concerned. Then there is the seed fair, live stock judging schools, circulating libraries, etc., which might be taken up in addition to the present program.

While advocating development along new lines, we do not think that the present system of meetings should be discontinued. New features will add renewed interest to the meetings and make them more effective.



A county road of Lanark, Ontario.

Practical Pointers on Road Making

1. Every good road has two essential features:

(a) The earth sub-soil is well drained naturally or artificially, making a strong, unyielding foundation, acted upon to the least possible degree by frost.

(b) The wearing surface is a smooth, hard and compact crust, which sheds water readily, and distributes the concentrated wheel load over a greater area of sub-soil.

2. The surface covering is generally a coating of gravel or broken stone, which should be put on the road in such a way that it will not in wet weather be churned up and mixed with the earth beneath. That is, it should form a distinct coating.

3. To accomplish this:

(a) The gravel or broken stone should contain very little sand or clay—it should be clean.

(b) The roads should be crowned or rounded in the centre, so as to shed the water to the open drain.

(c) Ruts should not be allowed to form, as they prevent water from passing to the open drains.

(d) The open drains should have a sufficient fall and free outlet, so that the water will not stand in them, but will be carried away immediately.

(e) Tile underdrains should be laid wherever the open drains are not sufficient, and where the ground has a moist or wet appearance, with a tendency to absorb the gravel and rut readily. By this means the foundation is made dry.

4. Do not leave the gravel or stone just as it drops from the wagon, but spread it so that travel will at once pass over and consolidate it before the fall rains commence.

5. Roll the gravel or stone with a road roller until it is smooth and hard, otherwise keep the road metal raked or scraped into the wheel and horse tracks until consolidated.

6. Grade and crown the earth road before putting on gravel or stone; also roll the earth road before putting on the metal, if a road roller is available.

7. The grader should start work early in the spring, and be kept constantly in operation until the season's work is completed. Work for the grading machine should be staked out in advance, so that each piece can be taken up consecutively; otherwise much time is lost in moving the machine from one part of the township to another.

8. A fair crown for gravel roads on level ground is one inch of rise to each foot of width from side to centre.

9. The road on hills should have a greater crown than on level ground; otherwise the water will follow the wheel tracks and create deep ruts, instead of passing to the side drains. One and one-quarter inches to the foot from the side to centre will be sufficient.

10. The work of cutting down hills should be undertaken systematically, a few being taken up each year and made good, the worst or most necessary being first looked after. Gravel or stone can then be put on permanently. The rise should not exceed one foot in twelve.

11. Repair old gravel roads which have a hard centre, but too little crown, and which have high, square shoulders, by cutting off the shoulders, turning the



A concrete tile culvert

material outward across the ditch if necessary, and placing new gravel or stone in the centre of the road. Do not cover the old gravel foundation with the mixture of earth, sod, and fine gravel, of which the shoulders are composed. The shoulders can be most easily cut off by means of a grading machine.

12. Roads of importance should be about twenty-four feet in width, between the inside edges of the open

ditches, with the central eight feet gravelled or metalled with broken stone. Roads of least travel should not be less than eighteen feet in width.

13. Wherever water stands on the roadway or by the roadside, or wherever the ground remains moist, or is swampy in the spring or fall, better drainage is needed.

14. Look over the roads after heavy rains and during spring freshets. The work of a few minutes in freeing drains from obstruction, or diverting a current of water into a proper channel, may become the work of days if neglected.

15. Surface water should be disposed of in small quantities; great accumulations are hard to handle and are destructive. Obtain outlets into natural water-courses as often as possible.

16. Instead of having deep, open ditches to underdrain the road, and dry the foundation, use tile.

17. Give culverts a good fall and free outlet, so that water will not freeze in them.

18. In taking gravel from the pit, see that precautions are taken to draw only clean material. Do not let the face of the pit be scraped down, mixing clay, sand, and turf with good gravel.

19. Gravel which retains a perpendicular face in the pit in spring, and shows no trace of slipping, is generally fit for use on the road without treatment. Dirty gravel should be screened.

20. Plan and lay out the work before getting the men on the ground.

21. When preparing plans keep the work of succeeding years in view.

22. Have on the work only such number of men and teams as can be properly directed.

23. In laying out the work estimate on a full day's work from each man, and see that it is performed. Specify the number of loads of gravel to constitute a day's work. Every wagon box should hold a quarter of a cord.

24. Make early arrangements for having on the road, when required, and in good repair, all implements and tools that will be needed.

25. Do all work with a view to permanence and durability.—A. W. C.

What Good Roads Are

But, some may ask, "What do you mean by good roads? We thought we had good roads in this valley." If after two weeks of rainy weather followed by one hour of sunshine a bicyclist can speed along at a gait of eight miles an hour and sling no mud up his back; if after a dry summer's traffic a funeral train can move over the road without raising the dust; if after several years' use there are no perceptible ruts made by wagon wheels or horses' hoofs, then we can pronounce it a good road. Some of you may think this is but an idle dream, impossible of realization. You need but travel a little in some of the European countries before mentioned to undeceive yourselves in this respect.



A piece of nicely-graded road.

You will find that such roads are possible, and not only possible, but in the long run the most economical. In this country in extensive drives or bicycle rides we rejoice when we approach a town, for there we expect to find solid roads. In most of the European countries on the other hand, we rejoice when we get out of the towns with their hard rough paving blocks, and reach the smooth, clean, country macadam. In this country, especially in the Western States, the plan is to make the highway wide enough to turn out from mud holes and dusty tracks. In the old country the plan is to keep the road narrow enough to enable them to fix it up properly. Land is valuable for cultivation, but roadside weeds are a nuisance.—U. A. P. Yoder, Utah State Agricultural College.

Communing Statute Labor

The number of townships in Ontario that have commuted statute labor is now 17. Wherever it has been properly managed this system has worked well. Some few townships that adopted it have abandoned it for reasons best known to themselves. The fact that a majority of them have reinstated the system, shows that it is the management and not the system that is at fault.

Statute labor is commuted at from 40c. to \$1 per day. At these figures more and better work can be done than by the old plan of having the people in the township do the work themselves. The inefficiency of statute labor is very forcibly set forth by the clerk of Tuckerstown township, Huron county, as follows:

"We annually let contracts for laying on about 200 cords of gravel (this year 191 cords, at an average cost of \$1.52), which is under the direct supervision of the council. This is a great help to the roads, and is nearly always put on to good advantage.

"We have 2812 days statute labor which this year laid down for us 3676 loads. We showed the electors at nomination that if the above days were commuted at 75c. per day, the proceeds, (at same cost as our job work, \$1.52 per cord) would lay down 6,000 yards, clear of all expenses, and would be better material and more intelligently laid down."

The Care of Country Roads

Q. What is the most important part of road-making that the pathmaster can accomplish with statute labor? A. The most important thing the pathmaster can do is to improve the drainage.

Q. Are ordinary side ditches sufficient for draining the common clay roads? A. Yes, if kept clear and brought to a grade by statute labor, and kept properly finished.

Q. Will tile draining improve clay roads? A. Yes, in every case.

Q. Do you consider it a good practice to put one tile drain in the centre of the road? A. No, I would rather put it outside the wheel tracks on the side the water is coming from, that is, the high side.

Q. If the road was flat, do you not think it would be better to have it in the centre than to have no drain? A. Yes, but the objection is that the water has to come under the road to get to the tile. Two smaller tiles, one on each side, would be much better than a large one in the centre.

Q. On many hills holes form in the spring just as if there was quick sand underneath: what is the cause and can anything be done to remedy it? A. The trouble comes from the fact that different layers of soil are exposed, and the water comes out where the soil is more sandy

or gravelly. If the side ditches are deep enough a tile laid diagonally across the road just above where the slough forms will often prevent the trouble, or a tile laid down the hill outside the wheel track or in the ditch in the hillside is a good plan.

Q. Does it pay to use a road grader to smooth a road in the spring? A. It is very important to smooth the road in the spring, and every road overseer ought to see that his road is gone over as soon as it is dry enough to bear the teams, and again after the spring rain is over, but there is a cheaper way than using the road grader. A common log scraper, drawn by one span of horses, will do almost as much work at less than half the expense.

Q. Is concrete tie pipe a success, or are they injured by frost? A. Where they are properly made and large enough to carry the water they are a great success. I have never seen the frost injure them.

Q. How large can they be made? A. Moulds are made from four inches to three feet.

Q. Can they be made out of native rock cement? A. I have seen some tiles made out of native rock cement, but I do not think it is safe. A good brand of Portland cement should be used.

Q. What is the best way to keep roads open in winter? A. Encourage the building of wire fences; then use a disc, and where possible follow with a roller.

Questions answered by Major James Sheppard in Farmers' Institute Report for 1934.

Freight Rate Discrimination

During the debate on freight rates discrimination at Ottawa recently some valuable information was presented. Among those who took part was A. F. MacLaren, M.P., Stratford. He paid special attention to the cheese trade, and among other things said:

"As you all know, I am connected largely with the cheese industry, and many people in my riding and north of the Grand Trunk and west of Toronto are very much interested in the rates on cheese. I may say that they are paying a very much higher rate of freight on cheese north of the Grand Trunk Railway and west of Toronto than they are paying 40 and 50 miles south. I only intend to give the House one or two figures to substantiate this statement. In Listowel, in my own county, where we often ship to and 15 carloads of cheese in a day, we are paying 7 cents per 100 pounds more than they are paying 40 and 50 miles south; in fact, they are paying 7 cents from Windsor to the seaboard less than we are paying from any place north of the Grand Trunk in my county. They can get as much freight carriage from Windsor for 93 cents as we can for \$1. The rate from London, Ingersoll and Woodstock is 7 cents less; they pay 31 cents where we pay 38 cents to the seaboard. All we want is fair play, equal rights and equal rates. The farmers in my part of the country are complaining very bitterly in regard to the very high rates of freight that they have to pay on the produce of the farm, and I think it is high time the Railway Commission was looking into this question. I think it is a very extraordinary thing that we should have to pay 7 cents more to ship cheese from points in my riding, as well as from Wingham, Lucknow, Kincardine, Harriston and other points in D district, more than they have to pay to ship cheese from Windsor, London, Ingersoll and Woodstock, although about the same distance to the seaboard."

"The farmers of this country send their sons and daughters to farmers' institutes and to colleges to educate them in regard to the best methods of producing their goods on the farm. I think the farmers are the most disorganized class of men on the face of the globe. I think that if they would meet together and consider what it costs to place their goods on the markets of the world, it would pay them to look into the matter very carefully and try to get equal rates and fair play all along the line. The farmers in my section of the country are becoming very much interested, and they are beginning to consider the best means of placing their goods on the markets of the world at the least cost. Probably if we would talk less about Autonomy Bills it would be better for the farmers of this country. I think that the hon. Minister of Agriculture (Mr. Fisher) should look into these things, and try to devise means whereby the products of the farm may be placed upon the markets of the world in the most economical manner possible. He should see that the farmer of this country are not robbed from the freight-rate standpoint. The farmers in my part of the country wonder why their dollars are not as good as the dollar of people in the south. We find people in the south, in our own country, not in the United States, are getting for 93 cents what we are paying \$1 for."

Still Coming to Canada

The following from the "Iowa Homestead" shows how Canada is attracting the weak farmers of the Western States:

Again this year, as for the last four or five years, hundreds and thousands of farmers from the western states are moving to the Canadian West. If anything the movement has opened earlier this spring than usual. During the month of February 920 tickets were sold from points on the Atchison, Topeka & Santa Fe railway system to Western Canada via Minneapolis and St. Paul. The little town of Norton, Kansas, which has only 600 people, has sent a train into Manitoba and the Canadian territories last month. These farmers are leaving land that is now worth \$50 to \$100 an acre and was secured by them for nothing only a few years ago. They are moving to Western Canada not because they are dissatisfied, but because they know that the opportunities there during the next few years will be second to none, better, than they were in Oklahoma a few years since. Splendid land may be homesteaded in Western Canada or bought for a few dollars an acre.

If you consider the number of people, who are now passing through the St. Paul gateway on their way to their new homes in Western Canada, they will tell you that they are going into Canada simply because they can still get cheap and fertile lands. So great has been the demand for the famous hard wheat lands of Western Canada during the past few years that it is a fact that the Canadian Pacific land department at Winnipeg has sold about 5,000,000 acres.

There is no doubt that these new settlers will do well. Practically all of the farmers in Western Canada, who have come from the states, are doing well; many are making their fortunes. With wheat a dollar a bushel and land at from one to ten dollars an acre, they will produce twenty to forty bushels of wheat per acre, it is not difficult to understand how these people will "get rich quick" in the best sense of the phrase.

The Clydesdale or the Percheron*

Live Opinions from Practical Horsemen as to the Merits of these Two Breeds

Dr. J. H. Reed's Opinion

EDITOR THE FARMING WORLD,

In answer to yours of the 16th inst. re my opinion of the respective merits of the Percheron and the Clydesdale from a farmer's standpoint, I may say that it is a difficult point to discuss without antagonizing the advocates and those financially interested in the breed not favored.

There are many superior animals of each breed, but I think the percentage of good Clydesdales is greater than that of good Percherons. The Clydesdale usually has a flatter, cleaner bone, and more obliquity of both shoulder and pastern, hence should have better action. I cannot agree with your correspondent, Mr. G. M. Ballachy, who says "The Percheron

careless breeding than from undesirable individuality of the sires, but from some cause the breed practically disappeared and breeders of heavy horses paid their attention to the Clydesdale and Shire, especially the former, and as a consequence, many good mares with a strong infusion of Clydesdale or Shire blood have been graded up, while there are very few mares with Percheron blood."

Now, sir, if the owners of those mares are alive to their own interests they will continue to use Clydesdale or Shire sires, and thereby improve the size and quality of their stock. While, on the other hand, if they infuse foreign blood, whether it be Percheron or other draught breeds, the stock will become mongrelized and deteriorate rather than improve. If

all their untiring efforts they can't displace the Clydesdale and Shire. They are here to stay.

About the merits of either breed, I think the farmer who, after years of breeding in the Clydesdale strain, turns to the Percheron, will be sure to find his mistake. Living as I do practically among the French-Canadians you would suppose they would favor the French horse, but such is not the case.

About 40 years ago this county imported Clydesdales, eight years later they imported an extra good Percheron, as they rather leaned to them. They used him about five years, and got tired of him, selling to parties in the west (Woodstock, Ont.) at half cost, he proving a failure as a breeder, his gets being round boned, flat-footed and had middles, with ends fairly good, while with the gets of the Clydesdale and native mares teams were sold at that time as high as \$300, and of good weight. I remember well a colt of The Briton, a Clydesdale, trotted a mile inside of 2:28 at four years old, and at that time was considered good. The



A rock-crushing outfit, the property of Salfleet Township, Westworth, Co., Ontario.—Courtesy of Sawyer & Massey Co., Limited.

is a faster walker, better traveller, easier keeper and more spirited than the Clyde." There is probably no better opportunity of judging the quality of the breeds in these respects than at the yearly International exhibition in Chicago, where the very best of both breeds are exhibited, not only in the stallion classes, but in single harness, pairs, fours and sixes. I do not think that any unprejudiced horseman, who has ever seen these classes exhibited could concede to the Percheron the superior merits claimed by the said correspondent. However, these points must remain as a matter of opinion.

I have no faults to find with the Percheron as a farm horse, but I think it is unfortunate that he should be introduced and used in the stud in most sections of Ontario. Some years ago a great many Percheron sires were brought into the Province and proved unsatisfactory, more, I consider on account of irrational and

a breeder has a mare with Percheron blood, I would advise him to breed to a good sire of the same breed, but in order to improve the class of our horses, it goes without saying, "We must stick to breed and type." Another reason why, in my opinion, the farmer should stay with the Clydesdale or Shire is that he sells better, and this must be an important point, as there are few farmers who breed horses who do not, at least occasionally, have one or more to sell.

J. H. REED.

O. A. C., Guelph.

The Clydesdale Here to Stay

EDITOR THE FARMING WORLD,

I have read your article in the issue of 1st April, "Is the Clydesdale Doomed?" and also the letter of May 15th by G. M. Ballachy, entitled "Favors the Percheron."

Now, I think it is not only our American cousins but some of our own importers who are pushing the Percheron business pretty strongly. But, sir, with

French-Canadians never cared to invest in another Percheron, but have persistently continued with the Clydesdale, and to-day the district of Beauharnois is second to none for draft horses of the thick, low-set type with quality.

I would not, however, have the public think the Percheron is an entire failure. There are districts that have never had an imported draft horse, and there a Percheron would be a great improvement, but wherever the Clydesdale has got a hold he is there to stay. Certainly there is room for all in this great country of ours.

ROBERT NESS.

Howick, Que.

Have Not Gained in Favor

EDITOR THE FARMING WORLD,

As I have never used a Percheron stallion, I am hardy in the class of farmers that Mr. Ballachy invites to discuss the merits of his favorites versus Clydesdales. I may say, however, that we have been favored in this section of the province with as good representatives of the Percheron

*We would be pleased to have the opinion of anyone interested on this question.—Ed.

as I have seen anywhere, and while they were very liberally patronized by farmers, who first introduced, they have not gained in favor since their stock "came to the collar," nor have they distinguished themselves in the market or show-ring in competition with the other breeds.

J. G. CLARK.

OTTAWA, ONT.

Clydesdale Sells Better

EDITOR THE FARMING WORLD.—With regard to the letter in the issue of the 15th inst. re "Percheron and Clydesdale," I might give my experience with them. First, the Clydesdale is a better work horse; second, the Clydesdale is a better mover in all kinds of harness from a dealer's standpoint, and will get the dealer more praise and trade from the people than the Percheron.

Of course, we know the Percheron matures early, from 3 to 4 years of age, whereas the Clydesdale will be 4, 5 or even 6 years old before full maturity is reached. When you put both breeds on the market, the Clydesdale will bring in more money and will more than amply repay the farmer in price and work for the longer time of maturing. Thanking you for the valuable space in your paper, I remain,

A CONSTANT READER, QUC.

Hesitates to give an Opinion

EDITOR THE FARMING WORLD.—Your favor of the 16th received. An sorry I cannot oblige you in this matter, as to the merits of the Clydesdale and Percheron horses. It would not do for me to enter into a discussion through the press. My Institute subject is "The Horse." There are good and poor horses in all breeds.

Yours very truly,

Note.—The above letter was received from a prominent institute lecturer whom we asked for an expression of opinion as to the merits of the Clyde and the Percheron. Surely a person whose business it is to talk "horse" at Institute meetings should have no scruples about expressing an opinion on a subject of such vital importance to the farmers of this country as this is.

Contrast the attitude of this "lecturer" with that of Dr. J. Hugo Reid, of the Ontario Agricultural College, a permanent government official, who as his letter published elsewhere in this issue shows, is not afraid to express his opinion in the public press. Dr. Reid's action in this matter is to be commended, and if others engaged in similar educational work (not omitting such important personages as Institute lecturers) would come right out into the open and express their unbiased opinions on all questions affecting the farmer's interests, the public would be greatly benefited thereby. So long as the opinions expressed are based upon experience and sound reasoning no one can consistently find fault.—Editor.

Glanders

Glanders is a very malignant and contagious disease. Just as rabies seem to be peculiar to the canine race, but transmissible from it to any other warm blooded animal, so glanders seems to be peculiar to the horse, though any of the warm blooded animals may contract it by inoculation. It is a very old disease. The first notice we have of it comes from the fourth century. It seems to be a disease peculiar to the temperate regions, it be-

ing unknown in very warm countries, as Australia, nor is it known in very cold ones. There are one or two exceptions to this, as it is met in the hot climate of Java and close to the Arctic circle in Norway. Its cause can usually be traced to infection, but at times it has been known to break out where there seemed little possibility of this and, as all diseases which are peculiar to any race of animals, would seem to break out spontaneously when surrounding circumstances were favorable for its development. Badly ventilated stables, hard work, little care and poor food would be conditions most favorable for its outbreak. Farcy is the same disease as glanders only it is a much milder form and attacks the legs. A horse affected with farcy may impart glanders to another, and vice versa.

The symptoms of glanders are such that it is very hard to identify with certainty, as most of the conditions indicative of glanders are also present in other disorders. There is a discharge from the nostrils, one or both of a bluish watery sticky matter. On looking at the inside of the nostril will be seen on the membrane from the size of a pin head to that of a ten cent piece. These ulcers are gray at the centre with dark red or purple edges. Sometimes at the first outbreak of the disease there are no ulcers in view. A similar discharge may be produced from nasal gleet, or from a diseased tooth, and horses have been destroyed in which a diseased tooth has been found to be the cause. The symptoms to be looked for are glazy, sticky discharge, often from one nostril than from both, ulcers in the membrane of the nose, hard swelling of the glands under the jaw and usually adhering to it, and added to all this, the absence of any other apparent cause, or the discharge of a maline test, one somewhat similar to that so conclusive in tuberculosis, is necessary to give sufficient certainty to make the destruction of the animal and the thorough disinfection of stable and furniture imperative. Many authorities have contended, however, that horses afflicted with nasal gleet should also be destroyed, claiming the danger of its turning into glanders.

Navel Ill in Foals

This disease is caused by a germ which enters by way of the navel. The illness is often called rheumatism, and sometimes attributed to the foal getting tramped upon by the dam. Some joints will be swollen and sore, and the colt will be very lame. There will be feverishness, loss of vigor, constipation, the colt will refuse to suck. On examining the navel remains, it will be found to be moist and clammy instead of having dried up, and water may trickle from it at times. The joints continue to swell, abscesses will form and death from exhaustion will follow. It is well to note the symptoms, as the early employment of a veterinary surgeon only will avail, and nothing can be done to save the foal later.

The Dead Meat Trade and How it Will Benefit the Stockman*

The great meat consuming countries to-day are those of the most highly advanced civilization. As people become more highly civilized, they become greater meat eaters. All the people in the world use no eat, and it is fortunate for the lover

of the "savory steak" that this is the case. There are estimated to be 1,500,000,000 people in the world, and if we allow $\frac{3}{4}$ lb. meat per head per day it would require 750,000 steers daily to supply the demand, a quantity that the meat producing countries of the world could not begin to supply. There is ample room, therefore, for the demand for meat to increase, a most encouraging outlook for the cattle raiser.

But the important question with the cattle raiser to-day is how best to get his produce to the consumer in a condition that will bring him the most money. The method by which the great cattle producing countries of the world are endeavoring to reach the consumer is by the development of the dead meat trade, killing the animals at large central abattoirs and sending forward meat in a chilled or frozen state. This method has received its greatest development in the United States, where the export of dead meat are twice as large as they were ten years ago. The result of this development has been enhanced values for the cattle raiser, and the utilization of the by-products in the country where the cattle are grown. The packer has also profited largely thereby, and though he has become wealthy himself he has put more money into the pockets of the producer. In the Argentine, in Australia and New Zealand the dead meat trade is year by year assuming larger proportions, and these countries, though a month or six weeks from the British market, continue to send forward frozen meats at a profit both to the producer and the packer.

BUT WHAT OF CANADA?

For a number of years the advisability of establishing the dead meat trade has been before the public. But so far nothing of a large or centralized way has been done to establish this trade in Canada. We have been joggling along in the old way, sending our cattle across the water to be slaughtered at the port of entry within ten days after landing, with the result that we are very little further ahead, considering the growth and expansion of the country, than we were ten years ago so far as our export cattle trade is concerned. Our exports of live cattle for 1904 were over 30,000 head less than in 1903. In my opinion we shall never reach our possibilities as a great cattle producing country, unless in a very short time the dead meat trade is established on a large and permanent basis. It is such a simple way of having a dead meat trade as well as a live cattle outlet for our finished animals.

I have been asked to say something as to the advantages of the stock raiser will derive from the establishment of this trade. Let us look at these from two standpoints—the export trade and the local trade. Canada is not yet a great meat consuming country, though she has advanced a civilization as any other land in the world. But there are not enough of us yet to consume any very large quantity. Therefore expansion in the meat industry must come largely from the development of the export trade.

In developing the export market

THE ADVANTAGES

to the cattle raiser in having the dead meat trade established are many. They may be enumerated in brief form as follows:

(1) By sending over our cattle alive we are at the mercy of the English buyer, who knows we are compelled to slaughter at the port of entry within ten days after landing.

*Address delivered by the Editor of THE FARMING WORLD at the Provincial Winter Fair, Guelph, Dec., 1904.



A good type of the Collie.

The Collie Dog

Accepted as the popular favorite with the Canadian farmer, the light-footed, spirited and intelligent Collie is at the same time one of the handsomest and most useful of all the canine race. Just as the shrewd Scotch farmer or shepherd always strove to breed exactly what he wanted in his business, whether horses, sheep or cattle, and with what success the world knows, so he successfully bred a dog that has all the qualities of activity, endurance, pluck and intelligence that he needs in his business, which is often a very arduous one. Therefore a dog to meet these requirements had to possess the intelligence of the St. Bernard, with the activity and strength of the setter, and the spirit and endurance of the blooded sporting dog. Of late years the standards required for a winner in the show ring have not been of a nature calculated to really improve the breed, and the long heads, expressionless and lacking character, would not seem to indicate all the intelligence which one could wish for.

The Collie Club of Scotland allows 30 points out of a total of 100 for the head, which places a great deal of their estimation on character. The following is a description of a standard collie head: The skull should be flat and moderately wide between the ears, gradually tapering to the eyes. There should be but a very, very slight depression at the top. The proper width in the skull depends upon the proportionate length of skull and muzzle, which altogether should in turn depend upon the size of the dog; the skull incline to lightness and cleanliness of outline of cheek and jaws. A heavy headed dog lacks the bright, intelligent look without which he is not a Collie, only a long haired dog. The ears should not well be too small, if carried properly and a heavy leathery ear is to be shunned. They should be about three-quarter erect, a prick ear is very objectionable. Neck should be of sufficient length to give the dog a fine upstanding appearance, and to show off the frill, which should be very full. The body should be rather long, with ribs well sprung, chest deep and thick behind the shoulders, which should be very sloping. The loins should be well arched, and showing power. The fore legs should be straight and muscular, with a fair amount of bone, forearm moderately fleshy, pasterns flexible without showing weakness, the hinds should be sinewy, less fleshy, and with hocks and stifles well bent. The pads on the feet should be strong, feet well arched and toes close together. The tail in the male should be moderately long, carried low when the dog is quiet, and with a slight upward swirl. The coat is a very important point in a well bred Collie. Except over the head and on the legs the coat should be abundant, the outer coat strong and harsh, the inner one fine and very thick, so that it is difficult on parting to see the skin. The mane and tail should be abundant. There should be a slight fringe of hair on the back of the fore leg, but none on the hind leg.

In service there is perhaps no kind of dog which is more useful than the Collie, but just as a spirited horse needs a skilful driver to manage him, so a spirited dog can only be brought to his best by a skilful master. The eager spirit of the Collie makes him chase domestic animals as hard as they can run, unless he is trained to take them more slowly, and this is just what very many of our farm dogs are never trained to do. For

(2) The cattle after the long and oftentimes rough sea voyage, arrive frequently in a jaded condition, and not in the "bloom" that catches the eye of the English buyer. Besides, they lose greatly in weight.

(3) Two car loads of live cattle can be sent forward in one car when killed and dressed, thus effecting a great saving in freight charges.

(4) Then there is the cost of feeding, loading and caring for the live cattle on shipboard. I have not been able to obtain the figures for 1904. But for 1903 it cost nearly \$2,000 per head to send our live cattle via Montreal to England, made up of \$1,250 for railway and ocean freight, and \$80 extra for feed, kept in yards, etc., or a total of \$2,044.30. If the 147,216 cattle sent over in 1903 had been converted into dead meat there would have been a saving of nearly two-thirds of this amount, or about \$2,000,000.

(5) By slaughtering on this side and

CENTRALIZING THE BUSINESS

and by exporting only the dressed carcass, we retain the by-products at home, and by utilizing them properly they will return a good profit to the producer and packer.

(6) Allied industries for converting the by-products into saleable merchandise would spring up, which in turn would give employment to more people and thus increase the home demand for meat.

(7) The American packer is satisfied if he can get as much for the dressed carcass as he pays for the live animal, the value of the by-product being sufficient to pay the expense of running his large establishment and leave a good profit besides.

(8) The dead meat trade would give us a steadier and more reliable market for our cattle, as the product could be held for a rise in case there was a slump in the market.

These are some of the advantages to be derived from exporting dressed meat instead of the live animal. It would not be wise to discontinue altogether the export trade in live cattle. The two plans should be utilized, and the cattle raiser's chances of obtaining a better price for his cattle thus greatly increased. Once

established we believe the dressed meat trade would increase at the expense of the live cattle trade, as the former would be found to be more profitable for both the producer and shipper.

(To be Continued.)

To Prevent the Horns Growing

A simple method to prevent the growth of horns on calves, which is practised to some extent by stock-keepers in this country, is also being followed abroad. The English Board of Agriculture gives the following directions for the use of caustic potash: Clip the hair from the top of the horn when the calf is from two to five days old. Slightly moisten the end of a stick of caustic potash with water, or moisten the top of the horn bud, and rub the tip of each horn firmly with the potash for about a quarter of a minute, or until a slight impression has been made on the center of the horn. The horns should be treated in this way from two to four times at intervals of five minutes. If, during the interval of five minutes after one or more applications, a little blood appears in the center of the horn, it will then only be necessary to give another very slight rubbing with the potash.

The following directions should be carefully observed: The operation is best performed when the calf is under five days old, and should not be attempted after the ninth day. Caustic potash can be obtained from any druggist in the form of a white stick. When not in use, it should be kept in a stoppered glass bottle in a dry place, as it rapidly deteriorates when exposed to the air. One man should hold the calf while an assistant uses the caustic.

Roll a piece of tinfoil or brown paper around the end of the stick of potash which is held by the fingers, so as not to injure the hand of the operator. Do not moisten the stick too much, or the caustic may spread to the skin around the horn and destroy the flesh. For the same reason, keep the calf from getting wet for some days after the operation. Be careful to rub on the center of the horn, and not around the side of it. Caustic potash is poisonous, and must therefore be kept in a safe place.

this reason alone the average dog is an animal of doubtful value as a herdsman's companion, but the Collie is accepted as an alert and courageous watch dog as well. J. W. S.

What Breed of Sheep Do You Keep?

There is great activity among sheep breeders these days, and the business of sheep raising is on a better footing than it has been for some time. Information bearing upon the industry will therefore be helpful. For this reason we are asking our readers for replies to the following questions, and trust there will be a liberal response:

(1) What breed of sheep do you keep?

(2) Have you found them profitable for mutton and wool production?

(3) How has the lamb crop been this season? Have you lost many lambs, and what has been the cause?

(4) Is the worrying of sheep by dogs common in your district? What means would you advise for lessening this evil?

(5) Does it pay to wash sheep?

We shall be glad to have answers from our readers to some or all of these questions, and any further information bearing upon the sheep industry that they may care to send. A large number of replies would enable us to form accurate conclusions on several important phases of sheep breeding.

Lamb-Raising Profitable

Editor THE FARMING WORLD.

In reply to your questions, I would say:

(1) South Downs and Leicesters mixed.

(2) I found young lambs born in the spring and kept until the last of October very profitable and saleable. Realized good money out of them. I think they pay well. We have not paid very well these few years back. Prices have been low.

(3) My lamb crop has been very good. I have lost only two lambs. Nearly every ewe had two. A good deal of the trouble at the lambing season is the fault in managing the ewes. They should be looked after and warmly housed, and not allowed to run out much. If they are kept warm and dry the lambs that are dropped will not be chilled through. They require some nursing. Good clover hay and chopped mangles are very good feed if all things are right.

(4) The worrying of sheep by dogs is common in my district. Some farmers have become discouraged on account of the dog nuisance and have sold their sheep. The township council has by-laws enacted which, if enforced, are very good. I don't know as I could better them any. If the sheep industry is looking up and farmers want to make sheep pay in every sense of the word no farmer should be allowed to keep dogs. God speed the day.

(5) It does pay to wash sheep. My plan of washing sheep is this: put my shipping truck on my wagon, dump my sheep into it and give them a ride to the water. I adopt this method on account of their getting dusty and dirty if driven back on foot.

Norfolk Co., Ont. OLD FARMER.

In Great Britain a law recently came into force making it compulsory to dip sheep in districts where on the order of the Board of Agriculture, it is found that sheep scab or a suspicion of sheep scab exists. This implies, however, that the order will not be given unless there is a certainty that it will be carried out in its entirety.

Packers Must Pay More for Bacon Hogs

Does the Bacon Hog Pay?

The following questions are practical and to the point. We want every reader who keeps hogs to answer them. If you cannot answer all, reply to those you can. It will help you and provide a fund of information that will aid in putting the industry on a better basis:

(1) What breed of hogs do you keep?

(2) Have you found them profitable for bacon production?

(3) What is your method of feeding for the bacon market?

(4) At about what age are the hogs ready for market?

(5) Do the buyers in your district give enough more for select bacon hogs than for lights and fats, to make the business of raising the bacon hog profitable? What difference in price, if any, do they make?

We shall be glad to have opinions on points not covered by these questions. Who will be the first to reply?

Buyers Must Discriminate More

Editor THE FARMING WORLD.

I noticed an article in your paper entitled "Our Bacon Trade in Ontario." There is no doubt a good deal of truth in it; because we still find a large number of farmers who think that the Chesters and Poland Chinas, and even the small Berkshires are more profitable than the slower maturing breeds. The buyer gives no more for the York, Tamworth or good Berkshire, and the farmer who believes in the thick, fat short hog, continues to breed the same, and some of the feeders who have been caught with a lot of large, slow maturing bacon hogs when the prices are tumbling down say they will get into the smaller breeds. On the other hand, there is a large majority of farmers who believe that from experience in feeding suitable foods, there is more money in the bacon breeds, and these men will continue to produce the right type, although the buyers make no difference in price. The buyers should discriminate against these undesirable types and do their share in helping to build up the bacon trade.

ROBERT THOMPSON.
St. Catharines, Ont.

Packers Entirely to Blame

Editor THE FARMING WORLD.

In reply to yours of the 15th regarding the bacon trade, I quite agree with the view of the matter expressed in your editorial. It is certainly the fault of the packers in not paying a higher price for the export hog, and they will have themselves to blame when the scarcity of that kind of hog comes, as undoubtedly it will in the near future unless they are prepared to pay a premium for what is required for their best trade, for that class of hog costs more to produce and requires constant care from start to finish. It has always been a mystery to me why there should be such a difference in the price of export cattle and butcher's stock, and practically no difference in the price of export bacon hogs and common stock.

In reply to your question I would say:

(1) We have always, since the bacon trade started, kept Yorkshires.

(2) We think them best for producing the class that the packer wants, but I think the Berkshire will make weight quicker, and is a more docile hog.

(3) At about eight months.

(4) Emphatically no, and in consequence the farmers are going back to Berkshires and Chester Whites, and other of the thick, fat breeds, as they think they are easier kept.

R. S. STEVENSON.

Ancaster, Ont.

Why Hogs are Scarce

Editor THE FARMING WORLD:

I have noticed in some of the agricultural papers the cause of scarcity of Canadian hogs, especially in Ontario. The packer says the reason is the scarcity of coarse grains. That is not the only reason, because there was more coarse grain in Ontario last year than the year before.

There are not as many hogs in Ontario now as a year ago, for the reason that there are not as many raised. Farmers who used to raise from 75 to 100 hogs a year only raise to 25 hogs now, and many in my district have gone out of the hog business altogether.

The cause of the scarcity of hogs is really due to the cause of scarcity of themselves. They say that at the price they are now paying for hogs they lose one cent per pound on them. They did not think last fall when they were paying us \$4.50 to \$5.00 per cwt. that the farmers were losing from 1 to 2 cents per pound, but the farmer does not say anything. Last fall the packers put the price of hogs down low because they were plentiful in the country. In great many farmers did not like this and went out of the business.

The packing companies of Ontario were glad when they closed the co-operating companies. The farmers are getting even now and will put the packing companies out of business if they do not handle the price of hogs better.

With present prices for grain and labor it does not pay the farmer to feed hogs at the present price. The farmers are getting even now and will put the packing companies out of business if they do not handle the price of hogs better. With present prices for grain and labor it does not pay the farmer to feed hogs at the present price. The farmers are getting even now and will put the packing companies out of business if they do not handle the price of hogs better. With present prices for grain and labor it does not pay the farmer to feed hogs at the present price. The farmers are getting even now and will put the packing companies out of business if they do not handle the price of hogs better.

I would make a suggestion that we hear the farmers' side of the bacon hog question next year at the Winter Fair, instead of hearing the packers' side of it.

Sparta, Ont. W. B. ROBERTS.

Curing Scours in Pigs

A leading swine breeder of Pennsylvania gives his experience in treating pigs for scours as follows:

"My remedy for a sow with eight to twelve pigs has always been six raw eggs broken and stirred, shells and all, in the slop of the sow for the next three feeds. Nine cases out of ten the scours are all gone in 36 hours and I have never had a case to go over 48 hours. Here is a remedy all farmers have, and it is no trouble to administer. Occasionally pigs three to four weeks old are attacked with scours. The remedy is just the same. Also, I occasionally find a pig eight to fourteen weeks old with the same trouble. I catch him in a pen by himself and feed him just the same as before, only adding one raw egg, and in about three days he invariably recovers."

When salt is constantly in reach hogs will go to it very often and eat a small quantity each time.



A leading road in Wellington County. Note the crowns of the road.

The Clover Crop and Its Value to the Farmer

The value of the clover plant to the farmer of to-day cannot be overestimated. Not only does it furnish available food for stock, but it contributes valuable plant food to the soil.

Many farmers do not realize the true value of clover as a stock food. In many sections Timothy is almost exclusively grown for the hay crop at the expense of clover and other grasses. This is due largely to the fact that Timothy hay commands a better price on the market than clover. Hay composed of pure Timothy, not too fine, is graded as No. 1, and commands the best price on the market. As soon as clover is mixed with the Timothy the grade is lowered to No. 2 or No. 3, depending upon the quality and percentage of clover used.

While Timothy is an excellent hay, especially for horses, and can be cured with less care than clover, the growing of clover should not be neglected. As its composition shows, clover contains more protein than Timothy, one of the most essential and high priced food ingredients. Jenkins and Winton give the average composition of Timothy and clover as follows:

	Water	Ash	Protein	Fiber	Carbo- hydrate	Starch	Fat
	per cent.	per cent.	per cent.				
Timothy	13.2	4.1	3.9	29.0	45	2.3	
Clover	13.3	6.2	12.3	24.8	38	3.3	

From this table it will be seen that clover is one of the most valuable fodders that can be produced on the farm for growing, fattening or dairying animals. When clover is fed to stock less grain products are required than when Timothy is fed.

ITS MANURIAL VALUE.

As to the manurial value of the two plants, clover hay contains more nitrogen and potash, but less phosphoric acid than Timothy. Estimating nitrogen at 16c. per lb. and potash at 5c. per lb., it has been found that clover per ton to be used as manure is worth twenty to thirty per cent. more than Timothy. It has also been estimated that each ton of clover withdraws from the soil about 40 lbs. of nitrogen, 38 lbs. of potash, 11 lbs. of magnesia, 40 lbs. of lime, 11 lbs. of phosphoric acid and 15 lbs. of sulphuric acid, or an aggregate of ash ingredients alone of nearly 160 lbs. These figures show the value of feeding the clover or other hay crops on the farm and returning the manure to the soil.

A NITROGEN GATHERER

But in spite of the fact that clover takes from the soil a considerable amount of the essential plant food elements, clover as a fertilizer is scarcely surpassed by any other plant. Clover, like all other legumes, has the power to appropriate nitrogen from the air. This

nitrogen is gathered by minute organisms dwelling in the nodules on the roots of clover plants. These bacteria gather the nitrogen from both the air and soil and give it over to the plant as food. Here lies the clover's value as a fertilizing plant. Before the clover and bacteria theory was known farmers well knew from practice that on fields where clover, peas or other legumes were grown the soil was enriched, and that subsequent crops would grow and yield better than if no leguminous crop had been grown. There is, therefore, no better crop to grow for increasing the plant food in the soil, and especially if the clover hay crop is fed on the farm. There is no better way of increasing the productivity of the soil than by plowing under a clover crop. It will pay farmers to grow clover for this purpose only, especially on land whose fertility has been depleted by continually growing grain. Clover should form a most important part in every crop rotation.

CAUSES OF BAD "CATCH"

In many districts complaints are heard that clover cannot be grown, or that a so-called "catch" of clover cannot be secured. This may be due to several



causes. The seed is often placed too deep in the ground. Experiments have shown that from one-eighth to one-fourth inches deep will insure best stand under the average conditions of weather. The seed-bed should be carefully prepared. A light harrow is the best for covering the seeds. A common trouble is the drying out of young plants, which may in a large measure be prevented by seeding early in the spring. Another cause may be the want of nitrogen fixing bacteria in the soil. This can be overcome by inoculating the field with soil that comes from a field where clover grows profusely. It can also be done by inoculating the seed before sowing with the desired bacteria.

To retain a good stand of clover, it should be cut before the seed forms, and nature, foiled in her purpose, will put forth her forces to grow and to throw a vigorous second crop. If this is cut before seed forms the same effort will be put forth to produce a third crop. A better stand is therefore maintained by cutting the clover before it forms seed. The clover plant roots deeply, and when it dies leaves almost one-half the plant—the stem, some leaves and roots—in the ground. In this way it increases the fertilizing material in the soil far more than do timothy and other grasses.—J. W. W.

Making Pastures

(Continued from last issue.)

A frequent cause is where land has been neglected for years, until it has become a perfect mat of couch or switch grass. (This, of course, is known under different local names.) In despair of cleaning it at a reasonable cost the owner decides to let it "go to grass" as hundreds of acres have actually gone.

Wisely, it is considered desirable to render nature some assistance, but it is almost a misnomer to dignify that assistance by the name of preparation.

In this instance also the routine previously advised is applicable. Rigorous harrowing in autumn, a heavy top dressing for the winter, and the sowing of suitable strong growing seeds in early spring, are the means by which the most profitable results can be assured.

I know personally plenty of cases where this rough and ready treatment has been followed by a fairly paying plant. Especially may improving crops be anticipated when the land is continuously matured, or where grazing cattle are liberally assisted with artificial food.

The actual work of sowing grass seeds is simplicity itself, but as the germination of the seed and the equal distribution of the plant depend upon the accuracy of the process, the details should be carried out with due regard to the serious loss which failure certainly entails. The necessity for making the seed bed fine and firm should be well understood.

At sowing time the additional requirement is a soil dry enough to allow the implements to work freely without any tendency to gather in clods on the roller. Of course, waiting to sow will often tax the patience severely, but it is worse than useless to enter into a conflict with nature. All such cases inevitably end in the defeat of man.

The first business is to run the harrow over to prepare the land for the seed, and the sowing may be either performed by the hand or by means of the common seed barrow. Some men are skilful in spreading seeds equally by hand, and, even on a still day this work answers well. But grass

seeds are light, and it does not need a very high wind to make the sowing irregular. As the barrow delivers the seed nearer the ground, it will, as a rule, distribute the grasses more evenly than the most practised sower by hand. But whichever method is adopted, there is a decided advantage in making two sowings. If the grasses and clovers are mixed together, half the quantity should be sown by passing up and down the land, and the other half by crossing the first sowing at right angles.

When the grasses and clovers are separate, the grasses can be put in one way, and the clovers should cross them.

A bush harrow is the best implement for covering seeds. In its absence a light iron harrow will answer, and the lighter it is the better, and yet on second thought, perhaps a chain harrow is best of all.

What is wanted is, that as many seeds as possible shall be just covered with soil, and no more. Grass seeds will germinate and become established when they are merely pressed on the surface of the earth, provided they are not consumed by birds or scorched by a hot sun. But many will not germinate at all at a greater depth than half an inch. Hence the necessity of fine soil and shallow sowing.

The roller must promptly follow the harrow, and it makes a better and more certain finish to go over the ground twice, in different directions, with a roller of moderate weight than to accomplish the task at one stroke with a heavier implement. This holds good, too, when having a good sod, you wish to make a lawn. The importance of this part of the work will be made apparent if any spots are missed by the roller, for on those spots there will be no grass plants.

A good plant of moderate weight can be obtained by first rolling with the ring roller then sowing the seed and afterwards crossing the land once or twice with the ordinary smooth roller.

Sowing grass seeds by the seed drill is comparatively a recent practice, and for light sandy soils, especially in a dry spring, it has decided advantages. Under favorable conditions drilled seeds germinate freely, and endure summer drought when surface sown seeds become malted. The covered drill affords protection from direct sunshine, the seeds have more certain access to moisture, and on grain that has grown too high to render broadcasting a safe procedure, the drill may often be available.

In any case the coulters should be adjusted carefully for shallow sowing, and must be set as closely as possible.

Sowing at two operations should also be considered a necessity. The harrow will not be requisite after drilling, but the importance of rolling down firmly is of greater consequence than when seeds are got in by hand or the seed barrow.

Hard and fast rules cannot be laid down for the time of sowing. In a great measure it depends on the weather, and perhaps the easiest way of arriving at a conclusion will be to consider separately the relative merits of spring and autumn sowing.

W. H. GILBERT.

Worth Remembering

It is a well settled fact that it pays best to keep good stock and to keep it well.

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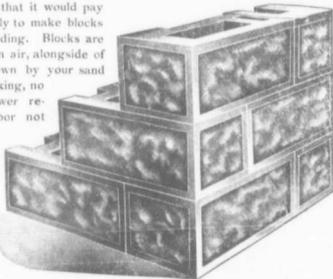
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In a dairy cow good care and keep is as essential as proper selection and breeding.

While feed has much to do with the quality of the milk, breed is equally important.

While all the elements of growth are in skim milk, it has but little tendency to fatten.

It is wasteful feeding to give corn meal to cows without mixing it with more bulky food.

If you have a good cow, see that she has a good manger.

Cattle can thrive only on good feeding, and without thrift there can be no profit.



A group of Alderney cattle at Sandringham.

The Royal Dairy at Sandringham

Among the interesting spots at Sandringham, the Norfolk home of the King and Queen of England, is the dairy. Her Majesty Queen Alexandra pays frequent visits to the dairy and to it her favored friends are often asked to tea in spring and summer. It is like a Swiss chalet from the outside, but the chief attractions are in. The walls are exquisite, all tiled with peacock-blue Indian tiles, given to the King while he was in India, and having as design shamrock, rose and thistle with the motto "Ich Dien," for it was when His Majesty was Prince that the dairy was erected as a surprise for the Princess. The shelves of white marble bear pans of silver lined with thinnest china, some are of white enamelled china, and there is a small churn of dull silver, which has been used by the royal lady herself and by her daughters. Among the cows the Queen has her favorites, while the fawn and mouse-colored calves, with their velvety noses and soft, large eyes, are often fed and caressed by Her Majesty's hands. A curious feature is a collection of models of cows and calves in marble, silver, china, terra cotta, wood, copper and bronze which were given to Her Majesty at different times. A gift especially valued and kept in a cabinet, is an earthenware milk jug, which was given to the Queen as a token of gratitude by a very poor girl whose last months she had smoothed and who had nothing else to bestow.

Iced Cars for Butter

Government refrigerator car service for the carriage of butter to Montreal for export during the hot season has been arranged with the C. P. R. and G. T. R. A few changes have been made in the services with a view to having the cars arrive at Montreal earlier in the week, so that there will be a better opportunity to have the butter properly chilled before being delivered to the steamer.

Butter loaded on these cars will be charged the current less the car-load tariff rates without additional charge for icing. Under no circumstances will cheese be loaded on these cars. As far as space will permit these cars may be used for local shipments of small lots of butter.

For particulars as to the service and the time and place for cars stopping, creamery salesmen should enquire of the local railway agent in their district.

New Standards for Grading Cheese

The following are the standards and classification which the official referee at Montreal will observe in giving certificates as to the quality of the cheese which he is asked to examine:

First grade—Flavor, clean, sound; body and texture, close, solid, silky; color, even; finish, fairly even in size, smoothly finished, sound and clean surfaces, straight; boxes, not too large nor too small for cheese, strong, well made, weight stencilled, clean.

Second grade—Flavor, "fruity," not clean, slightly "off," "turnip"; body and texture, weak, open, loose, "acidic," too soft, too dry; color, uneven, mottled; finish, very uneven in size, showing rough corners, black mould, dirty or cracked surfaces, soft rinds; boxes, too large or too small for cheese, weights marked with pencil or not stencilled, cheese projecting more than half an inch above box, boxes made of too light material.

Third grade—Flavor, rancid, badly "off," anything inferior to No. 2; body and texture, soor, any cheese from which a full plug cannot be drawn from any cause; color, no question of color in ordinary commercial experience would be sufficient alone to make third grade; finish, cheese "filled" or stuffed with bad rind, decayed rinds, rough finish; boxes, no question of boxes sufficient to make third grade if other qualities are good.

The relative values that have been generally adopted for the different divisions of quality are as follows: Flavor, 45; body and texture, 30; color, 15; finish and boxing, 10; total, 100.

Uniform Temperature in Curing Cheese

During the course for dairy instructors at the Guelph Dairy School some tests were made of cheese cured at different temperatures.

1. Cheese made in June last and placed directly from the hoop into a clean dry box in cold storage without turning were equally as good as cheese placed on a shelf in cold storage for four or five months and then placed in a box.

2. Of five cheese made in September, 1904, and ripened at temperatures of 28 to 35 degrees F., nearly all were agreed that the cheese ripened at 40 degrees F. were the finest cheese. The one ripened at a temperature of 50 to 55 degrees had a more or less objectionable flavor.

We should like to emphasize the fact that *uniformity of temperature* is very important in cheese ripening. Cheesemakers who allow the temperature of the curing room to go as low as 40 degrees F. at night, light a fire in the morning and warm the room up to 50, 60 or 70 degrees in the day time are not observing the necessary precautions for success. From several years' work in this connection we feel safe in saying that a *uniform temperature* of about 40 degrees F. will produce the finest quality of cheese. We may get nearly as good results at less cost by ripening at 50 to 60 degrees F., if the cheese are consumed before they have an opportunity to develop off flavors, but for cheese that are to be put into cold storage or are to be kept some time before being consumed, we are confident that the sooner after being made cheese are placed in a temperature of about 40 degrees F., the better will be the quality of such Canadian cheddar cheese. Sometimes buyers object to cheese ripened at low temperatures. As a matter of business, it pays factorymen to study the fancies of buyers and to ripen them what they are willing to pay for, but this does not alter the facts contained in the preceding statements.—H. H. D.

A Banquet in a Stable

The ventilation of barns, and especially dairy stables; has of late years been reduced to a science. At first attempts were made to give the cow-barn pure atmosphere by increasing the number of cubic feet of air space per cow as well as by some of the old date system of ventilation. But this plan has not worked well, for as space increased the temperature in the room fell and the flies did not draw off the impure air as they should. The problem has been solved in a different way and a good illustration of the result is given in a recent issue of the "National Stevedore." A correspondent gives the report of a trial held in the cow stables of Mr. H. T. Cook, Denmark, N.Y. Mr. Cook has held that a place fit to produce so delicate an article of food as milk is a suitable place in which to eat. The occasion for the banquet was a Farmers' Institute meeting, held on March 8. The barn is described as follows:

"The barn selected for this purpose was perhaps the best to be found in the United States to illustrate the object desired. The former directions for building the dairy stable have given to each thousand-pound cow one thousand cubic feet of air space, but Mr. Cook has demonstrated that a stable only nine feet high and containing only five hundred cubic feet of air space for each cow can be so ventilated as to give an air perfectly free from foul odors and moisture. This is done by the King system of ventilation. There was no moisture on the ceiling and no evidence of there ever having been any. The room above the stable was also dry. There is maintained about a 58-degree temperature, with a variation not exceeding six degrees during the winter. The stable, 30x90 feet, with smooth walls and ceiling, side walls being whitewashed and the floor of cement, is sanitary. On this occasion the ceiling and walls were decorated with flags and bunting. Curtains were hung immediately back of each row of cows, and the space between was filled with seats to accommodate the four hundred people present. During the noon hour the seats were removed and tables were set in the space with a seating capacity of one hundred."



The white-throated sparrow.

Nature About the Farm

Edited by C. W. NASH

WHITE-THROATED SPARROW—THE NESTING SEASON

By the time this number of FARMING WORLD is issued the last of the warblers will have arrived and bird migration for this spring will be over. The season was an exceptionally favorable one in this province, so that the winged hosts were able to prosecute the last stage of their long journey without any serious checks. In consequence of this, many species passed through much more rapidly than usual.

The white-throated sparrows, which generally remain with us until about the twentieth of May, took advantage of the fine weather and the bulk of them left us a week earlier than that. They have not all gone, however. Some of them will remain through the summer and nest here. Even in the neighborhood of Toronto a few pairs may be found by those who know how to look for them in the secluded ravines north of the city. During the breeding season they are very unobtrusive and are not often seen or heard, for as a rule, while nesting, the male only sings late in the evening, or at night, and very startling it is, to hear close beside you, as you are passing through the scrub, the stillness of the night broken by the clear notes of this bird. Many of our birds will sing at night if wakened by any slight disturbance, but generally speaking the song is only uttered once and in a dreamy sort of fashion, without vim or energy. The white-throated sparrow sings vigorously and continuously through the dark hours, so noticeably that it has, in some places, earned the name of "Canadian Nightingale." When migrating in spring and autumn their notes may be heard all day, but after dark they are, I think, silent. Their near relatives, the white crowned sparrows, are here now, graceful, pretty birds, more beautiful in my eyes than the favorite white throat, though not nearly such good singers. The habits and manners of these two

sparrows are very similar and their food is the same, but their distribution in summer is different, the white crowned going far north to breed; no authentic record has ever come to my knowledge of its having nested in either Ontario or Manitoba, though no doubt it will presently be found breeding in the far northern part of both.

The great majority of our summer residents have now selected their quarters for the season and have settled down to the serious business of nest building, some of the very early ones, in fact, having already taken off their first broods. A pair of robins, which built their nest, without any pretence at concealment, in a birch tree near my house, took off their young on the fourteenth of May, being only a few days later than that indefatigable producer, the house sparrow. Bluebirds, song sparrows and crows have young in their nests and many other species have eggs, while the later arrivals are all busily engaged in mating, or gathering material's with which to construct their nests.

To thoroughly appreciate the true value of our birds, a few pairs should be kept under observation from the time of their arrival, at their accustomed nesting place, until they final-

ly leave with their young. There is no particular trouble involved in this, for many of our most familiar birds, such as robins, bluebirds, house wrens, song and chipping sparrows, the phoebe, and some of the swallows attach themselves closely to our habitations and will build their nests in such positions as to enable an observer to see all the proceedings of the birds in feeding and rearing the young without difficulty. At some convenient opportunity, after the young are hatched, the number of visits made by the parent birds to the nest with food in some specified time, say, fifteen minutes or half an hour, should be counted, and from that an estimate can be made of the number of insects required to feed the brood in a day. It must be borne in mind, though, that each visit does not necessarily represent only one insect, for if these are small, several may be carried upon each trip. The total number of insects carried in a day cannot therefore be exactly determined, but even allowing only one for each visit, the number destroyed will be surprising.

Many birds seem to have a strong affection for their old nesting places, and will return to them year after year so long as they are undisturbed in their family affairs. Several pairs of different species return to my garden every spring and at once establish themselves in their old haunts with an air of confidence which shows them to be quite at home, that is, when the pair consists of the same individuals as were here the previous year; if, however, one of them is a stranger, the fact is at once apparent, the new bird is shy and suspicious and is quite evidently unused to its surroundings. In course of time this wears off and the newcomer will become as familiar as its predecessors.

This season the catbirds of this kind has presented itself; the pair of catbirds which frequent my shrubbery duly arrived and both of them from the first displayed the same fearlessness they have always shown towards me, and the dog which always accompanies me. They had certainly both been here before and knew they were perfectly safe. A pair of Wilson's thrushes have also frequented the same place and bred nearby; they, too, realized the security of their position and were so confident that they would come out to where I was digging and capture insects within a few feet of my spade but this spring one of them (the female) is evidently new to the locality, and is as yet full of fears, her whole manner shows that she is quite unaccustomed to human beings as associates. If she knows them at all, it is only to dread them and keep out of their way, just as is the habit of her race in the woods. The mate, on the other hand, came over to me on

(Continued on Page 146.)

Canada Permanent Mortgage Corporation

HEAD OFFICE—TORONTO STREET, TORONTO

SAVINGS DEPARTMENT

\$1 and upwards received on deposit. Interest compounded half yearly at 3½% \$100 and upwards received for which debentures issued. Same attached for half yearly interest at 4%

Paid-up Capital	86,000,000.00
Reserve Fund	2,000,000.00
Invested Funds	24,000,000.00



A man must not choose his neighbor; he must take the neighbor that God sends him. In him, whoever he be, lies hidden or revealed a beautiful brother. The neighbor is just the man who is next to you at the moment. This love of our neighbor is the only door out of the dungeon of self.—George MacDonald.

Keep A-Go-in'

If you strike a thorn or rose,

Keep a-go-in'!

If it hails or if it snows,

Keep a-go-in'!

'Taint no use to sit and whine,
When the fish ain't on your line,
Bait your hook and keep on tryin'.

Keep a-go-in'!

When the weather kills your crop,

Keep a-go-in'!

When you tumble from the top,

Keep a-go-in'!

S'pose you're out of every dime,
Gettin' broke ain't any crime;
Tell the world you're feelin' prime,

Keep a-go-in'!

When it looks like all is up,

Keep a-go-in'!

Drain the sweetness from the cup,

Keep a-go-in'!

See the wild birds on the wing!
Hear the bells that sweetly ring!
When you feel like singin'—sing!

Keep a-go-in'!

Some Remarkable Animals

The following true stories are taken from a collection published some months ago in an American weekly journal. They will be of interest to readers on the farm:

A HELPFUL COLT

One rainy day I opened the barn door and endeavored to call in the cows, as I did not care to walk in the mud. One cow refused to come, although I called her by name repeatedly.

A colt, standing at the other side of the yard, watched me as I vainly tried to drive the cow, without stepping into the mire.

Then the colt quietly stepped up to her and bit her.

Of course she moved. He followed, giving her a nip whenever she moved in the wrong direction, until she went through the door into the barn. Then he went back to the other side of the yard.

A DOG WHO SWAM GUARD

Shep was a black and tan Scotch collie. One day he went with the family and some friends to the little stream just below our camp grounds. The children were going bathing, and Shep was very fond of the water, so he swam back and forth in the stream just at the edge of the swift current, and would not allow the children to get into the swift water.

This was commented on by the older persons; but a sceptical lad said that it was not so. Then, to show he was right, he went out to the swift water and tried to get past Shep. This he could not do. Shep, however, in his efforts to keep the lad back, got out into the swift current, and was swept

down the stream; but he soon returned, and took up his old station, where he continued to swim guard over the children as before.

BRUNKEN PIGS

A saloon keeper, after having drawn off all the liquid from a barrel of cherry-bounce, emptied the cherries into an alley where about thirty hogs were accustomed to roam at ease. Espying something eatable, they sampled it, and continued to eat until the alcohol began to take effect.

They attempted to stand on two feet, on their heads, and rolled over and over in their glee. They grunted and squealed as they jostled one another, until they attracted attention. Their owners were told of the queer antics of their swine and came to see for themselves, but could not imagine why they should be so strangely affected.

There was much talk of prosecuting the saloon keeper that night, after the cause had been found, but the next day the porkers were as well as ever. But they didn't want any more alcohol.

A MYSTERIOUS REFUSAL

Late in the evening, many years ago, my Uncle Elisha was returning to his

Only Me

A little figure glided through the hall; "It that you pet?"—the words came tenderly;

A sob—suppressed to let the answer fall—

"It isn't pet, mamma; it's only me."

The quivering baby lips!—they had not meant

To utter any word could plant a sting.

But to that mother's heart a strange pang went;

She heard and stood like a convicted thing.

One instant, and a happy little face Thrilled death unwonted kisses rained

above;

And from that moment, Only Me had place

And part with Pet in tender mother love.

The Boy's Share

He told his son to milk the cows, feed the horses, sleep the pigs, hunt the eggs, catch the colt and put him in the stable, split some kindling, get in the



Soap-making time on the farm.

home with a sum of money in his possession. His horse was trusty and true, and going toward home over a familiar road; but, when approaching a lonely part of the road, the horse stopped for no apparent reason, and no amount of persuasion could induce him to proceed. When turned toward the village he proceeded with his usual willingness; but when again turned toward home he refused to go forward.

Uncle Elisha was obliged to return to the village and remain until morning. He believed that but for his horse's refusing to carry him further toward home, he would have been waylaid and perhaps murdered.

wood, stir the cream, put some fresh water in the creamery after supper, and be sure to study his lessons before he went to bed, then he went to the Farmer's Club to discuss the question "How to Keep the Boys on the Farm."

Wisdom of a Baby

All the world loves a baby.

Fine fathers do not make swear words.

Honey makes the tears go.

The more waste the less feed.

A penny swallowed is a penny saved.

The wages of sin is bed.

"That You is You, an' Me is Me"
There's something I'm awfully anxious to know,
I think it's important as it can be—
S'pose it had happened beforehand, so
That I was somebody else but me!
Then some other boy would be your little boy,
And love you more than a "tongue can tell"—
I wonder would he be his "muvver's joy,"
And smooth your headaches to make 'em well
—Cause I think it's funny as it can be,
That you is you, an' me is me!

I've worried an' bothered for most a day,
Termin'g what I should ever do
If things should be 'ranged in a different way,
An' you should be somebody else but you,
You'd live in some other place but here—
Far away, maybe—but, anyhow,
I'm perfectly positive, mother dear,
I'd love you 'zactly as much as now,
—But I think it's funny as it can be,
That you is you, an' me is me!
If you was somebody else but you,
I praps w'd meet in the street some day,
An' I'd be plite and say "How-de-do?"
An' "What a nice little boy!" you'd say,
Then w'd walk for almost a block be-fore
I'd tell you just who I was—an' then
You wouldn't be somebody else any more,
An' I'd be your little boy again!
—An' I think it's funny as it can be,
That you is you, an' me is me!

ELIZA WEBB'S MISFORTUNE

THE queer little red cottage in which Miss Eliza Webb lived was built in the old fashion, with a lean-to and a porch. Behind it grew a row of cherry trees, and on one side ran a picturesque hedge of lilac bushes set out on the right, stretching the entire length of her tiny farm, was a high board fence.

Miss Eliza Webb frowned at the fence and at the great house and stable which loomed up behind it.

These big buildings cut off a large portion of the river view from the red cottage, but Miss Webb could still have seen part of the valley from her windows had that obnoxious fence been removed.

"Insultin'!" murmured Miss Webb. "Right down insultin'! And just because I told 'em plain out what I thought of 'em."

She fixed her eyes on the fence and went on watering the gay nasturtium bed, till little muddy rivulets ran away from it and settled about her slippers feet.

Fifty years before all those broad acres stretching from the lilac hedge across the hills to the little river winding through the valley beneath had belonged to Miss Webb's father. He had often stood on the porch of the red cottage, with his wife and daughter beside him, building air castles on the very spot now occupied by the great house. But years brought losses to Simeon Webb, and the site of his air castle had to be sold.

Miss Webb had never greatly felt the loss, however, until this summer, when her limits were defined by a hideous fence, and the hill beyond was cut out into for the foundations of the Traffords' house and stable.

Old Mr. Trafford was anxious to buy the land clear through to the lilac

hedge. He tried to persuade Miss Webb, into whose hands the property had descended, to sell her small farm and have the red cottage moved to another spot on the village.

But she refused to consider the proposition, and her refusal was given in such an indignant way that the old man's wrath was roused, and he built the fence out of spite. On Mr. Trafford's side a trellis of grape-vines ran the entire length of it, but on hers no trailing vines or flowers covered the rough, unpainted boards.

"Mercy me!" cried Miss Webb, suddenly conscious of the cold stream trickling into her cloth slippers. She held her alpaca skirts high in one hand, and stepped gingerly onto a bit of dry ground.

"Mercy me! I don't know but what I'm losin' my senses over that pesky fence and those toplofty Traffords. They needn't have been so scared. I w'dn't have gone near 'em, fence or no fence. They ain't what I want to see. It's the river and the valley, that I've been used to lookin' out on ever since I was born." She picked up the watering-pot and walked angrily into the house.

That afternoon her theory of the toploftiness of the Traffords was shaken. At exactly four o'clock, which was "visitin'-time" in Danesville, her front gate clicked. Peeping out from behind the drawn window-shade, Miss Webb saw young Mrs. Trafford coming slowly up the walk.

"My land! If her ain't the widow Trafford, the old man's daughter-in-law! Well, she can knock and knock, for all she'll get in here."

Mrs. Trafford was aware of the angry eyes fixed on her from behind the built window-shade, but she repeated her knocks several times. At last, despairing of effecting an entrance by the usual method, she took a step back from the little porch, looked up suddenly at the window, and nodded pleasantly. Then she knocked again.

Miss Webb left the window and stood in the middle of her best room, trembling with indignation.

"Of all the sass and impudence!" she gasped. "I'll have to open the door now, 'an she knows it."

"How do you do?" smiling brightly into the grim face above her. "We are such near neighbors that I think it is quite time we knew each other. I should have waited for you to call first, but as you did not I feared you might be ill or too busy—"

"Always well, and I ain't ever particularly busy," interrupted Miss Webb.

"Oh!" returned Mrs. Trafford. "Oh—well, I am very glad to hear that! Good health is a great blessing."

Miss Webb swung the door back and forth suggestively, without answering. Mrs. Trafford held out a basket of delicious-looking strawberries.

"Won't you accept this?" she said, persuasively. "It is early for strawberries, I know, but our gardener is very proud of these, for they are unusually sweet."

"I w'dn't touch one of 'em," said Miss Webb, fiercely, "no more than I would a stone right out of the street."

"Really!" Mrs. Trafford flushed, then said sweetly, "I know they do disagree with some people. You are very wise in refusing them, for indigestion is so unpleasant. Good by! I hope now we shall meet often." Then she beat an honorable retreat down the gravel path, leaving the enemy angry and puzzled.

"I believe, after all, she didn't get hold of my meanin' about them strawberries, and put it all down to dyspepsy!" ruminated Miss Webb wrathfully.

Young Mrs. Trafford waited until the

protecting fence shut out the red cottage before she gave way to her laughter. "Poor woman!" she said at last. "I don't wonder she hates us. It must be hard enough to have Mr. Trafford's house and stable planted all over every doorway, without having that hideous fence added. It shuts off her entire view but I suppose that is just what he wanted. He is such a vindictive old man if any one crosses him. I wonder if in some way I could get some vines planted on her side of the fence as they are on ours. That would go far to hide its ugliness if Mr. Trafford insists on keeping it up."

On Saturday afternoon, when Miss Webb returned from the weekly sewing-circle, she found a line of trellis-work running the entire length of the fence on her side, and saw the Traffords' gardener working busily at one end of it.

"Mrs. Trafford's orders, Miss," he said, touching his hat, as she strode across the grass to the gate. "She hopes you'll like it, Miss, and I'm to finish up on Monday."

Miss Webb folded her long arms and surveyed his work in contemptuous silence.

"I'm to finish Monday, Miss," repeated the man, uneasily, and then he shuffled out of the yard.

It took him an hour to clear away the heap of brown straw-work and vines which, he found the next morning, had been flung ruthlessly over the fence into Mr. Trafford's yard.

Mrs. Trafford grew a little discouraged at the failure of her friendly attempts, but she would not give up.

"Why, Mr. Trafford," she said, a few evenings later, at the end of one of their discussions on the subject, "no wonder the poor old man feels bitter towards us. I heard through the minister's wife yesterday that she thinks you put up that fence to keep her out of your grounds. She has always been in the habit of going to the village by the path through the meadow; now she has to go by the road, a quarter of a mile farther. I wish you would allow Benson to make a gateway at that end, if nothing more can be done."

"Well, well. Have it your own way, Lucy!" grumbled Mr. Trafford. "Cut the gateway, but don't let me hear any more about it."

So Mrs. Trafford sent a note to Miss Webb, telling her that she would be glad to have her make use of the gate which Benson was making at the farther end of the fence.

She received no answer, but the day after the opening was completed she saw Miss Webb come out of her kitchen door with a box of nails and a hammer in her hand.

She listened to the sharp, vindictive blows of the hammer, and reluctantly acknowledged to herself that her last effort, like her first, was a failure.

That afternoon, as young Mrs. Trafford walked in the garden with her father-in-law, he stopped in front of the newly-completed trellis behind which the rejected gate was hidden, and smiled derisively.

"Your friend, Miss Webb, keeps Benson quite busy," he commented. But Mrs. Trafford pretended not to hear.

Three months passed without further intercourse between the great house and the red cottage, and old Mr. Trafford had nearly forgotten his neighbor's existence. Not so with Miss Webb. As the days grew colder, and the light frosts of autumn turned the leaves of the oaks and maples to brilliant reds, and yellows, she felt more keenly than ever the loss of her extensive view.

"I've read somewhere in some book that country people don't care for beautiful scenery, because they're so used to

(Continued on Page 431.)

THE BOYS AND GIRLS

The Eggs and the Bricks

Quite a number of THE FARMING WORLD'S girls and boys sent in correct solutions of the two problems given in our last issue. The first correct answers sent in were from Myrtle Jackson, Port Perry, and C. Henderson, Thamesville. As these, reaching this office in the same mail, were correct answers to both problems, the prizes have been divided, and a book, as announced, has been sent to each, with FARMING WORLD'S congratulations.

The answers to the problems are (1) sixteen eggs; (2) twenty-one pounds.

Jamie's Prize

JAMIE Norris was a little Scotch lad, who came all the way from his far-away home—beyond the great ocean—to his uncle's home in America, alone. He was only eight years old, when a low fever carried off both father and mother in a single week. After they were buried neighbors wrote to Jamie's uncle and asked what was to be done with the orphaned boy. "Tag him for Baxter, Ill., U.S.A., and ship him by express to me," was the reply. So after a fortnight's journey he reached the station to which he had been shipped and was taken in charge by his uncle, who was waiting for his arrival.

Jamie was homesick and tired after his long trip, but he was a brave little fellow and winked back his tears when his aunt kissed him and welcomed him to the prairie home. There were three children in the Norris home—Bruce, aged eleven; Frank, ten, and little Jean, just Jamie's age. It was on Saturday that he completed his long journey, and on Monday he went with his cousins to the village school. The boys laughed at his Scotch plaid, and mimicked his Highland brogue, but he walked off knowing very well that he was too small to defend himself from the rudeness, and that it was better to endure their taunts quietly than be worked in fight.

In the evening when roll was called Jamie observed that most of the scholars answered "merit"; a few said "demerit" when their names were called, but not understanding what they meant by the answers, when it came to Jamie Norris, he simply replied, "Here," as he had been accustomed to in the school across the big waters.

"Are you 'merit' or 'demerit'?" asked the teacher, glancing up from her daybook; and when Jamie said he did not know what was meant by these answers, she explained: "If you haven't whispered one word during study hours, answer 'merit,' but if you have, 'demerit.'"

"Then, I'm 'demerit,'" replied Jamie, "for I whispered several times."

"How often?" questioned the teacher.

"I don't know," Jamie returned quietly.

"As many as two?" urged the teacher.

"More than that," said Jamie.

"Three, four, or five times," asked Miss Ray.

"More than that," was the answer.

"Six, eight or ten times, I suspect?" "I didn't know the rule, and so I didn't keep count."

"Then I'll have to give you zero," said the teacher, sternly. "You ought to know not to whisper in school, even if you were not told."

"You're a gilly to tell," said Bruce, on the way home in the evening.

"But I did talk; ever so much," insisted Jamie. "What else could I do but tell?"

"Why not answer 'merit' like the rest of us, of course? The teacher didn't see you, and it'll spoil your report dreadfully. Just think of it!—zero the first day. Father will think it is awful. He always wishes us to get 'merit.'"

"Not if you do not deserve it," Jamie returned. "And I can't see what difference it makes whether the teacher saw me or not. I saw myself, and that's the same."

"No, it isn't," contradicted Bruce. "That sort of whispering doesn't count. Why, we all do that kind of talking. Making signs and writing notes aren't talking."

"But they are breaking the rule, and that's the same," persisted Jamie. "I'll try to keep from breaking the rules, but if I forget, I'll not answer 'merit.'"

And he held to his Scotch resolution despite the twitting and big "demerits." If he whispered or did things against the rules, he did not call them by some other names, or try to sneak out of them, and yet de-

spite his poorest report, the teacher said he was one of the quietest, most obedient pupils in the school. His lessons were always well prepared, though it was a matter of regret that no honors went his way.

A series of prizes for high standing in classes and best reports in conduct were to be distributed on the closing day of the term, and, as usual, much interest was felt in the outcome of the contest.

In the award, Jamie's name was not mentioned at all, but after the result of the winter's contest had been announced, and the prizes distributed, the President of the Board, who had been spokesman on the occasion, said: "I have another prize to bestow to-night; one not mentioned in the list of honors. It is a gold medal, and goes to Jamie Norris, the boy who always prefers 'demerits' to untruths, and in consequence carries away a report below the average, though according to the teacher's estimation, in both work and conduct, he stands higher than any other pupil in school."

Tricks of Manner

What old-fashioned folk called "tricks" of speech or manner are deplorably easy to assume and extremely difficult to break off. Several to which girls are more or less prone are these: Repetition of a sentence or a point of a story, telling it over again almost in the same breath, the usage of "you know" or "don't you know" for emphasis and beginning a laugh with such haste that it entangles itself in the speech and the final words are delivered in a giggle. All these and similar mannerisms may be more readily dropped in youth than later in life, and every girl would be wise to watch herself lest she fall into them or their like.



Miss Kitty Manx to Sir Thomas Angora

Sir Thomas, pardon me, I pray.
But I would like to know

If you could not direct me to
The swamp where cat-tails grow!

Do you know this Mr. Cheesemaker

Salting the Curd is a most important process of manufacturing; strict attention to the salting or lack of attention will make or mar uniformity. Know exactly the quantity of milk in each vat, weigh on a reliable scale the right quantity of

WINDSOR Cheese Salt

required, spread the curd to a uniform depth in the sink, and apply the Salt evenly, stirring the curd

No Breakfast Table
complete without

EPPS'S COCA

An admirable food, with all its natural qualities intact, fitted to build up and maintain robust health, and to resist winter's extreme cold. It is a valuable diet for children.

COCA

The Most Nutritious
and Economical.



**HECLA
HEATING
ENSURES
COMFORT
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IN THE KITCHEN

Rhubarb Recipes

In cooking rhubarb, if it is tender, it is not necessary to remove skin. Wash stalks, cut into bits and cook. While rhubarb pies are usually cooked in two crusts, some very nice ones may be made with only one crust. The same mixtures may be used to make tart or tiny pies for the children's lunches. Many who do not care for plain rhubarb are delighted with it when used with other fruit.

RHUBARB CUSTARD PIE—Stew 2 cups rhubarb, press through sieve or beat until smooth. Add 1 cup sugar, 1 egg, 1 tablespoon cornstarch, butter, size large nutmeg. Stew together a minute. No upper crust. Add more sugar if desired very sweet.

RHUBARB APPLE PIE—Two cups stewed rhubarb, 1 cup sugar, teaspoon butter, teaspoon flour, 1 cup apple sauce. No upper crust. If preferred, however, a crust can be put on, but it is nice without. Here is another: Cook 6 apples until smooth. Add 1 cup sugar, 1 tablespoon lemon juice, 1 tablespoon cornstarch and 1 cup stewed rhubarb. With or without upper crust.

RHUBARB PRUNE PIE—One cup stewed rhubarb, 1 cup sugar, 1 cup stoned chopped, cooked prunes. Boil together for a few moments. Sprinkle a little more sugar on top of mixture after bottom crust is filled. Cover and bake.

RHUBARB PUDDING—Sift together 2 cups flour, pinch salt, 2 teaspoons baking powder, ½ cup sugar. Stir in 1 egg beaten with ½ cup milk, or cream, and 2 tablespoons butter. Add 2 cups rhubarb cut into small bits. The pink part with the skin left on is the nicest for this pudding. Boil in floured cloth until done and serve hot with any desired sauce.

New Vegetable Ways

CARROTS AND TURNIPS—We never liked carrots at our house until served in this combination: Cut equal quantities of turnips and carrots in rather thick slices and cook in salted water until perfectly tender. Pour over them this sauce: Melt one tablespoon butter in a saucepan, add one tablespoon flour, cook together until blended, then add gradually one teacup milk and cook, stirring constantly until of creamy consistency.

CREAMED CABBAGE—Our favorite cabbage dish is this: Cut the cabbages into quarters or eighths, according to size, and cook in salted water until done. Butter a large baking dish, put in the cabbage and pour over the cream sauce given above. Cover the top with bread crumbs and bake ½ hour.

DIGESTIBLE ONIONS—Cut onions in thin slices and cook in plenty of water until tender. Then drain and return to the fire with ½ cup water, salt to taste, ¼ cup vinegar, and 1 tablespoon sugar. Let all cook together five minutes, then drain again and serve. Onions cooked in this way are extremely digestible and are enjoyed by those who find their after effects objectionable in any other form.

Quick Bread-Making

Joy's in store for the good housewife in a report which comes from Nottingham, England. A quick breadmaking process has been recently introduced, by which it is claimed that bread can be made much more quickly than by the procedure usually employed—in 3 or 4 hours, against ten or twelve—and that a given weight of flour yields a larger weight of bread, five or six times more per sack of flour. The materials used are the same as in ordinary bread-making, without preliminary washes or "bread improvers," and the better results claimed are attributed in the main to the supersession of common rough-and-ready empirical methods by systematic and scientific regulation of the temperature at which the fermentation is carried on, so that the fermentative process is rendered at once more rapid and more complete. A further advantage of bread made in this way is stated to be that it has remarkable keeping qualities, loaves over a week old still being sweet and retaining their moisture, and consequently their weight to an unusual extent.

New and Old

Rice Waffles—Rice makes one of the best variations of plain waffles. It must be boiled and cooked, then rubbed through a sieve before adding the other ingredients. To one pint of milk allow one cupful of rice, two eggs, lard the size of a walnut, two teaspoonfuls of baking powder, one teaspoonful of salt and flour to make a thin batter. Separate the eggs and beat thoroughly. Add the rice to the yolks with salt and the lard. Mix thoroughly and add the milk and flour, sufficient to make a moderately thick batter. Lastly, beat the whites of the eggs and add the baking powder. Bake like ordinary waffles. The batter should be perfectly smooth and of a consistency that pours readily.

Flannel Cakes—An old recipe calls for a quart of flour, a teacupful of white Indian meal, one pint of milk, four eggs, one teacupful of melted butter, one-half cake of yeast and a teacupful of salt. Sift the meal and flour together with the salt, scald the milk and let stand until lukewarm. Dissolve the yeast in one-quarter of a cup of warm water and add it with the milk and butter to the flour and let it stand in a warm place over night. In the morning separate the eggs and beat them thoroughly, then add first the yolks, then the whites to the batter. Beat well and bake in muffin rings or on a well greased griddle.

Things Worth Knowing

That a little powdered borax will make washing look extra glossy when ironed, if thrown into the starch.

That a handful of salt thrown into hot milk makes a fine bath for parts affected with rheumatism. The curds which form when the mixture gets cold make an excellent poultice to put upon the parts over night.

That white wool articles are thoroughly cleansed by rubbing with dry flour. Shake well afterwards.

That it takes less sugar for fruits and preserves if put in after they are well cooked.

No Argument Will Convince a Woman

that a flour is all right, if she can't make good bread with it. The one argument that wins every woman in favor of ROYAL HOUSEHOLD FLOUR is, that it never fails to turn out the most beautiful Bread and Cake and the most crisp and delicious Pastry when used according to the very simple "Royal Household" recipes. That one fact outweighs all the theories of two thousand years.

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Your grocer sells "ROYAL HOUSEHOLD" and you can have the recipes by simply sending your name and address to The Ogilvie Flour Mills Co., Limited, Montreal, and mentioning the name of this paper.

Health in the Home

Tonics

The need for medicinal tonics is manifested after illnesses of all sorts, and in conditions of physical depression which so readily expose the sufferer to the inroads of disease that they are commonly regarded as themselves but initiating symptoms of diseases.

The value of moderate muscular exercise as a tonic to the heart is well recognized by physicians. The absolute quiet sometimes enjoined upon persons suffering from certain diseases of the heart is a measure employed, as a rule, only to meet a crisis. When the crisis is passed progressive muscular exercises are prescribed.

When the intestinal tract suffers from lack of tonicity, variety of diet is usually a better and more effective remedy than medicine. Oatmeal, peas, beans, and certain cereals, although they contain an immense amount of nutrition, are difficult of assimilation, especially when not subjected to thorough cooking. The digestive organs may be strained by the task of reducing such concentrated foods to the uses of the body.

A diet composed largely or exclusively of milk used for a time may in itself prove sufficient rest to the stomach to enable it to regain its normal activity. Many other "restful" foods might also be temporarily employed.

The Sick Room

The following paper was read at one of the Women's Institute meetings not long ago:

With the increasing developments in the science of medicine, and particularly in the field of bacteriology, and with the conviction which is becoming recognized more and more that thoroughly clean surroundings and pure air are conditions absolutely necessary to the recovery of

patients, arrangements and equipments have become subjects of serious consideration to both the medical and nursing professions. Why not, then, apply these considerations to the construction of our homes.

It becomes important and necessary that the nurse should understand the plans and arrangements of a modern sick room, for there is nothing in or about the sick room that does not directly or indirectly affect the welfare of the patient.

Many of the rules that hold good in hospitals can be applied with some modification to private dwellings.

The modern sickroom should be of ample size, away from any noise, have plenty of light and sunshine, and be capable of being thoroughly cleaned. There should not be less than two windows, unless the sun has free access to it, when one large one will be sufficient. The higher up the room is situated the better it is for fresh air and ventilation. The furniture of a sick room should be as simple as possible. The bed should be placed so as to be accessible from all sides, away from the door; the dressing table on the side or in a corner, where the patient cannot see into the mirror. Everything should be in good taste and as dainty as possible, but elaborate carvings and hairy woollen rugs or carpets, upholstered chairs, pictures and bric-a-brac should not be permitted, as they only gather dust and hold germs which are hard to remove. A simple room can be made to look exceedingly pretty and inviting by the addition of long white curtains of some soft washing material, a small rug or two, but should the case be infectious or contagious even these should be prohibited. Where possible an adjoining room should be set apart in which to keep everything in the way of utensils, medicines, etc., as everything disagreeably suggestive should be kept out of sight of the patient.

The dusting of the room should be done with a damp cloth wrung out of

a basin of a weak solution of carbolic acid. The duster should be washed out in hot soap and water and wrung out of a five-per cent. solution of carbolic acid before being hung up to dry, thus killing germs which have been gathered. It is necessary to have good ventilation, but the patient should be placed out of all draughts; the air which enters should penetrate into every part of the room and become well mixed with that already there. A thermometer should be suspended at a central point in the room, not too near the window, and the temperature recorded once an hour.

Health Hints

A raw egg, swallowed, will usually detach any foreign substance, like fish-bone, if lodged in the throat.

One teaspoonful of pure sweet oil, taken three times a day, after meals, will cure the worst case of dyspepsia.

A cake made of equal parts of brimstone, saltpetre and lard, if bound about a felon, will cure it. Renew as soon as it gets dry.

A preparation of one ounce of flower of sulphur and one quart of soft water, if applied thoroughly to the scalp, night and morning, will remove every trace of dandruff and render the hair rich and glossy.

A few drops of lime water, added to milk, will prevent it from souring on the stomach.

Dates and Oatmeal

The addition of stewed fruit gives a welcome variety to the morning cereal. I know of a family of children who always hail with approval a dish of oatmeal in which dates have been stirred. Remove stones and chop, or better still, cut each into small pieces. Stir these into the oatmeal ten minutes before it is to be eaten, or you may let the mixture get firm in a mold and serve very cold with cream at lunch, or even as a dessert.

SUNDAY AT HOME

The Spirit

How shall I quiet my heart? How shall I keep it still?
How shall I hush its tremulous start at tidings of good or ill?
How shall I gather the old contentment and peace and rest—
Wrapping their sweetness fold on fold, over my troubled breast?

The Spirit of God is still, and gentle and mild and sweet,
What time His omnipotent glorious will guideth the words at His feet,
Controlling all lesser things, this turbulent heart of mine,
He keepeth as under His folded wings in a peace serene, divine,

So shall I quiet my heart, so shall I keep it still,
So shall I hush its tremulous start at tidings of good or ill;
So shall I silence my soul with a peacefulness deep and broad,
So shall I gather divine control in the inmate quiet of God."

Lift Up Your Heart

Lift it up in earnest and believing prayer. It is not cowardly to cry for help. Courage for the conflict is necessary, but it is not sufficient. Have the courage to admit your need of aid from above, and cry mightily to the God of all grace. When you see the temptation approaching, send off post-haste for re-enforcements. God has permitted the use of ejaculatory prayer on this very account. No set form is needed, and no specially appropriate attitude is required. "Help, Lord!" "Lord, save me!"—such short cries suffice; nay, a sigh or a groan is all that is possible at times. He waits to be gracious. He is a very present help in every time of trouble. If you cry into God in the battle, He will fight for you, and that spells victory. Therefore do not forget to pray. Dream not that you can manage without heavenly help, nor fancy that prayer is vain. "Ask, and ye shall receive." The victory is almost yours if you enter the battle with a prayer. Then you need no longer fear, for it is true enough that

"Satan trembles when he sees
The weakest saint upon his knees."

Forward

Mr. Evan Roberts, the revivalist, was recently asked to write a few lines in the album of a well-known minister's daughter, and the following is a translation of what he wrote:

"Believe in Christ. Believe in His promises. Forward towards Truth. Forward towards Life. Forward towards God. Forward through Reproach. Forward towards God. Forward at all times. Forward. Forward."

Missions and Life

An artist was once asked to paint a picture of a dying church. Instead of putting on canvas a small, feeble, poor congregation in an old building, he painted a stately, modern edifice, through the open portals of which could be seen the richly carved pulpit, the magnificent organ and the beautiful stained glass windows. Just within the entrance, guarded on either side by a pillar of the

church in spotless apparel was a contribution plate of goodly workmanship for the offerings of fashionable worshippers. But right above the plate suspended from a nail in the wall there hung a small box, bearing the legend, "Collection for Foreign Missions," and over the slot, through which certain contributions should have gone, was a huge colweb!

The Value of Meditation

A chief advantage of the Quiet Hour is that it gives opportunity for meditation on the Word of God. In prayer we speak to Him; in meditation on His Word we permit Him to speak to us. It is so much a question of the time that is given as it is in being shut up with God and His Word and shut out from the world and distracting surroundings. The practice of the Quiet Hour would be greatly strengthened if we were to take very brief portions of Scripture—a verse or two, or a short section—rather than a whole chapter or chapters.

A Blacksmith's Prayer

One of Dr. Torrey's chief characteristics is his absolute faith in answers to prayer. During a Sunday afternoon address he recently told how a blacksmith received some remarkable answers to prayer. He said:

"One day a blacksmith was working in his forge, when there came over him a great burden of prayer. He put out the fire, locked up his forge, hurried to his home, got down on his knees before God, and commenced to pray. He was overwhelmed with a burden of pleading for certain people in his town. He wrestled long with God in prayer for each one of those people, and every single one of them was convicted and converted that very day."

God keep us through the common days,
The level stretches, white with dust,
When thought is tired, and hands up-

raise

They burdens feebly, since they must,
In days of slowly fretting care,
Then most we need the strength
of prayer.

—Margaret E. Sangster.

Sentence Sermons

Less saying and more praying, less dependence on feeling and more on faith, would bring the desired revival to many a church.

The Christian life that is not progressive is retrogressive.

If one would live forward, he must not be forever looking backward.

The world will never weary of the profession of religion that springs from the possession of religion.

Some Christians are attractive and some dettractive.

He who prays and pays not sends voice no higher heavenward than he who pays and prays not.

Whether we admire good people or envy them depends on which class we belong to, theirs or the other.

When Scripture says that "the kingdom of heaven suffereth violence," it means that man will have to fight to enter it, not that God will force him



Hello!

Have you heard of the New Century Ball Beating Washing Machine?

If you use it once you would ring this in to all your friends. It is the acme of perfection—you sit when using it—no handling of the clothes necessary to clean them perfectly—five minutes does a tubful. Costs only \$1.50. Your dealer can procure them. We will send a descriptive booklet on application.

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Toronto.

into it. Every height gained involves the struggle in climbing.

If some people really comprehended what they were saying, or expected their prayers to be answered, they would be less ready to repeat that phrase in the Lord's Prayer, "Forgive us our debts as we forgive our debtors."

In the Sewing Room

May Manton's Hints

MISSES' SHIRT WAIST 5025

Nothing marks the season more surely than the suspenders which are to be found in almost innumerable variations, and nowhere are they more appropriate than when worn by young girls. In the illustration is shown a charming waist made of white lawn with trimming of embroidery, which includes suspenders of the simpler sort that can either be made, as in this instance, to match



6025 Misses' Shirts
Waist, 12 to 16 yrs.

the waist or match the skirt as may be preferred. The waist itself is an attractive one, tucked in groups, between which the suspenders are arranged, while the suspenders are made in sections, the centre portions being curved to fit over the shoulders. In the case of the model the trimming is embroidery and the suspenders combine embroidery with the lawn, stitched, but the possibilities of the waist are many. It would be attractive made from dotted Swiss, from any of the pretty Madras materials of the season, and indeed from almost any waisting, whether cotton, linen, silk or wool while the trimming can be any banding that may be liked, the season being exceptionally prolific in that direction.



6011 Shirred Blouse
House Gown,
32 to 40 bust.



6046 Boy's Norfolk
Suit, 6 to 12 yrs.

The waist is a simple one made with fronts and back only and is finished with the regulation shirt waist plait at the centre front. The sleeves are the new ones in shirt style, tucked at the wrists, and can either be finished with the cuffs or without as may be liked, while choice also is allowed of a turn-over or stock collar.

SHIRRED SURLIPE HOUSE GOWN 5011

No house gown of the season is more attractive and charming than this one made in surplice style with the dainty chemisette. It would be

effective and appropriate made from any simple pretty wool material such as challie, cashmere, albatross and the like, but, in this instance, combines ring dotted challie, pale blue in color, with bandings of pale blue silk and a chemisette of tucked muslin. The shirred shoulders and girle make characteristic features while the puffed sleeves, finished with frills, are eminently graceful and attractive, but the model is an adaptable one and long sleeves with roll-over cuffs can be substituted whenever preferred. The foundation is a smoothly fitted lining on which the full fronts and backs are arranged, which, together with the waist, is joined to the skirt, which in turn is shirred over a foundation yoke.

BOY'S NORFOLK SUIT 5046

The costume that pleases the mother and the looker on and delights the young lad himself is the one that always is in demand, and this Norfolk suit exactly meets the conditions. Illustrated is made of cheviot in shades of brown and is finished with tailor stitching with corticelli silk. It is, however, appropriate, for all suitings, the linen and khaki cloth of warm weather as well as the wool of the cooler season. The coat in Norfolk style is always a favorite one, while the loose trousers are far more becoming to the growing boy than any other sort.

The suit consists of the coat and trousers. The coat is laid in box plaits, that extend from the shoulder to the lower edges and is supplied with ample patch pockets and finished with a belt. The trousers are in genuine knickerbocker style, drawn up beneath the knees by means of elastic inserted in the hems.

Eliza Webb's Misfortune

(Continued from Page 436.)

"It" she muttered. "Some city folks wrote that, I'll be bound. 'Tain't so. The trees in the valley all flamin' and yellow used to make me feel so chipper! It's lonesome and smotherin', bein' boxed in like this."

She locked the back door of the cottage, and set out for a half-day's visit to her sister in South Daneville. As she walked down the frozen road and passed the end of the fence, she gave a sudden start, and stared hard at the last post. At its foot a little pile of leaves and shavings was smoldering.

An expression came into her face of mingled triumph and hesitation. Then her features settled into a hard smile.

"Traffords' folks is all way to-day, and it's none of my concern. It won't blaze up, anyhow, I guess," she said, half aloud, and setting her lips firmly together, she moved away.

Mrs. Daws noticed that her sister was strangely absent-minded that afternoon. Susy Daws made a cross significant

with her two forefingers and shook her head warningly at her small brothers when they ventured too near Miss Webb's rocking-chair.

But Miss Webb hardly noticed them, and even forgot to make her usual comment on "Mandy's slack way of bringin' up children." She idged nervously until it was time to take the five-twenty train back to Daneville.

When she stepped out of the car at the Daneville station, she noticed with surprise that a little group of her neighbors was standing on the usually deserted platform. Deacon Farrar came forward to meet her.

"Miss Webb," he said, in a sepulchral voice, "some'n terrible's happened."

"Let me tell her!" cried the deacon's wife, elbowing her way to the front. "A man don't know how to break things to a body. 'Lizy, the Traffords' fence is all burnt down. They think one of the men workin' on the road must have left his pipe on it, and it got set that way. Anyhow it's gone. And the wind came up to blow, and the house caught, and it's burnt to the ground."

"Land o' Goshen," cried little Miss Foss, the village dressmaker, "she's goin' to faint clean away, I'd believe!"

Miss Webb's face had turned white, and she was swaying back and forth with tensely clasped hands.

"Oh," she moaned. "I never thought of such a thing! How could a fence so far off from everything have set fire to the house! And me a member of the Orthodox church!"

"There, there," said the deacon, soothingly. "Of course it's a dispensation, Miss Webb, but do try to bear up. It had to be the one house or the other. If the wind had changed, the Traffords' house would have gone 'stead of yours."

"The Traffords' house!" gasped Miss Webb. "Do you mean to tell me that it's my house that's burned down and not theirs?"

"'Tis so," said Miss Foss. "Didn't we tell you?"

A light came into Miss Webb's eyes, and she burst into tears.

"Thank heaven," she sobbed.

"She went clean out of her mind," said the deacon's wife afterward. "I never before in my life saw 'Lizy shed a tear."

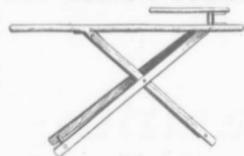
A few days later young Mrs. Trafford drove over to Mrs. Daws' in South Daneville, and asked to see her sister. Miss Webb came down at once to the best room, where her visitor was waiting, and as she entered she held out her hand.

Mrs. Trafford took it cordially, although with some surprise, and they sat down side by side on the haircloth sofa.

"I have come," said Mrs. Trafford, gravely, "with a proposition from my father-in-law, which I hope you will accept. I need not tell you how sorry

(Concluded on Page 436.)

The Bennett Combination Ironing Table



It is the largest made—15 in. wide, 60 in. long. It is the only table on which you can iron shirt-waist sleeves, or, in fact, sleeves of any kind, in a perfect manner.

It can be folded up and placed away.

It stands solid on the floor.

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It will iron skirts full length without changing.

The sleeve attachment turns under when not in use.

Ask your hardware dealer for this, or send us 50 we will forward.

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FARM HELP

Read the following extracts from *THE FAT OF THE LAND*, dealing with this problem:—

"Modern farming is greatly handicapped by the difficulty of getting good help. I need not go into the causes which have operated to bring about this condition; it exists, and it has to be met. I cannot hope to solve the problem for others, but I can tell how I solved it for myself. I determined that the men who worked for me should find in me a considerate friend who would look after their interests in a reasonable and neighborly fashion. They should be well housed and well fed, and should have clean beds, clean table linen and an attractively set table, papers, magazines, and books, and a comfortable room in which to read them. There should be reasonable work hours and hours for recreation, and abundant bathing facilities; and everything at Four Oaks should proclaim the dignity of labor.

From the men I expected cleanliness, sobriety, uniform kindness to all animals, cheerful obedience, industry, and a disposition to save their wages. These demands seemed to me reasonable, and I made up my mind to adhere to them if I had to try a hundred men.

The transient farm hand is a delusion and a snare. He has no interest except his wages, and he is a breeder of discontent. If the hundreds of thousands of able-bodied men who are working for scant wages in cities, or in vainly tramping the country, could see the dignity of the labor which is directly productive, what a change would come over the face of the country? There are nearly six million farms in this nation (*the United States—Ed. F.W.*), and four millions of them would be greatly benefited by the addition of another man to the working force. There is a comfortable living and a minimum of \$180 a year for each of four million men, if they will only seek it and honestly earn it. Seven hundred millions in wages, and double or treble that in product and added values, is a consideration not unworthy the attention of social scientists. To favor an exodus to the land is, I believe, the highest type of benevolence, and the surest and safest solution of the labor problem. * * *

"August 3 found me at Four Oaks in the early afternoon. A great hollow had been dug for the cellar, and Thompson said that it would take but one more full day to finish it." Piles of material gave evidence that the mason was alert, and the house-mover had already dropped his long timbers, winch and chains by the side of the farm-house.

While I was discussing matters with Thompson, a smart trap turned into the lot, and a well-set-up young man sprang out of the stylish run-about and said,—

"Dr. Williams, I hear you want more help on your farm."

"I can use another man or two to advantage, if they are good ones."

"Well, I don't want to brag, but I guess I am a good one, all right. I ain't afraid of work, and there isn't much that I can't do on a farm. What wages do you pay?"

I told him my plan of an increasing wage scale, and he did not object. "That includes horse keep, I suppose?" said he.

"I do not know what you mean by 'horse keep.'"

"Why, most of the men on farms around here own a horse and buggy, to use nights, Sundays and holidays, and we expect the boss to keep the horse. This is my rig. It is about the best in the township; cost me \$280 for the outfit."

"See here, young man, this is another specimen of farm economics, and it is one of the worst of the lot. Let me do a small example in mental arithmetic for you. The interest on \$280 is \$14; the yearly depreciation of your property, without accidents, is at least \$40; horse-shoeing and repairs, \$20; loss of wages (for no man will keep your horse for less than \$4 a month), \$48. In addition to this you will be tempted to spend at least \$5 a month more with a horse than without one; that is \$60 more. You are throwing away \$182 every year without adding one dollar to your value as an employee, one ounce of dignity to your employment, or one foot of gain in your social position, no matter from what point you view it.

"Taking it for granted that you receive \$25 a month for every month of the year (and this is admitting too much), you waste more than half on that blessed rig, and you can make no provision for the future, for sickness, or for old age. No, I will not keep your horse, nor will I employ any man whose scheme of life doesn't run further than the ownership of a horse and buggy."

"But a fellow must keep up with the procession; he must have some recreation, and all the men around here have rigs."

"Not around Four Oaks. Recreation is all right, but find it in ways less expensive. Read, study, cultivate the best of your kind, plan for the future and save for it, and you will not lack for recreation. Sell your horse and buggy for \$200, if you cannot get more, put the money at interest, save \$200 out of your wages, and by the end of the year you will be worth over \$400 in hard cash and much more in self-respect. You can easily add \$200 a year to your savings, without missing anything worth while; and it will not be long before you can buy a farm, marry a wife, and make an independent position. I will have no horse-and-buggy men on my farm. It's up to you."

"By Jove! I believe you may be right. It looks like a square deal, and I'll play it, if you'll give me time to sell the outfit."

"All right, come when you can. I'll find the work." * * *

The author of this book deals with all the details of farm life, and his remarks are worth reading. They contain valuable advice, driven home. Written by a man who has run a farm with success, using common sense, the *Fat of the Land* contains suggestions for every farmer who wants to make the best of his land. Better get it right away.

How can it be obtained?—By sending us one NEW subscription for two years, or two NEW subscriptions for one year, or your own renewal and one NEW subscription. Send us the necessary subscriptions, and we will send you a copy post free.

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The Farming World
90 Wellington St. West, Toronto, Ont.

The Orchard and Garden

Toronto Fruit and Flower Show

The Fruit, Flower and Honey Show will be held this year in November in Massey Hall, Toronto. A strong committee has been selected to look after the work. H. B. Cowan, Toronto, is secretary.

County Prizes for Fruit

The Ontario Fruit Growers' Association proposes to secure a grant from each county in Ontario of \$25 or more to be divided into three or more prizes to be competed for by growers within the county offering the prize at the Fruit, Flower and Honey Show, to be held in Toronto in November. The association will pay the expenses on fruit to Toronto, and hold it in cold storage till the date of the show.

Orchard Cultivation

The cultivation of an orchard is an important factor and requires careful consideration. Usually a bearing orchard will give best results when plowed or otherwise stirred to a depth of three or four inches early in spring and kept stirred with harrows and cultivators until about the middle of July, then sowing a cover crop of buckwheat or rape, using clover every fourth year or so. There are soils in Ontario that have an available supply of moisture at all seasons of the year, and require little or no cultivation. The purpose of cultivation is to hold moisture for use of trees. If there is plenty of moisture it is not necessary to cultivate except to assist in making unavailable moisture food available. A liberal mulch of straw manure often serves all purposes of cultivation. The poorer the soil and the less manure furnished, the greater need there is of thorough cultivation. Where an average soil cultivation is practiced if six or eight loads per acre of good barnyard manure is furnished every other year with 25 to 40 tubs of good unleached ashes the alternate year, enough fertility will have been furnished for growth of good crops of apples. Regulate the cultivation and manure so that there is an average wood growth of four to five inches.

ELMER LICK.

Ontario Co.

B. C. Fruit Wanted at Winnipeg

Mr. G. W. Hunt, manager of the Ottawa Fruit Exchange, Winnipeg, visited British Columbia recently and in a reported interview, among other things said: "Last year shipments into this market amounted to over 120 cars of fruit, and the consumption of British Columbia fruit would amount to about 10 per cent. of it. There is no question at all in my mind but the British Columbia fruit is equal to anything that is grown on the continent. We handled a small quantity of strawberries last year which gave exceptionally good satisfaction, considering the way they were put up. The quality was all that could be desired, and under the crude transportation that was afforded them they arrived in fairly good condition. We have no hesitation in saying that Manitoba and the North-West will take all the surplus fruit that British Columbia can produce for many years to come, and take the fruit at a paying price. But in order to do this the growers must do their part and put up the fruit in the proper shape."

"It is a known fact that California practically controls the Winnipeg

market until the Oregon fruit comes in. Their haul is so much shorter and the rate is so much less that they control the market as soon as their fruit ripens. To my mind there is no market in the world to-day that presents such bright prospects for the British Columbia growers as Winnipeg and the North-West Territories. It will take a year or two to establish that market properly, but once it is established, California need have no license to go in there to sell its fruit at any time. The difference in the fruit is so marked in favor of British Columbia that it would be impossible to interfere with the sale there. But, as already stated, it is impossible to pick up that market and use it without the assistance of the growers, and they must be willing to introduce the fruit and probably take less money for it than they could get in other places for the time being, but any money they may spend in this direction would be more than repaid in the course of a year or two."

Why does not Ontario count in this deal? Ontario fruit growers should look to the West more than they do for a market for their fruit.

Caring for the Strawberry Patch

May is the best month for planting strawberries. As soon as possible after setting, the ground should be cultivated to a depth of about two inches in order to loosen up the soil. Cultivation should be continued at intervals of about ten days during the summer, so that a fine dry earth mulch may be maintained and the weeds held in check. Runners root much more quickly in loose soil than in that which is uncultivated. Any blossoms which may appear should be pinched out before the fruit sets. Fruiting the first season weakens the plant and reduces the crop for the succeeding year. The first runners should be permitted to grow, as the earlier the runners root, the stronger the plants will be. An average of eight or ten plants from each one set should give a row sufficiently thick for a good yield of fruit. Late formed runners should be cut off because they form plants too weak to be of any value, and they also draw nourishment from the plants already formed.

Mulching is of first importance in strawberry culture. As soon as the ground becomes frozen fairly hard in the fall, the plants should be covered with a mulch of straw manure or marsh hay. This will protect the ground from the alternate freezing and thawing which heaves the plants out of the soil, breaking their roots and causing reduced yields. Then about the middle of April, preferably on a cloudy day, the mulch should be raked off the rows into the paths between. As the fruiting season approaches, more mulch should be put between the rows, to assist in holding the moisture and to keep the sand off the berries and the pickers.

It is seldom advisable to harvest more than one crop from a plantation, but if one desires to take a crop the second year, the old rows should be narrowed down to about six inches, the weeds and many of the old plants taken out, and just enough old plants left to start a new stand. Keep the ground well cultivated to encourage the formation of new runners, the plants which will bear the next season's crop. Then mulch again in the fall the same as the previous year.

H. S. PEART, O.A.C., Guelph.

Growing Celery on the Farm

A New York grower gives the following plan for growing celery on the farm:

The trench, 2 feet deep, should have 6 inches of barnyard or horse manure mixed with an equal amount of soil, so place the plants that the remaining earth will not tumble into the crown of the celery and smother it. Allow the plants only when the leaves are dry. For the same reason set out the plants on dry days. Avoid crusts of the soil from top watering; better far pulverize the soil and get the benefit of the natural rise of moisture from underneath. After rootlets have formed on the transplanted plants, cover with a few inches of soil. Remember that a good root is necessary to make a strong and large plant. In banking finally, the outer stalks will effectively keep out the soil if there has been a good growth.

After digging summer celery, it needs to be kept from drying or burning in the light. After washing and bunching it can be kept in excellent condition by placing it in a box 12 inches deep or more of water in a tightly covered barrel or box. Winter celery should be banked at the time of the first frost. He who gets the knack of keeping his celery from growing away in the soil keeps it moist and cool, is certain to have a supply ready for use at any time of winter. A warm place is not suitable. Find a spot on your farm where the sun does not often strike, have the earth compact about the base of the celery roots, loosely covering the rest, with exception of 2 inches from the top, then cover with straw and loose material, and you should have no trouble in bringing out celery that will compare well with your competitors' at any time during the winter.

Cabbage

To have success with cabbage it must have very careful attention at this time of the year.

The green cabbage worm is its worst enemy, as they can be seen on the day and worms the next. To guard against the pest the cabbage should be examined every day; if any worms be found pick them very carefully to be sure to find all of them; then take white leadore—it can be bought at any first-class drug store. To one gallon of water take one teaspoonful of leadore, sprinkle the cabbage thoroughly with the mixture, open up the little inner leaves so the mixture will get on all the leaves. There is no danger of poison if it be entirely dissolved, as the heads form from the inside.

The spider is also to be watched and is hard to handle for if it is not killed it will go to another head. Examine the heads and if you find a spider is not far away. Kill it if possible, clean away the web. Then break off the big inner leaves so the sun can shine all around the plants. Taking off the big leaves gives more nourishment to the heads and leaves no hiding place for insects.

A little salt sprinkled on the heads make them crisp, but must not be done when the sun is shining hot on them. The salt will burn the cabbage. Early in the morning or after the sun goes down.

A. G. S.

Another Useful Bug

A bug has been discovered in Texas which kills the boll weevil. That bug will be caught, carefully cultivated, and when it is overruling the land it will be found out to make a new stand. Keep quality of its own, and then the quest will be on to find the destroyer of the boll weevil's destroyer. It might simplify the problem if the English sparrow could be forced to make some structure the past by eating both—Balt. American.

Destroying the Codling Moth

The life-story of the codling moth may be stated concisely as follows: The insect winters over as a caterpillar in a cocoon in some protected place, and in early June when the blossoms are falling from the apple the adult winged moths appear. The females deposit their eggs on the leaves and newly formed fruit. In about ten days the caterpillars escape from the eggs, and a few days later enter the apples, usually at the calyx end. The "worm" remains inside the apple about 20 days, after which it comes out to spin a cocoon within which it lives until spring if there is but one brood, but only about two weeks if there are two broods in a season. The second brood of moths appears about the end of July or the beginning of August; then eggs are again deposited, and the "worms" which hatch from these eggs enter the developed apples about the middle of August, leaving them again in September to make cocoons within which to spend the winter.

With our knowledge of these facts we are able to state quite definitely the best times to apply remedies. The plan is to poison the "worms" with Paris green or some other arsenic mixture before they enter the fruit. The trees should be sprayed (1) a few days after the blossoms fall; and (2) about the middle of August for the second brood of larvae. An additional spraying ten days or two weeks after the first will, in most cases, be productive of much good. It is advis-

able, of course, to use the arsenic mixture along with Bordeaux to control the apple scab fungus at the same time that the codling moth is being treated. For the scab two additional sprayings are necessary—one before blossoming and one in July.

The Bordeaux-Paris green mixture is prepared according to the following formula:

Copper sulphate or blue stone, 4 lbs.
Fresh lime 4 lbs.
Water 40 gals.
Paris green 4 to 6 ounces.

The blue stone is dissolved in 15 to 20 gallons of water in a barrel, and in another barrel the lime is slaked carefully and 10 to 15 gallons of water are added to make a milk of lime. Then the contents of the two barrels are poured into the spray barrel through a strainer. Finally the Paris green is made into a paste with water and put into the barrel along with the Bordeaux. It is very necessary that the agitator should work while pumping is going on, so as to keep the Paris green well distributed throughout the mixture. Use a good spray pump and spray the trees carefully at the times mentioned above.—Prof. Lochhead, O. A. C., Guelph.

Spraying for the Brown-Tail Moth

Trees from which the winter nests of the brown-tail moth have been removed will need no further protection against this pest during the spring or early summer. The remedy of cutting and burning the winter

nests, if thoroughly carried out, is sufficient.

Carefully as the work of nest destruction has been done in most localities this spring, it is, however, highly improbable that every nest will be discovered before the leaves start. In some places owners have been away for the winter and the trees remained unsearched; and all along the border line of the infestation, where nests are perhaps four or five miles apart, there is naturally a danger that people will feel that the brown-tail moth has not yet reached their vicinity and neglect, through ignorance of their presence, the few scattered nests which are there as centres of a greater trouble another year.

In such cases it is still not too late to combat the pest. Arsenical poisons, such as Paris green or arsenate of lead, will kill the caterpillars feeding upon sprayed leaves. Arsenate of lead is much to be preferred because the most delicate foliage is not injured by its presence, and also because it remains longer upon the leaves, lessening the need of frequent spraying. Wherever the winter remedy has been neglected, it is urged that a constant watch be kept this spring for the caterpillars in order that they may still be killed by spraying.—Main Experiment Station.

"Are you an Irishman?" a witness was asked at Birrham Police Court. "No," was the reply; "but my mother was."

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FINANCIAL NEWS AND NOTES

Ontario's Government Bonds

After much negotiation and the obtaining of tenders for the \$6,000,000 of bonds which the Ontario Government were preparing to issue in connection with the Temiskaming and Northern Ontario Railway, the Provincial Treasurer decided not to issue the bonds at present, but instead renewed the loan in England of that amount, for a further period of six months at 3 1/2 per cent. The railway commissioners state that the first 113 miles of the road from North Bay to New Liskeard, now about completed, will cost \$4,500,000. The remaining 150 miles required to connect with the Grand Trunk Pacific will cost another \$4,500,000. Of this total of \$9,000,000, it is expected that \$7,500,000 will be spent before the next Session.

The Treasurer now proposes to issue \$7,000,000 of thirty or forty year Ontario Government 3 1/2 per cent. debentures to meet this expenditure (including the \$6,000,000 loan at maturity) leaving the finances of the Province to provide the remaining half million. He believed the credit of the Province was good enough to enable these debentures to be issued at par. The revenue of the finished portion of the road for the first four months of the present year was \$35,604, with expenditures (not including interest) of about \$10,000 less than this sum.

The annual report of the Sao Paulo Tramway Light and Power Co., in which Canadians are so largely interested, for 1904 showed gross earnings of \$1,419,338, as compared with \$1,034,178 the previous year; an increase of \$385,160. The net income after deducting all expenses and fixed charges amounted to \$648,000, an increase of \$15,457 over 1903. Out of net profits dividends paid totalled \$320,027, equal to 7 1/2 per cent.; leaving \$127,973 surplus to be carried forward. The capital stock subscribed is now \$7,500,000; fully paid, \$7,465,662; bonus authorized, \$6,000,000; issued, \$5,500,000.

The Government of the Province of Quebec announce their decision, that all insurance and trust company bills before the Legislature must provide that trust companies who intend carrying on a banking business, by receiving deposits, must have a subscribed capital of \$500,000, and a paid up capital of half that amount. All other trust companies must have a paid up capital of \$100,000, and insurance companies must deposit \$25,000 with the Government, and annual reports must be furnished.

This legislation is in the right direction, and might be copied with advantage by the Dominion and the other provincial governments. There are too many irresponsible institutions, incorporated and otherwise, in our country, doing a semi-banking and trust business. An instance in point is a company now seeking incorporation at Ottawa, to be called a savings or financial institution, which, on a capital of \$25,000 asks power to deal in stock, act as agent of properties, do a general agency business, manage estates, collect moneys, rents, etc.

The following details are reported of a proposed amalgamation of the War Eagle, Centre Star, and Le Roi companies at Rossland. The capitalization of the combined companies is to be \$10,500,000, of which \$2,000,000 remains in the treasury for working capital; \$3,000,000 of shares go to the Le Roi

shareholders; \$2,000,000 to War Eagle; \$2,400,000 to Centre Star; \$100,000 to Snow Shoe, and \$1,000,000 to the Trail Smelter. W. H. Aldridge is to be manager of the new company.

A large number of Canadians are interested in the securities of these companies, and it is to be hoped that the new arrangement will bring brighter financial days to these unfortunate investors, or rather speculators.

A summary statement of the operations of the Grand Trunk Railway for the year 1904 shows gross receipts for the year \$28,445,500, against \$29,523,740 in 1903 and \$25,045,395 in 1902. The working expenses for these three years are, 1904, \$20,503,265; 1903, \$21,045,580; 1902, \$17,892,108. The net profit for 1904 allowed the payment of the usual dividends on the 4 per cent. stock, and on the first and second preferred 5 per cent. stock, but the dividend on the third preferred stock had to be passed.

The gross receipts from 1st January to 21st March of the current year show an increase of \$1,090,170 over those of 1904.

An Easy Creditor

In a certain town of Connecticut a deacon of the church charged with soliciting subscriptions for a charity recently experienced considerable difficulty in getting the townsmen to contribute.

To one of the neighbors the deacon said:

"Oh, come, Richard, do give something."

"Sorry, deacon," answered Richard, "but I don't see how I can."

"Why not? Isn't the cause a good one?"

"Oh, yes, the cause is good enough; but I owe too much money."

"But, Richard, you owe God a larger debt than any one else."

"That's true, too," drawled Harper, "but God ain't pashin' me!"—Harp's Weekly.

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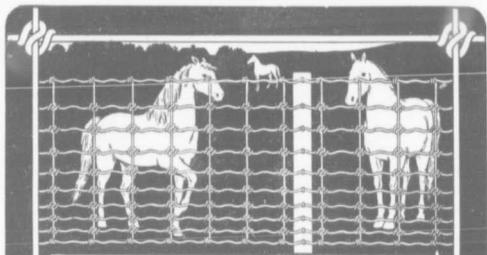
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INCORPORATED 1855

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PAROD ROOFING

QUESTIONS AND ANSWERS

Sick Pigs

I have been troubled with my young pigs coughing badly. They get thin and stop growing. They seem to have a vigorous movement of the flanks. Some die and the others never amount to anything. They are cared for as well as hogs ordinarily are and have a large lot to run in. What is the matter with them?—J. R. S.

This looks like a case of "thumps." This trouble comes primarily from indigestion—induced by over-feeding and lack of exercise. Pigs of weak constitution are more subject to it, which shows the need of a good strong sire to infuse new life in the stock. Treatment for this trouble is not very effective. Preventative measures are best. Look to the breeding, feeding and management of the hogs.

Our correspondent does not say what he feeds, and ordinary care in his estimation may be just the condition required to further the disease. If young sucking pigs are affected turn both sow and litter out on grass and shut off strong food. See that they get plenty of exercise. One or two tablespoonfuls of castor oil, according to size, given to the sow for two or three days will do good. Half-grown pigs are frequently subject to "thumps." The same treatment is required. Stop the feed and compel them to exercise and rustle for themselves.

B. C. a Province

Will you please tell me whether British Columbia still remains a separate province, or is it taken in with the North-West Territories to form the two new provinces, Alberta and Saskatchewan?—Miss M. C., Port Elgin, Ont.

British Columbia has been a separate province of the Dominion of Canada since July 20th, 1871. The new provinces of Alberta and Saskatchewan will include the district between the western boundary of Manitoba and the eastern boundary of British Columbia.

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.

Possession of Land

I have worked three-quarters of an acre of land for the last four years without paying any rent for it during all that period. There was no line fence between it and the acre of land I had. The party who owned the three-quarters of an acre when I took possession of it died about three or four years ago, and never asked for the payment of any rent. My stables are built on it. The widow of the former owner is now asking me to pay rent or to move my

stables and she will put up the line fence between us.

(1) Can I retain the three-quarters of an acre under title by possession.

(2) If I leave the place for all winter can it be taken from me if I leave some furniture in the house.—A. G., Ontario.

(1) If there was no agreement between yourself and the owner of the land under which you were permitted to work it or remain in possession of it, and if you have been in actual adverse possession of the land for the fourteen years and have given no acknowledgment of title to any person you would be entitled to retain possession of it, provided your possession during that period was actual, exclusive, continuous, open or visible, and notorious, and that the owner or owners were under no disability, and that no action was brought to recover possession of the land from you until after your title by possession had become absolute. Adverse possession for a period of ten years is sufficient to give a title by possession if it has the foregoing requisites.

(2) You do not mention that the house is situated on the three-quarters of an acre of land in question. The mere going away, however, for the winter under the circumstances described would not be an abandonment of your possessory title to the land.

Lease of Farm

A rented a farm to B for three years. B has worked it for one year. The barn on the farm was burned down on the 1st of May. The insurance was very small and A has not the means to rebuild the barn. The lease is under seal and is in the ordinary form (1807, Cap. 125, R.S.O.) and contains a proviso that in case of fire rent shall cease. B says he can hold the farm for the whole balance of the term without paying any rent for it.

(1) Can he do so, or has B to quit the farm after the present crop is harvested, and can A get full rent for this year.—(Waterloo).

Ans.—We presume that the provisions referred to in the lease is that contained in the act respecting Short Forms of Leases (Revised Statutes of Ontario, 1807, chapter 125). The short covenant reads as follows: "Provided that in the event of fire, lightning or tempest, rent shall cease until the premises are rebuilt." The extended form of this covenant is the following: "Provided, and it is hereby declared and agreed that in case the premises hereby demised or any part thereof shall at any time during the term hereby agreed upon be burned down or damaged by fire, lightning or tempest, so as to render the same unfit for the purposes of the said lease then and so often as the same shall happen the rent hereby reserved or a proportionate part thereof, according to the nature and extent of the injuries sustained, shall abate, and all or any remedies for recovery of said rent or such proportionate part thereof shall be suspended until the said premises shall have been rebuilt, or made fit for the purposes of the said lease."

R would be entitled to retain possession of the farm under his lien and it would also be entitled to just abatement or lessening of the rent reserved until the barn is rebuilt. He would not, however, be entitled to

retain possession of and work the farm for his own benefit without paying the owner a just proportion of the rent reserved under the lease.

Re-entering the Lease

When the proviso in a lease reads that the lessor may re-enter on non-performance of covenants, is it strong enough or does it need anything more added to it?—WATERLOO.

The proviso for re-entry, as contained in the act respecting Short Forms of Leases, is in the following words:

"Proviso for re-entry by the said lessor on non-payment of rent or non-performance of covenants."

It requires no additional words added to obtain the full benefit of this proviso, if it is in the words above quoted.

The questions (3 and 4) in reference to the Rotation of Crops and as to what manure loses in value by being left in the yard for two years instead of being used on the land, are practical farming questions rather than questions of law.

Books and Bulletins

SOIL INVESTIGATIONS.—Bulletin 89, Experiment Station, St. Anthony Park, Minn.

POULTRY CULTURE.—Bulletin 91, Experiment Station, St. Anthony Park, Minn.

HEAVY AND LIGHT WEIGHT GRAINS, ETC.—Bulletin 90, Experiment Station, St. Anthony Park, Minn.

SOIL TREATMENT, ETC.—Bulletin 92.—Experiment Station, Urbana, Ill.

PRODUCING AND MARKETING GARDEN TRUCK.—Bulletin 81, Experiment Station, Calhoun, La.

EFFECT OF RUST ON STRAW AND GRAIN OF WHEAT.—Frank T. Shutt, Chemist, Central Experimental Farm, Ottawa.

GRAIN CROPS IN NORTHWEST TERRITORIES.—Bulletin 15, Dept. of Agriculture, Regina.

Eliza Webb's Misfortune

(Continued from Page 431.)

We both are for your misfortune, and especially that it should have been caused by our fence. But since that is the case, Mr. Trafford is very anxious to rebuild your cottage on the same site. And I can assure you that the fence has gone forever," she added, with a smile. Miss Webb had been fumbling in her pocket all the time Mrs. Trafford had been speaking, and she now held out an envelope, stamped and addressed to Mr. Trafford.

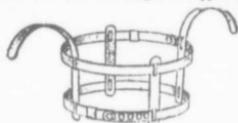
"I can't take it," she said huskily. "Tain't due me. I had a good insurance on my house, enough to get along on with what I've got in the bank. That fire was all my own fault. I saw the pile lyn' there, and I saw the post all charred and berrin'. I knew the fence would go. I hoped it would; but Mrs. Trafford, I never thought of its settin' fire to anything else. It's me that's got to pay you for the fence; and here's the money. Please give it to Mr. Trafford, and tell him it was my own fault."

But Mrs. Trafford could be as stubborn as Miss Webb. "The fence wasn't worth paying for," she said.

Farm Implements and Conveniences

Milk Pail Holder

The illustration shows a device for holding a pail of milk, patented by a New Jersey man. The curved arms hang over the milk's legs, above the knees, so that the weight is supported



without pinching the pail between the knees. The contrivance is adjustable to any size of pail, and can be arranged to tilt the pail at any desired angle.—*Rural New Yorker.*

A Simple Wagon Jack

This device is one of the simplest and most practical wagon jacks made and should be constructed of good hard wood and firmly bolted. The



pins, a and d, can be made of any ordinary $\frac{3}{4}$ or $\frac{1}{2}$ inch bolt, but they should be proportionately strong with the kind of wagon the jack is to be used upon. The lever, b, should be about four feet long in order to reduce the force required to raise the wagon.

To Remove the Tail Board

With a full cart body the "tail board" is hard to get out, if fastened in the usual way, especially if the cart body has been tipped up before the driver thinks to remove the tail board, as often happens. A flat piece of steel



with a catch at the end and fastened to the side of the cart, as shown, is exceedingly simple, effective and convenient. A slight tap with a good stick and the tail board is released. The latter has an iron strap along the end to keep the board from splitting by equalizing the pressure.

Machine for Spreading Lime

Many farmers have occasion to spread lime on the fields. Director C. E. Thorne, of the Ohio Experiment Station gives in the "National Stockman and Farmer" the following description of a lime spreader and fertilizer distributor that is in use on the station farm.

"Make a hopper similar to that of an ordinary fertilizer drill, except that it should be 8 or more feet long with sides and top 18 to 24 inches

wide. For the bottom get two pieces of heavy galvanized sheet iron 6 in. wide and as long as the hopper; have a row of holes cut in the middle of each piece, the holes being one inch wide and two inches long and eight inches apart. Cut the holes so that they will register. Fasten one strip to the hopper, as the bottom. Let the other strip slide under the hopper, moving upon supports made by leaving a space for it above bands of strap iron, which should be carried around the hopper every two feet to strengthen it. To this under strip, or plate, rivet a V-shaped arm, extending an inch in front of the hopper, with a half-inch hole in the point of the V, in which drop the end of a strong lever, bolting the lever loosely but securely to the side of the hopper, three or four inches above the bottom. Let the lever extend six or eight inches above the top of the hopper, and make a guide of strap iron, fastened to the hopper, in which the lever may move freely back and forth. The object of this lever is to regulate the size of the openings by moving the bottom plate. Make a frame for the hopper with a tongue at its top, similar to the frame of an ordinary grain drill.

Get a pair of old mowing machine wheels, with ratchets in the hubs and two pieces of round axle of sufficient length to pass through the wheels and frame and into the ends of the hopper, where they are welded to a bar of iron $1\frac{1}{2}$ inches in diameter and the length of the inside of the hopper. The axles should be fitted with journals, bolted to the underside of the frame.

Make a reel to work inside of the hopper by securing eight short arms of one-half inch by three-quarter inch iron to the axle, and fastening to these four bearers or wings of one-quarter inch by five-eighths inch iron, which will be almost scraped the bottom of the hopper but will revolve freely between the sides. This reel serves as force feed.

Tack two pieces of oilcloth to the bottom of the hopper, one in front and one behind, of sufficient width to reach the ground. These are to reduce the annoyance to man and team of the flying lime dust.

Constructing a Tile Drain

In constructing our drain we first use the team and plow, beginning at the source of the drain and plow toward the outlet, turning both furrows the same way. We use a left-handed plow and ditch right-handed with the spade, thus throwing the dirt the opposite way from which the plow furrows are thrown. With the first furrow we try to cut the sod all clear and turn it out of the way of the second. In plowing the second furrow we cut as level as we can and try to secure an even grade, cutting deep where the ground is raised and shallower where it is low. We prefer to make our drains straight, but if it is best to have them curved we try to make the curves as gradual as possible. After the furrows are plowed one spading in the bottom with a 16-inch spade is as deep as most of our ditches are dug. A 20-inch to 26-inch ditch is the usual depth and on most of our land here this depth brings the tile to the tough clay sub-soil. Just above this sub-soil we have usually found about six or eight inches of soil containing nearly 50 per cent gravel and by getting the tile at the bottom of this gravelly soil we have secured

the best results. We try to dig no more ditch in a day than we can lay the tile in before leaving the field at night, as it often happens that we do not return to that work the following day, and if a ditch is left open long it is apt to cave in, which makes bad work. After the tile is all laid up to the spading, the end of the last tile is carefully closed with a stone and all is safe for a month if we were to leave it that long.

LAYING THE TILE

As we spade the ditch is cleaned with a 4-inch scoop and when the tile is laid we use a tile scoop, the size to suit the tile being used, to cut down all the uneven places and to make as even a grade as possible.

We begin laying at the outlet and walk on the tile cutting the ditch smooth before us and placing the tile as close together as we can. When there is a notch broken in a tile, we lay the broken piece up, so that it can be seen, and when we are through laying for that day we cover the holes with a broken piece of the end then spade a little dirt on the entire string, walking on the dirt as we spade it in.

When a ditch is completed the team and plow are used for filling the dirt in, which is much quicker than filling with the spade.—H. D. M.

Magazine Hammer

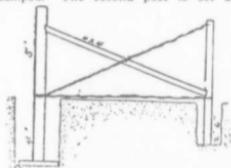
The accompanying contrivance is a "magazine" tack-hammer, which, it is claimed, entirely obviates the danger of striking one's fingers when driving in the tack. Only one hand is required to operate the hammer, thus



leaving the other free to hold in position the material to be tacked. The hammer is provided with a trigger, which, when pulled, takes a tack from the "magazine," or groove, beneath the handle, and places it on the face of the hammer. There the tack is held in position by a magnet. Between 60 and 70 tacks can be inserted in the magazine.

Bracing End Posts of Wire Fence

A fairly satisfactory method of bracing wire fence posts is shown in the accompanying illustration. To the lower end of the post is securely spiked a piece of 2-inch oak board. The post is set 4 feet in the ground and firmly tamped. The second post is set 25½



feet in the ground. A 4x4-inch brace extends from near the top of the first to the second, near where it enters the ground. Several strands of wire from first to second post near the ground, and from top of second to bottom of first, complete the bracing. By twisting the wires any slack may be taken up.

The Englishman—"I understand you Americans elect all your rulers by ballot?"

The American—"Yes; all but our wives."

In the Poultry Yard

The Farmer's Wife's Hens

Most of us are busy enough without attending to so much extra work as is recommended in many publications, and all have not the means to build the more or less expensive houses for which we see so many plans, but I am pleased to say that all this is not necessary anyway in the beginning. The only place I had to start with was an old hog pen, given to me by the neighbor because it was so cold, but it did not leak, and there were no open cracks where the wind could enter.

I bought some sashes out of a house that was to be pulled down for a little, and I used them myself, and teased John till he cut holes and put them in for me one wet day, taking care to make them wind tight. He also took to the old pens, leaving it all in one, and so that I could go where I liked without climbing.

When this was all done, I told him to clear out, I didn't want any more of him, and he said that was just the gratitude of women, and especially of the one he had to wait on, but I didn't mind. John and I are always paying each other such playful compliments, but we understand what it means perfectly, and haven't got over thinking a great deal of each other, though we have been married this twenty years.

I put up the roosts in two suit myself, being careful to have them all the same height, for either hens or turkeys will fight for the highest place if there is one. The nest boxes were some larger, some smaller, just as I could find them, securely nailed to the wall, and where it was the darkest.

Water would freeze solid in an hour, in the coldest weather, but the hens sung and scratched away at it as if it had been July, after they were once up in the morning, but they were like the boys in the house, hated to start very early. Nearly every day they were given some new material, such as straw, chaff out of the mangers in the barn, the sweepings of the barn floor, etc. Of course there were lots of seeds, clover leaves, and such stuff in it, and they enjoyed hunting for it.

It was not pitched out clean more than once a month, and then was given to the hogs, but it was always kept dry by such constant additions. They were fed a light mash in the morning to warm them up as much as anything, and they got no more until they were getting ready for the roost, when they were fed all the whole, warmed grain they would eat. Cabbage trimmings, apple parings, little potatoes and apples chopped fine, bones and an occasional ear of corn burned so that they could pick them easily, coals picked out of the wood ashes, all were given them, and I don't know which they liked the best.

If I had a flock of hens that would stand on one leg and look at me when I went to feed them, they have sent my neighbors do, they would think a famine had struck that part of the world and be glad to scratch for a living before they got any more.

I really believe more harm is done by over-feeding than in any other way, for the working hen is always the laying hen, and she will not work if the feed is always standing before her. So economize: the feed, save your money and fill the egg basket at the same time.

A great many people eat more than is good for them, and so do the hens. We all need exercising, but more than that is a damage, and a hen, to do her best, needs rational treatment as well as a human being.

FLORENCE HOLMES,

Brome Co., Que.

Clucking Hens and Young Chicks

Setting hens should be removed from the building or compartment in which the laying stock is kept, in order to keep them free from vermin and to secure quietness and regularity during the period of incubation. The work of moving them is best done after dark, as the hens are not so likely to leave their new nests when moved at that time. The nest boxes should be from 15 to 18 inches square and six inches deep. Fill the bottom of the boxes with earth, rounding up the corners so that the centre will be slightly hollow, and cover the earth with straw or chaff. Sometimes nest boxes are lined with Tansey, as this plant seems to be useful in keeping the nests free from vermin. If valuable eggs are being set, it is well to try the hen for a day or so on eggs of no special value before putting the good ones under her. Cluckers should be thoroughly dusted with insect powder at the time of setting, then about 10 days later on, and again about the 18th day of incubation. Test the eggs for fertility between the 5th and 9th days. A handy testing lamp is made by tying a piece of black cloth around a lamp or lantern chimney with a hole cut through the cloth opposite the blaze. A fertile egg held opposite the hole will appear dark or cloudy, while an infertile egg will be clear.

About 24 to 36 hours after hatching the chicks should be removed from the nest and placed with the hen in a small coop. The style of coop most favored at present is triangular in shape like the letter A, 2 feet square at the bottom and 22 inches high at the peak, made of matched lumber so as to be water-proof, and provided with a movable board bottom for use early in the season when the ground is wet and cold. The feeding of the chicks is the next point that calls for careful attention. To the ordinary farmer there is, perhaps, no food superior to bread soaked in milk and squeezed dry enough to crumble readily, with a little fine gravel or commercial chicken grit placed within easy access. A mixture of the following grains in the proportions given will also be found a very satisfactory food: 15 pounds cracked wheat, 10 pounds cracked corn, 15 pounds pin-head oatmeal, and 5 pounds millet seed, and a rather expensive feed but one which forces chickens along well, is Puritan Chick Feed, an excellent preventive of bowel trouble. For a soft food, equal proportions of bran, shorts, and corn meal, with half a measure of meat meal, moistened with milk or water, make an excellent mixture. Either milk or water may be given for drink, but chickens will grow faster and do better when they can have an abundance of the former. Very young chickens should be fed five times a day, but when seven or eight weeks old the number of feeds can be reduced to three a day. Feeds as much at a time as the chickens will clean up readily in five minutes.

W. R. GRAHAM,

O. A. C., Guelph.

Who Made the World

"Who made the world?" a lecturer asked a number of children at a Sunday School entertainment the other day. The children remained silent.

"Come, now," said the lecturer in an encouraging tone, "tell me. Who made the world?" Silence again.

"Who made the world?" the lecturer cried, in a loud, indignant key. Grave silence, even fear, upon the children's part.

"Who made the world?" shouted the man, frowning ferociously upon a boy in a pink blouse.

"It wasn't me," the boy piped timidly.



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American Saw Mill Mch'g. Co.,
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A Satisfactory Digger

Built with cast and guaranteed in every way. Machine free. Mention this paper.

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BURN SELF-LOCKING TACKLE BLOCK

For hoisting purposes, stretching wires, etc.

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THE YOKES HW. CO.,
TORONTO, CANADA.



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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.

Gossip

Geo. G. Stewart, Howick, Que., writes: "Clan McLeod, whose photo you printed in your magazine of the 13th ult., I am pleased to state, took first prize in a strong class of Clydesdales at the Montreal Horse Show, held last week in Montreal."

Flat's Sale of Fillies

The sale of Mr. W. D. Flatt's importation of Clydesdale fillies was well attended, and some good prices realized. The animals offered were a very choice lot, among them being some prize winners in Scotland. Others in the lot gave promise of becoming even better animals than the show-ring fillies. The lot, however, were in rather thin condition, many having contracted heavy colds in crossing the water. The highest price realized was \$505 for a very sweet, drifty, bay yearling by Baron's Peer. Lily of Mains, a fine light bay yearling, sired by King, was an exceedingly sweet and handsome filly, which went for \$345. Portia, by Golden Banner, sold to G. Miller, of Brougham, a mare comprising quality and action to a remarkable degree. Gloriosa, a light bay two-year-old, sired by Prince Alice, and unbeaten in the show ring in Scotland, sold to Samuel Barker, of Rosemount, for \$375. Another yearling, possessed of more than ordinary quality, bone and action, was Jip, sired by Royal Patron, dam by Royalist, sold to Donald Innes, of Brookside, for \$500. The entire lot were of a quality that will still further help on the improvement of the Clydesdale draft horse in Canada, and had the importation arrived in better condition a much higher average than the one realized, \$285, would have been attained. The following is a list of sales and prices:

Gracie Anderson, Vol. xxvii. (C. H. S. of G. B. & L.) foaled May, 1903—Marshall Lyons, Dundas, Ont., \$305.
Sonora, Vol. xxvi, foaled June, 1903—J. W. Innes, Woodstock, \$325.
Magnific, Vol. xxviii, foaled May, 1903—E. Kresnow, Haysville, \$390.
Lucretia, Vol. xxvi, foaled July, 1903—Joseph Haffie, Mono Mills, \$200.
Luna, Vol. xxvii, foaled May, 1903—W. J. Shean, Owen Sound, \$270.
Viola, Vol. xxviii, foaled June, 1903—J. E. Disney, Greenwood, \$250.
Pink, Vol. xxviii, foaled May 2nd, 1904—G. A. Brodie, Bethesda, \$150.
Rosie Black, Vol. xxvii, foaled June 14th, 1904—J. M. McFarlane, Sonya, \$180.

Any, Vol. xxviii, foaled June, 1904—Geo. Grier, Grand Valley, \$230.
Hallena, Vol. xxviii, foaled June, 1904—John B. Burk, Ormagn, \$205.
Mary Anderson, Vol. xxvii, foaled June 26th, 1904—O. Collins, St. George, \$255.
Pavonia, Vol. xxvii, foaled June 2, 1904—Wm. Irvin, Rosemount, \$375.
Attus, Vol. xxvii, foaled May 28, 1904—A. Stringer, Kingart, \$280.
Portia, Vol. xxvii, foaled April, 1904—George Miller, Brougham, \$330.
Mary Garter, Vol. xxvi, foaled May 7, 1903—Dr. J. D. O'Neill, London, \$205.

Marina, Vol. xxviii, foaled June, 1904—Geo. Fletcher, Binkham, \$200.
Royal Nora, Vol. xxvii, foaled June 28, 1904—Chas. A. Adams, Brantford, \$360.

Adriana, Vol. xxviii, foaled July 2, 1904—John McKenzie, Keward, \$305.
Peggy McKinley, Vol. xxviii, foaled April 29, 1904—Wm. Argo, Eden Mills, \$250.

Chiming Belle, Vol. xxvi, foaled May 14, 1903—J. M. McFarlane, Sonya, \$250.
Juliet, Vol. xxvii, foaled June 28, 1903—Dr. O'Neill, \$310.

Queen Mab, Vol. xxvii, foaled April 19, 1904—Geo. Miller, \$265.
Bill of Mains, Vol. xxvii, foaled June 22, 1903—Dr. O'Neill, \$280.

Lily of Mains, Vol. xxvii—John McKenzie, \$345.
Gloriosa, Vol. xxviii, foaled April 24, 1903—Samuel Barker, Rosemount, \$375.

Damsel, Vol. xxviii, foaled May 20, 1903—H. Dickenson, Glanford, \$235.
Gem, Vol. xxviii, foaled P.P., 30, 1903—Archibald Hislop, M.F.P., Walton, \$205.

Lady Frances, Vol. xxvi, foaled April 28, 1903—Dr. O'Neill, \$250.
Cordelia, Vol. xxvi, foaled June, 1903—J. M. McFarlane, \$215.

Ceres, Vol. xxvii, foaled 1904—John Miller, Brougham, \$240.
Madison, Vol. xxvii, foaled July, 1903—J. A. McMillan, Guelph, \$230.
Dido, Vol. xxviii, foaled May, 1903—Chas. Rankin, Wyebridge, \$300.

Juno, Vol. xxvii, foaled May, 1902—J. M. McFarlane, \$235.
Lady Brown, Vol. xxvii, foaled May, 1902—T. E. Robson, Ilberton, \$310.

Lalla of Bents, Vol. xxviii, foaled 1904—Dr. O'Neill, \$290.
Phebe, Vol. xxvi, foaled May 12, 1903—J. M. McFarlane, \$215.

Lady Alice, Vol. xxvii, foaled July 2, 1902—Valentine Ficht, Oriel, \$300.
Rose of Towrie, Vol. xxviii, foaled May, 1902—Dr. O'Neill, \$305.

Alba, Vol. xxvi, foaled May 14, 1903—Jno. B. Burk, \$275.
Jip, Vol. xxviii, foaled June 20, 1903—Donald Innes, Brookside, \$300.
Sutea, Vol. xxvi, foaled April 7, 1903—Chas. Rankin, \$260.

Azalea, Vol. xxviii, foaled April 7, 1903—H. Wells, Tevidale, \$305.
Lady Asen, Vol. xxvii, foaled May 22, 1904—S. Young, Guelph, \$250.
Forty-three fillies sold for \$12,255, averaging \$285 each.

The Montreal Horse Show

The sixth annual Horse Show of Montreal was formally opened by His Excellency Lord Grey, and occupied four days. As at Toronto, the show this year was far in advance of previous years, both in number and quality of exhibits. In fact, in the large cities of Canada the great change which the past few years have wrought in the character of the turnouts to be seen on the streets is not the increased number of automobiles, but the great improvement in the quality and appearance of the carriage teams and horses generally. Favored with fine weather, the Montreal Horse



generate less friction
than others.

That's Why they need a brake
they have one.
others have none.

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MONTREAL.

IT SAVES TROUBLE

and annoyance many times to have
ABSORBINE

handy in case of a Bruise or Strain. This remedy is rapid to cure, pleasant to use, and you can work the horse. So blister, no hair gone.

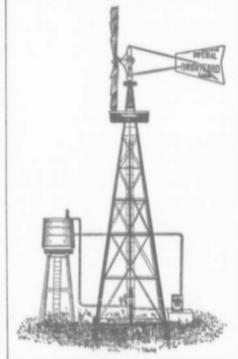
ABSORBINE cures Lameness, always pain, removes any soft lumps quickly. \$2.00 per bottle delivered or of regular dealers. Book 6-B Free.

ABSORBINE, JR., for joints or Ligaments. Kills Pain.

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DON'T MARRY, DOCTOR or despair "Don't do a thing" till you see clearly what's wrong. In all of **Flashlights on Human Nature**, on health, disease, love, marriage and parentage. Tells what you'd ask a doctor, but don't like to. 200 pages, illustrated, 25 cents; but to introduce it we send one only to one-half price, postage, please. **MURRAY HILL BOOK PUB. CO.**, 129 East 26th Street, New York.

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Show had also a very large attendance throughout. Besides a large list of local entries, there were strings from Toronto, London, Galt, Ottawa, New York and elsewhere.

The breeding classes have never been very strong at the Montreal Show, but called out a number of good representatives of the various breeds. In the draft horses the first and championship honors went to G. G. Stewart, of Howick, Que., for a good big draft, Clydesdale stallion, Clan McCleod, sired by Knight of Cowal. Senator's Heir, sire Baron's Pride, a thick, solid bay, somewhat finer in bone, was exhibited by R. Ness, of Howick, Que., and went to second place. A photo of Clan McCleod, the championship winner was published in THE FARMING WORLD on April 15th. Tiawald Shaw, the winner of championship last year, was this year relegated to third place. Lawrence 2nd, shown by J. C. Goodfellow, of Chateaugay, was the winner of fourth place, and the class, if not of number, was at least a pretty good one in quality.

A feature of the aged Hackney class was the presence in the ring of the aged Hackney stallion Hayton Shales, for years at the head of Senator Cochrane's stud at Hillhurst, P.Q., and now owned by the Canaan Farm at Lachine. Hayton Shales is the sire of A. Yeager's Hillhurst Sensation, who is proving such a famous sire, and whose gets are in every showing on the continent. First prize went to Knockinlaw Squire, owned by Geo. Hay, of Lachine, P.Q., and second to Dr. Watson, of Howick, P.Q., for his good chestnut, Duke of Blackpool. Hayton Shales, now past his showing days, was placed last. First in the Standard bred class was awarded to Wm. Donnelly, of Montreal, on a rangy rafter named Electric Star, second to a small but neat and trappy chestnut, Frank Muscovite, with King Antidote, winner of first in this class last year, for third. A feature of interest was the classes for draft geldings, and though Montreal is such a large market for this kind of horse, yet it was to Toronto that the prizes went. First went to the Shelden Forwarding Co., second to the same firm, and third to the Dominion Transport Co. The championship went to a get of Eastfield Stamp, bred by J. Wilkin, of Markham, while the Toronto winner, a get of Montrave Chief, was given third place.

Dominion Fair Dates

After further consideration the management of the Dominion Fair, to be held this year at New Westminster, B.C., has set the dates definitely for September 27th to October 8th, 1905. It was reported on good authority a few weeks ago that the exposition would take place about the same time at the Toronto Fair. Had this plan been adhered to it would have practically shut out eastern exhibits. The dates as now decided upon will not interfere with the larger eastern shows, and there should be a large contingent from eastern Canada at New Westminster next fall.

For particulars address Mr. Keary, manager, Dominion Fair, New Westminster, B.C.

Western Stock Growers

The Western Stock Growers' Association held its annual convention at Medicine Hat on May 11th. There was a fair attendance. Those present appeared sanguine as to chances for a

THOS. MERCER, Box 33, Markdale, Ont. Breeder and importer of Clydesdale Horses, Shorthorn Cattle and Yorkshire Pigs. Car lots for western trade a specialty. Driving Horses handled if ordered.

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Auctioneer, PORT PERRY, ONT.
Live Stock a Specialty.

Bone Spavin

Know it by the lump and the long—hard, long growth on the inner side of the hock joint, usually low down and a little forward of the center of the leg—a quick hitch with the second leg, and a stiff movement of the inner leg, leaving the weight on the toe, most noticeable in starting. New cases, old and bad cases, are cured by Fleming's

Fleming's Spavin and Ringbone Paste Guaranteed to cure the lameness for good—may or may not take off the lump. Easily used by anybody, and a single 30-minute application usually does the work. Absolutely painless. Write for Free Horse Book before ordering. It gives all the particulars, and tells you what to do for other kinds of lameness.

FLAMING BROS., Chemists,
37 Front Street, West, Toronto, Can.

good market in the fall. The same bounty on wolves was continued during the past year, namely, \$15 on grown wolves and \$5 on pups. During the year the stock shipped from the district covered by the Association totalled 60,078, or 52,188 cattle and 8,890 horses. Lipping for mange on cattle has been practiced with great success during the year. Mange has practically disappeared where dipping has been given a fair test. Some discussion took place as to how the Autonomy Bill would affect the Association. Dr. Rutherford, Chief Veterinary Inspector, Ottawa, was present and addressed the meeting, dealing more particularly with the work being done to stamp out mange in cattle and equine syphilis, a disease of horses that has broken out in southern Alberta. The policy of his department was to kill all affected animals and pay two-thirds of their value. Glanders was being treated in the same way.

Officers were elected for the ensuing year as follows: Pres., Walter Huckleby, Medicine Hat; 1st Vice-Pres., Geo. Lane, High River; 2nd Vice-Pres., A. J. McLean, Lethbridge; Executive: W. R. Hull and Pat Burns, Calgary; D. J. Wylie and J. C. Williams, Maple Creek; H. Harris, Lethbridge; W. MacKie, High River; G. Emmerson, High River; E. A. Cross, Mosquito Creek; J. Wilson, Cochrane Ranch; E. Munsell, Macleod; Dr. McEachern, Livingstone; A. B. McDonald, New Oxley; Andrew Gordon and Thomas Tweed, Medicine Hat.

Honesty is the uncurtained window of man's soul. Within there is nothing hidden. It is open to the light without.



Frost Lock

So simple, it makes you wonder why it wasn't invented a hundred years ago. So great, it makes the "Frost" the best wire fence in the world.

Frost Wedge Lock LOCKS running and upright wires together. Does not bend, knot, crimp or kink them. Simply locks them so they can't sag, bend, rub or hang. It's the only device yet invented that locks two hard wires without injury to either. Galvanized to prevent rust.

A wire fence that is put together with small, soft the wires is just as strong as those soft wires, and no stronger. A lock that needs a crimp or bend to make it hold, weakens the whole fence. When the horses or cows get to cutting up, and ram into the fence, those weak spots snap like a burst bubble.

Frost Wire Fence

is high carbon coiled spring steel wire, and every strand is capable of bearing 2,000 pounds weight. Uprights are large and strong, and the Frost Lock holds uprights and running wires into one compact whole that even Texas steers can't break down.

Write for catalogue. It's free.

FROST WIRE FENCE CO., Limited

WINNIPEG, HAMILTON, CLEVELAND,
MAN. ONT. OHIO



Quebec Agriculture

The condition of agriculture in the province of Quebec can be judged by a perusal of the following statistics, which are contained in the report of the Department of Agriculture, Quebec, for 1904. These figures show what increase has been made in the membership of the agricultural societies and farmers' clubs since 1898.

AGRICULTURAL SOCIETIES				
	No. of Societies.	Members.	Subscriptions.	Govt. Grants.
1898...	68	142,712	\$31,672	\$7,077
1900...	66	16,077	23,381	20,790
1902...	97	17,221	24,634	39,335
1904...	71	17,842	26,312	34,785

FARMER'S CLUBS				
	No. of Clubs.	Members.	Subscriptions.	Govt. Grants.
1898...	\$40	49,993	\$31,672	\$19,544
1900...	530	43,392	88,349	20,787
1902...	555	48,294	62,147	22,447
1904...	568	49,415	61,175	22,916

These organizations are approaching more and more the standard which they are expected to maintain, and in every instance they are accomplishing the objects for which they were founded. It is evident that the largely attended agricultural convention which was held at Quebec two years ago, has already borne fruit, and the agricultural societies are all working assiduously for the improvement of agricultural conditions in this province, some by the acquisition of pure-bred stock for feeding purposes, others by holding regular farmers' meetings, and others again by the organization of exhibitions, plowing matches, etc. The selection of seed grain has also received much attention, and a great deal of valuable assistance has been given in this connection by the Department of Agriculture.

BUYING STALLIONS

In connection with the purchase of stallions by the agricultural societies, the provincial government has greatly facilitated the movement by offering facilities for payment or by inducements in the way of freight and transport charges, and the reports of the last three years indicate that this policy will be of inestimable benefit to the farmers of this province.

With regard to the education of the farmers the same policy has been followed in 1904 as in former years, and a large amount of agricultural literature has been circulated by the Department, amounting to over 60,000 bulletins.

FRUIT GROWING

The Department has aimed specially to direct the attention of the farmers to the profits to be derived from intelligent fruit growing, and not only has it endeavored to stimulate the pursuit by the circulation of much useful information in bulletin form, but it has also distributed among the farmers of the province over 25,000 grafts of the hardiest varieties. The success which attended our exhibit of apples at the St. Louis Exposition can only serve to encourage our farmers to extend their orchards and redouble their efforts, more especially as they can be supplied with hardy stock well adapted to withstand the rigors of our Quebec climate.

THE NEW DAIRY SCHOOL

will be finished in a few weeks and should give great satisfaction to the Dairy-men's Association as well as to all who are connected with the dairy industry of our province. We will have as nearly perfect an institution as possible, with all modern appliances and improvements, also agricultural chemistry, bacteriological, and analytical laboratories, etc. This should remove any cause for envy on our part of our sister provinces, and will also place us

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.

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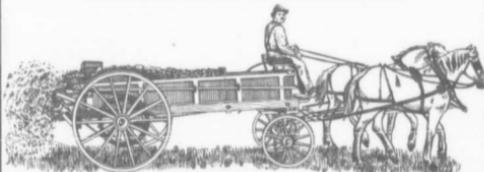
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in a position to investigate for ourselves, and thus keep well abreast of the times in all matters pertaining to dairying.

BONING CURING ROOMS

The same policy of boning properly constructed curing rooms in cheese factories will be continued another season. Last year the sum expended in this connection amounted to \$3,275.

Judges of agricultural merit will be obliged to return very detailed reports this year, and these will be prepared with object of affording the maximum amount of instruction to those who read them.

The preparations for a provincial exhibit at the Lieges Exposition, which opens in May, are finished, and we can confidently look forward to the province of Quebec gaining as many honors there as she did at St. Louis last year, and in Paris in 1900.

It is a well known fact that the Belgian press has been booming our country during the last few months. Our agricultural, industrial and mineral resources have been made the subject of special articles in all the leading papers of that country, and this, perhaps, may be regarded as a happy augury of the success which we will gain at Lieges in the excellence of our exhibits, which, we must remember, will be exposed to the eyes not only of the Belgians, but also of the numbers of foreigners who will visit this great exposition.

H. WESTON PARKY.

(Translated.)

Prince Edward Island

We have had cold, backward weather up to May 12. Winter has truly lingered in the lap of spring. On May 10 heavy rain set in which was followed by showers of snow. However, as there was not much frost in the ground the land will soon be ready for the beginning of seeding. The roads are reported bad. Owing to the scarcity of fodder many cattle were turned out on the fields early in May, in order to pick up a living. Seed grain is reported very scarce in some sections of the island.

On May 9, Davis & Fraser were paying from 7 to 7½¢ for best lacon hogs.

CHARLOTTETOWN MARKETS

Beef qr., per lb., 6 to 9¢, small 8 to 12¢; butter, per lb., 23 to 25¢; eggs, per doz., 12 to 14¢; fowl, per pair, 70 to 80¢; hay, per cwt. 80 to 85¢; oats, per bu., 35 to 38¢; potatoes, per bu., 20 to 25¢; turnips, per bu., 15¢; fresh herring, per doz., 8 to 10¢; lobsters, 12 to 20¢ each; straw, per ton, \$10.00; oatmeal, per lb., 3½¢; flour, \$2.70; pork, per lb., 10¢ to 7¢; wild geese, each, 75¢ to \$1.00.

SUMMERSIDE MARKETS

Beef qr., per lb., 5 to 6¢, small, 6 to 10¢; mutton, per carcass, per lb., 6 to 8¢; butter, per lb., 18 to 20¢; eggs, per doz., 12¢; flour, per cwt., \$3.00; oatmeal, per cwt., \$2.00; hay, per ton, loose, \$15 to \$16; straw, loose, per ton, \$7 to \$8; calf skins per lb., 6 to 6½¢; oats, black, per bu., 40¢, white, 45¢; wheat, per bu., \$1.10 to \$1.25; pork, by carcass, per lb., 6½ to 6½¢; potatoes, per bu., 16 to 18¢; turnips, per bu., 15 to 16¢; chickens, per lb., 10 to 12¢; wild geese, each, 50 to 85¢.

The Old Home Week will be from July 24 to July 29.

Lobsters are plentiful off eastern shore of the Island, but herring are as yet scarce.

The Government has chartered five schooners to carry hay from Pictou. They carry about 50 tons each on an average. As there are about 700 tons to be brought over these vessels in conjunction with the Stanley should soon do the work.



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Secretary. President.
BELLEVILLE, CANADA.

ONTARIO VETERINARY COLLEGE, Ltd.
Head anatomical Vet. Institution in America.
Prof. A. Smith, F.R.C.V.S., Principal,
Temperance St., Toronto, Can.

Mr. John Horne, Winslow, has shipped a beautiful chestnut horse to Halifax. This horse was sired by Billy McKie, dam by 2nd receptor, and is one of the finest carriage horses to leave the Island this spring.

A. H. McKay, Lawndale Farm, St. Peters Road, has purchased in Newfoundland that well known stallion, Barrister Jr. This horse was sired by famous Barrister, and bred by B. Dockendorf, North River, and imported to Newfoundland 4 years ago, where he has left excellent stock. Barrister Jr. weighs 1,500 lbs., 16½ hands high, and is a splendid representative of the grand family to which he belongs.

We are informed that there were only four loads of hay offered for sale during one week in the early part of May. The price demanded was 90¢ per cwt. A. R.

Stock of the North-West

Several shipments of pure-bred bulls have been made recently from the Guelph district, one of the best centres in Canada for all beef kinds, to the North-West ranches. Several Shorthorns have gone forward. Lt.-Col. McCrae shipped twelve head of Galloways to MacLeod, N.-W.T., on May 9th. This breed does exceedingly well on the ranches. An Aberdeen-Angus bull went along with this shipment for Manitoba.



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Box 478, Winnipeg, Man.

Ontario Crops

The following statement of the condition of crops and live stock has been prepared by the Ontario Department of Agriculture. It is based on the reports of the Departmental correspondents, and represents the conditions in Ontario on May 20th:

Fall Wheat—The lateness of the harvest of 1904 caused much of the fall wheat to be sown a week or two after the usual time. However, the soil was then in rather fine condition for seeding, and there was a good catch, although the cool weather in the latter part of the fall somewhat retarded the growth of the young plant. Taking the Province over, the crop suffered less than usual from winter-killing, the county of Northumberland being an exception to the general rule. The cold winds prevailing in April were very trying to fields in exposed places; nevertheless, the crop picked up wonderfully with the more favorable weather which followed, and when commentators reported as to conditions on the 10th of May, fall wheat had a most promising appearance in most quarters, more especially in the case of early sown fields. The more favorable statements, happily, come from the counties in which the crop has a large acreage. But little fall wheat has been plowed up compared with the two or three years immediately preceding, although in some instances barley or some other grain has been drilled in some of the bare spots. The disappearance of the Hessian fly—or, rather, the absence of any marked evidence of its presence—is one of the most gratifying features of the reports concerning fall wheat, for during the last four or five years the havoc wrought by this insect pest has been of a most extensive and costly nature.

Clower—The present indications are

TROUT CREEK

SHORT HORNS

Bulls in service: Gold Cup (imp.), bred by W. Duttie and Ardlethen Royal (imp.), a Marr Princess Royal.

James Smith,
MANAGER.

W. D. FLATT,
HAMILTON, ONT.

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NOTICE

We have been greatly reducing our herds but still have a few good Jerseys and a number of Guernseys to dispose of. Breeders will find it to their advantage to correspond with us.

DENTONIA PARK FARM, Coleman, P.O., Ont.

that there will be a full yield of clover this season, taking the Province as a whole. In the central and western counties clover fields are in a really first-class condition, having suffered but little from winter killing of any form. In the more eastern counties prospects are not so bright, but the fields are rapidly recovering from the heavy check given the crop by the raw winds of April. The general report is that new fields are particularly strong, the catch last year having been most successful.

Fruit Trees—A considerable loss is reported among plum trees, and some peach and other fruit trees are also said to have been winter-killed, although not to the same extent last year. In fact, much of the immediate loss of orchard trees is charged against the severe weather of the winter of 1903-4. Blossoming was starting, as correspondents wrote, and cherries, plums and peaches were coming out profusely. Apples are not likely to be so heavy a crop. Field mice continue their attacks upon young fruit trees, and there are many complaints of serious injury. There are now but few counties exempt from the injury of this active pest.

Live Stock—Live stock of all classes came through the winter without any serious mishap, any disease complained of being more or less local in character. Horses are described as being rather thin, but in good working condition otherwise, as the weather was not too warm during the spring operations. There are the usual scattering reports of distemper, with but few fatalities. Cattle are also said to be on the lean side, but hearty. Like other live stock, they had to be carefully fed, owing to the lack of corn and high prices of mill feed, but they are now rapidly picking up in form on the grass. Sheep are generally reported as in good condition, except in some of the townships of Lambton, where there was an outbreak of scab, which, fortunately, was quickly stamped out. Ewes have been prolific this spring, and lambs are said to be remarkably strong and active. Several correspondents, however, state that sheep cannot be kept in large numbers in Ontario on account of dogs. Swine are more generally raised, but do not appear to be as plentiful as usual this spring. Occasional reports have been received of crippling from rheumatism or other causes, but these attacks are generally the result of local housing and feeding. New litters of pigs do not appear to have done so well in the eastern part of the Province as in the counties farther west. Generally speaking, there was a sufficiency of fodder, although many farmers were pinched for corn and straw.

Farm Supplies—In most parts of the Province there is more than a sufficiency of hay, although the scarcity of straw and corn drew largely on this fodder. Oats have been largely fed, and high prices have been paid for what was marketed, and while there is a surplus on hand, it is not a large one. Wheat is comparatively scarce from the same causes. Fat cattle have nearly all

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Some grand young stock for sale at once. Bred from the best milking strains. A pair of fine young bulls fit for service. Write or call on



WM. STEWART,
Menie, Ont.

Hoard's Sta., G.T.R.

HOLLYMOUNT STOCK FARM

MITCHELL, - ONT.

Pure-bred Short horns of best imported strains. Present offering—A grand 12 mos. bull calf from imported sire and dam.

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Pine Grove Stock Farm

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Breeders of choice

Scotch Short horns and Shropshires.

W. C. Edwards & Co., Ltd., Props.
Joseph W. Barnet, Manager.

Ashland Stock Farm.

Pure Scotch Topped Short horns. Cows bred 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.

MAPLE LODGE STOCK FARM

Scotch Short horns, Choice Milking Strains, Fine Winning Leicesters, Young Stock for sale—imported and home bred.

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

CHAS. RANKIN, Wyebridge, Ont. Importer and breeder of Shropshire Cattle and Oxford Down Sheep. Bred head by Prize of Scotland (imp.). For Sale—Females and bulls of all ages, from noted Scotch families.

Short horns, Galloways and Shropshires for Sale.

Bulls and heifers of approved breeding and quality. Clyde fields, imported and home bred. Shearling and ram lambs, imported. Mansell. Prices Moderate. **Chas. A. HODGKIN,** Bethesda, Ont., Stouffville Sta.

Menie Stock Farm.

Some fine young Ayrshire stock for sale. As I have two herd bulls I can furnish pairs not akin. Write for prices.

A. HUME, - Menie, Ont.
Hoard's Station, G.T.R.

"NETHER LEA" AYRSHIRES

Offering this month, 4 bulls 15 mos.; 3 choice bull calves, 3 mos.; bull and heifer calves just dropped; Napoleon of Auchenbarr (imp.) at head of herd, whose dam has a record of 21 lbs. per day. Prices low. **T. D. McCALLUM,** Danville, Que.



ROCK SALT for horses and cattle, in tons and carlots. **Toronto Salt Works, Toronto**

been bought up, and store cattle are not so plentiful as usual. In fact, more farmers are grazing their own stock than in former years, good prices for beef and the scarcity of it agricultural laborers leading to this end.

Spring Seeding—The sowing of spring grain averaged a week or two earlier than usual, in many instances being concluded in April. The seed-bed was in ideal condition, and the catch was generally successful. In the Georgian Bay section, the northern districts, and some of the St. Lawrence and Ottawa counties, frequent rains delayed operations on low-lying fields; but on high lands work was well ahead. Peas were not sown early purposely by many farmers, in order to escape the weevil.

A Toast to the Cow

Old cow, right now
Make a hit, be it;
Do your best with a zest
To raise the test.
If you do not think you can
Make this pan
Give more gallons.
It will surely do as well,
So they tell.
The farmer man you can
Make to smile all the while
Despite the rain;
He'll look sunny when the money
Comes his way pay-day.
"Blessed cow," he'll say.
Ice-cream we seem
To need bad, indeed.
Old cow, desert us not
While it's hot!
C. E. Kelsey, Richmond, Kan.

Institute Annual Meetings

The annual meetings of the Farmers' Institutes for the respective electoral districts in Ontario will be held during June. Every member is urged to be present. At the following meetings no speakers will be supplied by the Department: Centreville, June 17; Sault Ste. Marie, June 10; Sowerby, June 6; Pt. Elgin, June 8; Stittsville, June 20; Cornwall, June 12; Winchester Springs, June 5; Oroon, June 20; Dutton, June 10; Kingsville, June 13; Alexandria, June 21; Augusta, June 1; Owen Sound, June 3; Cayuga, June 3; Milton, June 1; Madoc, June 7; Brussels, June 17; Ridgeway, June 14; Harrison, June 3; Bridgen, June 17; McDonald's Corners, June 1; Perth, June 20; Merrickville, June 3; Napanea, June 3; Gore Bay, June 2; London, June 10; Ailsa Craig, June 1; Appin, June 6; Wellandport, June 19; Utterson, June 10; Pt. Carling, June 3; Delhi, June 17; Cobourg, June 17; Woodstock, June 28; Norwich, June 13; Hurk's Falls, June 7; Parry Sound, June 10; Milverton, June 2; Norwood, June 16; Peterboro, June 17; Vanleek Hill, June 16; Picton, June 10; Fenetang, June 6; Orillia, June 3; Duntroon, June 6; Warran, June 13; Falls S., June 19; Kenilworth, June 6; Freeiton, June 12; Weston, June 2nd.

The following meetings will be addressed by speakers as named: J. W. Mitchell, at Stella, June 26; Dr. Clark, at Burford, June 6; Winton, June 8; Hensall, June 10; Vittoria, June 14, and Brampton, June 31; Prof. G. E. Day, at Paisley, June 2, Midway, June 1, Brooklin, June 6, and Breslan, June 5; A. E. Sherrington, at Winton, June 2; Prof. Reynolds, at Shellburne, June 26; Vandeleur, June 15; Durham, June 14; Agincourt, June 6; C. W. Nash, at Millbrook, June 6, and Cookstown, June 3; A. W. Smith, Watford, June 8; Hy. Glendenning, Fenelon Falls, June 6; Prof. H. H. Dean, Elmira, June 8.

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Pigs shipped not akin to each other. For price and particulars, write
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Good Quality. Easy feeders.
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OAK LODGE YORKSHIRES



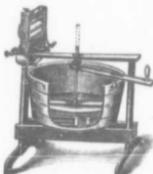
This herd won the PREMIER CHAMPIONSHIP for BREEDER of LARGE YORKSHIRES at St. Louis WORLD'S FAIR. Boars and Sows of all ages, close to PRIZE-WINNING STOCK, for sale. Prices reasonable.

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In the Royal both rotate, but in opposite directions. There is no perceptible wear on the clothes.

The wringer does not have to be removed from start to finish. The drip from the wringer is carried back into the tub by the metal spout.

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The International Preparing

At a meeting of the board of directors of the International Live Stock Exposition, Chicago, held a few days ago, Mr. W. E. Skinner was re-elected general manager. The treasurer's report showed that the proposed guaranty fund now stands at over \$40,000. The erection of the new arena with seating capacity of 10,000 is practically assured as the future home of the show.

There are some few minor changes in the prize list this year. In the cattle classification open heifers will be admitted to competition in the carload lot division. In the horse department special prizes, practically the same as last year have already been provided by the different associations. There will be no change of consequence in the sheep department, but in the swine section in all classes for pure-bred farrowed entries will be made by age instead of weight.

The opening day this year will be a week later than in 1904, the opening day being on December 2nd, on which date the students' contests will be given. A committee was appointed to devise some plan to simplify the methods of making awards, with a view if possible to eliminate marking the papers.

Will Visit O. A. C.

The East and West Peterboro' and East Durham Farmers' Institutes will hold their annual excursion to the Ontario Agricultural College, Guelph, on Thursday, June 8th, 1905. For full particulars apply to Wm. Collins, secretary, Peterboro', Ont.

Market Review and Forecast

The Trend of Markets - Supply and Demand - The Outlook

Toronto, May 29, 1905.

Trade has been a little quiet recently, due largely to the cool weather. However, prospects are good. Money keeps firm and a good deal is being absorbed for mercantile purposes.

WHEAT

The wheat market rules dull, with red and white quoted here by shippers at 97c and goose at 85 to 86c per bushel. The highest quotation on Toronto farmers' market is \$1.02. The crop outlook continues good. The Ontario crop report, given elsewhere in this issue, shows a fairly satisfactory condition of affairs. Speaking of the United States crops *Price Current* of last week says:

"The winter wheat crop has not been essentially disturbed in its general position of promise. The late information discloses but a limited extent of unfavorable conditions surrounding this crop, and mostly limited to that which has previously been apparent. The average condition of the crop has been lowered but little since the first of the month.

The spring wheat in the Northwest has not advanced as rapidly as could have been the case under higher temperatures in the recent past, but the situation generally is favorable, and as a whole the crop is not much short of full promise. In the Canadian West the wheat crop situation appears to be very favorable."

COARSE GRAINS

Oats continue to command good prices, shippers' quotations here being 42c outside. Reports from the growing crop in the United States indicate a fairly good promise. Barley continues quiet at quotations. The corn market on the whole is higher at 49c to 50c for Canadian and 59c to 60c for American, Ontario points.

HAY AND STRAW

The hay market rules quiet. The demand is, however, quiet for export supplies being bought up mostly on local account. Hay is coming forward very well here and prices rule steady at \$8.50 for No. 1 timothy and \$7 for mixed or clover in car lots Toronto. Baled straw is still in demand at 50c per ton.

EGGS AND POULTRY

The egg market continues strong, with little change in values. There has been keen competition at local points for eggs, prices running up to 10c at some points, which has kept values up to a high level. Prices are considered too high for export, though a number of orders are reported to have been placed for export account. It looks now as if eggs are as cheap as they will be this season. Prices rule steady here at 15½c and 16c for small lots.

POTATOES AND BEANS

The potato market is weaker, with prices on the down grade. At Montreal about 50c per bag in car lots is all that can be got, while here 60c rules for Ontario, and about 65c for eastern stock in car lots.

The bean market appears very active and strong. Quotations here are \$1.75 to \$1.80 for hand-picked, \$1.65 to \$1.70 for prime and \$1.25 to \$1.50 for undergrades.

DAIRY PRODUCTS

The cheese market has ruled fairly steady, with prices well maintained. A

good demand seems to be ruling in England under light offerings. Receipts of cheese are increasing at Montreal and a big make is in prospect for June. Prices at the local markets during the week have varied considerably, offers ranging from 8½c to 9½c, with the majority going over 9c. At Brockville on Thursday last 300 boxes sold at 6½c, while at London two days later the highest offer was 9c.

The butter market improved considerably during the week, owing to a better export demand. Receipts are reported light at Montreal and the demand keeps good. At Montreal 10c is the ruling quotation for choice creamery, with some few sales at 10½c. Here receipts both of creamery and dairy are liberal, with the former quoted at 18c to 20c for prints, and 18c to 19c for solids. Choice dairy rolls sell at 16c to 17c and large rolls at 15c to 16c per lb.

WOOL

There is nothing much doing in Canadian wool yet, as the new clip has not begun to come forward in large quantities. In the United States prices rule very high, with no appearance of a drop for some time. At Montreal Canadian wool is in limited supply, and holders have the whip hand. Felled is quoted there at 39c to 37c, washed fleece 27c to 28c and unwashed 16c to 18c per lb.

On Toronto market unwashed fleece is quoted at 13c to 14c per lb.

LIVE STOCK

The live stock market has eased off considerably here owing largely to lower values at Chicago, where receipts have been large, both of export and butchers' stock, and prices dropped 25c to 35c per cwt. during the week. Choice to extra prime steers were quoted at Chicago on Friday last at \$5.40 to \$5.40 per cwt. The run of cattle at the Toronto Cattle Market eased off towards the end of the week, and a generally easier tone prevailed. Exporters seem to be buying only when they have space to fill on the boats, as they claim the Old Country market is not high enough to do a profitable business at prices on this side. Choice exporters are quoted at \$5.40 to \$5.65 and other quality at \$5 to \$5.40 per cwt, and bulls at \$4.25 to \$4.50 per cwt. The demand for butchers' stock has been only fairly active. Good to choice is quoted at \$3.20 to \$5.50, fair to good at \$1.80 to \$5.10, and other quality at \$3 to \$4.75 per cwt. The demand for feeders and stockers keeps firm at \$1 to \$5.40, bulls \$3.40 to \$3.80 and stockers \$1.75 to \$3.50, as to quality. There is a fairly active demand for cows which sell at \$35 to \$50 each. The run of calves has been light and the market keeps firm at \$2 to \$12, or \$1.50 to \$6 per cwt.

The sheep market rules steady with a slightly easier tone in grain-fed yearlings. Dealers say the prospects for



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G. de C. O'GRADY, General Manager.

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
	30	29	25	25	24
Wheat, per bushel.....	\$ 97	\$ 1 00	\$	\$	\$ 0 93
Oats, per bushel.....	42	40	31	30	39
Barley, per bushel.....	45	48	55	50	40
Peas, per bushel.....	70	81	77	78
Corn, per bushel.....	59	57½	65	66
Flour, per barrel.....	4 45	5 23	6 00	6 22	4 50
Bran, per ton.....	17 00	10 00	22 50	22 50	14 00
Shorts, per ton.....	19 00	21 00	22 50	24 00	16 00
Potatoes, per bag.....	60	50	30-35½	30-35½	90
Beans, per bushel.....	1 80	1 75	1 80	1 90	1 75
Hay, per ton.....	8 50	13 50	12 00	13 00	7 00
Straw, per ton.....	6 00	6 00	9 00	9 50
Eggs, per dozen.....	15½	16½	18	17	12
Chickens, per pound, d.w.....	13	15	per 1 00	1 00	per 13
Ducks, per pound, d.w.....	15	15	per 1 00	1 00	12
Turkeys, per pound, d.w.....	18	19	20	20	18
Geese, per pound, d.w.....	12	13	16	16	11
Apples, per barrel.....	3 00	3 50	3 50	3 50	6 00
Cheese, per pound, d.w.....	10½	9½	12	12	12
Butter, creamery, per pound.....	20	19	19	22	25
Butter, dairy, per pound.....	17	16½	21	21	18
Cattle, per cwt.....	5 65	6 00	5 50	5 50	4 50
Sheep, per cwt.....	5 50	5 00	5 50	4 75	6 00
Hogs, per cwt.....	6 60	7 25	5 75	6 00	6 00
Veal Calves, per cwt.....	6 35	5 50	5 00	6 00

THE FARMERS' EXCHANGE

One Cent a Word
CASH WITH ORDER

Advertisements under this head one cent a word. Cash must accompany all orders. No clipping type or cuts allowed. Stock list and membership at one word.

FARMS FOR SALE

FOR SALE—300 acres valuable farming land, first-class timber, also several other fine properties in Southern Alberta. Send for list. G. F. BEERS, Macleod, Alta.

THE south east corner of Sec. 10, Township 12, Range 11; 100 acres all in a good state of cultivation, 40 acres ready for crop, the rest pasture, all fenced with wire and oak posts; good house and outhouse, and granaries; 2 good wells; $\frac{1}{2}$ mile from school, 1 mile from church, $\frac{1}{2}$ mile from town, $\frac{3}{4}$ mile from good timber, lots of hay and spring water close by. Will rent or sell cheap, apply to D. A. SMITH, Austin P.O., Manitoba.

TO CLOSE an estate, we offer for sale a fine 200-acre farm, on gravel road, adjoining the village of Burford. There is a good 2-story uthick house, containing eight bedrooms, 2 bank barns and a frame barn, horse barn, implement house, sheep sheds, hen house, etc. There are 2 wells. Orchard consists of 4 acres apples and pears. Good house soil. Liberal terms of payment will be given. G. S. READ & SON, Brantford, Ont.

LIVE STOCK

SHEPHERDS—The best and better combination. Scotch collies from imported stock. Write for particulars. H. C. GRAHAM, Ailsa Craig, Ont.

BARRON COW CURE makes any animal under ten years old breed, or refund the money. Given in feed twice a day. M. E. Heeder, Muncy, Pa., says: "I have used your Barron Cow Cure and succeeded in getting two of my cows in calf—one ten years old; both had previously been served repeatedly but to no purpose." Particulars from L. F. SKILLECK, Morrisburg, Ont.

NITRIDE FAIRM HERD of large English Berkshire. Four sows for sale, 1 a year and 3 seven months. These are first-class pigs of the large bacon type, would make good show pigs. Will sell reasonable, as I want the room for young pigs. Address, E. E. MARTIN, Canning P.O., Ont. Paris Station, G.T.R.

NURSERY STOCK

WANTED—Energetic, responsible men to sell fruit trees, ornamental trees, etc. Canvasing outfit free. Liberal pay weekly. Arrangements made for whole or part time. We also have a special line of seed potatoes never before offered for sale in Canada. For best terms apply **JOHN PELHAM NURSERY COMPANY**, Toronto, Ont.

SALESMEN WANTED for our hardy Nursery Stock. Choice Specialties. Liberal terms. Elegant outfit free. Pay weekly. **C. A. WILSON BROS.**, Galt, Ont.

STRAWBERRY PLANTS—All the new kinds, raising big crops of big fancy berries. \$1.00 in plants will grow enough for you and your neighbors. Our prices are low. A. W. SMITH, Box F, Bechville, Ont.

SEED POTATOES—Ontario College Farm experiments with 104 varieties, some yielded 300, others 12 bushels some half rotten, others none. What kind of croppers are you growing? Get some new seed, double your crops. Don't grow rotten ones. Send for list, 2 varieties, low prices. A. W. SMITH, Box F, Bechville, Ont.

CUT OFF HERE.

THE FARMING WORLD,
Toronto, Ont.

Enclosed please find being
years subscription to THE FARMING WORLD, to the following addresses:

Name Name

P.O. P.O.

Prov. Prov.

POULTRY

BROWN LEGHORNS, single comb, winners of 80 prizes at Toronto, Ottawa, Giesler, etc., last five years. Eggs \$2 set, exhibition matings; eggs \$1.00, \$1.20, \$1.50, \$2 and up. W. J. FLAYHER, Galt, Ont.

CHOICE standard-bred White Leghorn. Famous layers. Yearly average 100 eggs each. Eggs \$1.00, \$1.20 and \$1.50 per setting. Incubator eggs \$3.00 per 100. Write at once for free catalogue describing them. J. W. CLARK, Free Ontario Club, Importer and Breeder, Cainsville, Ont.

BUFF ORPINGTONS—8 breeding pens this season, headed by imported and prime stock. Eggs \$1.00, \$1.20 and \$1.50 per setting. Incubator eggs \$3.00 per 100. Write at once for free catalogue describing them. J. W. CLARK, Free Ontario Club, Importer and Breeder, Cainsville, Ont.

EGGS FOR HATCHING—15 for \$1.00; 30 for \$1.75; 50 for \$2.50; 100 for \$4.50. Assorted if desired. S. C. White Leghorns, Utility and Wyandottes and B.P. Rocks. Quality superior. Poultry and Bee specialties. Correspondence solicited. E. L. COLLETT, Port Huron, S.S.

INCUBATORS—Poultry and Pet Stock Supplies. Large new catalogue from A. J. MORGAN, London.

HELP WANTED

BRIGHT YOUNG MEN WANTED—To teach in the schools on telegraph lines on Canadian railways at from forty to sixty dollars per month; our new telegraph book, giving Morse alphabet and full particulars, mailed free. Dominion Office of Telegraphy, 9 East Adelaide-street, Toronto. Also our fully equipped telegraph school in Canada, in which a really competent staff of teachers is employed.

Always mention *The Farming World* when answering advertisements. It will usually be an advantage to do so.

sheep are lower. Export sheep are quoted at \$3.50 to \$5.25, grain-fed lambs \$6 to \$6.50, barnyards \$3 to \$4 per cwt., and spring lambs \$3 to \$6 each.

Hogs have also taken a drop and quotations are \$6.60 for selects and \$6.35 for lights and fats.

HORSES

The horse market continues brisk, with prices good for choice quality in all classes. Quotations have changed little if any since last writing and prices rule firm. Dealers complain that farmers are very independent about selling and are holding out for high prices, too high in their opinion.

MARITIME MARKETS

Halifax, N.S., May 22, 1905.

Eggs have advanced $\frac{1}{2}$ cent per doz. in P. E. Island, thereby causing an advance to 16 cents in Halifax. The cause of the advance is that Montreal picklers have been buying on the Island, and run prices up where they will probably remain for some time.

Butter—There is not much change in the butter market since last reporting. Grass butter will soon be on the market, and as soon as this happens prices will take a drop.

Creamery is quoted at 21 cents for solids. Small tubs, 22 cents; prints, 24 cents; rolls, 25 cents.

Cheese are declining in price, and almost all the local factories are getting in operation. This is leading the trade

to expect lower prices. September cheese are quoted at 12 $\frac{1}{2}$ cents and new fodder at 11 $\frac{1}{2}$ c.

Ample supplies of beef are offered, and the price paid for good stock is from 7 to 8 cents. Supplies of mutton are small. Lamb is commencing to come forward in larger quantities. The present price is about $\frac{3}{4}$ per carcass. Veal is plentiful and commands from 4 to 5 cents per pound. Potatoes are very plentiful and cheap; price 30 cents per bushel. Turnips, 35c. Oats, hay and other feeds still remain firm. L. B. B.

The Deaf and the Blind

No more philanthropic and commendable work is being done in Canada today than that of the Ontario institutes for deaf and dumb and the blind. These institutions are maintained by the Ontario Government and are performing a work that is both humane and useful. The instruction of the deaf and dumb and of the blind cannot but make the lives of persons so afflicted more cheerful and happy. When O. H. Mathison, Supt. of the Deaf and Dumb Institute at Belleville, and Mr. H. F. Gardiner, Supt. of the Blind Institute at Brantford, will be glad to learn of the whereabouts of all deaf mutes and blind children from the ages of 7 to 20 years. Any person knowing of such will confer a favor by corresponding with these gentlemen.

Monahan—"Tis always th' unexpected that happens. When Oi went home full last night, Oi expected me wolf would hit me wid a poker."

Mulhearn—"An' she didn't!"
Monahan—"No; she hit me wid th' flatiron an' pianny-shoole!"—Judge.

Nature About the Farm

(Continued from Page 424.)

the day of his arrival and exhibited all his old time confidence; not only so, but that evening he flew up to the house and visited a spot close to the door, where last season food used to be placed for such birds as would go for it. There can be no doubt that the mate is one of the old pair, and that some fatality has befallen his mate, and else they have separated and my bird has brought a new bird to the old nest. It is not generally understood that the smaller birds mate for life, in fact popular belief inclines the other way; my own experience, however, leads me to the conclusion that the same birds return to their old nesting sites, if security is assured, and that it is the same individuals which occupy them as a rule. Bird life, however, is very insecure, accidents of so many kinds are liable to happen in the migrations, that changes in the pairs must of necessity be frequent. Much as to this and other interesting problems of bird life can be learned by giving a little attention to our feathered friends whilst they are occupied in nesting and raising their young.

A BIRD RESTAURANT

By JOHN GOULD, Aurora Station, Ont.

(Continued from April 15th issue.)

The Chickadees watch their chance and eat when they can, turning up this way and that, their little beady eyes, and are quite inclined to fly to, and

light upon your outstretched hand, nobly if they can see bread crumbs upon it. For a while old "Big Dan," the fox squirrel that lives in the big maple by the lawn, would take his "bite" from the nut, but much preferred hickory nuts, which he and his faithful spouse will dig for in the deepest snow, and in the bitterest storm, and eat on the big limb of the lawn hickory, and then go into the deep snow for more, and seemingly always find them, evidently some of their shallow buried stores of last fall. To-day I saw "Big Dan" coming out of the cow barn, where he had been seeking corn, which I think he found, and will continue to and possibly a few ears of it nearer home.

A day or two later I put some ears of corn by the roots of the big maple for them and I had hardly gone ten rods before the four squirrels were at them, and a great feast they seemed to have, despite the bitter wind and snow bluster about them. One would take a fair sized ear of corn and scamper up the tree with it, when another squirrel would take chase and force the other to drop it, and then race to the ground for it, seemingly getting there about as soon as did the ear. After their appetites were satisfied they engaged in a sort of tag game that lasted for some time and took them to every part of the tree, and in their jumps from one slender twig-like branch to the other they often only succeeded in maintaining their precarious hold by the most active efforts of tooth and toenail.

The smaller birds, like the juncos, snow birds, and that class, seem to like the smaller seeds, and patches of snow are brushed away and a quart or so of millet scattered and bushels of the hay, oats, are thrown upon the snow, where a score of birds may be seen at a time digging and scratching as industriously as hens, although accompanied with many a short flight and wing gratiation in the air.

The big red-headed woodpeckers occasionally appear in quest of food, and seem very deliberate in their ways, except that the male will drive away the female, even chase her away, and then come back to enjoy his food in solitude, or until some other bird gives him the grand bounce. While he is utterly selfish now, how things will change in the warm days of spring, when he commences his love-making proposals, and his brutality now, will be changed into the most sentimental gush; and he will be all politeness and attention. Flocks of snowbuntings and juncos come now and then and look over the assortment of seeds. The juncos seem to prefer to have the food scattered on the snow, and will leave the cleared places to pick up the food in the loose snow, and then when they have satisfied their hunger, fly up to the most exposed, wind swept tree branch, to—well, come back and take another free lunch.

A couple of winters ago a fine flock of twenty-five quails wintered about the barn and granary, making their home in the thickets near the river, some 50 rods away. They would come about a certain time of day, walking across the snow piping their low, musical q-u-i-t, q-u-i-t, and seemed always glad to see the fellow that fed them. They preferred broken up corn to any other food and conducted themselves very much like a flock of hantams would have done. Then they would walk about, and soon would return the way they came, talking in a most sociable way among themselves. Soon the warmer days will come, and then it will be the blue birds, robins, and the sober phoebes that will be our guests at luncheon, and then the April days will close our bird restaurant for the summer.

FARMERS' BINDER TWINE CO.

LIMITED

BRANTFORD, - - ONTARIO

CO-OPERATION



THE BONE AND SINEW OF THE FARM Do as You Please About Coming In

Don't figure on rapping for admission after the gate is closed. It will be useless. It's not your little requirement of Binder Twine that's the issue, but the sustaining of this fighting Company, the only one to-day in Canada that can assist you in winning a great battle against Monopoly and Combine of every character.

It's virtually the thin end of the wedge.

Co-operation, to the Canadian farmer, is the only fighting chance left him. This has been abundantly demonstrated by the intelligent people of the Kingdom of Denmark, who to-day head the list in both control and quality of every article produced or handled by them on their farms. In other words, they are masters of the situation and have combine and monopoly at their feet.

Farmers, act intelligently, fight shy of, as you would the very Devil, and drive from your homes newspapers or men that undertake to say one word against co-operation, and co-operative institutions, such as the Farmers' Binder Twine Co., Limited, with its eight thousand farmer stockholders, or others that are going into existence in Canada, promoted by responsible, well-tried men whom you know, or ought to know, or that you can go to any chartered bank and find out all about. Look out for traitors who are prepared to act, with all the wickedness and low-bred instinct in them, as paid hirelings of the opposition who would sell co-operation and the very best of us into the hands of the enemy remorsefully as Judas did our Saviour for thirty pieces of silver. Canada and the United States are the home of monopoly and combine. President Roosevelt is endeavoring his level best with all the greatness and manliness in him to overthrow the awful and gigantic monopolies in his domain that are ruining the country for the sake of a few multi-millionaires. Your safe point is always to observe the character of the men identified with these movements, and that cannot be bought off or tampered with. Send post card and I will furnish you with an article from April *Cosmopolitan* magazine on Implement Combine, touching the whole black family of trusts. Every farmer should read it.

J. STRATFORD, GENERAL MANAGER.

A Canadian Factory



For Canadian Farmers

Did you ever stop to think what that great factory of the International Harvester Company of Canada, (Limited), at Hamilton, Ontario, means to you?

It means, first of all, implements and machines for the Canadian farmer, built on Canadian soil, by Canadian workmen, and so far as possible, of Canadian materials.

It means a factory whose facilities or turning out work of the highest quality fare not excelled in the whole world.

It means a factory backed by years of experience, dating from the very invention of modern labor saving farm machinery.

It means the production of a line of harvesting machines, seeding and tillage implements and other labor savers for the farmer, of the most improved patterns, constructed of the best procurable materials, built by the

methods best calculated to give them strength and durability.

It means, in short, a line of implements and machines *for your use*, of a quality and excellence impossible to produce without such a factory full of such facilities, operated by such experience.

We ask you as a practical man who wants to get the most for his money, to investigate the International line before you buy farm implements of any kind.

It will take only a few minutes of your time to talk to the International dealer and see for yourself the labor-saving, trouble-saving, money-saving advantage he has to offer you.

Call on the International Dealer.

These machines are manufactured by

INTERNATIONAL HARVESTER COMPANY OF CANADA, (Limited)
Works: Hamilton, Ontario, Canada



The International lines are represented by different dealers. See them for catalogues of

DEERING & McCORMICK

Binders, Reapers, Mowers, Rakes, Tedders, Corn Binders, Huskers and Shredders, Gasoline Engines, Knife Grinders, Disc Harrows, Smoothing Harrows, Lever Harrows, Spring Tooth Harrows, Hoe Drills, Disc Drills, Cultivator and Seeder, Broad-cast Seeder, Scufflers, Binder Twine. Also selling agents for Chatham and Petrolia Wagons.